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Abstract: Identification of target user segments and preferences in relation to the target Elder-Spaces functionalities, features and applications. Definition and analysis of a set of operation scenarios for the Elder-Spaces platform, along with related use cases.

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Glossary

3D	3 Dimensional
AAL	Ambient Assisted Living
API	Application Programming Interface
BYTE	Byte Computers S.A.
ES	Elder-Spaces
ESC	Emotions in Social Context
EU	European Union
FIP	Facial Information Processing
GPS	Global Positioning System
ICT	Information and Communication Technology
iWiW	International Who Is Who
KAPI	Open Centre for Elderly Protection
MSN	The Microsoft Network
PC	Personal Computer
SOTE	Semmelweis University
UC	Use Case
UK	United Kingdom
UML	Unified Modelling Language

1. INTRODUCTION

The scope of the current document is to set up the framework for the project's use cases.

In the second chapter is briefly displayed the Trikala case study, which included a focus group of targeted elderly people and posed the justification of the two age segments of the users. This is a sequence of what had been already stated in Deliverable D1.1[1].

The third chapter analyses the existing case study of iWiW. The background of that platform is briefly presented on the scope of what would be the ideal base for the development of realistic use case scenarios.

The fourth chapter includes the main part of the current document. It approaches the use cases in three perspectives. In the first part are presented introductory definitions and the envisaged roles to be played for the functionality of the use cases. In the second part are presented the use cases which describe in detail nearly most of the envisaged aspects of the platform. Finally, in the third part are presented real life use case scenarios, so as to make them more understandable to general public.

Finally, the executive summary gives a more official ending tone in the document and the annex completes what information is crucial for the independent reading of the document.

2. TRIKALA CASE STUDY

2.1 INTRODUCTION

As explicitly shown in chapter 2.2 of Deliverable 1.2[2], broadband coverage is increasing in great rate. Statistically[3] this has led to the increase of the ages over 55 which use ICT means (PCs, laptops, smart phones).

The first approach and the results of the conducted focus group have been already mentioned in the official Deliverable D1.1, in Chapter 2. In the following section the justification of that choice is further explained.

2.2 JUSTIFICATION

In Trikala, ten users aged over 55 had been asked a number of questions regarding their knowledge in computer usage at first level, in internet in a second one and in social networking in a last one. Their answers were monitored and afterwards they were asked to evaluate a series of hypothetical services that they would consider to be of any interest on their scope.

The proposed user segmentation considered two major groups; the first one for ages from 55 to 70 (55-70) and the second for ages over 70 (70+).

In accordance to the current difficult financial recession crisis, the majority of the people belonging to the first group are people still working, having a few years towards their retirement. For this group it was emphasized the fact that they could use part of services and activities that could be interconnected with their occupation.

Regarding the second group, it is relatively more difficult to involve elderly over 70 with the scope of the Elder-Spaces project. In particular, for this group should be given emphasis only on activities like hobbies and habits elderly used to have during their day routine. One disadvantage comparing to the first group is the fact that nearly all of them aged over 70 are already retired, which ultimately posed the threshold for segmenting the two groups.

3. SOTE CASE STUDY

Virtual Memories on "Social objects" for Elderly People combined with expression of emotions on iWiW.

3.1 INTRODUCTION[4]

Imagine looking at an object not for its artistic or historical significance but for its ability to spark conversation. Every museum has artefacts that lend themselves naturally to social experiences. It might be an old stove that triggers visitors to share memories of their grandmother's kitchen, or an interactive building station that encourages people to play cooperatively. It could be an art piece with a subtle surprise that visitors point out to each other in delight, or an unsettling historical image people feel compelled to discuss. It could be a train whistle calling visitors to join the ride, or an educational program that asks them to team up and compete.

These artefacts and experiences are all social objects. Social objects are the engines of socially networked experiences, the content around which conversation happens. Social objects allow people to focus their attention on a third thing rather than on each other, making interpersonal engagement more comfortable. People can connect with strangers when they have a shared interest in specific objects. Some social networks are about old memories. Others centre around family trees. Others focus on religion or art works and exhibitions. We connect with elderly people through their own interests and shared experiences of the objects around them.

In 2005, engineer and sociologist Jyri Engeström[5] used the term "social objects" and the related phrase "object-centred sociality" to address the distinct role of objects in online social networks. Engeström argued that discrete objects, not general content or interpersonal relationships, form the basis for the most successful social networks. For example, on iWiW you do not socialize generally about photography or pictures, as you might be on a photography-focused listserv. Instead, you socialize around specific shared images, discussing discrete photographic objects. Each photo is a node in the social network that triangulates the users who create, criticize, and consume it. Just as iWiW connects people via books instead of reading, iWiW connects people via photos instead of art-making.

The objects do not have to be physical, but they do have to be distinct entities.

3.1.1 WHAT MAKES AN OBJECT SOCIAL?
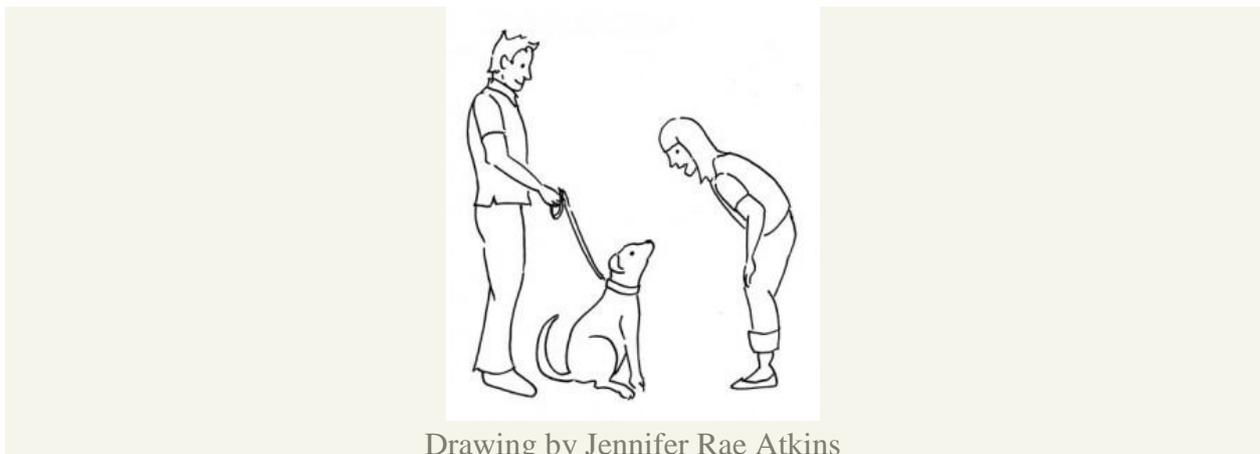
Drawing by Jennifer Rae Atkins

Not all objects are naturally social. A social object is one that connects the people who create, own, use, criticize or consume it. Social objects are transactional, facilitating exchanges among those who encounter them. For example, one of my most reliable social objects is my dog. When

I walk around town with my dog, lots of people talk to me, or, more precisely, talk through the dog to me. The dog allows for transference of attention from person-to-person to person-to-object-to-person. It is much less threatening to engage someone by approaching and interacting with their dog, which will inevitably lead to interaction with its owner. Unsurprisingly, enterprising dog owners looking for dates often use their dogs as social instigators, steering their pups towards attractive people they would like to meet.

Take a brief mental tour of a cultural institution. Is there an object or experience that consistently draws a talkative crowd? Is there a place where people snap photos of each other, or crowd around pointing and talking? Whether it is a steam engine in action or an enormous whale jaw, a liquid nitrogen demonstration or a sculpture made of chocolate, these are your social objects.

Whether in the real world or the virtual, social objects have a few common qualities. Most social objects are:

1. Personal
2. Active
3. Provocative
4. Relational

3.1.2 PERSONAL OBJECTS

When visitors see an object in a case that they have a personal connection to, they have an immediate story to tell. Whether it is a soup bowl that looks just like grandmother's or the first chemistry kit a visitor ever owned, personal objects often trigger natural, enthusiastic sharing. The same is true for objects that people own, produce, or contribute by themselves. Recall Click! participant Amy Dreher's words about her pleasure in visiting the exhibition repeatedly: "I felt ownership over what was on those walls because I had been involved in it."

Not every artefact automatically stirs a personal response. It is easy for staff members to forget that visitors may not have personal relationships with many artefacts. Staff and volunteers who care for, study, or maintain objects often have very personal connections with them. One of the challenges for cultural professionals is remembering that visitors do not come in the door with the same emotional investment and history with artefacts that professionals have and may not see them as obvious conversation pieces.

3.1.3 DESIGNING PLATFORM ON iWiW FOR ELDERLY ON SOCIAL OBJECTS

What makes an interpretative strategy explicitly social? iWiW Social platform focus primarily on providing tools for elderly to engage with each other around objects. While attractive and functional presentation of objects is still important, it is secondary to promoting opportunities to discuss and share them. Let us compare the social behaviours supported by a traditional exhibition to those provided by an online social network, iWiW, in the context of the presentation of photographs.

In a traditional museum photo exhibition, visitors can look at photographs hanging on the walls. They can read information about each photo and its creator in label text, and they can probably access information about how the photograph is catalogued in the museum's collection database. Sometimes visitors may take their own pictures of the photographs; other times, they are prohibited from capturing any likeness of the artefacts or even their labels. In some installations, visitors may be able to share personal thoughts about the photographs in a comment book at the entrance or exit of the gallery. The institution also typically offers visitors the chance to buy reproductions of some of the photographs in a catalogue or postcard set in the museum's retail shop.

In a typical photography exhibition, visitors can look and learn, but they cannot leave comments or share the images with others as they browse. Social use of the photos is visitor-directed and may or may not be institutionally supported.

Photo by Linda Norris.[6]

Contrasting these to the visitor actions, which will be supported by iWiW, is different. On iWiW, users can look at photos. They can read information about each photo and its creator. They can leave comments on each photo. They can mark particular images as favourites in their personal collections of favourites. They can make notes directly on sub-areas of photos to mark details of interest. They can add tags and geocodes that serve as descriptive keywords for each photo. They can view the comments, notes and tags created by other users who have looked at each photo. They can send personal messages to each photo's creator, or to other commenters, with questions or comments. They can invite photographers to submit their photos to special groups or virtual galleries. They can send individual photos to friends by email, or embed them in blog posts or entries on other social networks. They can talk about each photo on iWiW and elsewhere.

3.2 JUSTIFICATION

In the Origo/SOTE case the justification initiated **with some arguments:**

1. Elderly people have rich memories about their travels in the past,
2. They also have lot of photographs (digital or paper) to share,
3. Elderly people enjoy talking about old times frequently,
4. An elderly-friendly virtual playground like Travel Memories can engage elderly people in online social activities,
5. The elderly people have a rich "virtual album" on their "social objects" to share with the others,
6. The elderly emotions should be expressed by many ways such as: "Moodies".

In the following subsections main functionalities that can act as use cases on the envisaged ES platform are briefly displayed.

3.2.1 MAIN FUNCTIONS #1

Easy to use country selection from a map with zoom

Figure 3.2-1: Map for country selection

3.2.2 MAIN FUNCTIONS #2

- Creating a Travel Memory in a selected country,
- Sharing Travel Memories with friends and family
- Listing friends' Travel Memories in a selected country
- Commenting Travel Memories
- Automatically creating an event in the social platforms, based on the Travel Memory (iWiW Event API must be implemented),
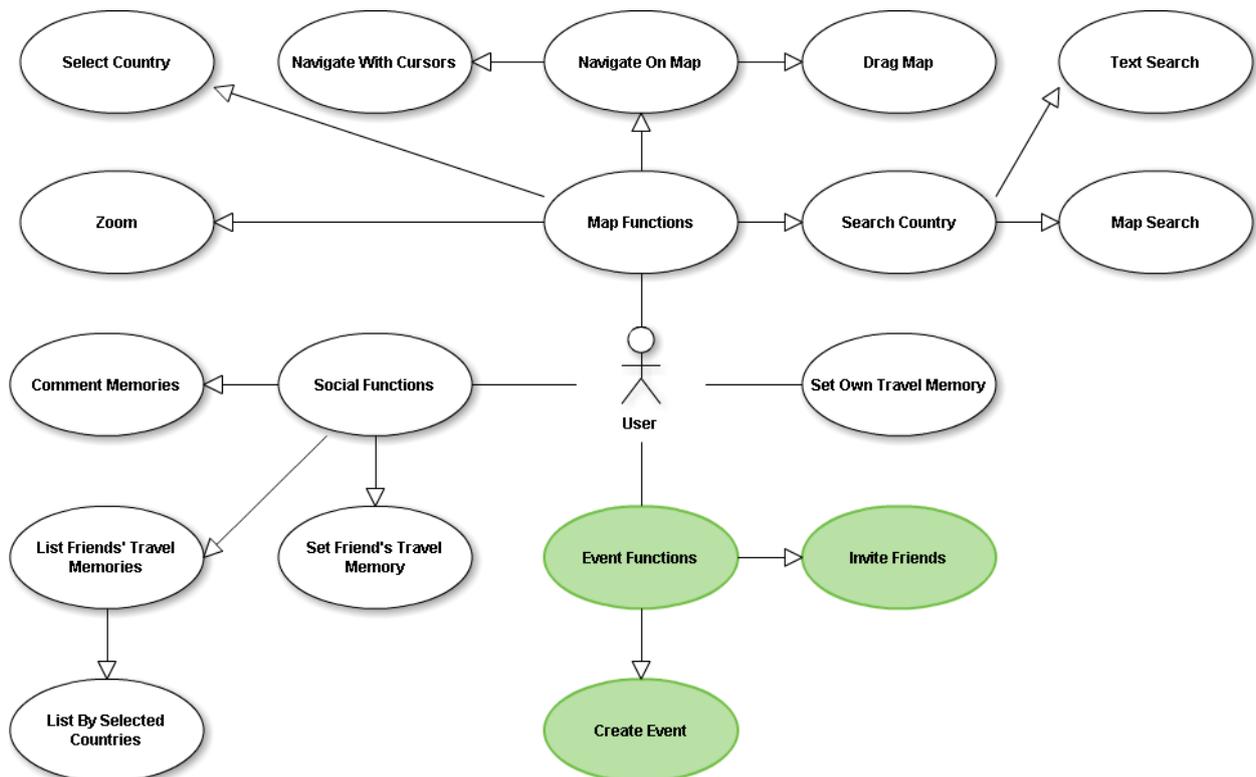
* White nodes – already implemented functions

* Green nodes – functions need to implement

3.2.3 FURTHER ACTIVITIES #3

- Creating the visual concept and design,
- Creating the functional requirements and specification,
- Developing Travel Memories application,
- Creating detailed plans for testing and field trials,
- Analysing field trials' results and other feedback, implementing required modifications,
- Launching Travel Memories on iWiW and Facebook.

3.2.4 Statistics of Travel Memories application on iWiW

About the statistics

- Start of the application: 2009 February
- Start of the measurement: 2009 August
- End of the application: 2011 June

Usage of Travel Memories
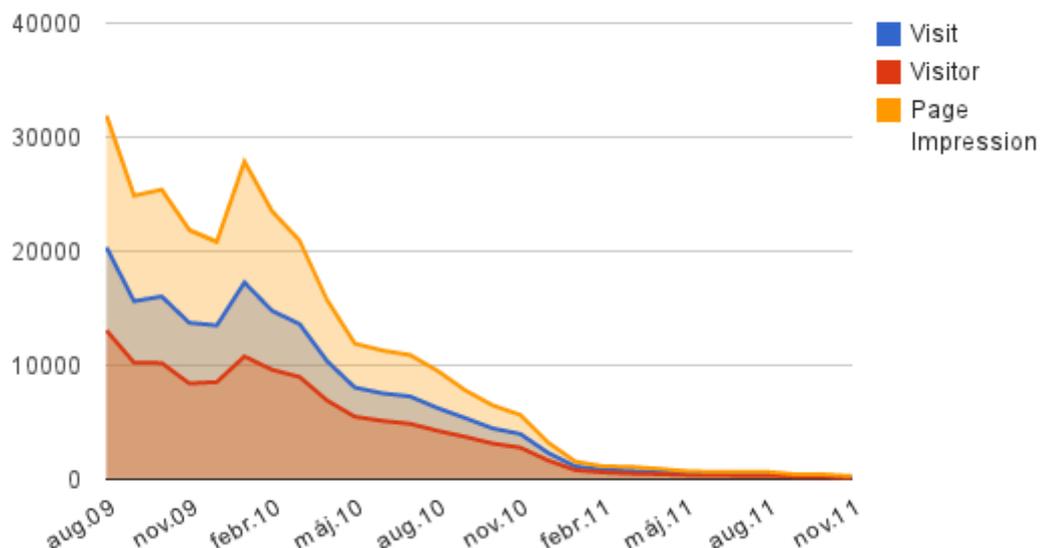
Travel Memories Users' Age Distribution
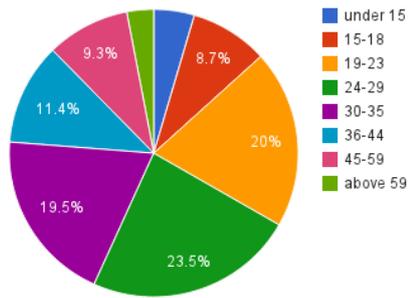
Travel Memories Male / Female users
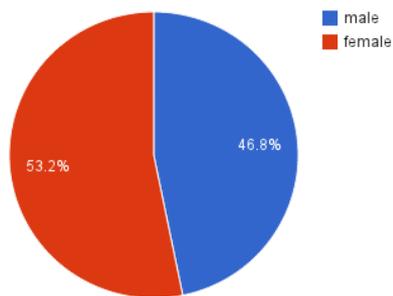
4. USE-CASES ANALYSIS AND EXAMPLES

4.1 INTRODUCTION

In this chapter the use cases which cover most of the project's functionalities are thoroughly analysed. The chapter has three major sections. In the introductory section are defined generic terms that are to be used for the functionality of the platform and is also examined the role of each separate actor. In the second section are presented the use cases in tabular format and a unified schema are displayed on their functionality and interconnectivity. In the third section are displayed real life scenarios, which may be used for easier comprehension and for dissemination purposes.

4.1.1 DEFINITIONS

Systems: set of bundled applications, e.g. iGoogle, FaceBook, Elder-Spaces

Applications: Elder specific application/tool that it is based on the infrastructure/Services of Elder-Spaces platform

- part of software designed to be used by humans via a sufficient user interface (graphical or others)

Services:
- technical: interface and underlying technology to be used by applications/other technical entities
- social: mostly face to face services done by humans to humans

Mashups:
A type of service, which combines input from various sources to produce new functionalities. Usually, it is characterized by enhanced visualization and aggregation of combined information. Perhaps of most common ones are geo-visualization mashups (combination of maps i.e. google maps with some other source of information, which produces a visual display of aggregated information which is easy to understand and use).

Travel memories can be an application which could use such an approach.

Cognitive Social Search (Cognitive Social Recommendations):

Cognitive Social search refers to a specific set of services that are used in Elder-spaces to enhance and expand platform functionalities in order to maximise social interaction between elderly people involved in the platform.

Cognitive Social search combines Social search and Concept based search techniques to return interesting entities of the platform to the user. These entities can be users, groups and events of the platform. In order to give to the users useful information that could enhance Social and Cognitive activities, the system will produce personalized recommendations for each user, instead of asking users to actively execute searches. This recommendation mechanism has been will be designed in order minimize the interaction of the user with the system to actively search for information and also in order to enhance also the usability of the system by elderly users. A specific use case, called

"Cognitive Social Recommendations" is defined for Cognitive Social Search.

4.1.2 ROLES

A typical requirement is to allow only some users (authenticated users) to share extra functionality. In that case, it is typical for the platform to provide a way for users to log in and be authenticated, and to hide information from anonymous users (users who are not logged in).

The first step to setting up the membership is to decide the way through which the content is going to be organized. As was mentioned before, some of the content will be available to anonymous - guest users. A guest user is anyone who visits the platform without creating or logging into an account. In addition to the general content that's available to everyone, there should be the opportunity to share extra privileges to members-only content that's available only to members — people who have joined the platform by setting up a user account. In this direction, the different types of users are going to be based on several roles which are explained below:

Anonymous user: The anonymous user is the user that first browses the platform and has access to some static and de facto content. The most important functionality that this role will perform is to become a member of the platform, establishing in this way the user's identity (authenticate the user) so that the Web site can perform actions based on who the user is, such as showing or hiding information. To get the user's identity and be member of this type of role, the first step for the user is to register. Therefore, registration component must be provided.

Registered – authenticated user: The first step is to create a role that will distinguish members of the platform from anonymous users who are just looking around. In case that an anonymous user wants to log a series of credentials some of which are unique must be given in order for registration to be completed. The registration procedure takes place once while the next times the user signs up through the predefined procedure using username and password. The order to log is to enter two pieces of information:

- User name (or e-mail address) and
- Password.

The user name defines the user and the password verifies that the user actually is who they say they are (assuming the user has not been handing out password to people).

That two-step process is known as authentication because it both identifies the user and verifies the truth of its identity. The typical step for someone that becomes registered user is to allow users that belong to this role to view certain extra pages having in this way extra privileges. Therefore, the next task for this walkthrough is to define the members-only functionality, and then create a rule that limits access to this role.

Moderator: This role is placed between Registered Users and Administrator. In other words, Moderators have the privilege to edit several content categories but on the other hand these functionalities are quite restricted. In more detail, a Moderator can edit the date of an event or a group activity but does not have the ability to delete the same event.

Administrator: The most privileged user in the platform is the one that belongs in the Admin role which consists a super user having access over all components and modules. This role has permissions to manage, configure, change and delete activities, events, groups and all other components that will be defined. There is only one administrator in the platform.

The following table presents the identified Actors and Roles

Actors	Role	Brief Description
Administrator	**Unique Platform Registered User (member)**	This user is the one who manages the platform. They are responsible for maintaining the portal, assigning roles to users, creating moderators, creating any groups, updating the hosting site and generally troubleshooting any uprising issues.
Moderator	**Platform Registered User (member)**	The moderator is a registered user who has been given granted privileges by the administrator to conduct a series of processes. They are able to create a group, edit a specific event/activity, etc.
Registered-Authenticated User	**Platform Registered User (member)**	The authenticated user is the one who has previously signed in and is already registered in the Elder-Spaces platform. They have already inserted their data, including a set of mandatory (First Name, Last Name, Sex, Year of Birth, e-Mail, Username, Password) and other optional fields (address, phone and mobile phone number, complete birthday date, preferable hobbies, profile photograph). This category may include either elderly aged over 55 or younger citizens.
Anonymous User	**Un-authenticated Platform User (guest)**	The anonymous user is the one who has never signed in the Elder-Spaces platform and is not registered. They act as guests, and they have limited to no access on the platform's functions. While they can navigate on the welcome page, they do not have access to any other content of the platform. This category may include either elderly aged over 55 or younger citizens.

Table 4.1-1: UC identified Actors and Roles

4.2 USE CASES

In this section the Use Cases are described. At first part the tabular format is explained and what is expected to be filled in each field of the table. Each other section poses a separate Use Case, which briefly explore the functionality of the envisaged platform in general.

Use Case Name	The name of the Use Case
Use Case Code	The code of the Use Case for further (technical) reference

Goal	The brief goal of the Use Case regarding its functionality
Brief Description	A short description to comprehend the functionality in practice
Primary Actors	Which actors are necessary for the conduction of the specific Use Case
Secondary Actors	Which actors act subsidiary
Importance	The level of importance of the Use Case for the envisaged platform
Preconditions	Status of any prerequisites for the conduction of the Use Case
Main Flow	Brief display of the flow of the Use Case and the steps the user should follow to conduct the Use Case
Post Conditions	Conditions that are to follow the conduction of the Use Case
Alternative Flows	Cases where the flow is not following the compatible way, but is examined any unpredictable behaviour of the platform
Other Remarks	Any other notice that could help towards the comprehension of the use case

Table 4.2-1: UC Tabular Format

4.2.1 REGISTER

Use Case Name	Register in platform
Use Case Code	UC_001_REG
Goal	The user becomes an official registered user of the platform, gaining access to a variety of choices
Brief Description	A user browses to the platform and fills in the registration page in order to become a registered user. Social worker can help user with the registration procedure and then this data are registered into the corresponding electronic card.
Primary Actors	Any internet user
Secondary Actors	
Importance	High
Preconditions	The user must have internet access
Main Flow	1. The actor browses to the platform's web site 2. From the appeared page, they choose to register on the platform. The other alternative is to sign-in, which is not yet the case for the unregistered user. 3. A registration page window opens, asking from the user to provide a

	series of personal data, either mandatory (first name, last name, sex, year of birth, e-mail, preferred username, password, password confirmation, place of residency, interests) or optional (complete birthday date, address, hobbies, picture/emoticon to upload, profile short motto, etc.) 4. After filling in the data, the user submits the form. 5. A confirmation e-mail is automatically sent to the previously filled address of the registrant. 6. The system registers the user and shows a successful page indicating the fact. Now the home page of the platform is able to be shown to the user. 7. The user has the possibility to navigate through the site or log off.
Post Conditions	A confirmation email is sent to the user's registered email stating among all data the username and password for future reference
Alternative Flows	1. The user does not fill in one or more mandatory fields. When they press the 'submit' button, an error page pops up indicating which field(s) need(s) to be completed for a successful registration. 2. The user fills in different 'password' and 'confirm password' fields. Then a message pops up stating that these two fields should be identical. 3. The user fills in wrong email format. Then a message pops up stating that the user should use a valid format. 4. The user chooses the 'Cancel' option instead of the 'Submit' one. All data filled in disappear and the user is returned to the initial page of the platform where they are asked either to register or sign in.
Other Remarks	It is advisable for the user to fill in a valid email account in which they have access.

Table 4.2-2: Register Use Case

4.2.2 LOG IN

Use Case Name	Log in platform
Use Case Code	UC_002_LOG
Goal	The user logs in the platform and is ready to use its functionality in full
Brief Description	A user browses to the platform and chooses the sign in section, filling in their credential data in order to log in to the platform
Primary Actors	Registered user
Secondary Actors	
Importance	High
Preconditions	The user must have internet access

Main Flow	1. The actor browses to the platform's web site 2. From the appeared page, they choose to sign-in to the platform. 3. A sign-in page window opens, asking from the user to provide their username and password 4. After filling in the data, the user presses the 'Sign-in' button. 5. The user is signed-in and can navigate throughout the platform.
Post Conditions	
Alternative Flows	1. The user fills in wrong credentials and presses 'Sign in'. 2. Then a page appears indicating that wrong data have been provided, the user cannot log in and they are prompted to try again. 3. The user fills in wrong credentials and presses 'Sign in' for five consecutive times. 4. Then a page appears stating that the sign-in page is locked for the next half hour for the specific IP address, due to technical restrictions set by the platform's administrator. 1. The registered user has forgotten their password. 2. They click on the 'Forgot password' link next to the 'Login' button. 3. A page appears asking from the user to enter their username or the initial e-mail they had used during their registration. 4. The user fills them in and presses the 'OK' button. 5. A confirmation page indicates the fact that a new password has been automatically sent to the user's e-mail address. 6. The user presses on the 'OK' button and is returned to the platform's login page. 7. Now the user has the ability to log in the platform using the new assigned password that has been retrieved.
Other Remarks	

Table 4.2-3: Log in Use Case

4.2.3 LOG IN WITH A CARD

Use Case Name	Log-in Card
Use Case Code	UC_016_LOG
Goal	Authenticate a user by means of identity card, on the MS Surface
Brief Description	A user who is already registered in Elder-Spaces and has got an identity card uses it to authenticate with the MS surface.
Primary Actors	Registered user
Secondary Actors	
Importance	Medium

Preconditions	User has got an identification card from an elder-space social worker
Main Flow	1. User places his/hers identification card on the surface 2. The surface recognizes the card and sends the ID to Elder-Spaces server 3. The ID is verified and the user is authenticated.
Post Conditions	
Alternative Flows	1. The ID is not recognized 2. An error message is displayed and the user is prompted for login and password (see Use Case UC_002_LOG)
Other Remarks	

Table 4.2-4: Log in with Card Use Case

4.2.4 GET LOG-IN ID CARD

Use Case Name	Get Log-in ID Card
Use Case Code	UC_017_LOGID
Goal	Provide the Registered user with an ID card for automatic authentication in the surface interface.
Brief Description	A registered user can get an identification card from a social worker who is participating in the Elder-Spaces social network, in order to provide for automatic login to the surface interface.
Primary Actors	Registered user, Moderator
Secondary Actors	
Importance	Medium
Preconditions	The social worker (moderator) is able to create identification cards for the MS surface

Main Flow	1. The Moderator selects one ID Card (which has a unique ID number)
	2. The Moderator selects from Elder-Spaces platform, the function: "Link ID Card to Profile". In a two-step procedure he/she:
	    a. Searches for the user and finds his/her profile
	    b. Inputs the ID Card code to link it to the profile
	3. The system verifies the assignment
	4. The moderator gives the ID-Card to the Registered User

Post Conditions	
Alternative Flows	1. The ID is not recognized 2. The moderator has to select a different ID-Card

Other Remarks	ID cards are already printed and available to social workers. They are to be used as alternative means of authentication to the MS Surface which will be available to KAPI or other day care centres.

Table 4.2-5: Get Log in Card Use Case

4.2.5 SEARCH

Use Case Name	Search
Use Case Code	UC_003_SEARCH
Goal	The user searches for a specific keyword throughout the whole platform
Brief Description	The user signs in the platform and types a keyword in the search field, in order to perform a query. They are able to follow the linkable results in order to explore the returned query results.
Primary Actors	Registered user
Secondary Actors	
Importance	High
Preconditions	The user must have internet access
Main Flow	1. The user locates the search field and types in a concerning keyword 2. The user clicks on the 'Search' button 3. A page opens indicating all relevant results 4. The user may click on a clickable result and display detailed information including this keyword. 5. Alternatively the user may click on the 'Advanced Search' button, where they can apply filters on their search (combination of keywords, AND/OR functions, date of appearance, file size etc.). Then, they follow steps 3 to 5. 6. If no results are returned, then the user is prompted to return on the search page and retry.
Post Conditions	
Alternative Flows	1. The user does not fill in any keyword and presses the 'Search' button. An alert window appears indicating to fill in a keyword. 2. The user clicks on a clickable result but nothing happens due to technical reasons. An error page appears to the user with a choice to return to the previous search page and re-initiate their search.
Other Remarks	

Table 4.2-6: Search Use Case

4.2.6 COGNITIVE SOCIAL RECOMMENDATION

Use Case Name	Cognitive social recommendations
Use Case Code	UC_114_COGNITIVESR
Goal	The user receives recommendations for different entities types, for example possible new friends, groups and events based on their profile.
Brief Description	The user signs in the platform and clicks on the "view recommendations" button. The system provides in the same page different recommendations lists for different recommendation types. The user can explore recommendations, following the links, in order to see details of the recommended entity.
Primary Actors	Registered user
Secondary Actors	
Importance	High
Preconditions	The user must have internet access
Main Flow	1. The user access to the view recommendations page 2. A page opens indicating all relevant personalized recommendations for a user. Recommendations will be organized by recommendation type. 3. The user may click on a clickable recommendation and display detailed information about it.
Post Conditions	
Alternative Flows	1. The user isn't profiled or does not have any recommendation; an alert window appears indicating to perform some activities or/and to add some interests in the user profile box. 2. The user clicks on a clickable result but nothing happens due to technical reasons. An error page appears to the user with a choice to return to the previous page.
Other Remarks	

Table 4.2-7: Cognitive Social Search Use Case

4.2.7 CREATE

Use Case Name	Create Content
Use Case Code	UC_004_CREATE
Goal	The user creates content in the platform
Brief Description	The user creates content of their preference from an existing list (event, activity, group), and they are able to share it with their friends or any

	other users.
Primary Actors	Registered user
Secondary Actors	
Importance	High
Preconditions	
Main Flow	1. The user locates the field they prefer to create types in the name of the content type they envisage to create 2. The user clicks on the 'Create' button 3. A page opens introducing to the user a series of fields which describe the envisaged content type 4. The user should fill in the mandatory fields and some optional fields of the content type. 5. The content type is created and a page successfully displays this fact to the user 6. The user may choose to go back to the home page by clicking on the button 'Home Page' or edit the content type by clicking on 'Edit'.
Post Conditions	New content available in the platform
Alternative Flows	1. The user does not fill in any of the mandatory fields and presses the 'Create' button. An alert window appears indicating to fill in all mandatory fields. 2. The user chooses to create specific content type which already exists in the platform. After pressing the 'Create' button, an alert window appears indicating to the user that this content already exists. After pressing the 'OK' button, the user is returned to the creation page where they are prompted to change the name of the content and try again, or confirm the fact that they indeed want to create identical content. 3. The user clicks on the 'Create' button, the content is not created and a temporary page appears indicating a technical problem. They are prompted either to click on the 'Retry' button, which leads them to their previous page with all fields filled in, or on the 'Cancel' button, so as to terminate the process.
Other Remarks	This is a rather generic use case, which is analysed in more specific modules (events, activities, groups).

Table 4.2-8: Create Use Case

4.2.8 CREATE EVENT

Use Case Name	Create Event
Use Case Code	UC_104_EVCREATE

Goal	The user creates an event in the platform
Brief Description	The user creates an event of their preference, and they are able to share it with their friends or any other users.
Primary Actors	Registered user
Secondary Actors	
Importance	High
Preconditions	
Main Flow	1. The user locates the create event field and types in the name of the event they envisage to create 2. The user clicks on the 'Create' button 3. A page opens introducing to the user a series of fields which describe the envisaged event 4. The user should fill in the mandatory fields (name of event, description of event) and a number of optional fields (duration of event, maximum number of users for the event, etc.) and then click on the 'Create' button. 5. The event is created and a page successfully displays this fact to the user 6. The user may choose to go back to the home page by clicking on the button 'Home Page' or edit the event by clicking on 'Edit Event'. 7. Now the user is able to upload media.
Post Conditions	New event available in the platform.
Alternative Flows	1. The user does not fill in any of the mandatory fields and presses the 'Create' button. An alert window appears indicating to fill in all mandatory fields. 2. The user chooses to create an event which already exists in the platform. After pressing the 'Create' button, an alert window appears indicating to the user that this content already exists. After pressing the 'OK' button, the user is returned to the creation page where they are prompted to change the name of the event and try again, or confirm the fact that they indeed want to create an identical event. 3. The user clicks on the 'Create' button, the event is not created and a temporary page appears indicating a technical problem. They are prompted either to click on the 'Retry' button, which leads them to their previous page with all fields filled in, or on the 'Cancel' button, so as to terminate the process.
Other Remarks	

Table 4.2-9: Create Event Use Case

4.2.9 CREATE INTERGENERATIONAL ACTIVITY

Use Case Name	Create Intergenerational Activity
Use Case Code	UC_114_INTERACTCREATE
Goal	The user creates an intergenerational activity in the platform
Brief Description	The user creates an intergenerational activity of their preference, they set specific time restrictions or time schedule for it and are able to share it with their friends or any other users.
Primary Actors	Registered user, Moderator
Secondary Actors	
Importance	High
Preconditions	
Main Flow	1. The user locates the create intergenerational activity field and types in the name of the intergenerational activity they envisage to create 2. The user clicks on the 'Create' button 3. A page opens introducing to the user a series of fields which describe the envisaged intergenerational activity 4. The user should fill in the mandatory fields (name of intergenerational event, description of intergenerational activity, duration of the intergenerational event) and a number of optional fields (maximum number of users for the intergenerational activity) and then click on the 'Create' button. 5. The intergenerational event is created and a page successfully displays this fact to the user 6. The user may choose to go back to the home page by clicking on the button 'Home Page' or edit the intergenerational activity by clicking on 'Edit Intergenerational activity'.
Post Conditions	A new intergenerational activity is created and the creator becomes the event's moderator
Alternative Flows	1. The user does not fill in any of the mandatory fields and presses the 'Create' button. An alert window appears indicating to fill in all mandatory fields. 2. The user chooses to an intergenerational activity which already exists in the platform. After pressing the 'Create' button, an alert window appears indicating to the user that this intergenerational activity already exists. After pressing the 'OK' button, the user is returned to the creation page where they are prompted to change the name of the intergenerational activity and try again, or confirm the fact that they indeed want to create an identical intergenerational activity. 3. The user clicks on the 'Create' button, the intergenerational activity is not created and a temporary page appears indicating a technical problem. They are prompted either to click on the 'Retry' button, which leads them to their previous page with all fields filled in, or

	on the 'Cancel' button, so as to terminate the process.
Other Remarks	

Table 4.2-10: Create Intergenerational Activity Use Case

4.2.10 CREATE GROUP

Use Case Name	Create Group
Use Case Code	UC_204_GRCREATE
Goal	The user creates a group in the platform
Brief Description	The user creates a group of their preference, for which they may share common hobbies, beliefs, interests with others (friends or members in general).
Primary Actors	Registered user
Secondary Actors	
Importance	High
Preconditions	
Main Flow	1. The user locates the create group field and types in the name of the group they envisage to create 2. The user clicks on the 'Create' button 3. A page opens introducing to the user a series of fields which describe the envisaged group 4. The user should fill in the mandatory fields (name of group, description of group) and a number of optional fields (maximum number of users for the group, private or public group, etc) and then click on the 'Create' button. 5. The group is created and a page successfully displays this fact to the user 6. The user may choose to go back to the home page by clicking on the button 'Home Page' or edit the group by clicking on 'Edit Group'. 7. Now the user is able to upload media.
Post Conditions	New group available in the platform.
Alternative Flows	1. The user does not fill in any of the mandatory fields and presses the 'Create' button. An alert window appears indicating to fill in all mandatory fields. 2. The user chooses to create a group which already exists in the platform. After pressing the 'Create' button, an alert window appears indicating to the user that this group already exists. After pressing the 'OK' button, the user is returned to the creation page where they

	are prompted to change the name of the group and try again, or confirm the fact that they indeed want to create an identical group. 3. The user clicks on the 'Create' button, the group is not created and a temporary page appears indicating a technical problem. They are prompted either to click on the 'Retry' button, which leads them to their previous page with all fields filled in, or on the 'Cancel' button, so as to terminate the process.
Other Remarks	

Table 4.2-11: Create Group Use Case

4.2.11 CREATE TRAVEL MEMORY

Use Case Name	Create Travel Memory
Use Case Code	UC_504 _TRAVELMEMCREATE
Goal	Elderly have rich memories about their travels in the past; Authenticated users can create travel memory about these.
Brief Description	The actor wants to create a travel memory in a selected country in the Elder-Spaces system. An elderly-friendly virtual playground like travel Memories can engage elderly people in online social activities.
Primary Actors	Authenticated users
Secondary Actors	
Importance	High
Preconditions	The actor must be logged in the Elder-Spaces system
Main Flow	1. The actor wishes to create a new travel memory instant 2. The actor selects the 'Create Travel Memory' button 3. The actor enters the name of the travel memory which is going to be created 4. The system presents the Map function 5. The actor can navigate and drag the map with the cursors 6. The actor searches for the specific country in which the travel memory will be created 7. The actor selects the desired country 8. The actor can enter a general description or the location of the album (not mandatory) 9. The actor chooses the "Create Travel Memory" button 10. The system displays a successful message that demonstrates that the

	travel memory is created
	11. The actor is redirected to the travel memory's indexes
Post Conditions	A new travel memory is created on the personalized page of the actor
Alternative Flows	1. The actor chooses the "Create Travel Memory" button
	2. The system encounters an error and the travel memory was not created. A message is displayed to the actor indicating that the travel memory was not created successfully, along with a possible explanation why there was an error.
	3. The actor is redirected to the previous page.
Other Remarks	-

Table 4.2-12: Create Travel Memory Use Case

4.2.12 CREATE ALBUM

Use Case Name	Create Memory Album
Use Case Code	UC_404 _ALBUMCREATE
Goal	Registered users can create albums containing photographs or even videos.
Brief Description	The actor wants to create an album of various subjects (e.g. Travel memories) in the Elder-Spaces system. They select the name of the album and the material that is going to be used
Primary Actors	Authenticated users
Secondary Actors	
Importance	High
Preconditions	The actor must be logged in the Elder-Spaces system
Main Flow	1. The actor wishes to create a new album
	2. The actor selects the 'Create Album' button
	3. The actor enters the name of the album which is going to be created
	4. The actor can enter a general description or the location of the album (not mandatory)
	5. The actor chooses the "Create Album" button

	6. The system displays a successful message that demonstrates that the album is created
	7. The actor is redirected to the album's indexes
	8. Now the actor is able to upload media
Post Conditions	A new album is created on the personalized page of the actor
Alternative Flows	1. The actor chooses the "Create Album" button 2. The system encounters an error and the album was not created. A message is displayed to the actor indicating that the album was not created successfully, along with a possible explanation why there was an error. 3. The actor is redirected to the previous page.
Other Remarks	-

Table 4.2-13: Create Album Use Case

4.2.13 ASSIGN MODERATOR ROLE

Use Case Name	Assign Moderator Role
Use Case Code	UC_604_MODROLE
Goal	Turn a registered user to moderator for a specific action.
Brief Description	Administrators may be asked by registered users or moderators to turn a specific registered user to moderator for specific reasons. The administrator should ask first the moderator's allowance in order to fulfil this task.
Primary Actors	Administrator, Moderator
Secondary Actors	Authenticated users
Importance	Medium
Preconditions	The actor has to be logged in the Elder-Spaces system
Main Flow	1. A registered user wants to become moderator for a specific action. 2. They send a message to the administrator and/or the action's moderator to become themselves moderators as well. 3. The administrator receives this query and sends a message to the action's original moderator asking for permission to do so. 4. When the original moderator of the action logs in, they see a pending

	query from the administrator and they either can accept or reject it, by choosing the corresponding 'Accept' and 'Reject' buttons. 5. If they accept, then a message reaches the administrator's home page and they are able to assign to the register user this new role. The next time this user logs in, this fact will be indicated in their home page. 6. If they reject, then the administrator informs the registered user that their query has been rejected by the original moderator.
Post Conditions	User has been assigned to new role
Alternative Flows	1. The administrator sends a message to the registered user but the latter does not receive it. 2. If this happens after three attempts within an hour, the system informs the administrator and they re-send the message.
Other Remarks	-

Table 4.2-14: Assign Moderator Role Use Case

4.2.14 VIEW

Use Case Name	View Content
Use Case Code	UC_005_VIEW
Goal	The user views content in the platform
Brief Description	The user views content of their preference from an existing list (event, activity, group, etc.), and they are able either to comment on or edit it.
Primary Actors	Authenticated user
Secondary Actors	
Importance	High
Preconditions	Existing content in the platform. The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The user locates the content type they prefer to view 2. The user clicks on the 'View' button 3. A page opens introducing to the user the characteristic fields of the specific content type 4. The user is able to navigate through the characteristics of the chosen type.
Post Conditions	
Alternative Flows	1. There is no content to be shown. This is valid only when the platform is first created and no content has been created yet. On that case, a page appears to the user indicating the fact, giving them two

	options; one to press the 'OK' button and return on the home page and a second one to press the 'Create' button, which leads them to create type of contents.
Other Remarks	This is a rather generic use case, which is analysed in more specific modules (events, activities, groups).

Table 4.2-15: View Use Case

4.2.15 VIEW EVENT

Use Case Name	View Event
Use Case Code	UC_105_EVVIEW
Goal	The user views an event from the platform
Brief Description	The user views an event of their preference, and they are able to check on some of its characteristics or even edit them.
Primary Actors	Authenticated user
Secondary Actors	
Importance	High
Preconditions	Existing event in the platform. The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The user locates the event they want to check, they choose it and press the 'View Event' button 2. A page appears indicating all the specific characteristics of the event. 3. If the user is the owner of the event (has created the event), then a button 'Edit' appears in the page. Otherwise, only the 'OK' button appears, which if pressed leads the user to the platform's home page.
Post Conditions	
Alternative Flows	1. The user presses the 'View Event' button and no characteristic details of the event appear, but only a technical error notification page. The user may click on the 'Home Page' button to return to the home page or on the 'Retry' button, so as to try again to view the event.
Other Remarks	

Table 4.2-16: View Event Use Case

4.2.16 VIEW INTERGENERATIONAL ACTIVITY

Use Case Name	View Intergenerational Activity

Use Case Code	UC_115_INTERACTVIEW
Goal	The user views an intergenerational activity from the platform
Brief Description	The user views an intergenerational activity of their preference, and they are able to check on some of its characteristics or even edit them.
Primary Actors	Authenticated user
Secondary Actors	
Importance	High
Preconditions	Existing intergenerational activity in the platform. The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The user locates the intergenerational activity they want to check, they choose it and press the 'View Intergenerational activity' button 2. A page appears indicating all the specific characteristics of the intergenerational activity. 3. If the user is the owner of the intergenerational activity (has created the intergenerational activity), then a button 'Edit' appears in the page. Otherwise, only the 'OK' button appears, which if pressed leads the user to the platform's home page.
Post Conditions	
Alternative Flows	1. The user presses the 'View Intergenerational Activity' button and no characteristic details of the intergenerational activity appear, but only a technical error notification page. The user may click on the 'Home Page' button to return to the home page or on the 'Retry' button, so as to try again to view the event.
Other Remarks	

Table 4.2-17: View Intergenerational Activity Use Case

4.2.17 VIEW GROUP

Use Case Name	View Group
Use Case Code	UC_205_GRVIEW
Goal	The user views a group in the platform
Brief Description	The user views a group of their preference, and they are able to check on some of its characteristics or even edit them.
Primary Actors	Authenticated user
Secondary Actors	

Importance	High
Preconditions	Existing group in the platform. The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The user locates the group they want to view and presses on the 'View Group' button 2. A page opens introducing to the user a series of fields which describe the selected group 3. If the user is the owner of the group (has created the group), then a button 'Edit' appears in the page. Otherwise, only the 'OK' button appears, which if pressed leads the user to the platform's home page.
Post Conditions	New group available in the platform.
Alternative Flows	1. The user presses the 'View Group' button and no characteristic details of the group appear, but only a technical error notification page. The user may click on the 'Home Page' button to return to the home page or on the 'Retry' button, so as to try again to view the group.
Other Remarks	

Table 4.2-18: View Group Use Case

4.2.18 VIEW TRAVEL MEMORY

Use Case Name	View Travel Memory
Use Case Code	UC_305_TRAVELMEMVIEW
Goal	Authenticated users can preview travel memory instances.
Brief Description	The actor wants to view a travel memory that was previously created in the Elder-Spaces system.
Primary Actors	Registered users
Secondary Actors	
Importance	High
Preconditions	The actor must have at least one travel memory in the system
Main Flow	1. The actor wishes to preview an existing travel memory 2. The actor logs in the Elder-Spaces system 3. The actor enters the personalized page and selects the travel memory

	region
	4. The actor selects the thumbnail of the specific travel memory that they want to view
	5. The system redirects the actor to the specific page of the travel memory that was selected and displays the country
Post Conditions	The actor can preview the contents of the travel memory
Alternative Flows	1. The actor selects the thumbnail of the travel memory that they want to view
	2. The system encounters an error and the travel memory does not open. A message is displayed to the actor indicating that the travel memory is not currently available.
	3. The actor is redirected to the central page of the travel memory.
Other Remarks	-

Table 4.2-19: View Travel Memory Use Case

4.2.19 VIEW ALBUM

Use Case Name	View Album
Use Case Code	UC_405_ALBUMVIEW
Goal	Authenticated users can preview albums containing photographs or even videos.
Brief Description	The actor wants to view an album that was previously created in the Elder-Spaces system.
Primary Actors	Registered users
Secondary Actors	
Importance	High
Preconditions	The actor must have at least one album in the system
Main Flow	1. The actor wishes to preview an existing album
	2. The actor logs in the Elder-Spaces system
	3. The actor selects the thumbnail of the specific album that wants to be viewed
	4. The system redirects the actor to the specific page of the album that

	was selected and displays the contents
Post Conditions	The actor can preview the media files of the album
Alternative Flows	1. The actor selects the thumbnail of the specific album that wants to be viewed 2. The system encounters an error and the album does not open. A message is displayed to the actor indicating that the album is not currently available. 3. The actor is redirected to the central page of the albums.
Other Remarks	-

Table 4.2-20: View Album Use Case

4.2.20 EDIT

Use Case Name	Edit Content
Use Case Code	UC_006_EDIT
Goal	The user edits content in the platform
Brief Description	The user edits content of their preference from an existing list (event, activity, group), and depending on their rights they may even delete specific content.
Primary Actors	Authenticated user, Moderator or Administrator
Secondary Actors	
Importance	High
Preconditions	1. Existing content in the platform, 2. The actor has to be logged in the Elder-Spaces system, 3. The user should be administrator or moderator (the creator of the specific content) in order to edit the specific content.
Main Flow	1. The user locates the field type they prefer to edit 2. The user clicks on the 'Edit' button 3. A page opens introducing to the user a series of editable fields which describe the selected content type 4. The user edits the preferred fields and clicks on the 'Edit' button, or presses on the 'Delete' button to delete the record of the specific content type. 5. A confirmation message appears asking from the user to confirm ('OK' button) or discard ('Cancel' button) the conducted changes,

	for both of the alternatives of step 4. 6. If the 'OK' button is pressed, then a page displays that all modifications have been successfully implemented. 7. The user may choose to go back to the home page by clicking on the button 'Home Page' or return to the specific content type by clicking on 'OK' button. 8. If the 'Cancel' button is pressed, the user is returned to the previous page where they can locate content.
Post Conditions	Edited content in the platform.
Alternative Flows	1. The user deletes but does not re-fill in any of the mandatory fields and presses the 'Edit' button. An alert window appears indicating to fill in all mandatory fields. 2. The user chooses to edit specific content, which after the editing appears to have the same type-name with already existing in the platform. After pressing the 'Edit' button, an alert window appears indicating to the user that this content already exists. After pressing the 'OK' button, the user is returned to the creation page where they are prompted to change the name of the content and try again, or confirm the fact that they indeed want to create identical content. 3. A registered user tries to edit specific content created by another user. As not being the moderator of that content, they get an alert message when they press on the 'Edit' button indicating that they are not privileged to conduct such an action and are prompted to press the 'OK' button, which returns them in the platform's home page.
Other Remarks	This is a rather generic use case, which is analyzed in more specific modules (events, activities, groups).

Table 4.2-21: Edit Use Case

4.2.21 EDIT EVENT

Use Case Name	Edit Event
Use Case Code	UC_106_EVEDIT
Goal	The user edits an event in the platform
Brief Description	The user edits an event of their preference from an existing list of events. Depending on their rights they may even delete the event.
Primary Actors	Authenticated user, Moderator or Administrator
Secondary Actors	
Importance	High
Preconditions	1. Existing event in the platform, 2. The actor has to be logged in the Elder-Spaces system,

	3. The user should be administrator or moderator (the creator of the specific content) in order to edit the selected event.
Main Flow	1. The user locates the event they prefer to edit 2. The user clicks on the 'Edit' button 3. A page opens introducing to the user a series of editable fields which describe the selected event 4. The user edits the preferred fields and clicks on the 'Edit' button, or presses on the 'Delete' button to delete the selected event. 5. A confirmation message appears asking from the user to confirm ('OK' button) or discard ('Cancel' button) the conducted changes, for both of the alternatives of step 4. 6. If the 'OK' button is pressed, then a page displays that all modifications have been successfully implemented. 7. The user may choose to go back to the home page by clicking on the button 'Home Page' or return to the specific content type by clicking on 'OK' button. 8. If the 'Cancel' button is pressed, the user is returned to the previous page where they can locate content.
Post Conditions	Edited event in the platform.
Alternative Flows	1. The user deletes but does not re-fill in any of the mandatory fields and presses the 'Edit' button. An alert window appears indicating to fill in all mandatory fields. 2. The user chooses to edit an event, which after the editing appears to have the same type-name with already existing in the platform. After pressing the 'Edit' button, an alert window appears indicating to the user that this content already exists. After pressing the 'OK' button, the user is returned to the creation page where they are prompted to change the name of the content and try again, or confirm the fact that they indeed want to create identical content.
Other Remarks	

Table 4.2-22: Edit Event Use Case

4.2.22 EDIT INTERGENERATIONAL ACTIVITY

Use Case Name	Edit Intergenerational Activity
Use Case Code	UC_116_INTEREVEDIT
Goal	The user edits an intergenerational activity in the platform
Brief Description	The user edits an intergenerational activity of their preference from an existing list of intergenerational activity. Depending on their rights they may even delete the intergenerational activity.
Primary Actors	Authenticated user, Moderator or Administrator

Secondary Actors	
Importance	High
Preconditions	1. Existing intergenerational activity in the platform, 2. The actor has to be logged in the Elder-Spaces system, 3. The user should be administrator or moderator (the creator of the specific content) in order to edit the selected intergenerational activity.
Main Flow	1. The user locates the intergenerational activity they prefer to edit 2. The user clicks on the 'Edit' button 3. A page opens introducing a series of editable fields to the user which describe the selected intergenerational activity 4. The user edits the preferred fields and clicks on the 'Edit' button, or presses on the 'Delete' button to delete the selected intergenerational activity. 5. A confirmation message appears asking from the user to confirm ('OK' button) or discard ('Cancel' button) the conducted changes, for both of the alternatives of step 4. 6. If the 'OK' button is pressed, then a page displays that all modifications have been successfully implemented. 7. The user may choose to go back to the home page by clicking on the button 'Home Page' or return to the specific content type by clicking on 'OK' button. 8. If the 'Cancel' button is pressed, the user is returned to the previous page where they can locate a intergenerational event.
Post Conditions	Edited intergeneration activity in the platform.
Alternative Flows	1. The user deletes but does not re-fill in any of the mandatory fields and presses the 'Edit' button. An alert window appears indicating to fill in all mandatory fields. 2. The user chooses to edit an intergenerational activity, which after the editing appears to have the same type-name with already existing in the platform. After pressing the 'Edit' button, an alert window appears indicating to the user that this content already exists. After pressing the 'OK' button, the user is returned to the creation page where they are prompted to change the name of the content and try again, or confirm the fact that they indeed want to create identical content.
Other Remarks	

Table 4.2-23: Edit Intergenerational Activity Use Case

4.2.23 EDIT GROUP

Use Case Name	Edit Group
Use Case Code	UC_206_GREDIT

Goal	The user edits a group in the platform
Brief Description	The user edits a group of their preference from an existing list of events. Depending on their rights they may even delete the group.
Primary Actors	Authenticated user, Moderator or Administrator
Secondary Actors	
Importance	High
Preconditions	1. Existing group in the platform, 2. The user should be administrator or moderator (the creator of the specific group) in order to edit the selected group.
Main Flow	1. The user locates the group they prefer to edit 2. The user clicks on the 'Edit' button 3. A page opens introducing to the user a series of editable fields which describe the selected group 4. The user edits the preferred fields and clicks on the 'Edit' button, or presses on the 'Delete' button to delete the selected group. 5. A confirmation message appears asking from the user to confirm ('OK' button) or discard ('Cancel' button) the conducted changes, for both of the alternatives of step 4. 6. If the 'OK' button is pressed, then a page displays that all modifications have been successfully implemented. 7. The user may choose to go back to the home page by clicking on the button 'Home Page' or return to the specific content type by clicking on 'OK' button. 8. If the 'Cancel' button is pressed, the user is returned to the previous page where they can locate content.
Post Conditions	Edited group in the platform.
Alternative Flows	1. The user deletes but does not re-fill in any of the mandatory fields and presses the 'Edit' button. An alert window appears indicating to fill in all mandatory fields. 2. The user chooses to edit a group, which after the editing appears to have the same type-name with already existing in the platform. After pressing the 'Edit' button, an alert window appears indicating to the user that this content already exists. After pressing the 'OK' button, the user is returned to the creation page where they are prompted to change the name of the content and try again, or confirm the fact that they indeed want to create identical content.
Other Remarks	

Table 4.2-24: Edit Group Use Case

4.2.24 EDIT OWN TRAVEL MEMORY

Use Case Name	Edit own Travel Memory
Use Case Code	UC_306_TRAVELMEMEDIT
Goal	Authenticated users can edit travel memories albums which were created by themselves
Brief Description	The actor wants to edit an album of travel memories that was previously created in the Elder-Spaces system. He selects the specific fields of the memory album and the material that is going to be edited
Primary Actors	Registered users
Secondary Actors	
Importance	High
Preconditions	The actor must have at least one travel memory in the system to edit
Main Flow	1. The actor wishes to edit an existing travel memory 2. The actor logs in the Elder-Spaces system 3. The actor selects which travel memory they want to edit 4. The system presents the details of the travel memory instance 5. The actor selects the 'Edit Travel Memory' button 6. The system opens the specific details 7. The actor selects the 'Edit' button to edit the travel memory's data 8. The actor selects the corresponding item that is going to be edited 9. The actor chooses the 'End' button 10. The system displays a successful message that demonstrates that the travel memory is successfully edited and redirects the actor to the indexes of the album.
Post Conditions	The travel memory's data are edited
Alternative Flows	1. The actor chooses the 'End' button 2. The system encounters an error and the travel memory's details are not edited. A message is displayed to the actor indicating that the travel memory instance wasn't edited successfully, along with a possible explanation why there was an error. 3. The actor is redirected to the travel memory details.
Other Remarks	-

Table 4.2-25: Edit own Travel Memory Use Case

4.2.25 EDIT OWN ALBUM

Use Case Name	Edit own Album
Use Case Code	UC_406_ALBUMEDIT
Goal	Authenticated users can edit albums which were created by themselves
Brief Description	The actor wants to edit an album of travel memories that was previously created in the Elder-Spaces system. They select the specific fields of the album and the material that is going to be edited
Primary Actors	Registered users
Secondary Actors	
Importance	High
Preconditions	The actor must have at least one album in the system to edit
Main Flow	1. The actor wishes to edit an existing album 2. The actor logs in the Elder-Spaces system 3. The actor selects which album he wants to edit 4. The system presents the content list of the album contents 5. The actor selects the 'Edit Album' button 6. The system opens the content list 7. The actor selects the 'Edit' button to edit the album's data 8. The actor selects the corresponding item that is going to be edited 9. The actor chooses the 'End' button 10. The system displays a successful message that demonstrates that the album is successfully edited and redirects the actor to the indexes of the album.
Post Conditions	The album's data are edited
Alternative Flows	1. The actor can remove an image 2. The actor can edit or add a capture to an image 3. The actor can add the location where the image was taken 1. The actor chooses the 'End' button 2. The system encounters an error and the album's item is not edited. A message is displayed to the actor indicating that the album wasn't edited successfully, along with a possible explanation why there was an error.

	3. The actor is redirected to the album's contents.
Other Remarks	-

<div align="center">Table 4.2-26: Edit own Album Use Case</div>

4.2.26 SEND

Use Case Name	Send Content
Use Case Code	UC_007_SEND
Goal	The user sends content in the platform to another user
Brief Description	The user sends content of their preference from an existing list (invitation, message) to other registered user(s).
Primary Actors	Authenticated user
Secondary Actors	Administrator, Moderator
Importance	High
Preconditions	At least two registered users exist in the platform. The actor has to be logged in the Elder-Spaces system,
Main Flow	1. The user locates and presses the 'Send' button in the home page 2. A page displays a list of options to send (invitation, message, etc) 3. The user chooses the send option and depending on the choice a list pops up giving them options for sending content 4. One generic option is to locate the user(s) they want to send content to, by pressing on the 'Find User(s)' button. 5. They choose the number of users they want to include, they fill in the descriptive fields of the send/content and they press the 'Send' button. 6. A confirmation message appears informing the user that the specified content has been successfully sent to the selected users. 7. The user presses the 'OK' button and they are returned to the home page.
Post Conditions	The selected user(s) has(have) received specific content from the user (sender). When they open their home page, a corresponding sign indicates the fact that they have received content from a specific user. They are able to track it by clicking on the clickable content, and examine thoroughly what they have received.
Alternative Flows	1. There are no other registered users and the first registered user tries to locate others. An alert window appears indicating the fact that no other registered user exists in the platform, and the user is prompted to click on the 'OK' button and return on their home page. This is valid only when the administrator is registered in the platform, immediately after its creation.

	2. The user clicks on the 'Send' button of step 5 but an error page appears. The user has two options; one is to press the 'Retry' button which will try to re-submit the form, and the other one to press the 'Cancel' button, which terminates the process and returns them to their home page.
Other Remarks	This is a rather generic use case, which is analysed in more specific modules (invitation, message).

Table 4.2-27: Send Use Case

4.2.27　SEND EVENT INVITATION

Use Case Name	Send Event Invitation
Use Case Code	UC_107_EVINVSEND
Goal	The user sends invitation for an event to another user of the platform
Brief Description	The user sends invitation for specific event(s) to a number of users of their preference.
Primary Actors	Authenticated user
Secondary Actors	Administrator, Moderator
Importance	High
Preconditions	At least two registered users exist in the platform. The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The user locates and presses the 'Send' button in the home page 2. From the displayed list the user chooses to send an invitation for an event 3. A page appears with fields to be filled in regarding the invitation. 4. The user is prompted to select the event the invitation is concerned (from a drop down list), the user(s) they want to send it to (from a drop down list) and to fill in text that will be displayed on the recipients' home page. 5. The user clicks on the 'OK' button and the invitation to join the specific event is forwarded to all selected users throughout the platform. 6. A successful page indicates the fact and the user is prompted to click on the 'OK' button and return to their home page.
Post Conditions	The selected user(s) has (have) received an invitation to join and follow a specific event. When they open their home page, a corresponding sign indicates that fact. They are in position to click on the clickable invitation and either accept or ignore the invitation, pressing correspondingly on the 'Accept' or 'Ignore' buttons.
Alternative Flows	1. There are no other registered users and the first registered user tries to locate others. An alert window appears indicating the fact that no other registered user exists in the platform, and the user is prompted

	to click on the 'OK' button and return on their home page. This is valid only when the administrator is registered in the platform, immediately after its creation. 2. There are no events registered in the platform. The user then is prompted to return either on the home page or on the create event page by clicking the buttons 'Home Page' or 'Create Event' correspondingly.
Other Remarks	

Table 4.2-28: Send Event Invitation Use Case

4.2.28 SEND INTERGENERATIONAL ACTIVITY INVITATION

Use Case Name	Send Intergenerational Activity Invitation
Use Case Code	UC_117_INTERACTINVSEND
Goal	The user sends invitation for an Intergenerational Activity to another user of the platform
Brief Description	The user sends invitation for specific Intergenerational Activities to a number of users of their preference.
Primary Actors	Authenticated user
Secondary Actors	Administrator, Moderator
Importance	High
Preconditions	At least two registered users exist in the platform. The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The user locates and presses the 'Send' button in the home page 2. From the displayed list the user chooses to send an invitation for an Intergenerational Activity 3. A page appears with fields to be filled in regarding the invitation. 4. The user is prompted to select the Intergenerational Activity the invitation is concerned (from a drop down list), the user(s) they want to send it to (from a drop down list) and to fill in text that will be displayed on the recipients' home page. 5. The user clicks on the 'OK' button and the invitation to join the specific Intergenerational Activity is forwarded to all selected users throughout the platform. 6. A successful page indicates the fact and the user is prompted to click on the 'OK' button and return to their home page.
Post Conditions	The selected user(s) has (have) received an invitation to join and follow a specific Intergenerational Activity. When they open their home page, a corresponding sign indicates that fact. They are in position to click on the clickable invitation and either accept or ignore the invitation, pressing correspondingly on the 'Accept' or 'Ignore' buttons.
Alternative Flows	1. There are no other registered users and the first registered user tries to locate others. An alert window appears indicating the fact that no

	other registered user exists in the platform, and the user is prompted to click on the 'OK' button and return on their home page. This is valid only when the administrator is registered in the platform, immediately after its creation. 2. There are no Intergenerational Activities registered in the platform. The user then is prompted to return either on the home page or on the create Intergenerational Activity page by clicking the buttons 'Home Page' or 'Create Intergenerational Activity' correspondingly.
Other Remarks	

Table 4.2-29: Send Intergenerational Activity Invitation Use Case

4.2.29 SEND GROUP INVITATION

Use Case Name	Send Group Invitation
Use Case Code	UC_207_GRINVSEND
Goal	The user sends invitation for a group to another user of the platform
Brief Description	The user sends invitation for specific group(s) to a number of users of their preference to join as well.
Primary Actors	Authenticated user
Secondary Actors	Administrator, Moderator
Importance	High
Preconditions	1. At least two registered users exist in the platform, 2. The actors have to be logged in the Elder-Spaces system, 3. User already member of the specific group
Main Flow	1. The user locates and presses the 'Send' button in the home page 2. From the displayed list the user chooses to send an invitation for a group 3. A page appears with fields to be filled in regarding the invitation. 4. The user is prompted to select the group the invitation is concerned (from a drop down list), the user(s) they want to send it to (from a drop down list) and to fill in text that will be displayed on the recipients' home page. 5. The user clicks on the 'OK' button and the invitation to join the specific group is forwarded to all selected users throughout the platform. 6. A successful page indicates the fact to the user and they are prompted to click on the 'OK' button and return to their home page.
Post Conditions	The selected user(s) has (have) received an invitation to join and follow a specific group. When they open their home page, a corresponding sign indicates that fact. They are in position to click on the clickable invitation and either accept or ignore the invitation, pressing

	correspondingly on the 'Accept' or 'Ignore' buttons.
Alternative Flows	1. There are no other registered users and the first registered user tries to locate others. An alert window appears indicating the fact that no other registered user exists in the platform, and the user is prompted to click on the 'OK' button and return on their home page. This is valid only when the administrator is registered in the platform, immediately after its creation. 2. There are no groups registered in the platform. The user then is prompted to return either on the home page or on the create group page by clicking the buttons 'Home Page' or 'Create Group' correspondingly. 3. The owner of the group has the ability to ban a member of the group, by selecting "ban member".
Other Remarks	

Table 4.2-30: Send Group Invitation Use Case

4.2.30 SEND FRIEND INVITATION

Use Case Name	Send Friend Invitation
Use Case Code	UC_307_FRINVSEND
Goal	The user sends a friend invitation to another user of the platform
Brief Description	The user sends invitation to specific user to create a friendship.
Primary Actors	Authenticated user
Secondary Actors	Administrator, Moderator
Importance	High
Preconditions	At least two registered users exist in the platform, The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The user locates and presses the 'Send' button in the home page 2. From the displayed list the user chooses to send an invitation to a friend 3. A page appears with fields to be filled in regarding the invitation. 4. The user clicks on the 'OK' button and the friendship invitation is forwarded to the platform user throughout the platform. 5. A successful page indicates the fact to the user and they are prompted to click on the 'OK' button and return to their home page.
Post Conditions	The selected user has received a friendship invitation to join and follow a specific activity. When they open their home page, a corresponding sign indicates that fact. They are in position to click on the clickable

	invitation and either accept or ignore the invitation, pressing correspondingly on the 'Accept' or 'Ignore' buttons.
Alternative Flows	1. The user may choose the 'Choose Group of Friends' link. 2. A page appears showing the assignment of the user's friends in groups of their choice. 3. In case no groups exist, they are prompted to create a friends group by pressing the 'Create friends group' button. 4. Then, the user is prompted to type in the name of the friends group, choose as many users as they want and click 'OK'. 5. The friends group is created and the invitation to the whole group. 6. After that, the invitation has been successfully sent and this is indicated by a confirmation page
Other Remarks	

Table 4.2-31: Send Friend Invitation Use Case

4.2.31 SEND MESSAGE

Use Case Name	Send Message
Use Case Code	UC_407_MSGSEND
Goal	Send a Message to an Elder-Spaces user
Brief Description	Actor wants to send a message to another user in the system. They select the recipient (one or more) and compose a short message
Primary Actors	Authenticated User
Secondary Actors	
Importance	High
Preconditions	The actor must have at least one friend in the system, The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The actor wishes to send a message to other users 2. The actor selects the "Send Message" functionality from the profile menu 3. The system presents a message dialog and prompts the actor to select recipients from the actor's friend list. 4. The actor selects one or more recipients 5. The system prompts the actor to enter a message 6. The actor writes a short message

	7. The actor presses the "Send Message" button to send the message.
	8. The system informs the actor that the message was sent and redirects them to their home page
Post Conditions	
Alternative Flows	1. The actor presses the "send message" button to send the message.
	2. The system encounters an error and the message is not sent. A message is displayed to the actor indicating that the message was not sent, along with a possible explanation why there was an error.
	3. The actor is redirected to their home page
Other Remarks	-

Table 4.2-32: Send Message Use Case

4.2.32 PUT MESSAGE TO WALL

Use Case Name	Put Message to Wall
Use Case Code	UC_507_MSGPUTWALL
Goal	Write/put a message to the wall of a user, group, event or intergenerational activity
Brief Description	Actor wants to write a message to the wall of one of the entities mentioned above in the system. The actor navigates to the entity, composes a short message on the wall and then posts the message.
Primary Actors	Authenticated User
Secondary Actors	
Importance	High
Preconditions	The actor must have at least be connected to an entity in the system, The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The actor wishes to put a message to the wall of an entity
	2. The actor navigates to the entity
	3. The system presents entities page
	4. The actor writes a short message in the corresponding dialog box of the wall
	5. The actor presses the "Post" button to post the message.
	6. The system refreshes the wall demonstrating the newly inserted

	message
Post Conditions	
Alternative Flows	1. The actor presses the "Post" button to send the message. 2. The system encounters an error and the message is not sent. A message is displayed to the actor indicating that the message was not sent, along with a possible explanation why there was an error. 3. The actor is redirected to their home page
Other Remarks	-

Table 4.2-33: Put Message to Wall Use Case

4.2.33 DELETE MESSAGE FROM WALL

Use Case Name	Delete Message from Wall
Use Case Code	UC_607_ MSGDELWALL
Goal	Delete a message from a wall
Brief Description	Actor wants to delete a message previously posted from the wall of an entity in the system. The actor selects the recipient, chooses the short message previously posted on the wall and then deletes the message.
Primary Actors	Authenticated User
Secondary Actors	
Importance	High
Preconditions	The actor must have at least one friend in the system, The actor has to be logged in the Elder-Spaces system. The actor has previously posted a message on a wall Delete should be available only to the owner of the message and the owner of the commented entity
Main Flow	1. The actor wants to delete a message previously posted to a wall, 2. The actor navigates to the entity 3. The system demonstrates the wall showing all posted messages 4. The actor can delete only the messages that they are the owner or

	that are on the wall of an entity, which owner the actor is
	5. The actor identifies the message to be deleted
	6. The actor presses the 'Delete' button to delete the message
	7. The system refreshes the wall deleting the specific message
Post Conditions	
Alternative Flows	1. The actor presses the "Post" button to delete the message. 2. The system encounters an error and the message is not deleted. A message is displayed to the actor indicating that the message was not deleted, along with a possible explanation why there was an error. 3. The actor is redirected to their home page
Other Remarks	-

<div align="center">Table 4.2-34: Delete Message from Wall Use Case</div>

4.2.34 RESPOND TO INVITATION

Use Case Name	Respond to Invitation
Use Case Code	UC_008_INVRESPOND
Goal	The user accepts an invitation for a specific action from another user of the platform
Brief Description	The user accepts invitation for specific action (event, activity, group) from another registered user and is now able to join that action.
Primary Actors	Authenticated user
Secondary Actors	
Importance	High
Preconditions	At least two registered users exist in the platform, The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The user opens their home page and locates the pending invitation 2. They may choose from an existing list of invitations by clicking on the clickable name of the invitation. 3. A page appears with two options regarding the pending invitation; the user may either accept or ignore the invitation by clicking on the 'Accept' or on the 'Ignore' button. 4. If the user chooses the 'Accept' button, a page pops up informing the user that they successfully joined that specific action. Then, they are able to press on the 'OK' button and return on their home page. 5. If the user chooses the 'Ignore' button, a page pops up informing the user that they are to discard the invitation and leave it pending on

	their personal profile page. Then, they are prompted to press the 'OK' button and return on their personal home page.
Post Conditions	The user has joined either or a group or an event or an activity, or a friend.
Alternative Flows	The user accepts the invitation but an error page appears. The user is prompted either to retry or to abort the acceptance, clicking correspondingly the buttons 'Retry' and 'Cancel'.
Other Remarks	

Table 4.2-35: Respond to Invitation Use Case

4.2.35 REMOVE SELF FROM GROUP

Use Case Name	Remove self from Group
Use Case Code	UC_009_GRREMOVES
Goal	When a user participates into a group, they must be given the opportunity to leave the group
Brief Description	A Registered user can leave the group where they participate
Primary Actors	Registered users
Secondary Actors	
Importance	High
Preconditions	The actor must participate at the group from which they want to leave
Main Flow	1. The actor wishes to remove themselves from the group 2. The actor logs in the Elder-Spaces system and browses to the page of the specific group 3. The actor selects the 'Leave this Group' button from the corresponding menu 4. The system shows an alert that the actor is going to leave the group. An informative text is also shown describing the way that the user can become again a member of the group 5. The actor selects the button 'Leave from the Group' 6. The system displays a successful message that the actor leaves the specific group and redirects the actor to the previous page.

Post Conditions	The actor is not a member of the specific group
Alternative Flows	1. The actor selects the button 'Leave from the Group' 2. The actor can press the 'Cancel' button to cancel leaving the group 1. The actor selects the button 'Leave from the Group' 2. The system encounters an error and the actor cannot leave for the group. A message is displayed to the actor indicating that the withdrawal from the group wasn't completed successfully, along with a possible explanation why there was an error. 3. The actor is redirected to the previous page.
Other Remarks	-

Table 4.2-36: Remove self from Group Use Case

4.2.36 REMOVE SELF FROM EVENT

Use Case Name	Remove self from Event
Use Case Code	UC_109_EVEREMOVES
Goal	To remove a registered user from an Event taking place
Brief Description	An Authenticated user can remove themselves of the aggregation of the users
Primary Actors	Authenticated users
Secondary Actors	
Importance	High
Preconditions	The actor must be a participator in an Event, The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The actor wishes to be removed from an Event 2. The actor browses to the 'Events' section 3. The system presents a page with the Events list 4. The actor browses to the specific event that wants to be removed from 5. The system presents the selected Event page 6. The actor selects the 'Leave from Event' button from the top menu

	7. The system shows an alert that the actor is going to be removed from the specific event. 8. The actor confirms the leave from the event by selecting the button 'Remove from the Event' 9. The system displays a successful message that the actor has left the specific event and redirects the actor to the previous page.
Post Conditions	The actor will not attend the specific event
Alternative Flows	1. The system shows an alert that the actor is going to be removed from the specific event. 2. The actor selects the 'Cancel' button to cancel leaving the event 1. The actor confirms the leave from the event by selecting the button 'Remove from the Event' 2. The system encounters an error and the actor cannot leave for the Event. A message is displayed to the actor indicating that the withdrawal from the Event wasn't completed successfully, along with a possible explanation why there was an error. 3. The actor is redirected to the previous page.
Other Remarks	-

Table 4.2-37: Remove self from Event Use Case

4.2.37 REMOVE SELF FROM INTERGENERATION ACTIVITY

Use Case Name	Remove self from Intergeneration activity
Use Case Code	UC_109_INTEREMOVES
Goal	To remove a registered user from an Intergeneration activity taking place
Brief Description	An Authenticated user can remove themselves of the aggregation of the users
Primary Actors	Authenticated users
Secondary Actors	
Importance	High
Preconditions	The actor must be a participator in an Intergeneration activity, The actor has to be logged in the Elder-Spaces system.

Main Flow	1. The actor wishes to be removed from an Intergeneration activity 2. The actor browses to the 'Intergeneration activity' section 3. The system presents a page with the Intergeneration activity list 4. The actor browses to the specific Intergeneration activity that wants to be removed from 5. The system presents the selected Intergeneration activity page 6. The actor selects the 'Leave from Intergeneration activity' button from the top menu 7. The system shows an alert that the actor is going to be removed from the specific Intergeneration activity. 8. The actor confirms the leave from the Intergeneration activity by selecting the button 'Remove from the Intergeneration activity' 9. The system displays a successful message that the actor has left the specific Intergeneration activity and redirects the actor to the previous page.
Post Conditions	The actor will not attend the specific Intergeneration activity
Alternative Flows	6. The system shows an alert that the actor is going to be removed from the specific Intergeneration activity. 7. The actor selects the 'Cancel' button to cancel leaving the Intergeneration activity 8. The actor confirms the leave from the Intergeneration activity by selecting the button 'Remove from the Intergeneration activity' 9. The system encounters an error and the actor cannot leave for the Intergeneration activity. A message is displayed to the actor indicating that the withdrawal from the Intergeneration activity wasn't completed successfully, along with a possible explanation why there was an error. 10. The actor is redirected to the previous page.
Other Remarks	

Table 4.2-38: Remove self from Integeneration activity Use Case

4.2.38 REMOVE FRIEND

Use Case Name	Remove Friend
Use Case Code	UC_309_FRREMOVES
Goal	A Registered user may want to remove one of his Elder-Spaces friends

Brief Description	A Registered user can remove one of his friends of the aggregation of the users
Primary Actors	Registered users
Secondary Actors	
Importance	High
Preconditions	The actor must have at least one friend in his personalized profile of Elder-Spaces
Main Flow	1. The actor wishes to remove a friend 2. The actor logs in the Elder-Spaces system 3. The actor is redirected to the 'Friends' section 4. The system presents the friends list with all connected friends 5. The actor browses to the personalized page of the friend that they want to be deleted 6. The system presents the personalized page of the friend that was previously selected 7. The actor selects the 'Friend' button from the top menu 8. The system shows a menu containing the 'Remove Friend' choice 9. The system shows an alert that the specific friend is going to be removed from the user's profile. An informative text is also shown describing the way that the user can become again a member of the group 10. The actor selects the button 'Remove from Friends' 11. The system displays a successful message that the actor removed the friend and redirects the actor to the previous page.
Post Conditions	The actor is no longer friend with the specific person
Alternative Flows	1. The actor selects the button 'Remove from Friends' 2. The actor can press the 'Cancel' button to cancel removing the friend 3. The actor selects the 'Cancel' button and the friend is not removed 1. The actor selects the button 'Remove from Friends' 2. The system encounters an error and the friend removal is not completed. A message is displayed to the actor indicating that the withdrawal from the friend wasn't completed successfully, along with a possible explanation why there was an error.

	3. The actor is redirected to the previous page.
Other Remarks	-

Table 4.2-39: Remove Friend Use Case

4.2.39 UPLOAD MEDIA

Use Case Name	Upload media
Use Case Code	UC_010_UPLOAD
Goal	Upload media files in the Elder-Spaces system
Brief Description	Actor wants to upload media files in the Elder-Spaces system. He selects the corresponding place and uploads the files.
Primary Actors	Authenticated users
Secondary Actors	
Importance	Medium
Preconditions	The actor must be logged in the Elder-Spaces system
Main Flow	1. The actor wishes to upload media files 2. The actor enters their personal wall 3. The actor selects the 'Upload media' button 4. The system presents a dialog box to select the file to be uploaded 5. The actor presses the 'Upload' button to upload the file. 6. The system informs the actor that the file was uploaded and redirects him to his home page
Post Conditions	A new media file is uploaded on the personalized page of the actor
Alternative Flows	1. The actor presses the 'Upload' button to upload the file. 2. The system encounters an error and the file is not uploaded. A message is displayed to the actor indicating that the upload failed, along with a possible explanation why there was an error. 3. The actor is redirected to their home page
Other Remarks	-

Table 4.2-40: Upload Media Use Case

4.2.40 READ MESSAGE

Use Case Name	Read Message
Use Case Code	UC_011_MESREAD
Goal	Read a Message sent from an Elder-Spaces user
Brief Description	Actor wants to read the message sent from another Elder-Spaces user.
Primary Actors	Authenticated User
Secondary Actors	
Importance	High
Preconditions	The actor must have at least one message, The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The actor wishes to read a new message appearing with the corresponding notification 2. The actor selects the "Messages" functionality from the central menu 3. The system presents the whole message list 4. The actor selects the message that wants to read 5. The system presents the message to the corresponding page
Post Conditions	
Alternative Flows	
Other Remarks	-

Table 4.2-41: Read Message Use Case

4.2.41 REPLY TO MESSAGE

Use Case Name	Reply to Message
Use Case Code	UC_111_MESREPLY
Goal	Reply to a message of an Elder-Spaces user

Brief Description	Actor wants to reply to a message of another user of the system. The actor selects the message and composes a short message in reply.
Primary Actors	Authenticated User
Secondary Actors	
Importance	High
Preconditions	The actor must have at least one message in the system to reply, The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The actor wishes to reply to a message 2. The actor selects the "Messages" functionality from the central profile menu 3. The system presents the whole message list 4. The actor selects the specific message to reply to 5. The system opens the message that is going to be replied to 6. The actor selects the 'Reply' button 7. The system presents a message dialog 8. The system prompts the actor to enter a message 9. The actor writes a short message 10. The actor presses the "Reply message" button to send the reply 11. The system informs the actor that the message was sent and redirects him to his home page
Post Conditions	The reply to the message is sent
Alternative Flows	1. The actor presses the "Reply message" button to send the reply. 2. The system encounters an error and the reply is not sent. A message is displayed to the actor indicating that the reply was not sent, along with a possible explanation why there was an error. 3. The actor is redirected to their home page
Other Remarks	-

Table 4.2-42: Reply to Message Use Case

4.2.42 DELETE TRAVEL MEMORY

Use Case Name	Delete Travel Memory
Use Case Code	UC_311_TRAVELMEMDELETE

Goal	Delete a travel memory instance sent from an Elder-Spaces user
Brief Description	Actor wants to delete a specific travel memory sent from another Elder-Spaces user.
Primary Actors	Authenticated User
Secondary Actors	
Importance	High
Preconditions	The actor must have at least one travel memory, The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The actor wishes to delete an existing travel memory instance 2. The actor selects the "Travel memory" functionality from the central profile menu 3. The system presents the whole travel memory list 4. The actor selects the specific travel memory that wants to delete 5. The system presents the travel memory's corresponding page 6. The actor presses the "Delete travel memory" button to delete the travel memory. 7. The system informs the actor that the travel memory was deleted successfully and redirects him to his home page
Post Conditions	An existing travel memory is deleted
Alternative Flows	1. The actor presses the "Delete travel memory" button to delete the specific instance. 2. The system encounters an error and the travel memory is not deleted. A message is displayed to the actor indicating that the travel memory was not deleted, along with a possible explanation why there was an error. 3. The actor is redirected to their home page
Other Remarks	-

Table 4.2-43: Delete Travel Memory Use Case

4.2.43 DELETE MESSAGE

Use Case Name	Delete Message
Use Case Code	UC_211_MESDELETE

Goal	Delete a Message sent from an Elder-Spaces user
Brief Description	Actor wants to delete a message sent from another Elder-Spaces user.
Primary Actors	Authenticated User
Secondary Actors	
Importance	High
Preconditions	The actor must have at least one message, The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The actor wishes to delete an existing message 2. The actor selects the "Messages" functionality from the central profile menu 3. The system presents the whole message list 4. The actor selects the specific message that wants to delete 5. The system presents the message to the corresponding page 6. The actor presses the "Delete message" button to delete the message. 7. The system informs the actor that the message was deleted successfully and redirects him to his home page
Post Conditions	An existing message is deleted
Alternative Flows	1. The actor presses the "Delete message" button to delete the message. 2. The system encounters an error and the message is not deleted. A message is displayed to the actor indicating that the message was not deleted, along with a possible explanation why there was an error. 3. The actor is redirected to his home page
Other Remarks	-

Table 4.2-44: Delete Message Use Case

4.2.44 VIEW GAME LIST

Use Case Name	View Game List
Use Case Code	UC_021_VIEWGAML
Goal	The users wish to check the list of the available games
Brief Description	All available games are presented through a list

Primary Actors	Authenticated users
Secondary Actors	
Importance	High
Preconditions	
Main Flow	1. Users enter the Elder-Spaces application 2. From the menu ribbon, they select the "Games" menu 3. In a new ribbon all available games are displayed in a list view 4. The user check all games that are offered in order to decide which is going to play
Post Conditions	
Alternative Flows	
Other Remarks	

Table 4.2-45: View Game List Use Case

4.2.45 PLAY GAME

Use Case Name	Play Game
Use Case Code	UC_019_PLAYGAM
Goal	The users wish to play one of games in the table top
Brief Description	Description of the reusable shell for playing games on the table top
Primary Actors	Authenticated users
Secondary Actors	
Importance	High
Preconditions	
Main Flow	1. All available games are demonstrated in a list 2. Users tap on the image of the game of their choice. The navigation bars disappear and the game info is displayed 3. The actor selects the icon for reading the game instructions 4. The instructions appear and are read by users. 5. They then press a button to continue to the game 6. They are prompted to select difficulty level (three options)

	7. They select the level by tapping on the desired icon 8. The game starts. (actual game play depends on the specific implementation) 9. When users end the game, an end game message appear 10. In order to close the game, users press the Home button and they are returned to the main menu
Post Conditions	
Alternative Flows	1. Users may skip the instructions by simply selecting to start the game instead of reading them. 2. Users may wish to leave the game before it is completed. they will use one of the four icons on the corners of the game display to go back to the main menu. 3. After the end of the game, users may want to play again. Instead of selecting the Home button they can tap on the Play Again button and the game will reset to the point of selecting difficulty level.
Other Remarks	

Table 4.2-46: Play Game Use Case

4.2.46 LIFELONG LEARNING

Use Case Name	Lifelong Learning
Use Case Code	UC_021_LIFELEARN
Goal	The actor will be motivated and intrigued through the occupation with new interesting courses.
Brief Description	e-learning applications will be available to the elderly providing the important functionality adjusted to the needs and requirements
Primary Actors	Authenticated users
Secondary Actors	
Importance	High
Preconditions	The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The actor enters the Home page of the Lifelong learning demonstrating a welcome message 2. The actor can select the link to see all available courses 3. The system presents a list of the courses along with a brief description for each one of them 4. The actor can select 'View Course' to see the content of one course

	5. The actor can enrol to the course by pressing the 'Enrol' button
	6. The actor selects the link 'My Courses'
	7. The system shows up all courses in which the user is available
	8. The actor may un – enrol from a course which is currently attending
Post Conditions	
Alternative Flows	4. The actor doesn't want to see a specific course and select the 'Home' tab to return to the Home page
	5. The actor can search for a course at any time using key words.
Other Remarks	-

Table 4.2-47: Lifelong learning Use Case

4.2.47 COMMENT

Use Case Name	Comment
Use Case Code	UC_012_COMMENT
Goal	Authenticated users can comment on their friends' media and wall posts.
Brief Description	The actor wants to comment for example on a picture or other previously uploaded media.
Primary Actors	Authenticated users
Secondary Actors	
Importance	Medium
Preconditions	The actor must have at least one friend in the system to comment on the corresponding activities, The actor has to be logged in the Elder-Spaces system.
Main Flow	1. The actor wishes to comment on a friend's picture
	2. The actor selects the corresponding picture
	3. The actor selects the button 'Comment'
	4. The system presents a dialog box and prompts the actor to fill in the textbox
	5. The actor fills in the desired text and presses Enter
	6. The system records the comment and publishes it correspondingly

Post Conditions	A new comment is created
Alternative Flows	1. The actor fills in the desired text and presses Enter 2. The system encounters an error and the comment is not published. A message is displayed to the actor indicating that the message was not deleted, along with a possible explanation why there was an error. 3. The actor is redirected to their home page 1. The creator of the comment logs in the platform and reaches the specific section of the platform where they have previously commented on. 2. They choose the existing comment and press the 'delete' button which appears next to it. 3. A confirmation message and the disappearance of the comment indicate that the comment has been successfully deleted. 1. The owner of the commented entity logs in the platform and reaches the specific section of the platform. 2. They choose an inappropriate comment and press the 'delete' button which appears next to it. 3. A confirmation message and the disappearance of the comment indicate that the comment has been successfully deleted.
Other Remarks	-

Table 4.2-48: Comment Use Case

4.2.48 DELETE USER

Use Case Name	Delete User
Use Case Code	UC_013_DELUSER
Goal	Administrator deletes a registered user
Brief Description	The administrator receives messages from many authenticated users that a specific user abuses the platform's usage or they get acknowledged that a specific user has passed away. In both cases, the administrator deletes the user's profile and bans for the specific name/email combination to re-sign in.
Primary Actors	Administrator
Secondary Actors	Authenticated users

Importance	Medium
Preconditions	
Main Flow	1. The administrator receives messages from over five authenticated users that a specific user abuses the platform or has passed away 2. They open the profile management home page of the platform and locate the specific user 3. They send a warning message to that user to stop behaving this way, or else they will have to ban them from re-using the platform if they receive more complaints after this warning. 4. In case the user does not comply with the warning, the administrator presses on the 'Delete' button assigned next to that user and deletes their profile and all interconnecting content. 5. An alert message appears to them, asking either to confirm or to abort the process, pressing respectively the buttons 'Delete' and 'Cancel'. 6. In both cases, the administrator is redirected to the home management page of the platform
Post Conditions	A registered user is deleted
Alternative Flows	1. No complaint message reaches the administrator after the warning message for ten days, which makes the removes the user from the 'black list'. 1. The administrator may initiate a discussion throughout the platform with indicative 'complainers', so as to confirm the abuse of the platform.
Other Remarks	-

Table 4.2-49: Delete User Use Case

4.2.49 MANAGE OWN PROFILE

Use Case Name	Manage Own Profile
Use Case Code	UC_014_MANPROFILE
Goal	User modifies specific fields of their profile
Brief Description	Every user has the ability to modify personal data or other elements from their registered profile.

Primary Actors	Authenticated users
Secondary Actors	
Importance	Low
Preconditions	
Main Flow	1. The user clicks on the 'Manage My Profile' button. 2. A page opens displaying all fields concerning the user in editable format. 3. They decide to edit specific field(s) of their preference and they click on the 'OK' button. 4. They are redirected to a page indicating that all changes have been successfully conducted. The user is prompted to press the 'OK' button, which redirects them to their personal home page.
Post Conditions	Specific data in the user's profile are modified
Alternative Flows	1. The user edits the username field and enters an existing one. 2. A message appears while having typed the name, indicating that this name already exists in the platform and cannot be created. 3. The user is prompted to enter a different name, while three alternatives automatically appear for their convenience to choose, relatively similar to the one chosen.
Other Remarks	-

Table 4.2-50: Manage own Profile Use Case

4.2.50 ADD APPLICATION TO PROFILE

Use Case Name	Add Application to Profile
Use Case Code	UC_015_ADDAPPPROFILE
Goal	User chooses to add application to profile
Brief Description	Every user has the ability to add extra applications to their registered profile.
Primary Actors	Authenticated users
Secondary Actors	

Importance	Important
Preconditions	
Main Flow	1. The user browses themselves to the specific application which will be added to the profile 2. The system presents the main page of the specific application 3. The user selects the 'Add Application to Profile' button 4. A dialog box appears requesting to accept the Terms of use of the corresponding application in order to be added to the user profile 5. The user click on the 'OK' button. 6. The system notifies the user that the application is added to the user profile 7. The user is redirected to the main page of the application.
Post Conditions	A new application is added to the user's profile
Alternative Flows	-
Other Remarks	-

Table 4.2-51: Add Application to Profile Use Case

4.2.51 DEACTIVATE OWN PROFILE

Use Case Name	Deactivate own profile
Use Case Code	UC_018_DEACTPROFILE
Goal	User deactivates completely their profile
Brief Description	Every user has the ability to deactivate completely their registered profile.
Primary Actors	Authenticated users
Secondary Actors	
Importance	Important
Preconditions	

Main Flow	1. The user clicks on the 'Deactivate my Account' button. 2. A dialog box appears warning the use that the complete profile will be deleted 3. They decide to delete the profile account and they click on the 'OK' button. 4. They are redirected to the home page that the anonymous sees.
Post Conditions	Profile of the user is deactivated
Alternative Flows	-
Other Remarks	-

Table 4.2-52: Deactivate own Profile Use Case

4.2.52 USE CASES – USER REQUIREMENTS

Use Cases	User Requirements
Register	Login
Log In	Login
Search	Search content
Cognitive social recommendation	Search content
Create	Create content
Create Event	Create Events
Create Group	Create Group
Create Album	Create content
Assign moderator role	Edit Properties
View	Edit Content
View Event	Edit Content
View Group	Edit Content
View Album	Edit Content
Edit	Edit Content
Edit Event	Edit Content
Edit Group	Manage Group
Edit own Album	Edit Content
Send	Send Text / SMS
Send Event Invitation	Send Text / SMS
Send Group Invitation	Send Text / SMS
Send Friend Invitation	Send Text / SMS
Send Message	Send Text / SMS
Respond to Invitation	Edit Content
Remove Self from Group	Edit Properties

Remove Self from Event	Edit Properties
Remove Friend	Edit Properties
Upload Media	*Upload Content*
Read Message	Send Text / SMS
Reply to Message	Send Text / SMS
Delete Message	Edit Content
Comment	Send Text / SMS
Delete User	Edit Properties
Manage own Profile	Edit Properties
Deactivate own profile	Edit Properties
Add Application to Profile	Use Application

4.2.53 USE CASES UML DIAGRAM

In the following figure are displayed all the use cases and their interconnection.
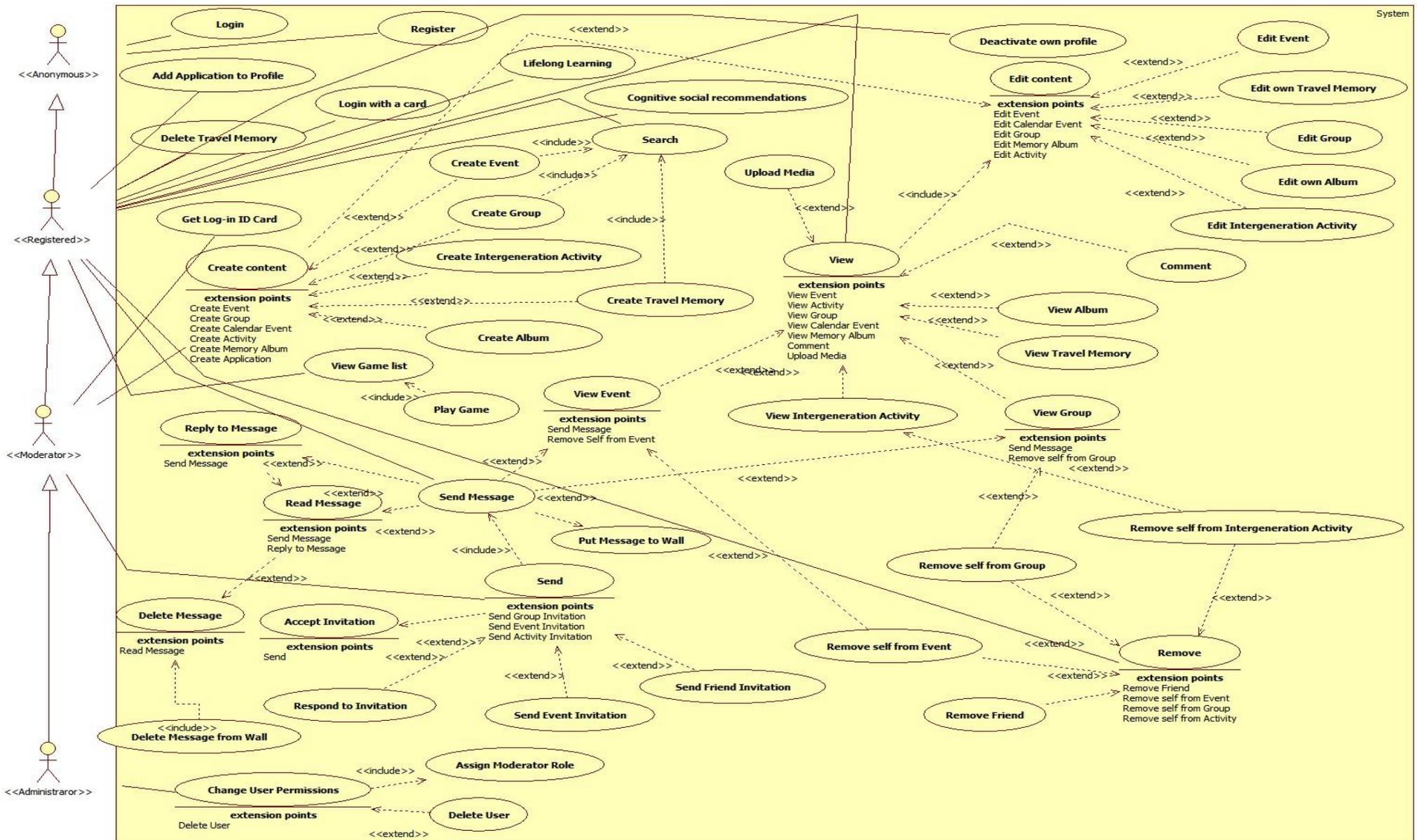
Figure 4.2-1: Use Cases in UML DiagramUse cases in Real Life Scenarios

4.2.54 USE CASE SCENARIO NO1 – GROUP FOR ACTIVITIES

4.2.54.1 UC ROLES

Actors	Role	Description
Katerina	Retired Philologist, Platform Moderator	Katerina (62) is a retired philologist who lives with her son in Trikala, Greece. She is passionate with Greek Mythology. She would like to share her passion with other people who have the same interest. She would also like to enrich her knowledge about Greek Mythology through electronic libraries. Thus she uses the facilities of the ELDER-SPACES platform.
George	Computer Engineer, Platform Administrator	George (32) is the ELDER-SPACES platform's administrator. He is able to create users and groups, grant access to users for conducting a series of activities, turn a simple user to moderator and he is also responsible for the proper functionality of the platform.
Alexander	Retired clerk	Alexander (73) is a retired clerk and lives in Athens, Greece. He is also passionate with Greek Mythology, but finds it difficult to talk with others about Mythology. Thus, he advises the ELDER-SPACES platform and shares his hobby.
Paul	Farmer	Paul (68) is a farmer who lives in Serres, Greece. He knows quite a few about Greek Mythology, but shows interest to know more through the ELDER-SPACES platform.
Claudio	Teacher	Claudio (59) is a teacher who lives in Rome and teaches Roman History and Ancient Greek in High School. He has discovered the ELDER-SPACES platform by chance through a search-engine, when he was looking for information regarding a 'mythological' lemma.
Maria	Student	Maria (22) is studying History in Rome, being a student of Claudio. Her origin is from Kalamata, Greece, and as she is living abroad and feels homesick, she considers that it would be great to participate to the ELDER-SPACES platform as a guest, where she could exchange ideas mostly with Greek citizens. Her engagement with the platform emerged after Claudio mentioned and proposed it in one of his lectures.

Table 4.2-53: UC 1st Activities roles

4.2.54.2 UC DESCRIPTION

Katerina logs in the ELDER-SPACES platform searching for a "Greek Mythology" subject. After a few unsuccessful attempts, she realizes that there is not such an activity created so she tries to create one instead. As she has not the privilege to create the event, she asks George to

create the activity. George turns Katerina to a site's moderator, thus Katerina has now the ability and creates an activity by herself, entitled "Greek Mythology". As a first comment, she writes that she is interested in exchanging views and commenting on the ancient Greek mythology.

Two days after the creation of the activity, Alexander who is an existing ELDER-SPACES user, locates this topic which attracts his interest, by navigating throughout the platform's subjects. He decides to join that group and exchanges the first ideas with Katerina. After a week, he finds out that his cousin Paul has been registered to the ELDER-SPACES platform and decides to invite him in the group. Paul, although not familiar with Greek Mythology, finds attractive the idea and takes part in the discussions.

In the meantime, Claudio tries to extract more information on a mythological lemma, so as to be better prepared for his forthcoming lecture. At first he tries an internet search engine, where he accidentally runs into Elder-Space's platform. He immediately recognizes the subject for mythology and decides to register and join that group. From his first visit to the platform he finds out that the level of the discussions is high, and that he indeed learns new aspects of Mythology. Thus, he decides to propose this website to his students in History Class, where Maria seems to be the most active mimic.

4.2.54.3 UC FLOW DIAGRAM

In the following diagram, the most important already encoded services are displayed, based on the previous description.
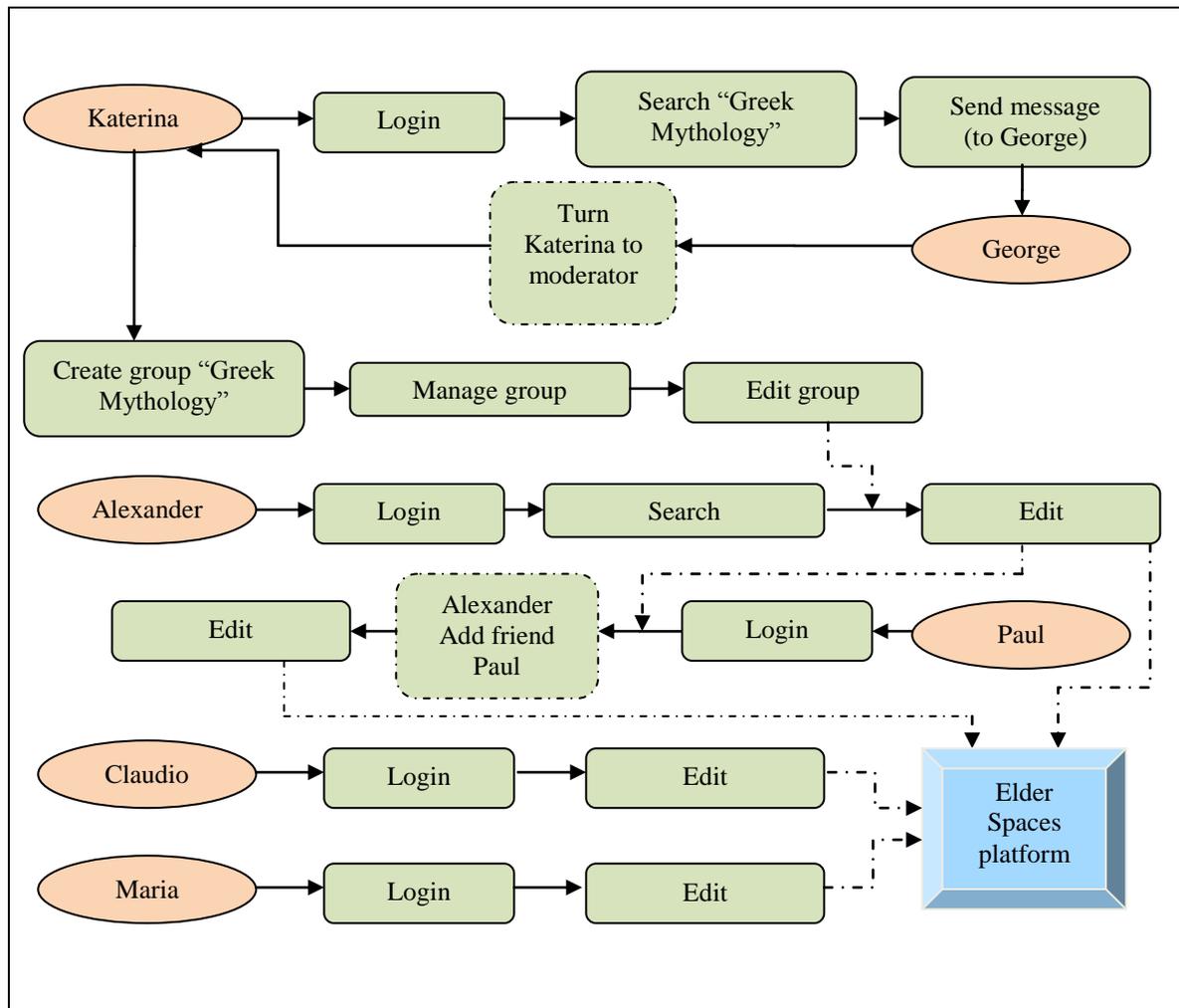
Figure 4.2-2: UC 1ˢᵗ Activities flowchart diagram

4.2.55 USE CASE SCENARIO NO2 – GROUP FOR ACTIVITIES

4.2.55.1 UC ROLES

Actors	Role	Description
Kostas	**Farmer, Platform Moderator**	Kostas (60) is a farmer who lives with his wife in the suburbs of Trikala, Greece. He loves animals and is quite affectionate to his two pet dogs. He and his wife Alexandra are members of Animal Welfare Organizations, and meet with other members once per year national wide. At the time being he tries to find hobbies and interests through local newspaper advertisements, when he takes into consideration the Elder-Spaces platform and realizes that it could be used as a tool for organizing the members of the

		Animal Welfare.
Alexandra	**Housewife**	Alexandra (58) is a housewife and spouse of Kostas. As they do not have children of their own, they both have developed remarkable affection towards animals. She fully supports Kostas in his effort of organizing the other members of the Animal Welfare.
Tom	**Retired private employee**	Tom (68) is a retired private employee widower who lives isolated in an apartment in the centre of Athens, Greece, along with his cat. He is an ex-president of an Animal Welfare Organization, but finds it difficult to visit and participate in its events as it is located in the city's suburbs and he deals with mobility issues. Thus, he finds Elder-Spaces platform as an extremely helpful opportunity to express himself.
Sophia	**Student**	Sophia (14) is a student, lives in Munich, Germany, with her parents and her cat and is Tom's granddaughter. She has recently been invited by Tom to participate in the Elder-Spaces platform. She is thrilled with this idea, as she will have the chance to communicate regularly with her beloved grandfather.

Table 4.2-54: UC 2nd Activities roles

4.2.55.2 UC DESCRIPTION

Kostas logs in the Elder-Spaces platform and decides to create an Animal Welfare group. He introduces his wife Alexandra and himself to the group's comment fields, explaining that they both are existing members of an Animal Welfare Organization. Although most of the times they are connected to internet together by home, they decide to have one separate account each.

Alexandra decides to send electronic invitations to join the group a number of members they knew as a couple from the past. The first one to accept the invitation is proved to be Tom, who is excited with the idea. Tom starts sending invitations on his turn, to as many of the members he could remember throughout the years of his presidency. After a month of its creation, the group reaches 100 members, most of them Tom's retired known.

Sophia is a 'side-effect' member of the group, but really enjoys both talking about animals and also learning the latest news from Tom.

4.2.55.3 UC FLOW DIAGRAM

In the following diagram, the most important already encoded services are displayed, based on the previous description.
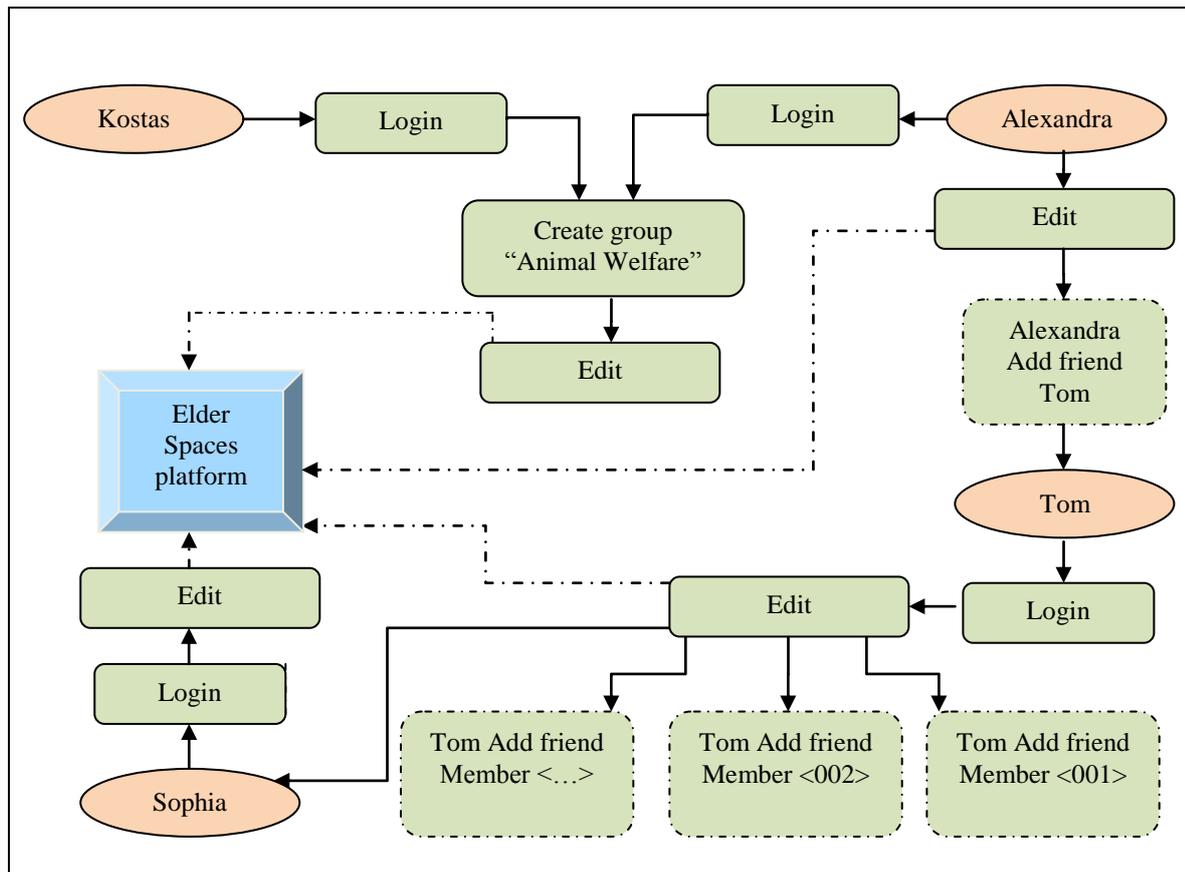
Figure 4.2-3: UC 2nd Activities flowchart diagram

4.2.56 USE CASE SCENARIO NO3 – GROUP FOR ACTIVITIES

4.2.56.1 UC ROLES

Actors	Role	Description
Mr Takács	moderator/ elderly/ Travel Memory network idea holder	Active iWiW subscriber, he is 57 years old. He is retired, but he was a teacher of mathematics and he uses actively the internet in his free time since the last 5 years. He moderates the Memory Travel thematic network for elderly at iWiW.
Mr Kovacs	elderly/ memory shareholder	Active iWiW subscriber, he is member of several clubs and he likes so much art. He is visiting at least once Budapest Art Gallery.
Zsolt	ICT facilitator/ youngster at	IT professional, youngster, iWiW and Facebook subscriber.

	iWiW	
Mrs Karola	elderly /memory shareholder	Active iWiW subscriber, she is 58 years old, living there with her husband.
Mrs Zsuzsanna	elderly/memory shareholder	Active iWiW subscriber, she is 77 years old, she lives alone in the Seniorhouse, and she is using Facebook also every day.

Table 4.2-55: UC 3rd Activities roles – iWiW

4.2.56.2 UC DESCRIPTION

The Participant is living at St Gellert Seniorhouse in Budapest, District XI. In this senior house the average age of the elderly are +55 till 92 years of age. Both are active in several activities. Some of them are the members of Budapest Art Brut Gallery, some of them are using the Internet corner within the Seniorhouse almost every day. Some of them are going for art therapy actively (once or more per week) to the SOTE Clinics of Physhiatry and Physhotherapy to Balassi street 6, in Budapest. Their children live in different countries, mainly in USA, but also in France, Belgium and Sweden. Mr Takacs is organising a Travel Memory club once per week, in each Monday evening, where the club members are in the Library room with permanent access to Internet. This is a special occasion to digitalise the old photos into different photo format, into bmp, jpeg and png, with the help of one young IT professional. His name is Zsolt and he is helping to create the personal digital photo album of everyone, who are only starters. He takes a short „how to do" session about the necessary steps;

Step 1 → Creating a Travel Memory in a selected country on iWiW
Step 2 → Automatically creating an event in the social platforms, based on the Travel Memory (iWiW Event API must be implemented)
Step 3 → Sharing Travel Memories with friends and family
Step 4 → Listing friends' Travel Memories in a selected country

When some of the club members asking Zsolt about other social functions on iWiW, he explains three more options and he shows to the interested elderly what they have to do;
Option 1 → Other social functions, such as commenting and uploading photos or videos are available in the social platform.
Option 2 → Moodies[7] will be integrated into the platform as well, as new functionality. FunIcon applications collect social interaction data via the Internet to provide emotion researchers with a better understanding of how people interact. The purpose is to create a more intuitive social interface. The privacy is completely protected. Transaction data is logged in an anonymous manner and is analysed using statistical tools.
Option 3 → Facial Samples. Create your personalized FunIcon from your very own photographs. The process is simple and fast. You record a number of photographs as shown in the example below. First you create a **NEUTRAL** image, then make different snapshots of your different **EMOTIONS** (Happy, Sad, Anger, Disgust, Fear, Surprise) and **EXPRESSIONS** such as funny faces (Kiss, Blow, etc.). You may also take several sets, this will make your FunIcon more versatile. Finally, you specify in what order on the **DISC CONTROLLER** you want them to appear and any **SPECIAL INSTRUCTIONS** before you upload your images. We will take care of the rest and you will shortly receive your personalized FunIcon to be used on FaceBook,

Skype / Instant Messaging, On-line 3D Worlds & Games, Mobile Phones and many more places[8].

4.2.56.3 iWiW Architecture Schema

In the following diagram, the most important already encoded services are displayed, based on the previous description.
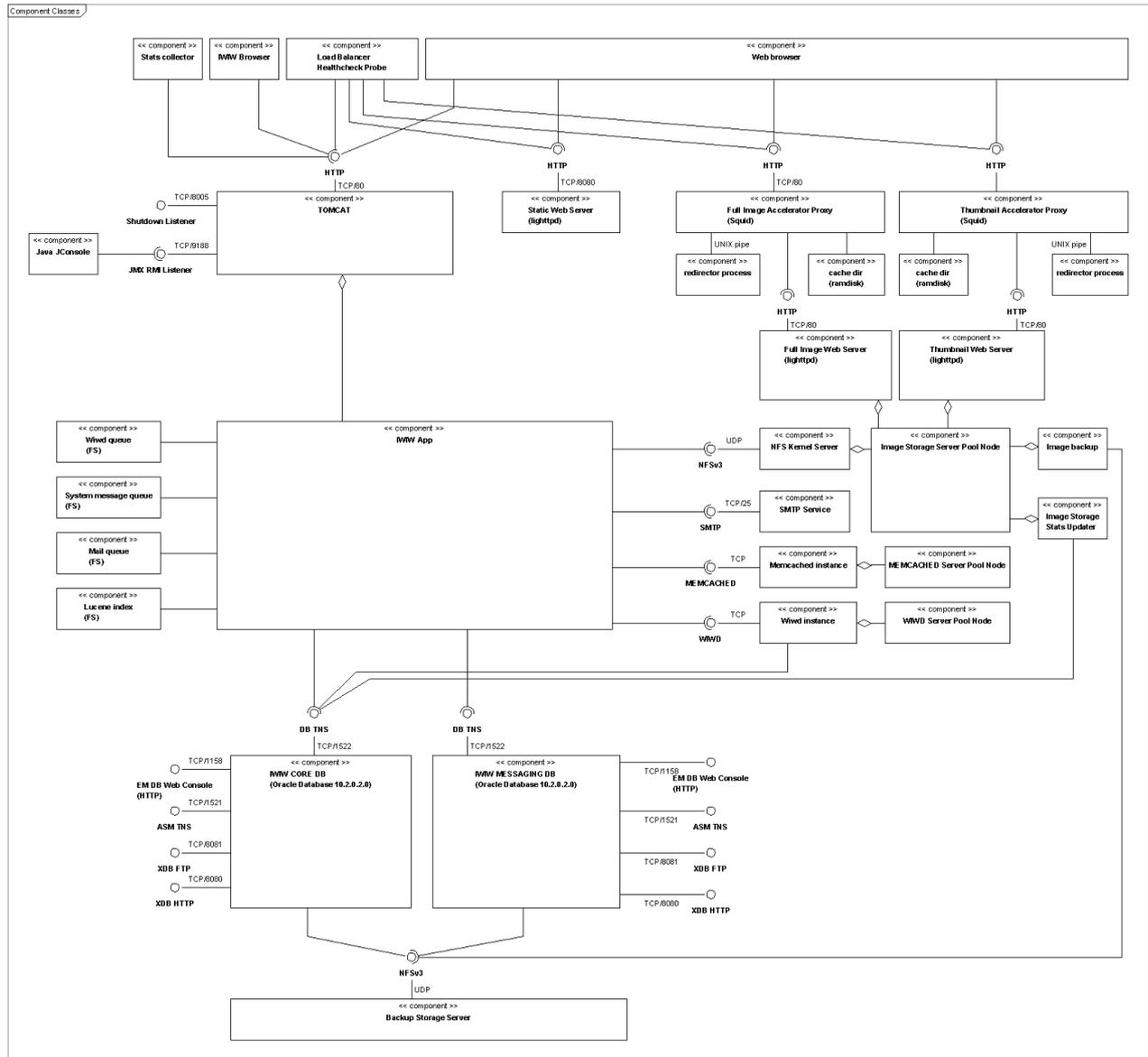

Figure 4.2-4: UC 3rd Activities – iWiW topology

4.2.57 Use case Scenario No4 – Professional Group

4.2.57.1 UC Roles

Actors	Role	Description
Giannis	**Florist, Platform Moderator**	Giannis (58) is a florist who lives with his wife in Larissa, Greece. His two children work and live in Athens, Greece. He is technologically illiterate and considers this to be a huge disadvantage for his occupation. As he cannot be regularly helped by his children, he explores the potential benefits of being involved in the Elder-Spaces initiative.
Matina	**Florist**	Matina (63) is a florist who lives and runs a family business in Agrinio, Greece, for the last forty years. All her three children are also working with her. Her oldest child, Philip (39), is quite fond with computers and has developed a website for their business.
Philip	**Florist**	Philip (39) is Matina's son. The website displays the total of the flowers their shop offers, gives information on their proper gardening and the ability for on-line buy. His mother, Matina, and he find it prosperous to participate in a group for professional florists via Elder-Spaces, as they consider it may end up to business collaboration.
Polyxeni	**Decorator**	Polyxeni (56) is a professional decorator and lives in Larissa, Greece. She had been cooperating professionally with a flower shop in Larissa for the last 20 years, until its owner got retired. She is now in seek for new collaboration, as flowers are a very important field in her job, whilst decorating reception halls for events (marriages, conferences, parties etc.). Thus, she turns to Elder-Spaces, where she believes to find new partnership close to her age, knowing that she is also close to her retirement.

Table 4.2-56: UC 1st Professional roles

4.2.57.2 UC DESCRIPTION

Giannis logs in the Elder-Spaces platform and decides to create a Florist professional group. He explains that he would like other partners to help him adopt their know-how on implementing a website for his shop and specifically in ordering rare flowers from abroad directly through internet.

Philip finds out the existence of Elder-Spaces from one query he initiated for ordering a flower from abroad. He immediately recognized the potential of this platform and he proposed to his mother Matina, who is the head of the business, to monitor it and participate. Consequently, Matina logs in the platform and exchanges views with other fellow florists.

Polixeni located Elder-Spaces in her search for partnership throughout an internet search engine. She was amazed to acknowledge that Giannis was in search for partnership, as they both live in the same city and had heard of him in the past. Thus, she proposes to cooperate for the next few years, until they both get retired.

4.2.57.3 UC FLOW DIAGRAM

In the following diagram, the most important already encoded services are displayed, based on the previous description.
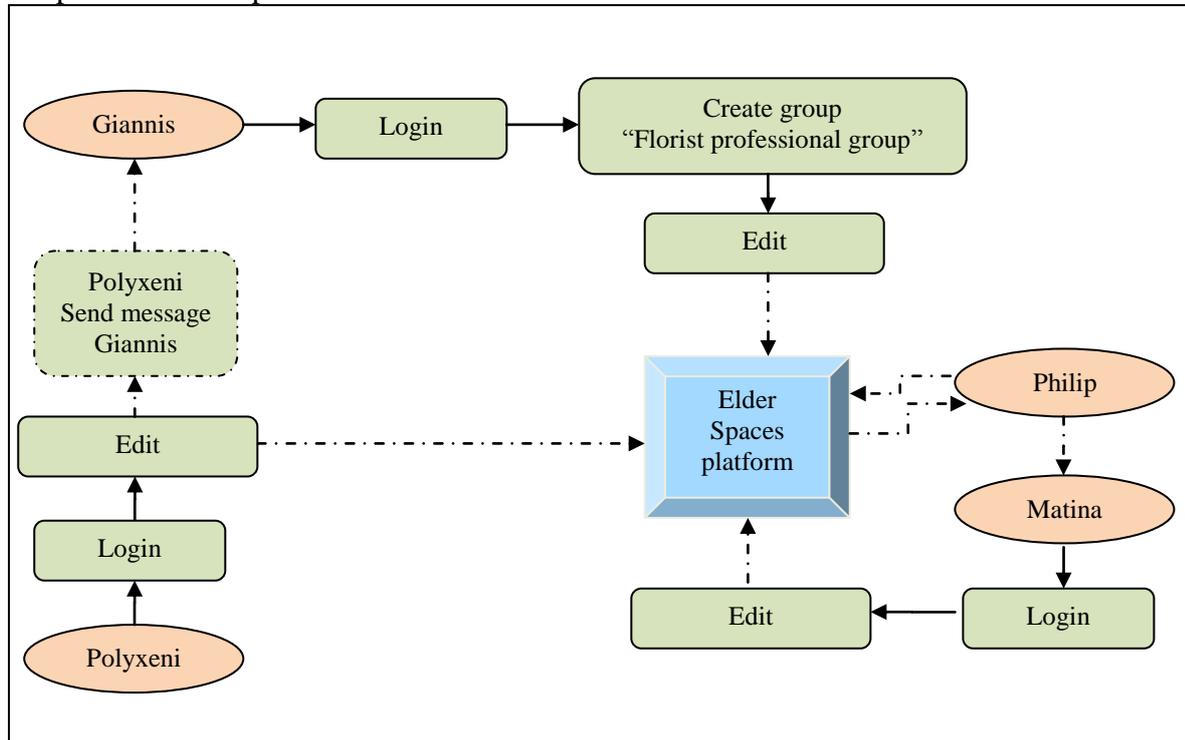

Figure 4.2-5: UC 1st Professional flowchart diagram

4.2.58 USE CASE SCENARIO NO5 – PROFESSIONAL GROUP

4.2.58.1 UC ROLES

Actors	Role	Description
Chris	**Truck driver**	Chris (57) is a professional truck driver from Kavala, Greece, who transfers fruit on behalf of a large company. Most of his routes include the Balkan peninsula, but there are times when he reaches even in Scandinavia. He seems to be more relaxed when travelling in the first area, while feels insecure when travelling in relatively 'unknown' routes. Considering that only a GPS is not providing all 'practical' information for a totally safe and relaxed route, he decides to take advantage of the Elder-Spaces platform and creates a "truck driver" professional group, so as to provide tips for any forthcoming potential colleague to make the same route.

Silvio	**Truck driver**	Silvio (59) is a professional truck driver from Perugia, Italy, who shares the same speculation with Chris. He most of the times transfers industrial medical hardware to Greece and the Balkans in general. There had been two times in the past when his vehicle had been blocked in the highway, due to protest against the local government from the local truck drivers, being immobilized for over 16 hours. As such information could not be provided by any GPS, he becomes a supporter of the "truck driver" group throughout the Elder-Spaces platform.
Eleni	**Long distance courier driver**	Eleni (56) is a long distance courier driver from Volos, Greece. Although she had acquired her professional license twenty years ago, she has been driving professionally for only the last three months, as prior to this she was working as a secretary to a recently bankrupt company. Due to the fact that she still does not feel confident when traveling to small towns and villages more than 500 kilometres away from her hometown, she finds exciting the idea of having access on practical information sourced from other colleagues throughout the Elder-Spaces platform.
Mitsos	**Commuting taxi driver**	Mitsos (62) has been a professional taxi driver for the last forty years. He is from Thessaloniki, Greece, where he worked all these years. The current financial recession crisis made him alter his professional habits, as he has turned himself to a long distance commuting taxi driver. That is, he transfers mostly elderly people with mobility problems interregional to almost all over Greece. He also seems to be quite interested in the idea of participating in such a group, where he could explore practical information on routes which might have been used by other colleagues.

Table 4.2-57: UC 2nd Professional roles

4.2.58.2 UC DESCRIPTION

Chris logs in the Elder-Spaces platform and decides to create a Truck driver professional group. He explains that he would like to share his travelling experiences on each recent route he has been into, providing information like the best places to park and spend time for a night stop, which hours to avoid traffic or if there are any planned festivals or events which could alter the route, without having this information available via GPS. Thus, he has started mapping the recent four routes he has conducted from Kavala to Belgrade, Serbia, proposing three alternatives for a safe night stop and warning other fellow drivers for four quite dangerous turns of the route, as they seem to have an opposite slope. He envisages via this group to create a dedicated forum with all kind of information necessary for the conduction of a professional trip.

Silvio this time is planned to make a route from Italy to Athens and from there directly to Belgrade. He is not used to this route, thus he logs and advises from Elder-Spaces via his smart phone, where he can follow the valuable information Chris had provided two months ago. Two days after his return home, he logs in to the platform and comments on the group, providing two more alternative stops and indicating three spots where one should be cautious. As he knows that the same route is to be repeated at least by two of his colleagues from his company, he

decides to invite them to the platform and join the group.

Eleni is assigned to travel to a small village in Kavala, where she has not been there before. She is equipped with the proper GPS to trace the route, but she would still like to have more information on her final destination. Her employer is a friend of Chris and decides to bring them in contact. Chris on his turn explains to her the difficulties of the trip and proposes her on using the Elder-Spaces platform and the truck driver group, where she could extract information on her journey. Eleni logs in the platform and realizes that there is few data for her route. Although disappointed at first, she seems determined to use this tool and one week after her return decides to fill in her travel experiences, so as to help anyone who could be in her place.

Mitsos is also assigned to transfer two elderly people to a mountainous village in Kavala. He finds out the existence of Elder-Spaces platform while trying to find the village on a search engine through internet in combination to directions. He logs in the platform and is surprised by the fact that although his route was planned for early June, he discovers through a past post in the platform that the village is accessible only by car snow chains even this time of year. He feels grateful to this information, as he had removed them from his car since April.

4.2.58.3 UC FLOW DIAGRAM

In the following diagram, the most important already encoded services are displayed, based on the previous description.
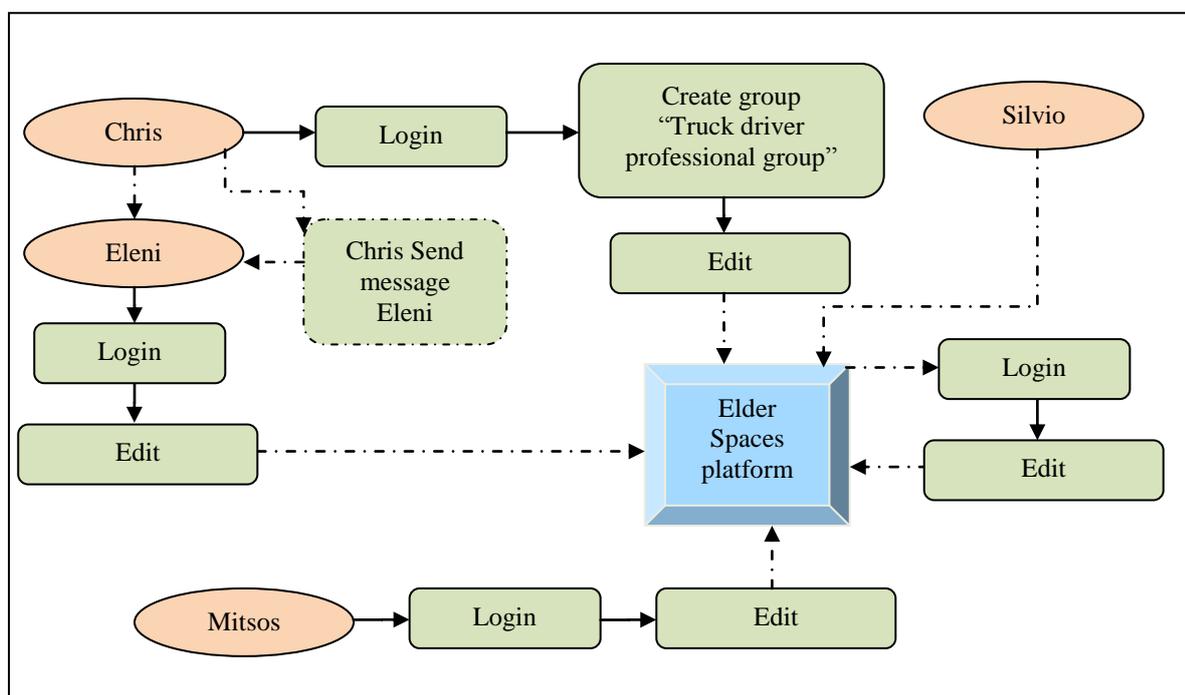

Figure 4.2-6: UC 2nd Professional flowchart diagram

4.2.59 USE CASE SCENARIO NO6 – INTERGENERATIONAL ACTIVITIES

4.2.59.1 UC ROLES

Actors	Role	Description
Pericles	**Retired politician**	Pericles (73) is a retired politician who lives in Chania, Greece. He is a live spirit and worries about Greece's current status. He strongly believes that young politicians and youngsters in general have been severely misled by the state the last decades. He uses the Elder-Spaces platform in order to organize intergenerational events in schools and have active dialogue both with students and inexperienced politicians.
Margaret	**Newly elected minister**	Margaret (32) is a newly elected minister in the area of Chania. It is her first time to be elected to the Greek Parliament and still is not experienced in dealing with her voters. Although she has a blog of her own, she finds attractive the idea of gathering the whole age spectrum of her voters through the Elder-Spaces project.
Christine	**High school director**	Christine (58) is a high school director in Chania. From her adolescence, she was quite politicized and took part in the movement against dictatorship in Greece during the late sixties – early seventies, when she had been studying Greek Literature in the University of Athens. Since then, she stays updated regarding the political news and fully supports any ideas of involving young students in the political decision making process.
Bill	**Student**	Bill (15) is a high school student who lives in Chania, Greece. He is an open minded student who likes sports and studying Mathematics. Up to the moment he had no relation to politics.
Melina	**Student**	Melina (16) is a high school student who lives in a village outside Chania. She is the president of the student committee in her school and interested in the local government decision making, as her father is a member of the Local Board.

Table 4.2-58: UC 1st Intergenerational Activities roles

4.2.59.2 UC DESCRIPTION

<u>First alternative (elderly initiated scenario)</u>

Pericles logs in the Elder-Spaces platform and creates an intergenerational activity called Involving Youngsters with Politics. His motivation is to use his fifty year experience and teach youngsters how to think and judge properly information they acquire from politicians. For this cause, he visits the high school of his neighbourhood, discusses with the director and proposes her to have the students use the Elder-Spaces platform, so as to arrange a two-hour talk to the students, where he will analyse the political situation in Greece and listen to the students' ideas.

Christine who is quite fond with such an idea, immediately joins that group herself and proposes her students to join that group. She makes a notice on the subject in the official school's notice

table and is pleased to see that half of the students not only have joined that group already, but after a month of creation most of them have commented on the subject. Finally, after two months of active intergenerational dialogue via Elder-Spaces, Pericles is officially invited to speak to the students and their parents in a day meeting regarding Politics.

During the meeting, Pericles prefers not to set any discussion rules, prioritizing on the dialogue model of answers and questions. Melina and Bill seem to be the most active participants in the discussion. In particular, Bill has dramatically changed his view on politics after the conduction of the meeting. The two students are enthusiast with the event and this is visible on their glorious comments on the Elder-Spaces platform.

On the outcomes of the event, they decide to write an article in the school newspaper describing their experiences. Christine rewards this qualitative initiative and forwards the article to all local newspapers of the prefecture. Then, Margaret is informed on the existence of the platform and decides to take part in the group. After six months of use, Elder-Spaces is considered for her as a means for acquiring the whole age spectrum of the voters, approach them directly and listen to the current trend of the local society.

Second alternative (youngsters initiated scenario)

Christine assigns to her students homework for interviewing a citizen. Melina and Bill pose one group which has been assigned to interview a retired professional. At first they decide to search through internet on a relative issue, when they find out of the Elder-Spaces project. After creating an account in the platform and start navigating, they join the group "Involving Youngsters with Politics" created by Pericles. They exchange a lot of ideas, when they propose to Pericles visit their school and perform the requested interview live in front of all their schoolmates.

Prior to their invitation, the two students invited Christine in the group as well and asked for her permission to conduct this live interview. Christine was thrilled with that idea and encouraged her students to continue taking such initiatives. Moving one step further, she decides to establish this process and inserts 'Elder-Spaces' platform in her learning methodology, by assigning to her students monthly visits of elderly to their school via the platform, in order to share their valuable experience with younger citizens.

4.2.59.3 UC FLOW DIAGRAM

In the following diagram, the most important already encoded services are displayed, based on the previous description. Figures 5.6-1 and 5.6-2 contain the two alternative scenarios, initiated by the elderly and by the youngsters correspondingly.
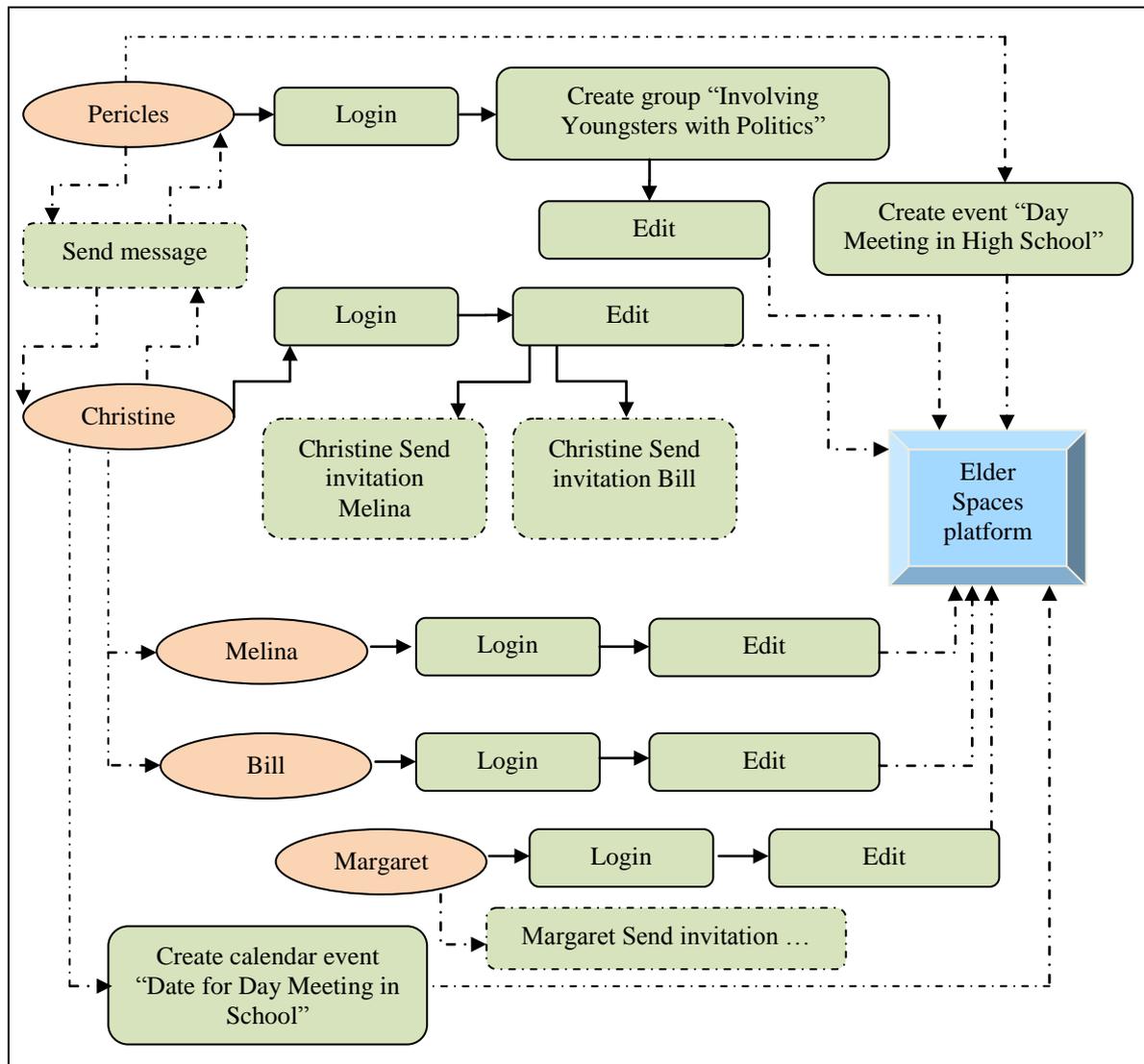
Figure 4.2-7: UC 1ˢᵗ Intergenerational Activities flowchart diagram (elderly initiated)
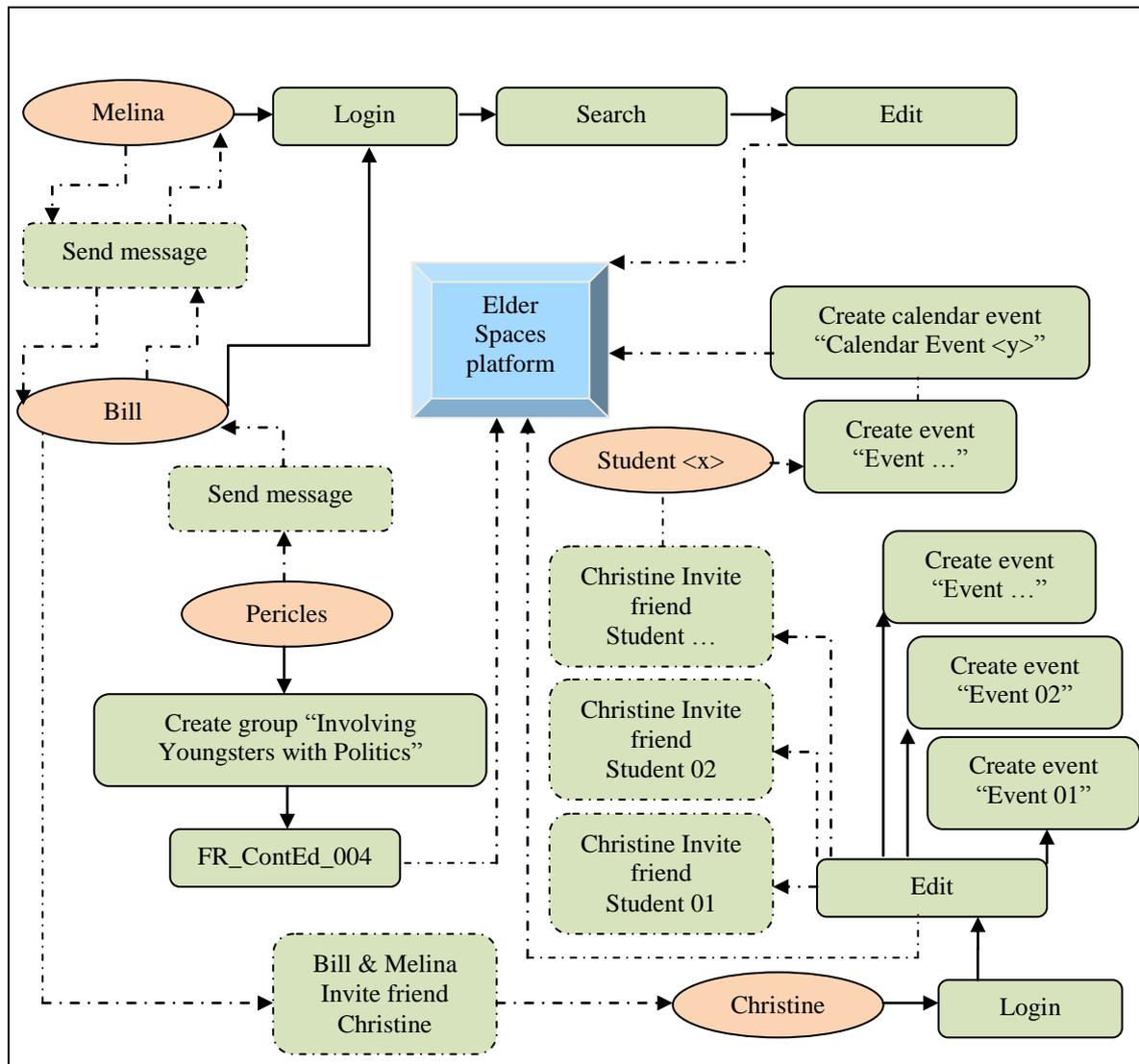
Figure 4.2-8: UC 2ⁿᵈ Intergenerational Activities flowchart diagram (youngsters initiated)

4.2.60 USE CASE SCENARIO NO7 – INTERGENERATIONAL ACTIVITIES

4.2.60.1 UC ROLES

Actors	Role	Description

Martha	**Elderly housewife**	Martha (62) is a housewife who lives in the island of Siros, Greece. She is renowned for her traditional sweets, which she loves cooking since her early youth. She always tries to explore recipes from other places, and finds it interested to use Elder-Spaces platform as a means towards this direction.
Anna	**Retired engineer**	Anna (64) is a retired engineer who lives in Kalamata, Greece. She loves cooking and always tries to create different rare recipes. Throughout Elder-Spaces, she can both show to younger people how to cook quickly and effectively and even learn new recipes and techniques from others.
David	**University student**	David (19) is studying Physics in the University of Patras, Greece, where he is renting a house. As it is his first time living alone apart from his family, he admits that so far he had little contribution in everyday cooking all these years. Thus, he finds Elder-Spaces a good opportunity in exploring ways of dealing with everyday cooking.
Jonas	**Retired lawyer**	Jonas (66) is a retired lawyer who lives in Budapest, Hungary. He tries to find ways to occupy his free time through internet, when he found out the existence of Elder-Spaces project, in a query for collecting old coins from all over the globe.
Cinzia	**University student**	Cinzia (21) lives and studies in the University of Budapest, Hungary. At the same time she participates in a volunteer activity, aiming at the social inclusion of elderly people. Thus, she becomes an energetic supporter of Elder-Spaces initiative.
Lothar	**Retired post office employee**	Lothar (72) is a recently retired post office employee who lives in Bonn, Germany. He had started collecting stamps since the beginning of his professional carrier, reaching over 20,000 pieces. Now he wants to occupy his time with his favourite hobby. For sure he would like to find more stamp collectors, proceed to stamp exchange and even organize an exhibition of his stamp collection. Prior to Elder-Spaces, he assumes that he would have few chances to fulfil his desire.
Lutz	**Private employee**	Lutz (27) is a bank clerk who lives in Bonn, Germany. He keeps himself updated on technology issues and is fond of using gadgets. His hobbies include sports, music, cinema and collecting stamps. Throughout Elder-Spaces he can expand his hobbies.

Table 4.2-59: UC 2nd Intergenerational Activities roles

4.2.60.2 UC DESCRIPTION

<u>First alternative (elderly initiated scenario)</u>

Lothar has recently found out the existence of Elder-Spaces and has become a regular registered user. He has created a group called "Stamp Collection" and discusses with others about their

passion. After five months, the users of the group have surpassed the threshold of 300 users. Lothar decides to go one step further, digitizing his entire stamp collection.

Lutz, who is a member of the group since its early creation, is willing to help him fulfil this idea. Thus, throughout the platform they exchange messages and they decide to have a meeting in Lutz's home, where Lothar can see how stamps can be digitized through a scanner and uploaded on the platform. Lutz trains Lothar in how to perform these tasks. Lothar is so excited that he decides to buy a scanner and perform the digitalization of the collection from his home. All stages of this flow have been reported on Elder-Spaces platform from both of them, while many other members comment on it.

One other such member is Jonas. He mostly likes to collect coins instead of stamps, so he creates a new similar group, named "Coin Collection". He possesses many duple coins and is willing to exchange them from other hobbyists. Through the platform, Cinzia advises him to take photographs of the coins and shows him how to upload them, so as to initiate a potential exchange.

Second alternative (youngsters initiated scenario)

Martha loves cooking sweets, especially traditional ones. She would like to explore her knowledge and find out how each location's traditional sweets are cooked. For this reason she decides to create a group in Elder-Spaces called "Cook Traditional Sweets". Anna shares the same interests and is the first member to join that group.

David searches desperately to find practical advice on how to cook. He has managed to find many recipes, but is inexperienced and finds it difficult to follow them, leading to unsuccessful meals which are not eatable. He finds out the "Cook Traditional Sweets" group in Elder-Spaces and asks for help from its members. After a week, he decides to create a new group called "Help New Cooks", sending invitations on Martha and Anna. They both accept and join that group, explaining through the platform in plain words how exactly to proceed in cooking a successful meal.

4.2.60.3 UC FLOW DIAGRAM

In the following diagram, the most important already encoded services are displayed, based on the previous description. Figures 5.7-1 and 5.7-2 contain the two alternative scenarios, initiated by the elderly and by the youngsters correspondingly.
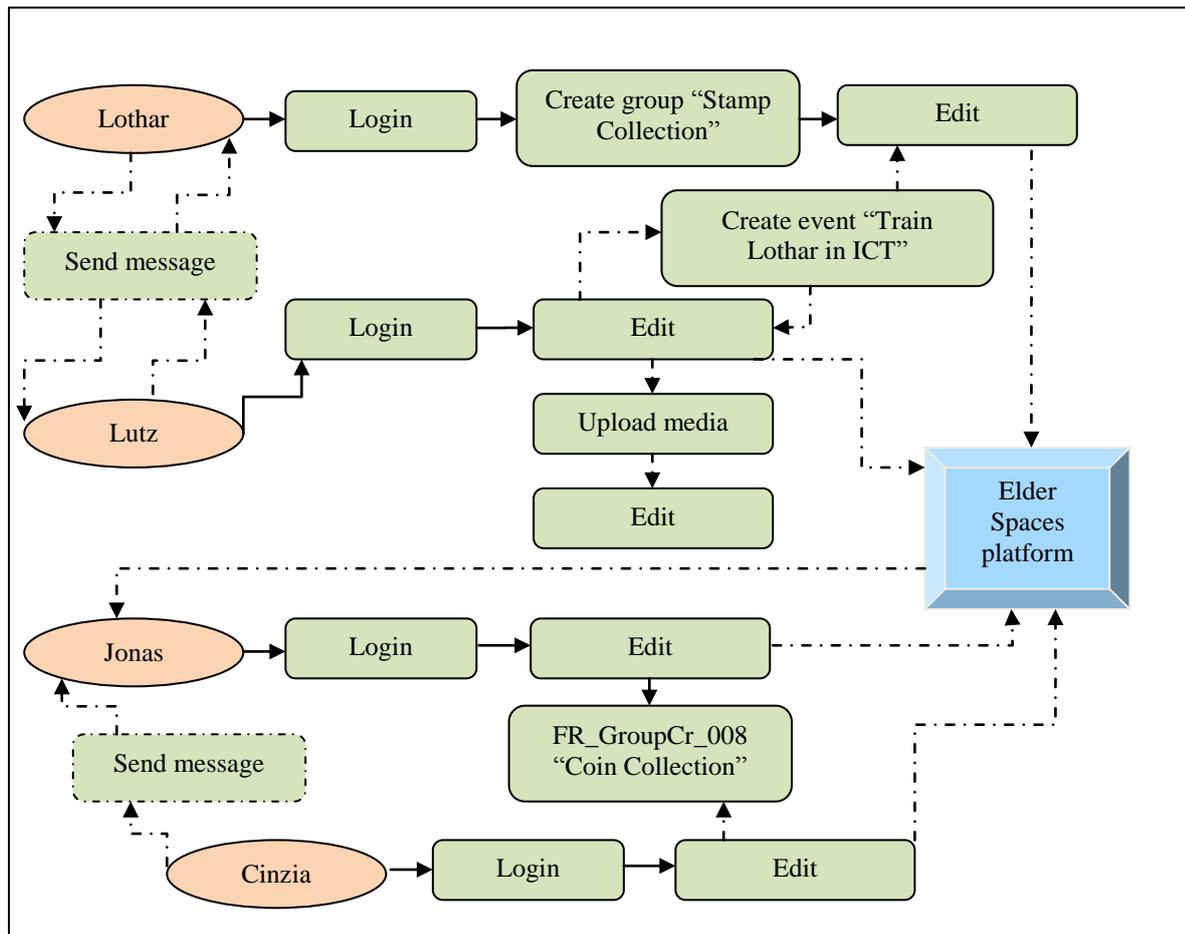
Figure 4.2-9: UC 3rd Intergenerational Activities flowchart diagram (elderly initiated)
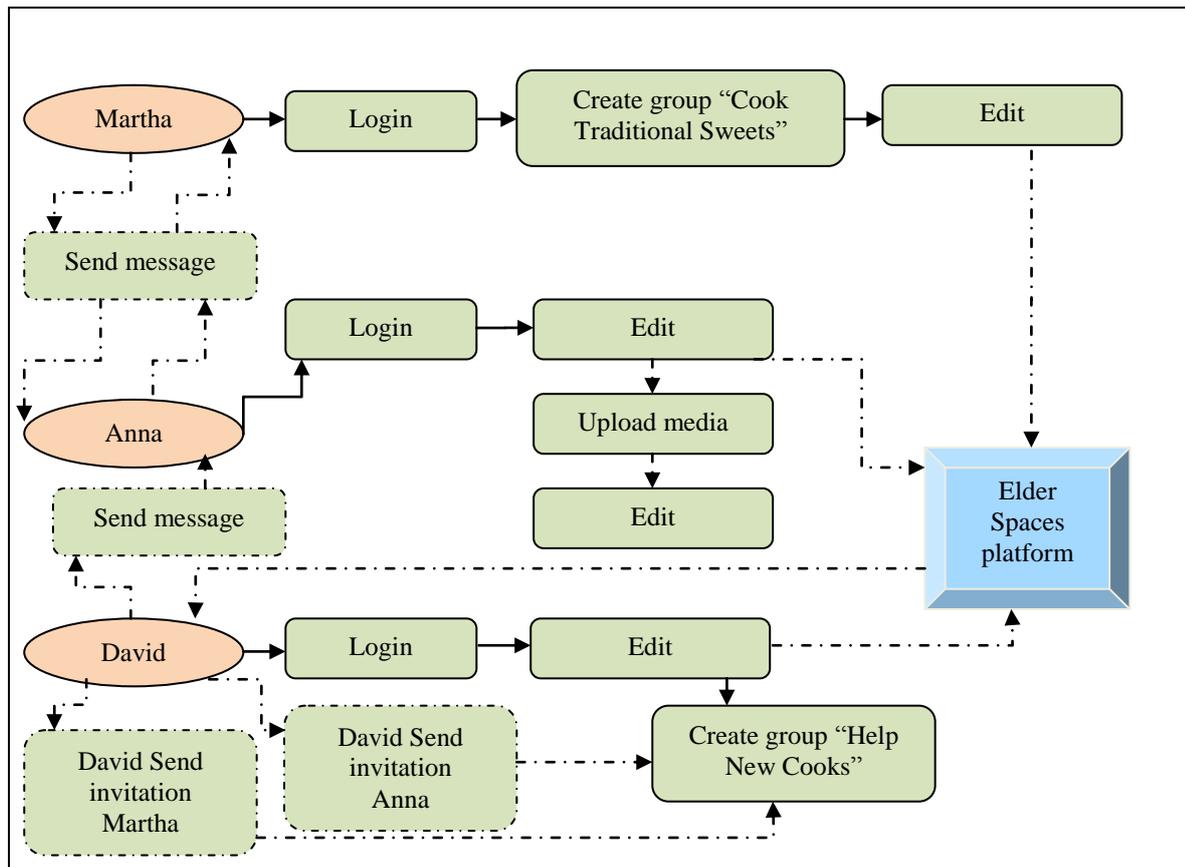
Figure 4.2-10: UC 4ᵗʰ Intergenerational Activities flowchart diagram (youngsters initiated)

4.2.61 USE CASE SCENARIO NO8 – ORGANIZING EVENTS

4.2.61.1 UC ROLES

Actors	Role	Description
Ermioni	**Housewife**	Ermioni (61) is a religious housewife who lives in Lamia, Greece. She has visited many orthodox monasteries with the KAPI, but she would like to broaden her activities, like visiting a religious landmark from abroad. She envisages to organise 'religious' tours by finding interested people and sharing the costs for one-week excursions by bus. Thus, she decides to initiate a discussion in the Elder-Spaces platform concerning the organization of 'religious' trips all around Europe.
Mustafa	**Constructor**	Mustafa (56) is an immigrant from Iran, living in Athens, Greece, for the last 30 years. He is working in the construction field and is a religious person. He is interested in knowing people and different religions. Elder-Spaces platform is a means

		for him to explore his horizons.
Johanna	**Theologian**	Johanna (57) is a Theologian in High School and lives in Athens, Greece. She has also been interested in visiting all places mentioned in her lessons. Thus, she becomes supporter of the idea of organizing and participating in a potential trip around Europe.

Table 4.2-60: UC 1ˢᵗ Organizing Events roles

4.2.61.2 UC DESCRIPTION

Ermioni has visited most of the major Orthodox Monasteries in Greece, but still needs to enrich her experience. She decides to use Elder-Spaces platform so as to organize 'religious' trips all around Europe. She logs in the platform and creates a group called "Organize Religious Tour". To her surprise, over fifty people join that group since its first week of creation. They all talk about religion issues and she proposes three potential places to visit by bus for a one-week tour; Italy, Romania and Hungary.

Mustafa is one of the first members to join the "Organize Religious Tour" group. He chooses Italy, as he would like to visit once in his life the Vatican City and St Peter. On the other hand, Johanna votes for Romania, where she would like to visit a set of three famous monasteries up in the mainland's mountains.

They all participate in a discussion where all members express their opinion. After three weeks of discussions, it is decided to travel to Italy. Thus, Ermioni gets offers from travel agencies for a mid-Spring week excursion to Italy, for a total of 34 participants, mostly retired elderly.

4.2.61.3 UC FLOW DIAGRAM

In the following diagram, the most important already encoded services are displayed, based on the previous description.
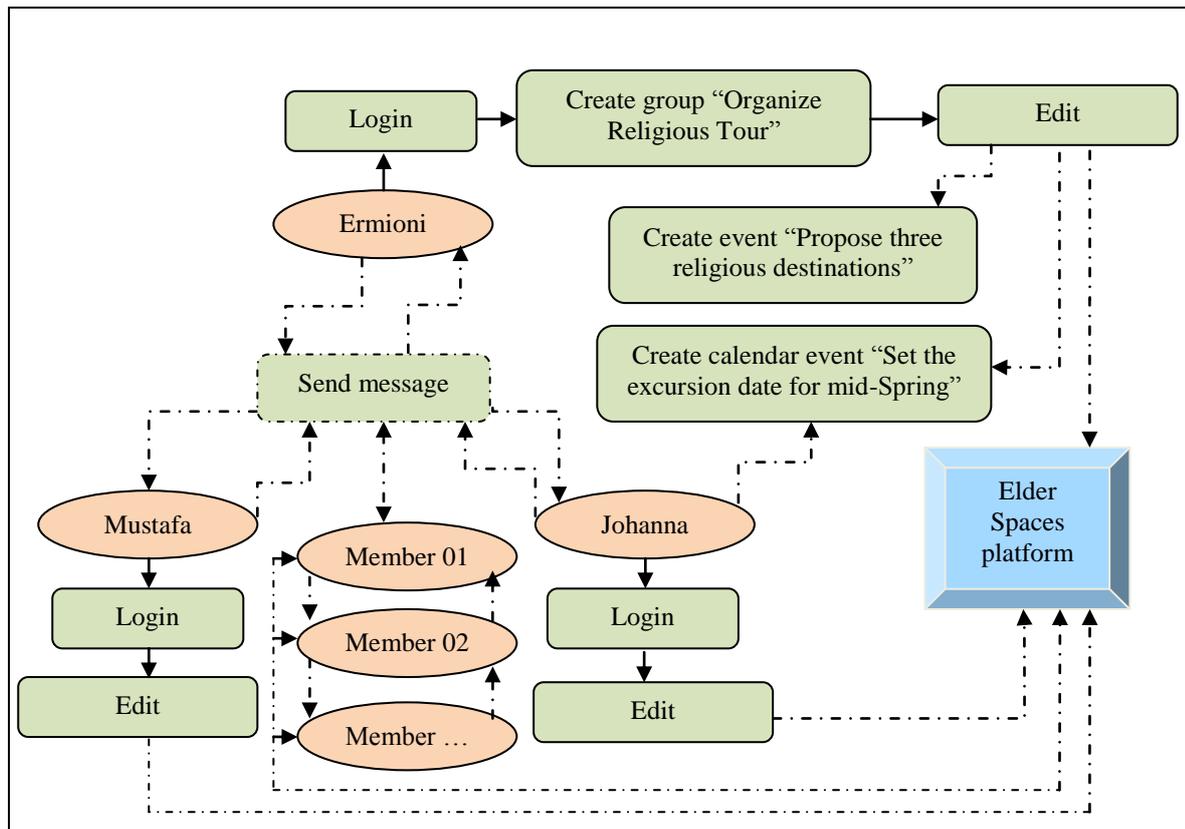
Figure 4.2-11: UC 1st Organizing Events flowchart diagram

4.2.62 USE CASE SCENARIO NO9 – ORGANIZING EVENTS

4.2.62.1 UC ROLES

Actors	Role	Description
Stamatia	**Teacher**	Stamatia (56) is a teacher in Komotini, Greece. She considers herself as a travel addict person, and she is always organizing the educational excursions of her school. It is a fact that she chooses qualitative excursions for the students. She finds interested to expand this role for personal excursions, engaging other willing people throughout the creation of a group "Excursions" in Elder-Spaces platform.
Giorgio	**Musician**	Giorgio (62) is a musician living in Xanthi, Greece. In the past he had travelled all over the Balkans with his band, but now he would like to visit other parts of Europe. He finds Elder-Spaces as the means to fulfil his desire and organize music events as well.

Michelle	**Hair dresser**	Michelle (57) is a hair dresser working in Drama, Greece. She has found out about Elder-Spaces from her clientele, and she decided to join the "Excursions" group. Although she is an active member of KAPI, she gets disappointed with the fact that no excursions are organized during the late autumn and winter months.

Table 4.2-61: UC 2nd Organizing Events roles

Table 4.2-61: UC 2nd Organizing Events roles

4.2.62.2 UC DESCRIPTION

Stamatia logs in the Elder-Spaces platform and searches for a group regarding excursions. As she cannot find anything similar, she creates a group "Excursions". On the primitive comments she explains that her ultimate goal is to visit at least one country from all five continents in the next decade. She hopes to find mimics in her ambitious plan, so she starts inviting people she knows in person through the platform, so as they invite others in turn and create a social group with remarkable number of interested members.

One such invitation is sent to Giorgio, who is Stamatia's friend. Two years ago she had arranged a music event in her school and Giorgio's band performed successfully. They had initiated a discussion on their personal travel experience and they both seemed to share the dream of traveling abroad. With the help of Elder-Spaces platform, Giorgio takes active part in the discussions and proposes potential touristic destinations to visit in the next three months.

Two months after the group's creation, a new member, Michelle, suggests making their first excursion abroad to Berlin, Germany. She has even got offers and starts enumerating the pros and cons for such a trip with all the members of the group. Finally, Stamatia creates a calendar entry in the platform as the final dates for the excursion.

4.2.62.3 UC FLOW DIAGRAM

In the following diagram, the most important already encoded services are displayed, based on the previous description.
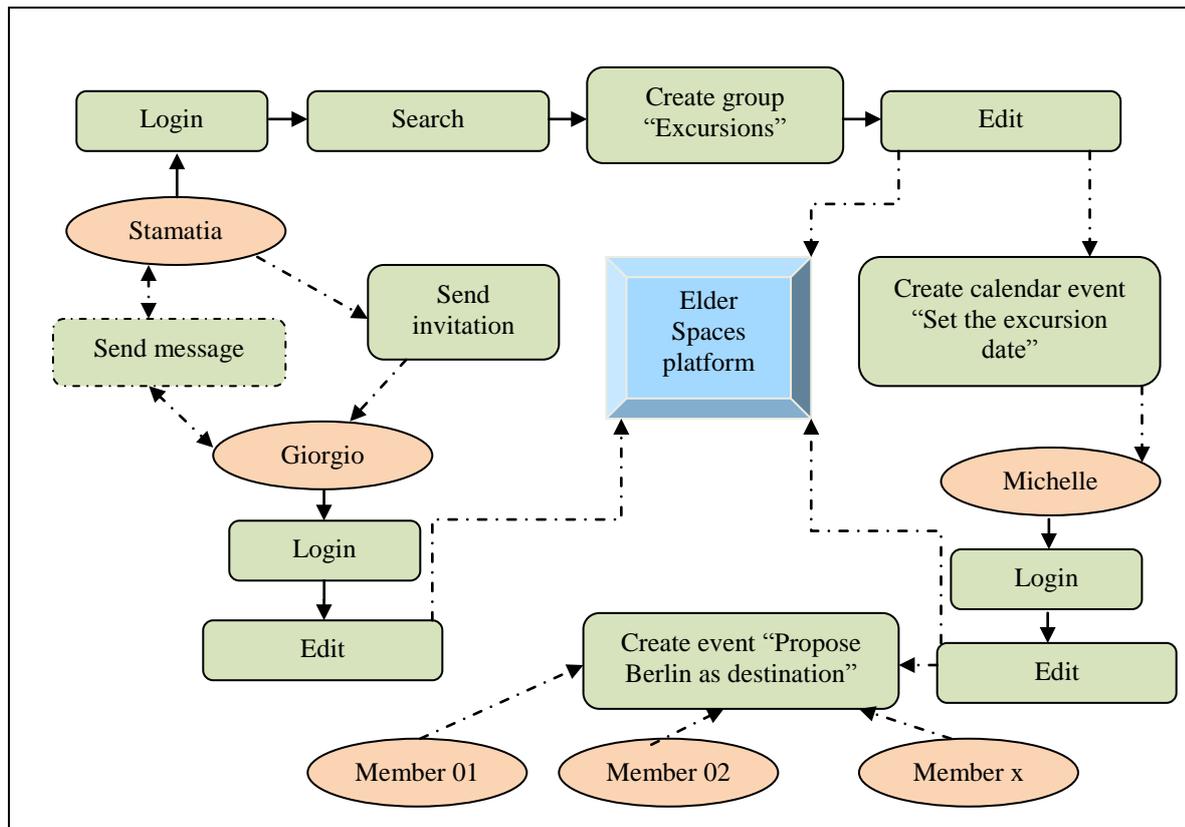
Figure 4.2-12: UC 2nd Organizing Events flowchart diagram

4.2.63 USE CASE SCENARIO NO10 – ORGANIZING EVENTS

4.2.63.1 UC ROLES

Actors	Role	Description
Aristotle	**Retired teacher**	Aristotle (67) is a retired teacher who lives in Athens, Greece. Since his early youth he was fond of writing poems. He has recently explored Elder-Spaces and initiated a group called "Poetry". He envisages attracting other poetry-lovers and ultimately organizing poetry evenings.
Sofoklis	**Civil servant**	Sofoklis (59) is a civil servant who works and lives in Athens, Greece. He likes reading poetry, both ancient and modern. He seems enthusiastic with his participation on the group and fully supports the organization of poetry evenings.

William	**Doctor**	William (62) is a doctor who lives in London, UK. He likes poetry and reads poems from all over the world, translated in English. He has found out Elder-Spaces when he queried a poem which had already been discussed in the "Poetry" group. Thus, he joins the group and takes part in the discussions. Throughout his work and the conduction of medical meetings, he has been visiting Greece quite often during the year. He decides to create calendar entries in the platform where he suggests creating a poetry evening during his forthcoming visit in Greece, so as to meet his new friends and discuss on poetry.

Table 4.2-62: UC 3rd Organizing Events roles

4.2.63.2 UC DESCRIPTION

Aristotle logs in the Elder-Spaces platform and searches for a group regarding poetry. As he cannot find anything similar, he creates a group "Poetry". His goal is to discuss about poetry of any kind with other members and organize poetry evenings, where they can meet each other and talk in person as well.

Sofoklis, who has poetry as his main hobby, is one of the first members to actively participate in the discussions. He proposes specific subjects and trends to talk about poetry in international level.

William, who has discovered interesting comments on his favourite poem through the platform, suggests arranging the forthcoming poetry evening with his next visit in Greece, proposing two separate dates in the calendar.

4.2.63.3 UC FLOW DIAGRAM

In the following diagram, the most important already encoded services are displayed, based on the previous description.
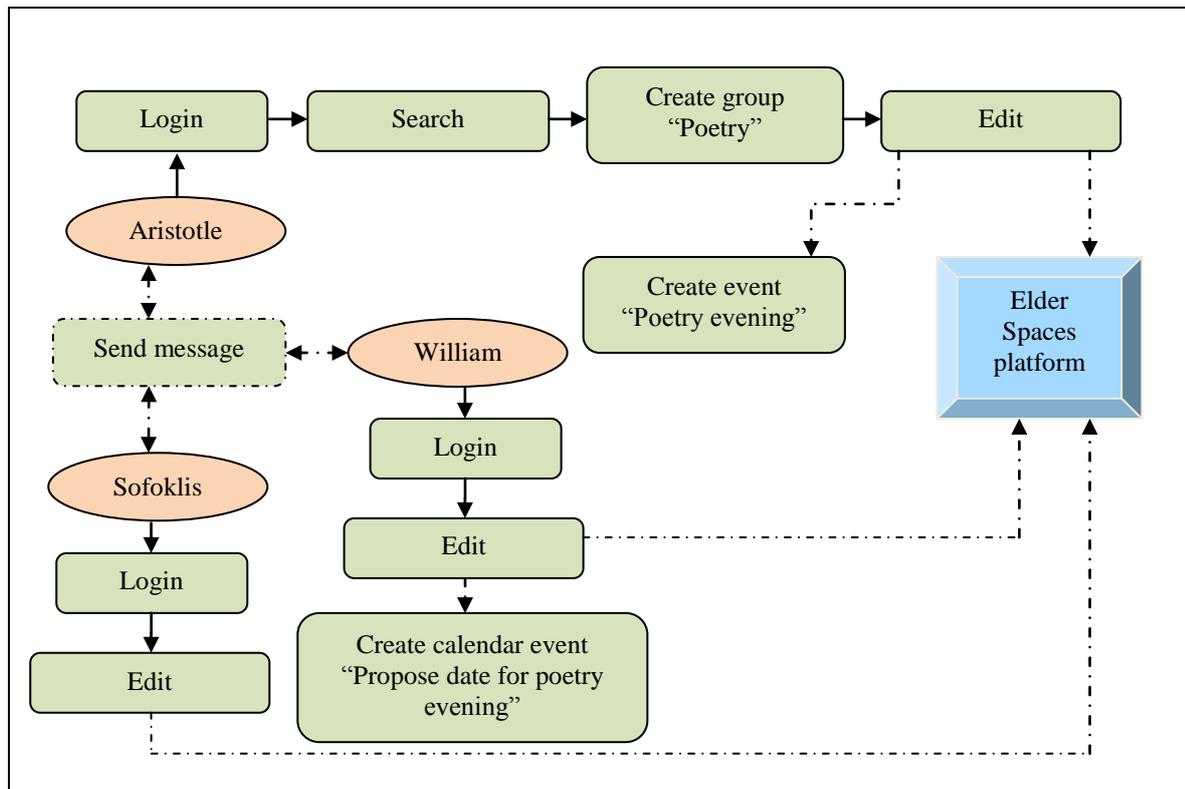
Figure 4.2-13: UC 3rd Organizing Events flowchart diagram

4.2.64 Use case Scenario No11 – Organizing events by social service provider

4.2.64.1 UC Roles

Actors	Role	Description
Michaela	**Manager**	Michaela (43) is the team manager at the residential home "House Bethesda". She manages the personnel and the finances of the institution.
Peter	**Occupational therapist**	Peter (56) is the occupational therapist of "House Bethesda". He does the ergo therapeutic therapies, but also manages activities like excursions or celebrations for the residents.
Rosi	**Resident**	Rosi (80) is a resident at "House Bethesda". She has lifelong been a housewife. She has 2 daughters and a son, is widowed since 5 years and suffers from mild dementia.
Petra	**Relative**	Petra is a saleswoman in a bakery and lives in the city, where "House Bethesda" is. She is the daughter of Rosi, visiting her twice a week.

Table 4.2-63: UC 4th Organizing Events by social service provider roles

4.2.64.2 UC DESCRIPTION

Peter makes the proposal to Michaela, to make a barbecue for the residents, their relatives and the team of "House Bethesda" as this year's main summer event. Michaela has the objection that the financial situation is not good enough to finance a barbecue for so many people. Peter proposes to search sponsors. Michaela decides to use the Elder-Spaces platform to organize the event and the acquisition of needed things for the barbecue.

She creates a discussion announcing the barbecue and explaining the situation. She also notifies all group members about that discussion and creates an event on the platform, where users may confirm their participation. Peter made a list of the needed things. Michaela creates a poll of it, where group members may enter, which things of the list they will donate.

Petra talks to her boss after reading the discussion, which will donor all the bread needed. She enters that to the list. She also confirms her participation. Even Rosi and Peter confirm their participation.

4.2.64.3 UC FLOW DIAGRAM

In the following diagram, the most important already encoded services are displayed, based on the previous description.
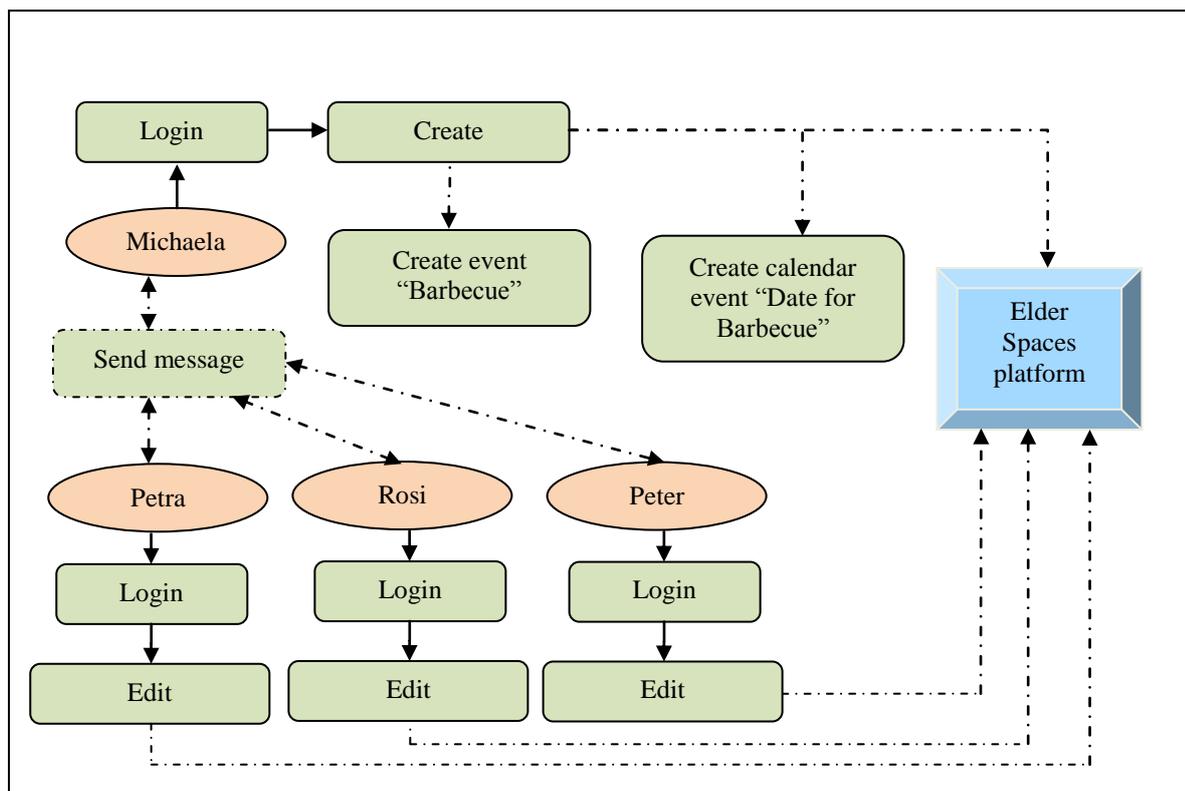

Figure 4.2-14: UC 4th Organizing Events flowchart diagram

4.2.65 Use case Scenario No12 – Lifelong Learning and Structured training

4.2.65.1 UC Roles

Actors	Role	Description
Odisseas	**Retired farmer**	Odisseas (56) is a retired farmer who lives in Trikala, Greece. His son has recently succeeded in the last exams and is studying in the University of Athens, Greece. Prior to their journey to Athens by their car, he is equipped with a GPS in order to drive feasibly in the unknown to him streets of Athens. The problem is that he needs help on how to properly use the device. So, he poses this issue on Elder-Spaces platform.
Melpomeni	**Taxi driver**	Melpomeni (57) is a taxi driver who lives in Athens, Greece. She tries to catch up on new technology, already possessing GPS on her professional vehicle. She finds Odisseas' quest quite easy to explain, as she uses such a device for the last 10 years. She decides to use Elder-Spaces platform and create a thorough step-by-step guide, analysing with simple wording the functionality of the device.
Erato	**Housewife**	Erato (59) is a housewife who lives in Arta, Greece. Her children found out of Elder-Spaces through internet, and suggested that she could register and ask herself whatever she does not understand from "new technology". After being member for a month, she creates a query on how to create documents via a PC, in an attempt to digitize her recipes collection.

Table 4.2-64: UC 1st Lifelong Learning and Structured Training roles

4.2.65.2 UC Description

Odisseas logs in the Elder-Spaces platform and poses a query on how to use a GPS device. He comments that although the employee of the shop was speaking to him in simple wording, he cannot still find out how to function his newly bought device. So, he would like another member to practically explain the main functionality.

Melpomeni who is using GPS for the last decade, decides to create a step-by-step guide in order to help Odisseas. She uses even screenshots from the specific model's navigation menu, turning the guide to a visualized tutorial, which she uploads on the platform.

In the meantime, Erato tries to follow the posts that already exist in the platform and decides to initiate a new one. As she explains, she would like to digitize her recipes collection, due to the fact that nearly half of them are written in old timeworn pieces of paper. Thus, she would like to be trained on how to write documents on her PC.

4.2.65.3 UC FLOW DIAGRAM

In the following diagram, the most important already encoded services are displayed, based on the previous description.
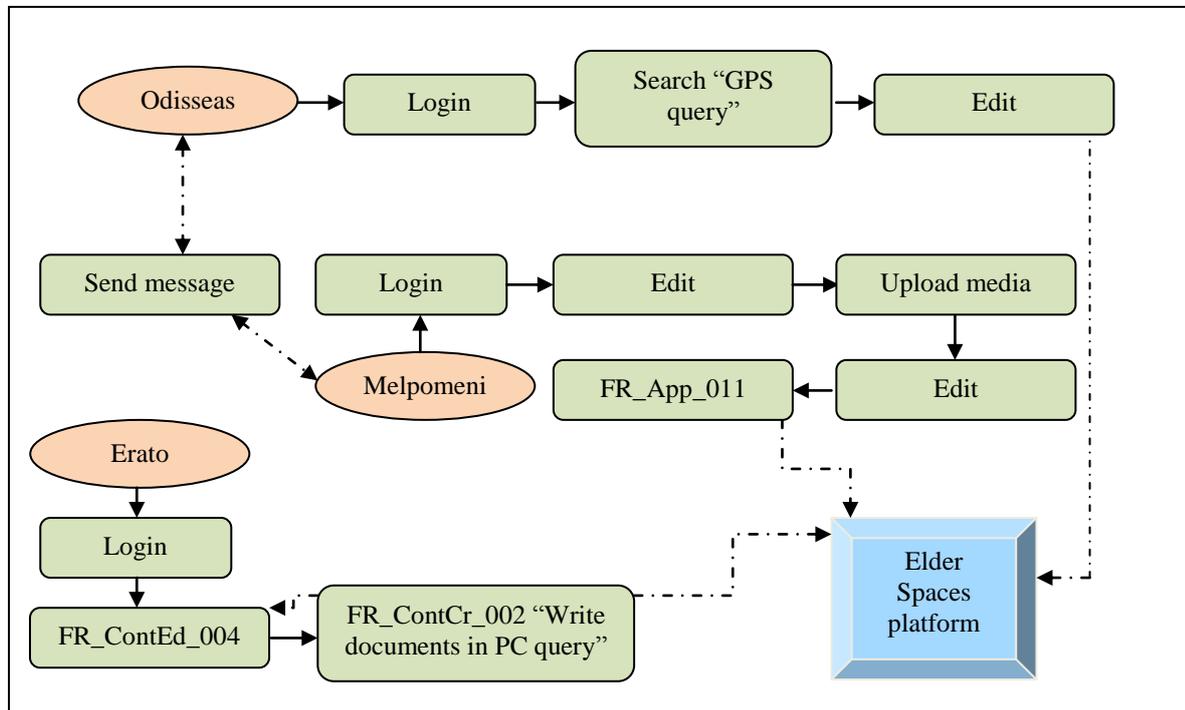
Figure 4.2-15: UC 1ˢᵗ Lifelong Learning and Structured Training flowchart diagram

4.2.66 USE CASE SCENARIO NO13 – LIFELONG LEARNING AND STRUCTURED TRAINING

4.2.66.1 UC ROLES

Actors	Role	Description
Anastasia	**Pensioner**	Anastasia (60) is lives in Edessa, Greece. She is recently retired and tries to find new hobbies to occupy her time. She knows how to play other card games, but she would like to know how to play 'Bridge'. Thus, she initiates such a query hoping to be trained on how to play.

Charalampos	**Private employee**	Charalampos (56) is a private employee who lives and works in Thessaloniki, Greece. He is an active member of the Greek 'Bridge' Association, taking part in national and international tournaments. For him, it is quite positive that through Elder-Spaces he can properly teach 'Bridge' to others.
Theodoros	**Pensioner**	Theodoros (67) lives in Pella, Greece, and likewise Anastasia tries to occupy his time. He visits the KAPI of his neighbourhood, but feels no interested in playing the same game ('xeri') all the time. He logs in Elder-Spaces platform and follows the instructions on how to learn and play 'bridge'.

Table 4.2-65: UC 2nd Lifelong Learning and Structured Training roles

4.2.66.2 UC DESCRIPTION

Anastasia logs in the Elder-Spaces platform and poses a query on how to play 'Bridge'. She has heard that it is quite interesting and she would like an expert teach her throughout the platform.

Charalampos logs in the platform and starts commenting on how to play the game. Due to the fact that the rules are a bit complicated, he decides to follow step-by-step instructions. He considers that a 7-day course would be feasible to turn someone to bridge player.

Theodoros starts following the instructions and invites more of his KAPI friends to try themselves this new card game.

4.2.66.3 UC FLOW DIAGRAM

In the following diagram, the most important already encoded services are displayed, based on the previous description.
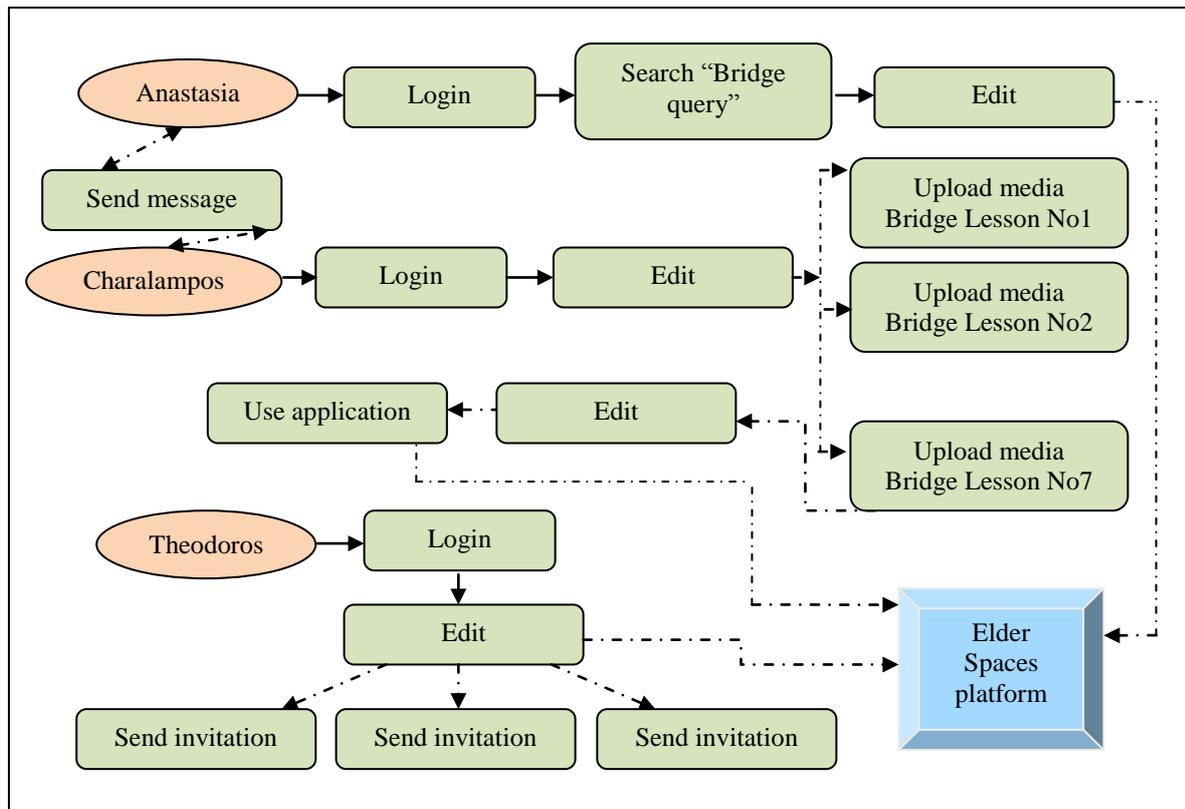
Figure 4.2-16: UC 2ⁿᵈ Lifelong Learning and Structured Training flowchart diagram

4.2.67 USE CASE SCENARIO NO14 – SEARCH

4.2.67.1 UC ROLES

Actors	Role	Description
Stella	**Pensioner**	Stella (62) lives in Bologna, Italy. She wants to search for any classmates of her since the elementary school. Her interest is focused on the period from 1956 to 1968. She cannot locate any relevant information and though decides to create a new group called "Old classmates", analysing the schools she attended per year.
Persefoni	**Pensioner**	Persefoni (64) lives in the suburbs of Bologna, Italy. She is already an 'Elder-Spaces' friend of Stella, and gets a notification of her to join the group. She is surprised to see that she had attended the same High School, without knowing that any of the two 'friends'.

Table 4.2-66: UC 1ˢᵗ Search roles

4.2.67.2 UC DESCRIPTION

Stella logs in the Elder-Spaces platform and searches for any of her old classmates. She is mainly focused on the decade 1956-1966, where she had some of the best memories of her childhood. Her query returns no results, thus she creates a new group, "Old Classmates". She sends notification messages to her existing near-aged friends, in order to forward this query to people of their environment who may be concerned.

Persefoni, who is already registered in Elder-Spaces, decides to join the group. Then she is surprised to see that during the years 1962-1964 they attended the same High school.

4.2.67.3 UC FLOW DIAGRAM

In the following diagram, the most important already encoded services are displayed, based on the previous description.
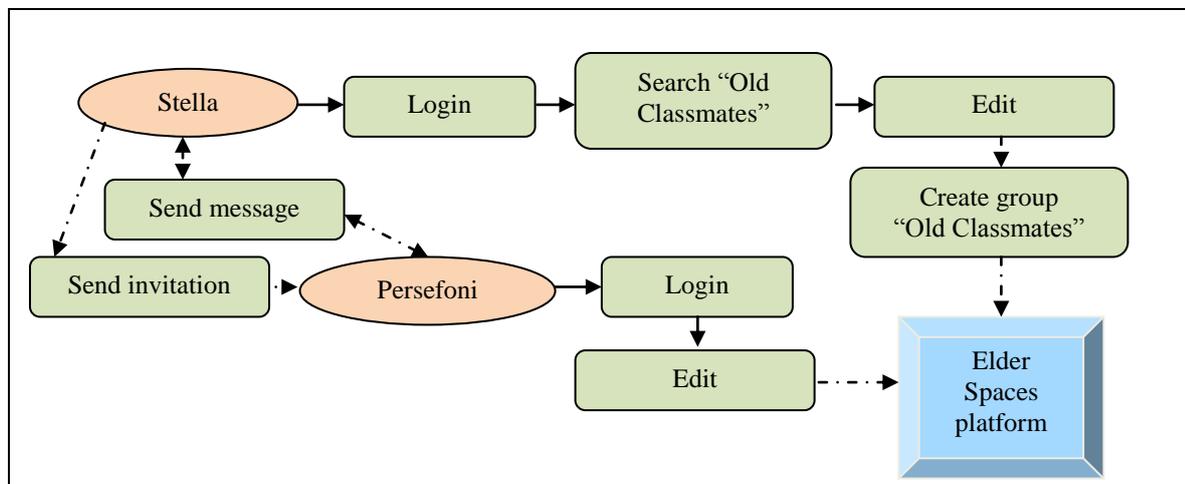

Figure 4.2-17: UC 1ˢᵗ Search flowchart diagram

4.2.68 USE CASE SCENARIO NO15 – SEARCH

4.2.68.1 UC ROLES

Actors	Role	Description
Panagiotis	**Pensioner**	Panagiotis (76) lives in Munich, Germany. He is accustomed to the Elder-Spaces platform, as he already participates in many groups and uses many of its applications. His age though makes him forget which steps to follow in order to locate a desired application. Thus, he uses the special provided search text field

		of the platform which points him directly to the desired location inside the platform.

Table 4.2-67: UC 2ⁿᵈ Search roles

4.2.68.2 UC DESCRIPTION

Panagiotis logs in the Elder-Spaces platform and wants to comment on a newly created group concerning politics. As he cannot remember the exact steps to follow, he uses the search tool provided by the platform. After commenting on this group, a 'friend' of his challenges him to play backgammon throughout Elder-Spaces. Panagiotis accepts the challenge, but as he cannot remember once again how to reach the application, he uses the search tool.

4.2.68.3 UC FLOW DIAGRAM

In the following diagram, the most important already encoded services are displayed, based on the previous description.
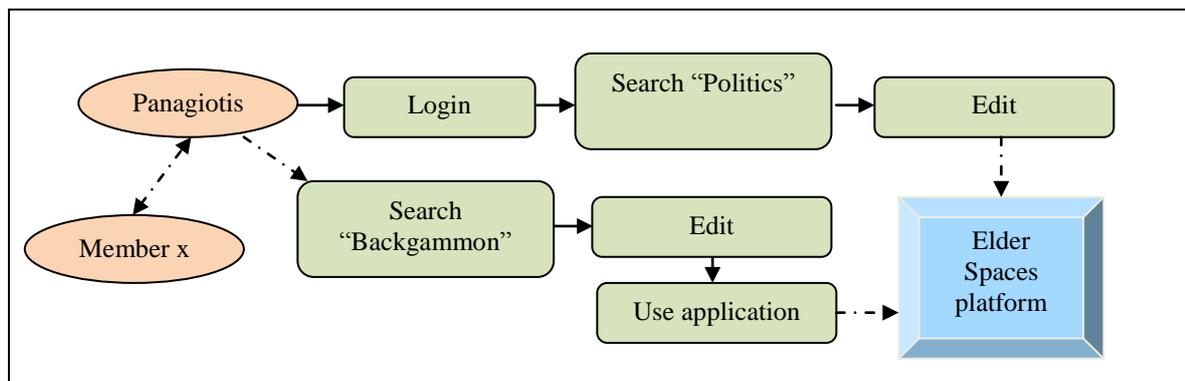

Figure 4.2-18: UC 2ⁿᵈ Search flowchart diagram

4.2.69 USE CASE SCENARIOS ANALYSIS

Studying all previous UCs, it is clear that some use cases may pose subsection from others. In this part the way the previous scenarios interconnect with each other is shown in the following table.

UC Scenario	Description	Includes UC Scenario
Group for Activities (Service A)		
UC_Activities_01	Prior to the initialization of an activity, one could search whether it already exists or not.	UC_Search_02
UC_Activities_01	This is an abstract approach, as one created activity may be transformed to a structured life learning process.	UC_LearnTrain_01
Professional Group (Service B)		
UC_Professional_01	Throughout this group of professionals, is probable to emerge a training process on how to conduct specific professional workarounds.	UC_LearnTrain_02
Intergenerational Activities (Service C)		
UC_Intergene_01a	Intergenerational activities can include training activities, in which the 'tutor' is elderly and the trainees are youngsters.	UC_LearnTrain_01
UC_Intergene_02a	Intergenerational activities can include training activities, in which the 'tutor' is youngsters and the trainees are elderly.	UC_LearnTrain_02
UC_Intergene_02a	Intergenerational activities may use the search tool in order to explore an existing activity or any other helpful information.	UC_Search_02
UC_Intergene_02b	Intergenerational activities can include training activities, in which the 'tutor' is youngsters and the trainees are elderly.	UC_LearnTrain_02
UC_Intergene_02b	Intergenerational activities may use the search tool in order to explore an existing activity or any other helpful information.	UC_Search_02
Organizing Events (Service D)		
UC_Events_02	Prior to the organization of events one may search whether a relevant event has already taken place.	UC_Search_02
Lifelong Learning & Structured Training (Service E)		
-	This type of service may pose a subcategory for many of the other services, as each of them may be transformed to a lifelong learning procedure.	-
Search (Service F)		
-	This type of service may pose a global subcategory, as it has a generic role.	-

Table 4.2-68: UC Scenarios interconnection description

EXECUTIVE SUMMARY

This document justifies the applied user segmentation for the current initiative and clearly sets out the framework of the use cases which should become a reality during the project's implementation.

Two partners' perspective is thoroughly examined, prior to the finalization of the two used main segmentation groups. The followed strategy for the segmentation of the users is briefly described.

The use cases and the real life scenarios are displayed in the form of use cases. Each use case is described in further detail and for many of the envisaged general services at least two use case scenarios are examined. They are analysed in both technical and descriptive format for further reference. This document is meant to be used in dual way; from the technical perspective by the technical partners of the consortium and from the more abstract and descriptive perspective, in order to fulfil dissemination and publication motives.

ANNEX

No.	Title	Code	Importance	Description
1	Login	FR_Log_001	High	The most important requirement, as it is the necessary step to initiate the proposed platform.
2	Create Content	FR_ContCr_002	High	Users should be able to create content throughout the software platform (posts, news, proposals etc.).
3	Search Content	FR_ContSrc_003	High	Users should be able to search content (multimedia content, friend, group, event, etc.) throughout the platform effectively.
4	Edit Content	FR_ContEd_004	Medium	Users should be able to edit content throughout the software platform.
5	Upload Content	FR_ContUp_005	High	Users should be able to upload multimedia content on the software platform (photographs, video files, documents).
6	Send Text / SMS	FR_Text_006	Medium	Users should be able to send short text messages to selected people (friends, groups).
7	Add Friend	FR_Add_007	High	Users should be able to add a friend.
8	Create Group	FR_GroupCr_008	Low	Users may create a group for a specific topic.
9	Manage Group	FR_GroupMan_009	Low	Some users could be given the role of a moderator and manage an existed group.
10	Edit Properties	FR_Prop_010	Low	Users may be able to edit properties from their profile or from own content uploaded on the platform.
11	Use Application	FR_App_011	High	Users should use applications (games, training or learning applications, etc.) effectively.
12	Create Events	FR_Event_012	High	Users should be able to create events (excursions, charity, volunteering, social events, etc.).
13	Create Calendar Entry	FR_Calend_013	Low	Users may use calendar entries in order to effectively manage their time schedule and create automated reminders throughout the platform.

Deliverable's D1.1 "Table 3" Services / Functional requirements

REFERENCES

[1] Deliverable D1.1 End-User Requirements, Elder-Spaces © project, AAL-2009-2-116

[2] Deliverable D1.2 Social Network Provider and Application Developer Requirements, Elder-Spaces © project, AAL-2009-2-116

[3] Kahana, Eva and Kahana, Boaz and Lovegreen, Loren and Cronin, Cory and Plaff, Holger (2011) *THE PROACTIVE AGED: NEW PLAYERS IN THE WEB WORLD.* pp. 1-2. In: Proceedings of the ACM WebSci'11, June 14-17 2011, Koblenz, Germany

[4] Quotation from http://www.participatorymuseum.org/chapter4/

[5] Read Engeström's April 2005 blog post, Why some social network services work and others don't—Or: the case for object-centered sociality.

[6] http://www.participatorymuseum.org/

[7] Moodies is a research tool to study **Facial Information Processing (FIP)** and **Emotions in Social Context (ESC)**, such as FaceBook, Skype, Yahoo Messenger, MSN, mobile phones, 3D on-line worlds, and many more applications/devices people use to communicate. It was developed by the Hungarian Academy of Sciences in cooperation with Digital Elite Inc. with image editing services provided by Digital Custom Group.

[8] http://www.digitalelite.net/Pages/DigitalElite/Moodies_PhotoSamples.html