# Nostalgia Bits - NoBits

## D1.2: Report on Operational Scenarios and Functional Requirements Report

Table of Contents

# A        Functional Specification from Virgo Systems Ltd.

# 1.      Introduction

## 1.1.        Purpose of the functional specifications

The purpose of this chapter is to give a detailed structure to the functions available in the NoBits portal. The functional specifications aims to be clearly structured and easy to understand both for consortium partners and developers.

## 1.2.        Scope of the functional specifications

This functional specification includes every aspect of the intended functionality, excluding technical aspects: technological details of implementation, database structure, software solutions, finalized wording of end user messages, etc.

In the specification phase design and interface plans are not yet available; therefore interfaces can be developed concurrently with software development. This specification is supplemented with user interface drafts – aka wireframes.

# 2.      Overview

## 2.1.        Design principles

In this part the functions of the portal are structured according to the hierarchy of user types, in expanding circles of available functions from narrow to wide. Back office administrative functions are detailed separately from portal functions. For details see Chapter Back Office administration interface. The primary targeted users of the portal are the elderly age groups. Keeping the usability of the portal easy and simple is a basic principle of design. Default settings are universally reduced to basic functions, with advanced functions available, but hidden. Accessing advanced functions is a user decision.

UI labels are easy to customize or translate during the deployment process. Every type of user is a considered to be a Visitor before login and after logout. Registered Members are preferable to unregistered Visitors in using the portal. To foster registration to NoBits, all the functions of the portal are displayed to every user. Members can use all the functions properly. Visitors can use many functions properly. If an unregistered Visitor attempts to use a function that requires registration, Visitor is prompted to log in or register. This difference is duly indicated in the description of functions.

2.2.     Privacy

The primary purpose of NoBits is collecting and sharing memories. Therefore, as default setting, all the content members create is public. Members can make their own content private. Making owned content private is a user decision.

There are two philosophies for member registration and portal operation in general: one employs a unique username, the other does not.

Without unique username: Members register with their e-mail and real names; log in using their e-mail and password; Member is referred to with his real name.

This solution is personal, giving Member's success in Nostalgia Bits (lots of uploaded content, praise from other Members in comments, etc.) a sense of personal achievement.

With unique username: Members register with a chosen username (AKA nick or nickname), giving their real name is optional; log in using username or email and password; Member is referred to with his username. This solution is more anonymous, providing a higher level of privacy.

*Please note: The system will be capable of providing either solution. It is a deployment level decision to be made before implementation.*

This specification presumes a unique username scenario. In this stage, differences from a scenario without unique username are minor.

# 3.          Glossary

General

| | |
|---|---|
| **Box** | A group of connected/related functions appearing consistently together. |
| **Category** | Categories are the basic units of the Taxonomy. Items and stories must belong to at least one category. |
| **Content** | Collective for items and stories uploaded to NoBits. |
| **Info bar** | A widget displaying non-critical information to the user. |
| **In-place editing** | When a piece of content is edited, it happens in the same page where it is viewed. |
| **Item** | Items are media files uploaded by users into NoBits. Item media types are text, picture (image), video and audio. Items have title, and additional data (tags, keywords, likes, ratings, public/private status, comments, etc.) |
| | Items are organized into Stories. Item is called "Artifact" in other project documents. |
| **Media type** | An item may be text, image, video or audio. This information is automatically added to items upon being added to NoBits. |
| **Profile Image** | Advanced member profile element. Not content. Profile Image is uploaded directly to Personal information on the Personal tab of Profile page. |
| **Story** | Basic unit of content in the NoBits portal. Stories have title, description, linked Items and additional data (tags, keywords, likes, ratings, public/private status, comments, etc.) Story is called "Artifact collection" in other project documents. |
| **Subscribe** | It is a Member action, in which a particular piece of content, other Member, tag or category of content is marked. Member will receive news about the subscribed entity. |
| **System Parameter** | Parameters with global scope, influencing the operation of the service are called system parameters. The behaviour of individual functions or even the scaling of the service may be controlled by system parameters. |
| **Tag** | Tags are keywords related to Items and Stories. Multiple tags are possible. |
| **Taxonomy** | Structuring content in a tree topology. Taxonomy attributes are managed in the Back Office. |

Messaging

There are different types of messages in NoBits. Each message type has a distinct purpose.

| | |
|---|---|
| **Activity** | Activities are messages either written by a Member or automatically generated by the system and sent to specific Members. |
| | Activities are used in broadcasting information. |
| | Activities are displayed in Feeds. |
| | For details please refer to chapter Main page, Page content. |
| **Attachment** | Binary data (file) attached to a (personal) message. |
| **Draft message** | Drafts are unsent messages in the process of composition, saved automatically by the system or manually by the user. |
| **Feed** | A feed is a personalized list of activities. |
| **Message** | Such messages are often called Private Messages in different contexts. |
| | Messages are messages written by a Member and sent to one or more specific Members. |

| | |
|---|---|
| **Notification** | Messages are used in personal communication. For details please refer to chapter Profile page, Messages tab Notifications are messages automatically generated by the system and sent to one or more specific Members. Notifications are used in delivering personalized information. For details please refer to chapter Profile page, Notifications tab |
| **Quota** | Quantifiable restriction(s) on the number or size of messages. |

<u>User types</u>
There are different types of users. User types have different levels of privilege. User types are arranged in a hierarchy of increasing levels of authorization.

| | |
|---|---|
| **Visitor** | Not registered member. Visitors have read-only access to public content. |
| **Member** | Registered member of NoBits. |
| **Owner** | Registered member who owns content: collection, Item, message, comment, etc. |
| **Content Admin** | Registered member with additional content management and moderation functions. Helpers in elderly homes, in support of the local resident NoBits Members is a good example for Content Admin. |
| **Sys Admin** | Registered member with full system wide control of content and user accounts. Administrator of back office functions. |
| **Pending Member** | *Applicable only if the two-step registration method is chosen.* Special user type: User in unfinished registration process. Pending Member is applicable only for the Registration landing page. Pending Member is indicated only in the specification of the Registration landing page. |

# 4.      Main page

Main page is the home page of the NoBits portal. If >URL< is opened in a browser, Main page appears with Visitor functionality.

The pages of the portal have four main parts:

1. Header is at the top of the page. It contains general basic functions.
2. Page content is in the middle of the page. Its content depends on user type and activity.
3. Footer is at the bottom of the page. It contains links to the portal's information pages.
4. Sidebar is on either side of the page. It is a collection of links relevant to the current page and its content.

Every type of user is a visitor before login and after logout.

## 4.1.      Header

Header, as described for the Main page, applies to every other page. Differences for user types apply in other pages respectably. Therefore headers are described only here.

**Visitor**
The Header contains the following elements:

- **NoBits logo** (link) - Clicking on it navigates to the Main page.
- **Registration** (link) - Clicking it navigates to the Registration page.
- **Login** (link) –Clicking on it brings up the Login pop-up layer.
- **Browse** (link) - Clicking on it navigates to the Browse page.

- Search box - This box provides search functions
  - **Input** (text input field) for search phrases, keywords. Pressing Enter/Return in this field equals clicking on the **Search** button. By default the **Input** field displays *"Search text here…"*
  - **Search** (button) – Clicking on it initiates a free text search and navigates to the Search page. Search phrase may be 0 characters.

**Member, Owner, Content Admin and Sys Admin**
The Header of these user types has the following additional elements:

- **Logout** (link) – these user types have this link in the place of the **Login** link. Clicking on it logs the user out and navigates to the Main page with Visitor functionality.
- **Personal** (link) – Clicking on it navigates to the Personal tab of the Profile page, displaying user's own information.
- **Messages** (link) - Clicking on it navigates to the Messages tab of Messages and Notifications, displaying user's messages.
- **My stories** (link) - Clicking on it navigates to the Stories tab of the Profile page, displaying user's own stories.

The **Registration** link is not applicable to these user types.


## 4.2.     Page content

The Page content of the Main Page consists of >panels<.

Paging is rudimentary for feeds: By default a feed displays the N newest activities. N can be set in the Back Office. To display older activities an **Older activities** link (see definition below) stands at the bottom of the feed.


### 4.2.1.     Wall feed

The Wall feed lists activities. Activities are listed chronologically, with newest activities on top. Activities are listed together with connected comments and likes.

Activities are written by Members or generated automatically by the system. Generated activities are about:

- Item created, deleted, commented, liked, rated, changed (updated), subscribed to;
- Story created, deleted, commented, liked, rated, shared, changed (updated) , subscribed to;
- Profile information changed (updated);
- Feed item, created, liked;
- Category subscribed to;
- Member subscribed to.

The Member who posts an activity (wall post) becomes the Owner of that activity. The Member who creates a comment becomes the Owner of that comment. In general the Owner of the interaction of which an activity is generated becomes the Owner of that activity.

**Visitor**
Wall feed is not applicable to Visitors.

**Member**
The Wall feed of Members has the following elements:

- Create a Wall post box
  Wall posts entered here will be sent to other Members who subscribed to Wall posts from Member.
  - **Text of post** (text input field) – The post's content can be entered here. Maximum text length (number of characters) of Wall posts can be set in the Back Office. Pressing Enter/Return starts a new line.
    If field is blank (message length is 0 characters), field displays the caption *"I just wanted to say…"*
  - **Characters left** (status) – read-only. This counter displays the number of characters remaining before maximum post length is reached.
  - **Submit** (button) - clicking on it sends the post.
    After the post is sent the page is refreshed. The post sent appears as a new activity at the top of the Wall feed. Create a Wall post box is reset to blank.
    Clicking on the **Submit** button with the **Text of post** field blank (comment length is 0 characters) closes the Create a Wall post box.
- Activity box
  The Wall feed consists of a series of Activity boxes, appearing in chronological order, newest on top.
  - **Profile picture** of activity's Owner (if available)(link) - clicking on it navigates to the Personal tab on the Profile page of message's
  - **Username** of message's Owner (link) - clicking on it navigates to the Personal tab on the Profile page of message's Owner
  - **Content of message**
    Wall posts written by Members are displayed as read-only text (Maximum displayed text length is N. If text is longer than N characters, displayed text is truncated to N and "See more" link is added. Clicking 'See more' link expands Activity box to display full text.)
    Activities generated automatically may include links to content. The link is a content type icon, indicating Story or text-, image-, video- or audio content. Clicking on a content type icon in a Wall post navigates to the Story page displaying the Story in detail.
  - **Date of activity** (status) – read-only
  - **Make comment** (button) – clicking on it opens the Make a comment box under the Activity box
  - **Like/Unlike** (button) – two state button.
    Clicking on **Like** changes the button to Unlike from Like and the read-only caption *"You like this message"* appears below the button.
    Clicking on **Unlike** changes the button to Like from Unlike and the read-only caption *"You like this message"* disappears from below the button.
    The number of likes added/removed in the Wall feed are included in the like-count of the relevant content (Story, Item).
  - **Unsubscribe** (button) – clicking on it opens Confirmation pop-up layer with the caption: *"Are you sure you want to unsubscribe the Member <username>?"*

- Comment box – if a comment is made to the Wall post, it appears below the Activity box. If there are multiple comments, they are listed in chronological order, oldest on top. Comments to Wall posts are also displayed among the comments of the relevant content (Story, Item).
  - **Profile picture** of Comment's Owner (if available)(link) - clicking on it navigates to the Personal tab on the Profile page of Comment's Owner
  - **Username** of Comment's Owner (link) - clicking on it navigates to the Personal tab on the Profile page of Comment's Owner

- o **Date of comment** – read-only
- o **Text of comment** – read-only

- Make comment box
  This box is not displayed by default. It opens under the corresponding Activity box or the last comment to this activity when the Make comment button is clicked in the Activity box.
  - o **Profile picture** of Member (if available) – read-only
  - o **Text of comment** – text input field; maximum text length (number of characters) of comments can be set in the Back Office
    If comment length is 0 characters, field displays the caption *"Your comment…"*
  - o **Submit** (button) - clicking on it sends the comment.
    After the comment is sent the page is refreshed. The corresponding Activity appears at the top of the feed with the newly made comment appended. Make comment box is closed.
    Clicking on the Submit button with the Text of comment field blank (comment length is 0 characters) closes the Make comment box
  - o **Cancel** button - clicking on it closes the Make comment box

- Confirmation pop-up
  This pop-up layer appears if the user initiated an action that requires confirmation (irreversible or difficult to reverse action).
  - o **Confirmation caption**
    Example: *"Are you sure you want to unsubscribe the Wall posts of <username>?"*
  - o **Confirm** (button) - Clicking on it confirms action, which is then executed
  - o **Cancel** (button) - clicking on it closes the Confirmation pop-up

- **Older activities** (link) – This link is at the bottom of the Wall feed below the oldest displayed message. Clicking on it refreshes the page, adding the next N messages to the displayed list.

**Owner**
**Delete** buttons are displayed to Owner in the Activity boxes and Comment boxes of the messages and comments he owns.

- Activity box
  - o **Delete message** (button) — clicking on it opens Confirmation pop-up layer with the caption: *"Are you sure you want to delete this message?"*

- Comment box
  - o **Delete comment** (button) — clicking on it opens Confirmation pop-up layer with the caption: *"Are you sure you want to delete this comment?"*

**Content Admin**
For moderation purposes the **Delete** buttons described in Owner are available to Content Admin type users. The **Delete** button is displayed in a Activity box or Comment box if the owner of the post or comment is assigned to Content Admin in the Back Office for moderation.

**Sys Admin**
For moderation purposes the **Delete** buttons described in Owner are displayed to Sys Admin type users in every Activity box and Comment box.

### 4.2.2.     Tag cloud

**Visitor**
Visitors have a tag cloud in their Main page. The tags in it are top tags. The tags are links. Clicking such a tag link navigates to the Search page, displaying the Story tab with the tag search field filled out with the tag clicked and a list of matching Story minis. The title of the search is the tag clicked in the tag cloud.

**Member, Owner, Content Admin, Sys Admin**
These types of users have a tag cloud of identical function in their Sidebar.

### 4.2.3.     Add new button

This function is intended to prompt Members to add more new content.

**Visitor**
Clicking on it brings up the login pop-up layer. This function is intended to prompt Members to log in or Visitors to register. If login or registration is initiated with this button, successful login or registration is followed by navigation to the Add new page.

**Member, Owner, Content Admin and Sys Admin**
Clicking on it navigates directly to the Add new page.

### 4.2.4.     Recommended stories

This is an automatically generated feed. It lists Story minis of Stories with attributes marked for the Recommended stories.

Settings for this feed are managed by Content Admin and Sys Admin type users. See also: **Add to Recommended** checkbox in the Story page.

**Visitor**

Story mini
- **Thumbnail picture** (link) – picture of collection; clicking on it navigates to the Story page, displaying the Story in detail
- **Title** (link) – title of Story; clicking on it navigates to the Story page, displaying the Story in detail
- Description (link) – Story's description; clicking on it navigates to the Story page, displaying the Story in detail. (Maximum displayed text length is N. If text is longer than N characters, displayed text is truncated to N and "See more" link is added. Clicking 'See more' link expands Story mini to display full text.)
- **Owner** (link) – name of Story's owner; clicking on it navigates to the Personal tab on the Profile page of the Story's owner
- **Number of likes** (read-only) – indicates number of likes given to collection
- **Media type** icons with counters (read-only) – Media types: text, picture, audio, video. Counters indicate the number of Items of the corresponding media type in the collection. Example: 2 text – 12 pictures – 0 video – 1 audio

**Member, Owner, Content Admin and Sys Admin**
Recommended stories is not applicable to these user types.

### 4.2.5.     Targeted feed

Targeted feed is an automatically generated feed. It lists Story minis of the newest Stories user may be interested in. Selection of Stories to be listed is based on user's activity log and preferences (comments, likes, ratings, personal information). Settings of the Targeted feed are managed in the Back Office.

**Visitor**
Targeted feed is not applicable to Visitors.

**Member, Owner, Content Admin and Sys Admin**
Targeted feed operates according to above description. Feed functionality is as described here.

### 4.2.6.     Navigation

**Visitor**
The functions of the Browse page appear here, displaying the top category of the browsing hierarchy.

**Member, Owner, Content Admin and Sys Admin**
Navigation is not applicable to these user types.

### 4.3.     Footer

The footer is identical for every user type in every page; therefore it is described only here.
The Footer contains the following elements:

- **About** (link) - Clicking on this link navigates to the About page.
- **Legal Statement** (link) - Clicking on this link navigates to the Legal Statement page.
- **Credits** (link) - Clicking on this link navigates to the Credits page.
- **Terms of Use** (link) - Clicking on this link navigates to the Terms of Use page.
- **Privacy Policy** (link) - Clicking on this link navigates to the Privacy Policy page.
- **Help** (link) - Clicking on it navigates to the Help page.

### 4.4.     Sidebar

The sidebar is a collection of links at the left/right side of the page. Its content is composed of links relevant to the current page and its content. The Sidebar is the default location for links to topic-sensitive help.

The Sidebar is functionally identical for every page. Only its respective content is listed - if applicable - for other pages of the portal.

The sidebar is a flexible portal component. A technical guide for extending/customizing the sidebar during deployment will be provided later.

Possible further sidebar components: tagcloud, alternative browse boxes, root browse box, banner boxes in commercial deployments, third party integration widgets (e.g. Facebook, iWiW)

**Abuse Report** (link) – It is functionally identical with a Compose new message button, with the following provisions:

- The recipient of the message is the Sys Admin, not editable
- The message body can be used to describe the reported abuse (indecent content, aggressive language, etc.)

# 5. Login and registration

This chapter deals with administrative procedures. These procedures are related to portal access.

## 5.1. Registration page

This page appears when a Visitor initiates registration to the NoBits system by clicking on the Registration link in the Header or in the Login pop-up layer.

> _Please note:_ _There are two methods for the registration process. Both have arguments pro and contra._ _This specification describes both methods. It needs to be decided which is the preferred method. After_ _the decision the not preferred method will be discarded from the specification._

**Visitor**

Registration method1 (hereinafter M1)
This method is a two- step registration process.

First step: To register, a user must choose a username, password and enter his e-mail address.

After the completion of this step an automatic e-mail is sent to the specified address. This e-mail contains the username, password and a confirmation link.

Second step: The portal navigates to the Registration landing page, which informs the user that his registration request has been received by the system, the above email has been sent and that his registration is pending until he confirms it by clicking the confirmation link in the email. Clicking on a Go to Main page link navigates to the Main page with Visitor functionality.

Clicking on the confirmation link in the e-mail confirms the registration to the system, opens the portal in a browser window and brings up the Login pop-up layer. Member can log in using the username and password specified during registration.

Pro: secure and failsafe

Con: more complex

The Registration page of M1 contains mandatory fields only. Leaving any of them blank results in failed registration.

- **Username** – text input field. This is a unique field, duplication is not allowed.
- **Password** – text input field. Must meet minimum password requirements.
- **Password strength-meter** (see http://iwiw.hu/i/regisztracio)
- **Repeat Password**– text input field. Must be identical with Password.
- **Safety advice** (link) – opens the Safety advice pop-up layer (See safety advice link: http://iwiw.hu/i/biztonsag)
- **E-mail**– text input field. . This is a unique field, duplication is not allowed.
- **Checkbox** with read-only caption _"I have read and agree to Terms of Use and Privacy Policy"._
- **Terms of Use** (link) - Clicking on it navigates to the Terms of Use page.
- **Privacy Policy** (link) - Clicking on it navigates to the Privacy Policy page.
- **Submit registration** (button) – Clicking it submits the registration.

*Succesful registration*

If both steps of the registration process are completed successfully, user can log in and use the portal with Member functionality.

*Failed registration*

If the registration process is not completed successfully, the *Registration* page returns. An error message about the obstacle of registration is displayed in highlighted format above the field in question.

Obstacles to the approval of registration:

- Username is already in use

- There is a NoBits account already registered to the e-mail address.

- Password and Repeat Password are not identical

- Password does not meet password requirements

- Email syntax is not valid

- "I have read and agree to Terms of Use  and Privacy Policy" checkbox unchecked

Registration method 2 (hereinafter M2)

This method is a single-step registration process.

To register, a user must choose a username and password, enter his e-mail address and verify that he is a person (as opposed to a bot - prevention of spam and phising) by passing a CAPTCHA test.

After the completion of this step registration is complete. The new Member of NoBits can start using the portal at once.

Pro: very simple

Con: the entered email address is not verified, which may generate problems later. (For example: mistyped address preventing forgotten password recovery, third party receiving login information and e-mail notifications, etc.)

In addition to the page elements described in M1, the Registration page of M2 contains a CAPTCHA box:

- CAPTCHA box
    - **Caption** – read-only. "Enter the characters displayed here!"
    - **CAPTCHA image** – read-only. Randomly generated
    - **CAPTCHA answer** – text input field
    - **Refresh** (button) – clicking it refreshes the CAPTCHA image

The CAPTCHA box could be replaced with a safety question. For test purposes (A/B test) both methods should be implemented, and the result of the field trials will tell which one NoBits portal should use in production environment.

*Successful registration*

If the registration process is completed successfully, Main page is displayed with Member functionality. Reminder e-mail with login information is automatically sent to the registered e-mail address.

If the reminder e-mail bounces back, automatically generated message is sent to Member with content "Messages cannot be delivered to the e-mail address you specified upon registration. Please check and correct it in your profile."

*Failed registration*

In addition to the obstacles to the approval of registration described for M1, M2 also has:

- CAPTCHA wrong

**Member, Owner, Content Admin and Sys Admin**

This page is not applicable to these types of users.


***Based on the decision of the project partners version M2 is going to be implemented!***


## 5.2. Registration landing page

This page is applicable only if the two-step registration method (M1) is chosen.

This page is applicable only to Pending User type users.

This is the only page where Pending User is applicable.

This page appears if the first step of the registration process is completed successfully.

- **Caption** – read-only.
  Example: *"Your registration request has been received by the system. An e-mail has been sent to the specified address. It contains your username, password and a confirmation link. Your registration is pending. Please confirm it by clicking on the confirmation link in the email. To return to the Main page please click on the Go to Main page link."*

- **Go to Main page** (button) – Clicking on it navigates back to the Main page with Visitor functionality.


## 5.3. Login pop-up layer

This layer appears when a Visitor initiates access to the parts of the NoBits system restricted to Members. Clicking on the **Login** link in the Header or portal elements reserved for Members.

**Visitor**

- **Login Caption** (text) - Login instruction to user
  Example: *For access to NoBits please enter your username and password.*

- **Username** (text input field) - Type username here
  Pressing Enter/Return, Tab forwards focus to the Password field.

- **Password** (text input field) - Type password here
  Pressing Enter/Return equals clicking on the OK button.

- **OK** (button) - Clicking on it submits the login information

- **Registration** (link) - Clicking on this link navigates to the *Registration* page

- **Registration Comment** (text) - Registration instruction to user
  Example: *Not a Member yet? Click here to register*

- **Forgotten Password** (link) - Click Initiates transfer to the *Forgotten Password* page

- **Forgotten Password Comment** (text) - Forgotten Password instruction to user
  Example: *Click here if you forgot your username and/or password*

- **Remember me / Keep me logged in** (checkbox) – If this checkbox is checked, the portal will open with the current Member logged in when the portal is next loaded

Successful login

If the login process is completed successfully, the login pop-up layer is closed and the current page is reloaded. The portal has Member functionality after login.

Failed login
If the login process is not completed successfully, the Login pop-up layer returns. An error message about the obstacle of login is displayed in highlighted format above the field in question.

**Member, Owner, Content and Sys Admin**
This page is not applicable to these user types.


## 5.4. Safety advice pop-up layer

This layer lists minimum requirements for the password (length, character types, etc.) and advice regarding commonly made safety mistakes and ways to avoid them. This page is managed from the Back Office.


## 5.5. Forgotten Password pop-up layer

This layer appears when a user initiates Forgotten Password process by clicking on the **Forgotten password** link in the Login pop-up layer. Login pop-up layer is closed and Forgotten password pop-up layer is opened.

This pop-up layer is identical for every user type.

- **Forgotten password comment** (text) – username/password recovery instructions to user. It is above the E-mail address text input field
  Example: *"Forgot your username or password? Enter the e-mail address you entered upon registration and click OK. Your username and new password will be sent to you in e-mail."*
- **E-mail address** (text input field) – Type e-mail address here
- **OK** (button) - Clicking on it submits the Forgotten password request

Successful password request
If the entered e-mail address matches the registered e-mail address, a new password is generated. This password is a randomized secure password. Username and new password are sent to the specified e-mail address. Forgotten password pop-up layer is replaced by Login pop-up layer. Caption added to Login pop-up layer: *"Your new login information has been sent to your e-mail."*

New password is permanent. User can set new password any time on the Personal tab of the Profile page.

Failed password request
If the entered e-mail address does not match the registered e-mail address, the Forgotten password pop-up layer returns. Caption of the forgotten password comment is replaced by a highlighted error message.

Example: *"The address you entered is not registered in our system. Please make sure that it is the address you registered and that it is typed correctly."*

# 6. Profile page

User information is collated for viewing in the Profile page. User information is grouped by type. The Profile page has subpages called tabs. Each type of information is dedicated to a tab. Regardless of the tab in view, the Profile page always displays the Member mini of the viewed Member in the Sidebar.

**Visitor**

Sidebar
- **Member mini**
  - **Member profile picture** (link) – profile picture of viewed Member; clicking on it navigates to the Personal tab on the Profile page of viewed Member
  - **Member** (link) – name of viewed Member; clicking on it navigates to the Personal tab on the Profile page of viewed Member

**Member**
- **Subscribe** (button) – clicking on it adds viewed Member to Member's Subscribed list. Page is refreshed. Subscribe button is replaced with caption: *"You are subscribed to this Member."*
- **Send message** (button) – clicking it navigates to the Compose tab on the Messages and notifications  page with viewed Member automatically filled in as recipient of message.
- **Help (link) -** Clicking on it navigates to the Help page.

**Owner**
**Subscribe** and **Send message** buttons are not applicable to Owners.

**Content Admin and Sys Admin**
The general Profile page functions are identical with Member's for these types of users.


## 6.1. Personal tab

This tab contains the user's personal information.
This tab is applicable to every user type.

**Visitor and Member**
The information displayed on this tab to these user types is read-only.

Only the fields marked as "public" by the Owner of the viewed profile are displayed on this tab to these user types.

For the list of possible fields please refer to the Owner section.

**Owner**
The tab is divided into Basic and Advanced blocks.

Every field in the Personal tab has a corresponding checkbox.:
If the checkbox is checked, the field's status is private. The contents of the field are not displayed for viewing to other user types.
If the checkbox is not checked, the field's status is public. The contents of the field are displayed for viewing.

The checkboxes of blank/undecided fields cannot be checked.

The fields Username and Password are exceptions. Please refer to their descriptions for details.


Basic block
This block is at the top of the tab.

This block contains the information submitted by every user upon registration; therefore, every item in it has an initial value.

- Username – content is unique, not editable; status is public, not editable
- Password – content is editable; status is private, not editable
- Change Password (button) – clicking on it opens the Change Password box under the Password field
- Change Password box
    - **Old password** – text input field. Must be identical with current password.
    - **New password** - text input field. Must meet minimum password requirements.
    - **Password strength-meter**
    - **Repeat new password** - text input field. Must be identical with New Password.
    - Show/hide typing (checkbox)?
    - **Safety advice (link)** – opens the <u>Safety advice pop-up layer</u>

**Save changes (button)** – clicking on it saves changes. Change Password box is closed. Page is refreshed. A reminder email con
If a requirement is not fulfilled, Change Password box returns with an error message about the obstacle of the password change in highlighted format above the field in question.

    - Cancel (button) - clicking on it closes the Change password box
- **E-mail** – content is editable; status is editable
- **Change E-mail** (button) – clicking on it opens the Change E-mail box under the E-mail field
- Change E-mail box
    - **New e-mail** - text input field. Must not be empty; must be a syntactically valid address.
    - **Save changes** (button) – clicking on it saves changes. Change E-mail box is closed. An automatic e-mail is sent to the specified address. This e-mail contains the username and a confirmation link. Clicking on the confirmation link in the e-mail confirms the new e-mail address to the system. The old e-mail is replaced with the new only after this confirmation.
    If the new e-mail address is not valid syntactically, Change E-mail box returns with an error message.
    - **Cancel** button - clicking on it closes the Change password box
    - **Show/Hide advanced block** (button) - two state button.
    Clicking on **Show** changes the button to Hide from Show and the Advanced block appears on the tab
    Clicking on **Hide** changes the button to Show from Hide and Advanced block disappears from the tab
    Hiding the Advanced block does not delete the existing advanced profile information.

Advanced block

The Advanced block is displayed below the Basic block if the Show/Hide advanced block button is set to show.

The fields in the Advanced block are initially blank/undecided. Filling them in is optional.

The fields in the Advanced block are a predefined set. Changing their values is not restricted.

- Media field (required upload):
  - Profile picture
- Fields with a fixed set of choices:
  - Sex: Male / Female
  - Marital status: Single / Married / Divorced / Widowed
  - Mother tongue (drop down)
  - Foreign languages (drop down)
- Dates:
  - Birth
  - Graduation
  - Wedding
  - Armed service beginning/end
- Free text fields:
  - Name
  - Title (PhD, DrMed, Rev, Prof, Sr, Jr, OMF, SJ, etc.)
  - Birth name (Maiden name)
  - Place of birth
  - Hometown
  - Skype account name
  - About myself
  - Mailing address
  - Phone number
  - Fax number
  - Schools/Education
  - Workplaces
  - Favourites (Music, Movies, TV programs, Books, Hobbies, Sports, Quotes, etc.)
  - Medals, honours, awards

This button is always the last (bottom) item on the tab:

- **Save changes** button – clicking on it saves any changes made. Page is refreshed.

**Content Admin**

If the Owner of the viewed profile is not assigned to Content Admin in the Back Office for moderation, Content Admin has Member functionality.

If the Owner of the viewed profile is assigned to Content Admin in the Back Office for moderation, Content Admin has Owner functionality.

**Sys Admin**

Sys Admin has Owner functionality for any profile.

## 6.2.          Settings tab

*Please note: Project proposal mentions retention time as an option. User needs/wants studies have shown that retention time is not a needed/wanted feature, therefore it has been omitted.*

**Visitor and Member**

This tab is not applicable to these user types.

**Owner**

In this tab Owner can change settings controlling certain aspects of the portal's operation, Owner's interaction with other Members, etc.

Default values of settings can be set in the Back Office.

Structure of toggle type settings:

- **Caption** – read-only. This is a statement about a setting.
  Example: *"New comments can be added to my Items."*

- **Checkbox**
  If the checkbox is checked, the statement is confirmed as true.
  *(Other Members will be able to add new comments to Owner's Items.)*
  If the checkbox is not checked, the statement is false.
  *(Other Members will not be able to add new comments to Owner's Items.)*

Toggle type settings:

- New comments can be added to my Items ON/OFF

- New likes can be added to my Items ON/OFF

- New ratings can be added to my Items ON/OFF

- New comments can be added to my Stories ON/OFF

- New likes can be added to my Stories ON/OFF

- New ratings can be added to my Stories ON/OFF

- Send e-mail copies of private messages ON/OFF

- Send e-mail copies of notifications ON/OFF

- Set the list of my Subscribers public ON/OFF

- Set the list of my Subscriptions public ON/OFF

- Set receive notifications ON/OFF

- *THIS LIST MAY GROW LONGER*

Other settings:

- Set paging size for listings (content, messages, search results, notifications)
  This setting has a text input field. The field must contain a positive integer.

- Blocking/unblocking Members
  Lists usernames (as links) of Members blocked by Owner. (See also:

- Blocking/unblocking Wall post types

- *THIS LIST MAY GROW LONGER*

This button is always the last (bottom) item on the tab:

- **Save changes** button – clicking on it saves any changes made. Page is refreshed.

**Content Admin**

If the Owner of the viewed profile is not assigned to Content Admin in the Back Office for moderation, Content Admin has Member functionality.

If the Owner of the viewed profile is assigned to Content Admin in the Back Office for moderation, Content Admin has Owner functionality.

**Sys Admin**
Sys Admin has Owner functionality for any profile.


6.3.          Subscriptions tab

This tab displays the lists of two types of contacts a user has:

Subscriptions - lists the Members, tags, categories Stories and Items Member subscribed to.

Subscribers - lists the Members who subscribed to Member's activities. Member can block subscriptions here (Block Member).

**Visitor and Member**
If the setting "Set the list of my Subscribers public" is set "ON" by the viewed Member, a read-only list is displayed.

If the setting "Set the list of my Subscriptions public" is set "ON" by the viewed Member, a read-only list is displayed.

If both settings are set off, the tab is not applicable to these user types.

**Owner**

Subscriptions
The list of subscriptions consists of a series of Subscription boxes appearing in the selected sorting order. Default sorting order is by name, ascending. Sorting order can be selected with the Sorting box.
Subscription box:

- **Username** (link) – clicking on it navigates to the Personal tab on the Profile page of the Member to whom Owner subscribed.

- **Unsubscribe** (button) - – clicking on it opens Confirmation pop-up layer with the caption:
  *"Are you sure you want to unsubscribe <username>?"*)
  Unsubscribed Members are removed from list.

Subscribers
The list of subscribers consists of a series of Subscriber boxes appearing in the selected sorting order. Default sorting order is by name, ascending. Sorting order can be selected with the Sorting box.
Subscriber box:

- **Username** (link) – clicking on it navigates to the Personal tab on the Profile page of the Member to who subscribed to Owner.

- **Block Member** (button) - – clicking on it opens Confirmation pop-up layer with the caption:
  *"Are you sure you want to block <username>?"*
  Blocked Members are removed from list. Owner can unblock blocked Members in the Settings tab of his Profile page.

**Content Admin**
If the Owner of the viewed profile is not assigned to Content Admin in the Back Office for moderation, Content Admin has Member functionality.

If the Owner of the viewed profile is assigned to Content Admin in the Back Office for moderation, Content Admin has Owner functionality.

**Sys Admin**
Sys Admin has Owner functionality for any profile.

6.4.      Stories tab

The Stories tab lists the public status stories owned by the viewed Member in Story minis.

**Visitor**
- Pager box – navigates among Story batches (number of Stories in a batch is settable in Profile/Settings; default value = 50) Appears both in the top and bottom of page.
  If list has less than [batch size + 1] hits then not displayed
    - **First** (button) – clicking on it navigates to the first batch of Stories
    - **Previous** (button) – clicking on it navigates to the previous batch of Stories
    - **Now showing** (status) – shows the range of Stories currently displayed
    - **Next** (button) – clicking on it navigates to the next batch of Stories
    - **Last** (button) – clicking on it navigates to the last batch of Stories
- Sorting box – sort listed items in ascending/descending sequence by date, or alphabetical/reverse alphabetical order of title
    - **Sort by** (radio button) - By date / By title
      With *By date* selected, Stories are listed in chronological order
      With *By title* selected Stories are listed in alphabetical order
    - **Sort order** (radio button) - Ascending / Descending
      With *Ascending* selected, Stories are listed in ascending order
      With *Descending* selected, Stories are listed in descending order
- Story mini – displays summary information of listed story

**Member**
- **Add new** – link; Clicking on it navigates to the Add new page
- Story mini
    - **Subscribe** button - clicking on it adds viewed Story to Member's Subscribed list. Page is refreshed. Subscribe button is replaced with caption: *"You are subscribed to this Story."*

**Owner**
- Story mini
    - **Publicness** status (read-only) - shows public (default) / private status of collection. Default value is public.
    - **List of shares**
      A Story is shared if its Owner granted owner privileges to other Members (regardless of the publicness status of the Story) or shared a private story with other Members.
      If the Story is not shared with other Members, the **List of shares** is hidden.
      Users sharing the Story are indicated with links (clicking such a link navigates to the Personal tab on the Profile page of respective Member), indication of owner rights (if applicable) and/or viewing right of private story (if applicable) and buttons to revoke either right.

**Content Admin**
If the Owner of the viewed profile is not assigned to Content Admin in the Back Office for moderation, Content Admin has Member functionality.

If the Owner of the viewed profile is assigned to Content Admin in the Back Office for moderation, Content Admin has Owner functionality.

**Sys Admin**
Sys Admin has Owner functionality for any profile.

# 7.          Messages and notifications

Messaging functions are collated in the Messages and notifications page. Messaging is grouped by type. The Messages and notifications page has subpages called tabs.

Regardless of the tab in view, the page always displays the Member mini of the viewed Member in the Sidebar.

## 7.1.          Messaging in general

The message handling functionality outlined here is basically a database-based messaging, therefore, it is not built upon a message handling standard (SMTP, XNMP), but upon classical database-based data filing. An exception to this is attachment handling, as attachments are stored in a file system.

### 7.1.1.          Quota handling

Two types of quota handling are implemented by message handling. One is based on the number of messages (message count), the other on the size of attachments. Quota handling is uniform for every Member, there is no differentiation by user types.

Count based quota handling
Count based quota sets the maximum number of messages Owner can have in his Inbox. Attributes:

- Considers the number of messages in the Inbox
- Ignores Sent and Draft messages
- It is automatically calculated on the transaction level (transactional)

If the quota limit is exceeded (not reached):

- The **Compose new message** button is not displayed to Owner anywhere in the portal.
- Owner cannot send any messages in the process of composition, receiving an error message instead
- Owner cannot receive new messages
- Owner may receive an e-mail about exceeding the quota
- Owner receives an attention message about exceeding the quota in the Messages tab of the Messages and notifications page

Daily count quota
Daily count quota sets the maximum number of messages Members can send in one day. Attributes:

- Considers the number of messages sent, not that of recipients

If the quota limit is exceeded (not reached):

- The **Compose new message** button is not displayed to Owner anywhere in the portal.
- Owner cannot send any messages in the process of composition, receiving an error message instead
- Owner receives an attention message about exceeding the quota in the Messages tab of the Messages and notifications page

Attachment quota
The confines of attachments are determined by three parameters:

- The total storage available to one Member, as much as the sum of the physical size of all the attachments uploaded and sent by this Member.

- Maximum size of a single file
- Daily quota for aggregate total size of attachments uploaded
- List of uploadable file types

If the total storage quota limit is exceeded (not reached):

- The **Attach file** button is not displayed to Owner.
- Owner cannot send any messages in the process of composition, receiving an error message instead
- Owner receives an attention message about exceeding the quota in the Messages tab of the Messages and notifications page

*Applicable system parameters:*

- Maximum number of messages in Inbox
- Sending of e-mail notification about reaching the quota (yes/no)
- Global on/off switch of count based quota handling
- List of attachable file types
- Maximum uploadable size of a single file
- Total storage used by uploaded attachments
- Global on/off switch of attachment handling
- Global on/off switch of attachment quota handling

On every message pages a quota indicator will be displayed. A warning message will be shown whenever the quota limit is exceeded by a given percentage.

## 7.1.2.      Message indicators

The system is capable of indicating new incoming messages or the number of new messages on every page of the portal. Typically this is attained in a fixed location, either in the header or in the sidebar.

## 7.2.          Incoming messages (Inbox) tab

**Visitor, Member**

This tab is not applicable to these user types.

**Owner**

The Inbox displays the list of incoming messages of the Owner in descending chronological order by default.

Attributes of the list:

- Sorting in descending and ascending order by sender, subject, attachment and sending date
- The list is pageable with regard to the following parameters:
    - The number of messages displayed in a single page is a system parameter
    - The pager handles the functions first, last, previous and next
    - The pager indicates which page is currently displayed to Owner
    - The pager indicates the numbers of *n* pages preceding and *m* pages following the current page, whereas *n* and *m* are system parameters
    - Pager can be displayed both on the top and bottom of the list
- In case of an empty list a caption like "You have no incoming messages" is displayed.
- The following action buttons are displayed
    - Mark selected messages as read
    - Delete selected messages
    - Tag selected messages
    - Select all /Deselect all messages checkbox
- Action buttons are displayed only if the list contains selected messages.

Message mini – list unit

We call the copy of a message listed in various folders a message mini. Every folder displays essentially the same format, differences are explained with the specific folders. Attributes:

It displays the following fields

- Name of sender – link; points at sender's profile page, provided the service has a profile page
- Subject of message
    - With the text truncated as required by design
    - Truncation takes whole words into account
    - It is a link pointing to the view message page
- Date of message
    - Sending date of message, to the second
    - Alternatively, the time elapsed since sending, according to system parameters (1 econd ago; 3 hours ago; 5 days ago)
- Attachment indicator
    - Indicates whether the message has an attachment
    - It is a link; clicking on it starts downloading the attachment
- Selector checkbox; checking it selects messages for different kinds of actions

**Content Admin**

Sys Admin has only member functionality on its own profile.

**Sys Admin**

Sys Admin has only member functionality on its own profile.

### 7.3.     Outgoing messages (Sent messages) tab

**Visitor, Member**
This tab is not applicable to these user types.

**Owner**
The messages successfully sent by the Owner are filed in the folder Sent messages. The message minis displaying here are:

- Sortable in in descending and ascending order by recipient, subject, attachment and sending date
- The list is pageable according to the paging principles described in <u>Incoming messages</u>
- In case of an empty list a caption like "You have no sent messages" is displayed.
- The following action buttons are displayed
    - Delete selected messages
    - Tag selected messages
    - Select all /Deselect all messages checkbox
- Action buttons are displayed only if the list contains selected messages.

The <u>message minis</u> are identical to the list units described for incoming messages, except for:

- in the place of name of sender the name(s) of recipient(s) is/are displayed
- As a message can have multiple recipients, this list unit may contain multiple links, each pointing at the respective recipient's profile page.

**Content Admin**
If the Owner of the viewed profile is not assigned to Content Admin in the Back Office for moderation, Content Admin has Member functionality.

If the Owner of the viewed profile is assigned to Content Admin in the Back Office for moderation, Content Admin has Owner functionality.

**Sys Admin**
Sys Admin has Owner functionality for any profile.

### 7.4.     Compose tab

**Visitor, Member**
This tab is not applicable to these user types.

**Owner**
The function of composing a new message is easily to access from any messaging-related page. It provides the following basic composition functions:

The system handles the following fields:

- Recipient field
    - It is possible to specify one or multiple recipients
    - Addressing is implemented using Ajax autocomplete technology
    - Any time during the composing any recipient can be removed by using the respective delete icon accompanying every recipient name
    - CC and BCC fields are not available
- Subject field – text input field, must not be empty
- Message body field – text input field, must not be empty
    - Text area type field

  o WYSIWYG editor, supports basic html formatting

The following action buttons are provided:

- Send message – clicking on it prompts the system to send the message to the recipient, provided the message passes the validation process
- Save draft – clicking on it prompts the system to file the message in the Drafts folder without sending it. The page remains in view, an additional "Message successfully saved" type message is displayed.
- Cancel - clicking on it prompts the system to navigate back to the Inbox.

**Content Admin**

If the Owner of the viewed profile is not assigned to Content Admin in the Back Office for moderation, Content Admin has Member functionality.

If the Owner of the viewed profile is assigned to Content Admin in the Back Office for moderation, Content Admin has Owner functionality.

**Sys Admin**

Sys Admin has Owner functionality for any profile.

## 7.5.     Operations with messages

**Visitor, Member**

This tab is not applicable to these user types.

**Owner**

### 7.5.1.     View message

Incoming, Sent and Draft messages are displayed for reading in the page View message. The page displays the following components:

- Sender of message
- Recipient of message
- Subject of message
- Message body
- Message tags

The following action buttons are provided with the messages:

- Reply to message
- Forward message
- Delete message
- Previous/Next message

### 7.5.2.     Delete message

This layer can be called up from message minis and the View page. In any case, the Delete message layer has the following attributes:

- Displays the number of messages being deleted and an explanatory text
- Offers cancelling without deletion
- Displays the Delete button

- The layer can be also be closed by using the Close button or by pressing the Esc button.
- In case of a successful deletion it displays a confirmation message.
- In case of an unsuccessful deletion it displays an error message.

### 7.5.3.     Reply to message

The subpage Reply to message can be accessed from the page <u>View message</u>. It is functionally identical with the tab <u>Compose message</u>, with the following supplements:

- The sender of the original message is added to the recipients
- Recipient handling is otherwise as described in the page Compose message
- The message body of the original message is displayed in the message body, with a distinct marking leading every line, such as '>'
- The subject of the original message is displayed in the Subject field, preceded by a prefix, such as '**Re:**'

### 7.5.4.     Forward message

The subpage Forward message can be accessed from the page <u>View message</u>. It is functionally identical with the tab <u>Compose message</u>, with the following supplements:

- The message body of the original message is displayed in the message body, with a distinct marking leading every line, such as '>'
- The subject of the original message is displayed in the Subject field, preceded by a prefix, such as '**Fwd:**'

**Content Admin**
If the Owner of the viewed profile is not assigned to Content Admin in the Back Office for moderation, Content Admin has Member functionality.

If the Owner of the viewed profile is assigned to Content Admin in the Back Office for moderation, Content Admin has Owner functionality.

**Sys Admin**
Sys Admin has Owner functionality for any profile.

7.6.        Notifications tab

The system can send automatic messages.

The system retains the notifications of the last N days. N is a deployment-dependent system parameter.

**Visitor**
This tab is not applicable to Visitors.

**Member**
Members receive notifications. Notifications are not retained indefinitely. Default retention time for notifications is 30 days. This parameter can be altered in the Back Office.

Notification box - Notifications are displayed in Notification boxes, appearing in chronological order, newest on top

> o **Date of notification** (status) – read-only
> o **Type of notification** – read-only
> o **Body text** – content of notification. May contain links.
>   Example: *"Due to maintenance NoBits portal will not be available between 02:00-06:00 on 16-08-12."*

Paging is rudimentary for the notifications log: By default the log displays the N newest notifications. N can be set in the Back Office. To display earlier messages an **Earlier notifications** link stands at the bottom of the wall feed:

- **Earlier notifications** (link) – This link is at the bottom of the notifications list below the oldest displayed notification box. Clicking on it refreshes the page, adding the next N notifications to the displayed list.

**Owner**
In addition, there are notifications generated from activities in relation to Owner's content. Such activities are:

- <u>Item</u> commented, deleted (shared ownership), liked, rated, changed (updated);
- <u>Story</u> commented, deleted (shared ownership), liked, rated, changed (updated), shared (shared ownership);
- <u>Wall post</u> liked.

The Body text of such notifications is composed of the following parts:

- Body text of activity notification
  - o **Username** of Member (link) - clicking on it navigates to the Personal tab on the Profile page of the Member who interacted with concerned content.
  - o **Description of interaction** – read-only. The type of interaction with Concerned content: comment-, liking- or rating added, content changed, shared on or deleted (if ownership is granted to other Member(s))
  - o **Concerned content** (link) – Clicking it navigates to the Story page displaying the concerned piece of content.
  - Example: *"John Doe added a comment to your Story "Vacation in Venice, June 1967"*

**Content Admin**
If the Owner of the viewed profile is not assigned to Content Admin in the Back Office for moderation, Content Admin has Member functionality.

If the Owner of the viewed profile is assigned to Content Admin in the Back Office for moderation, Content Admin has Owner functionality.

**Sys Admin**
Sys Admin has Owner functionality for any profile.

## 8.    Browse

Browsing content is navigating in a hierarchical structure. It is analogous with navigating in a folders-and-files structure of a computer.

The number and names of levels, categories and subcategories, the structure of the hierarchy and the default starting category is managed from Back Office.

Sidebar
- Categories box with the subcategories of the hierarchy's root, fixed.
- Tagcloud

**Visitor**
- **Breadcrumbs** (link) – It is a path type dynamic navigation aid. It allows users to keep track of their location within the hierarchy. The Breadcrumbs is composed of links to the hierarchy levels above the currently displayed level, in sequence from top to bottom. Clicking on such a link navigates to the Browse page with the clicked level as current.
- **Current category** (status) read-only – indicates the name of the current category.
- **Subcategories** (box) – This is a list of links to the subcategories of the current category. Clicking on such a link navigates to the Browse page with the clicked category as current. If the current category is in the lowest level of the hierarchy, this list of link becomes void and is not displayed.
- **Story minis** – top 10 stories belonging to the current category or any of its subcategories.
- **More** (button) – Clicking on it navigates to the Search page, displaying the Story tab with the Category checkbox of the Search in… checkboxes checked, the Input field filled out with the current category and a list of Story minis from the current category or any of its subcategories. The title of the search is the category in the browse page.

Story minis are displayed as here.

**Member**
Story minis are displayed as here.
- **Subscribe** (button) – clicking on it adds viewed category to Member's Subscribed list. Page is refreshed. **Subscribe** button is replaced with caption: *"You are subscribed to this category."*
- **Add new story** (button) – clicking on it navigates to page Add new story **with category filled out.**

**Owner, Content Admin and Sys Admin**
Story minis are displayed as here.

# 9.     Search page

This page is identical for every user type.

Search page is opened when a search is initiated.

- **Title** (status) – read-only. Title is based on the search phrase, browse category or tag originating the search.
- **Input** (text input field) - for search phrases, keywords. Pressing Enter/Return in this field equals clicking on the **Search** button. By default the Input field displays *"Search text here…"*
- **Search** (button) - clicking it initiates a new search, applying selected search options with search phrases, keywords entered in the **Input** field. The list of Story minis (Search results) is refreshed.

## 9.1.     Story tab

Search lists the Story minis of Stories matching the search criteria. If the search yielded 0 hits, the caption *"No story matched your search criteria."* is displayed.

- Advanced search box
  - **Search in tags (search field) – narrows the scope of the search to tag(s)**
  - **Seach in Categories (search field) – narrows the scope of the search to category**
  - **Search by media type** (checkboxes) - all, text, image, video, audio
- Sorting box
- Pager box (if applicable)
- **Number of hits** counter – status, read-only. Displays the total number of hits matching the search criteria.
- List of Story minis (hits)

## 9.2.     User tab

Search lists the Member minis of Members matching the search criteria. If the search yielded 0 hits, the caption *"No Member matched your search criteria."* is displayed.

- Advanced search box
  - **Born between (interval picker) –**
  - **Fixed set filters** (checkboxes, radio buttons) – sex, marital status
  - **Languages, hometown** (search fields) -
- Sorting box
- Pager box (if applicable)
- **Number of hits** counter – status, read-only. Displays the total number of hits matching the search criteria.
- List of Member minis

## 10.     Add new story

This page provides a linear, step-by-step facility to users for adding new Stories. Adding items to stories is done in the Story page. Space is reserved in this page for additional instructions, help, etc.

**Visitor**
This page is not applicable Visitors.

**Member, Owner, Content Admin and System Admin**
- **Add story title** text input field. This field must not be empty.
- **Add story description** text input field. This field may be empty.
- **Add story tags** text input field (autocomplete) – Tags (keywords) relevant to the story can be added here. This field may be empty.
- **Add story categories** text input field (autocomplete) – This field must not be empty.
- **Add first image** (button) – Clicking on it opens the Add image type item pop-up layer. This step may be skipped. If the first image type item is added in this stage, the story will
- **Cancel** (button) – Clicking on it navigates back to the page from which Add new story had been accessed.
- **Save** (button) - Clicking **Save** saves the story and navigates to the Story page, displaying the new story.

# 11.     Story page

The basic unit of NoBits content is the Story. The Story page displays a Story with all its content. It is never broken up to pages. A Story is displayed as continuous scroll. A Story with several Items is displayed as a long scroll.

The project proposal mentions albums. We consider the image type Items within a Story an album. An album can be displayed as a slideshow (For a detailed description, please refer to the chapter *Slideshow layer*).

Project proposal album - We consider the image type content of a story an album. This album can be displayed in a slideshow: slideshow – visualization; full page layer

**Visitor**
Visitors have read-only access to the contents of Stories.

<u>Story header</u>
Information about and functions related to the Story as a whole.

- **Title** – read-only
- **Description**– read-only
- Member mini of story's owner
- **Date of creation** (read-only)
- **Number of likes** (read-only) – indicates number of likes given to collection
- **Tag** (link) – lists the tags assigned to the story. Clicking on a tag link navigates to the Search page, displaying the Story tab with the tag search field filled out with the tag clicked and a list of matching Story minis. The title of the search is the tag clicked.
- **Category** (link) - lists the categories assigned to the story. Clicking on a category link navigates to the Search page, displaying the Story tab with the category search field filled out with the category clicked and a list of matching Story minis. The title of the search is the category clicked.
- **Slideshow** (button) – clicking on it brings up the Slideshow layer.
- **Comment box** – Multiple comments are possible; their comment boxes are listed in chronological order, newest/oldest on top.
  - Member mini of comment's owner
  - **Date of comment** – read-only
  - **Text of comment** – read-only
- **Like counter** (status) – read-only; displaying the number of likes the Story received.
- **Offline export** (button) – This function compiles the information in the Story header and the text and image type items into a printable format. Clicking on the button brings up a print preview window.
- Rating (emotional tagging) counter (status) – showing the summary of ratings the story accumulated. Each enabled rating scale has its own summary.
- Buttons for sharing to external social networks (Facebook and iWiW will be prepared as default. Further ones require deployment decision).

<u>Item boxes</u>
Information about and functions related to the items of the Story. One Item box contains one item. Multiple Item boxes are possible. Item boxes are listed in the sequence the Owner of the Story added them to the Story.

- **Title** – read-only

- **Username** of item's Owner (link) - clicking on it navigates to the Personal tab on the Profile page of item's Owner
- **Media content** – text, image, video or audio. Each type of media has a corresponding media box.
  - Text – text is displayed as read-only text.
  - Image – images are displayed to fit box width.
  - Video – video is displayed in the embedded video player of the video sharing site to which the video is uploaded.
  - Audio – audio is displayed in the embedded audio player of the video sharing site to which the audio is uploaded.
- **Date of creation** (read-only)
- **Number of likes** (read-only) – indicates number of likes given to item
- **Comment box** – Multiple comments are possible; their comment boxes are listed in chronological order, newest/oldest on top.
- **Like counter** (status) – read-only; displaying the number of likes the item received.
- Rating (emotional tagging) counter (status) – showing the summary of ratings the item accumulated. Each enabled rating scale has its own summary.

**Member**
In addition to Visitor functionality, Members have these functions:

Story header
- **Copy Story** (button) – Member can link all the Items of the Story to a Story of his own. Clicking the button opens the page Add new story in a new browser window/tab with a blank story header and an infobar stating that the items of the original story are linked. Member has to fill out the story header, etc. as in making a whole new Story. The Items are not actually copied but linked. The owner of the Items remains the original owner. Therefore, copied (linked) Items may disappear from the copied Story, if the original Item is deleted.
- **Subscribe/Unsubscribe** (button) – two state button.
  Clicking on **Subscribe** changes the button to Unsubscribe from Subscribe and the read-only caption *"You are subscribed to this Story"* appears below the button. The Story is added to Member's Subscriptions list. Member will receive activities about this Story in his Wall feed.
  Clicking on **Unsubscribe** changes the button to Subscribe from Unsubscribe and the read-only caption *"You are subscribed to this Story"* disappears from below the button. The Story is removed from Member's Subscriptions list. Member will not receive activities about this Story in his Wall feed.
- **Make comment** (button) - clicking on it opens the Make a comment box.

- Make comment box
  This box is not displayed by default. It opens above the first Item box when the **Make comment** button is clicked.
  - **Text of comment** – text input field; maximum text length (number of characters) of comments can be set in the [Back Office](#)
    If comment length is 0 characters, field displays the caption *"Your comment…"*
  - **Submit** (button) - clicking on it sends the comment.
    After the comment is sent the page is refreshed. The newly made comment appears in a comment box. Make comment box is closed.
    Clicking on the Submit button with the Text of comment field blank (comment length is 0 characters) closes the Make comment box.
  - **Cancel** (button) - clicking on it closes the Make comment box

- **Like/Unlike** (button) – two state button.
  Clicking on **Like** changes the button to Unlike from Like and the read-only caption *"You like this Story"* appears below the button.
  Clicking on **Unlike** changes the button to Like from Unlike and the read-only caption *"You like this Story"* disappears from below the button.
- Rate (emotional tagging) (slider scale) – Each enabled rating category is represented by a sliding scale with a title label and labels of the end values. Clicking on the slider and dragging it to the desired value, Member can assign a personal emotional value to the story. Member can adjust this value any time.
  Each enabled rating scale is displayed with a separate scale.

Item boxes

- **Link to Story** (button) – clicking on it brings up the <u>Link to Story pop-up layer</u>, in which the Item can be added to one of Member's existing stories or a new story.
- **Subscribe/Unsubscribe** (button) – two state button.
  Clicking on **Subscribe** changes the button to Unsubscribe from Subscribe and the read-only caption *"You are subscribed to this Item"* appears below the button. The Item is added to Member's Subscriptions list. Member will receive activities about this Item in his Wall feed.
  Clicking on **Unsubscribe** changes the button to Subscribe from Unsubscribe and the read-only caption *"You are subscribed to this Item"* disappears from below the button. The Item is removed from Member's Subscriptions list. Member will not receive activities about this Item in his Wall feed.
- Make comment box – as described for Story header
- **Like/Unlike** (button) – two state button.
  Clicking on **Like** changes the button to Unlike from Like and the read-only caption *"You like this Item"* appears below the button.
  Clicking on **Unlike** changes the button to Like from Unlike and the read-only caption *"You like this Item"* disappears from below the button.
- Rate (emotional tagging) (slider scale) – Each enabled rating category is represented by a sliding scale with a title label and labels of the end values. Clicking on the slider and dragging it to the desired value, Member can assign a personal emotional value to the item. Member can adjust this value any time.
  Each enabled rating scale is displayed with a separate scale.

**Owner**

Owners can edit their existing stories. Editing story elements is done by way of <u>in-place editing</u>. Every element of the story that contains editable information is accompanied by an **Edit element** button. Clicking on such a button opens the respective story element for in-place editing.

Controls for story-level settings are located in the Sidebar.

Sidebar

The Sidebar lists the users with owner rights to the viewed story (Owner, Content Admin, original Owners of linked Items, in case of private stories the Members with whom the Story is shared) in a list of Member minis.

- **Story settings** (button) – Clicking on it reveals the following, otherwise hidden story-level controls.
  The Enable/disable type setting have two checkboxes. One for the story header only, one for all items in the story. These settings cannot override the original owner's settings in case of items linked from other Members' stories.
  - o  **Enable/disable commenting** (checkbox) – default value: enable (checked)
    Existing comments are not deleted when commenting is disabled for a story.

- o **Enable/disable rating** (checkbox) – when a story is created, the default rating scale is enabled with the story. The other available (availability depends on whether more scales are defined, see also here.) scales are disabled.
  Existing rating values are not deleted when a rating scale is turned off (disabled) for a story.
- o **Enable/disable liking** (checkbox) – default value: enable (checked)
  Existing likes are not deleted when liking is disabled for a story.
- o **Share Ownership** (link) – It is functionally identical with a Compose new message button, with the following provisions:
  - The Recipients of this message will be the Members with whom the owner rights of the viewed story will be shared.
  - The message body contains a caption like "<Owner> shared the ownership of the story >link to story< with you. You can edit it now. If not interested, you can unsubscribe from it in the Subscriptions tab of the Profile page."
  - Stories to which a Member had been granted ownership are listed in every user type's view of the Stories tab of Member's Profile page.
- o **Edit in cooperation** (button) - clicking on it navigates to [*the page in which FamCorner's flash is embedded*]
  This function postulates sharing ownership of stories with other Members. See **Share ownership** button above.
- o **Make private** (button) - Stories are created as public by default. By making a story private Owner makes the Story and its content unavailable to other Members. Clicking on the button brings up Confirmation pop-up layer, with description of difference between public and private Stories. Confirmation makes the Story private. If the Story has been made private, the Make private button becomes void and disappears.
  Only such stories can be made private with Items owned by Owner and no linked Items. Linked items must be first deleted from the Story before making it private.
- o **Delete Story** (button) – clicking on it opens Confirmation pop-up layer with the caption: "Are you sure you want to delete this story and all its contents?"
  Deleting a story is irreversible.

If the Story is private, the following functions become available:

- o **Share Story** (link) – It is functionally identical with a Compose new message button, with the following provisions:
  - The Recipients of this message will be the Members with whom the the viewed story will be shared.
  - The message body contains a caption like "<Owner> shared this private story with you. You can view it now. If not interested, you can unsubscribe from it in the Subscriptions tab of the Profile page."
  - Private stories shared with a Member are listed in the Owner's view of the Stories tab of Member's Profile page.
- o **Make public copy** (button) - clicking on it navigates to the page Add new story. In Add new story the Story header is filled in and an infobar is displayed, stating that the items of the private story are carried over. None of the comments, likes or ratings of the private story are carried over to the public copy.
- o List of shares

Story header

- **Delete comment** (button) – if there are comments to the Story, this button appears in their Comment boxes. Clicking on it brings up Confirmation pop-up layer, with the caption "Are you sure you want to delete this comment?"

Item boxes

These controls apply to Owner's items. These settings cannot override the original owner's settings in case of items linked from other Members' stories. The link to the item's owner is displayed only in case of items linked from other Member's stories.

- **Enable/disable commenting** (checkbox) – default value: enable (checked)
  Existing comments are not deleted when commenting is disabled for an item.

- **Enable/disable rating** (checkbox) – default value: enable (checked)
  Existing ratings are not deleted when rating is disabled for an item.

- **Enable/disable liking** (checkbox) – default value: enable (checked)
  Existing likes are not deleted when liking is disabled for an item.

- **Delete Item** (button) – clicking on it opens Confirmation pop-up layer with the caption: "Are you sure you want to delete this item?"
  Deleting an item is irreversible.

- **Delete comment** (button) – if there are comments to the Story, this button appears in their Comment boxes. Clicking on it brings up Confirmation pop-up layer, with the caption "Are you sure you want to delete this comment?"

**Content Admin**

If the Owner of the viewed Story is not assigned to Content Admin in the Back Office for moderation, Content Admin has Member functionality.

If the Owner of the viewed Story is assigned to Content Admin in the Back Office for moderation, Content Admin has Owner functionality.

- **Add to Recommended stories** (checkbox) – next to **Current category**. If this checkbox is checked, the stories in this category will be included for selection to the Recommended stories

**Sys Admin**

Sys Admin has Owner functionality in this page. Sys Admin can also add stories to Recommended stories.

## 12.        In-place editing

This chapter is applicable to Owner and Content Admin type users.

### 12.1.        Story header

Editing the elements of the story's header is similar to filling out the header of a <u>new story</u>.

#### 12.1.1.        Edit story title

The read-only story title is replaced by an <u>Add story title</u> text input field. **Edit element** button is replaced by a **Save** button. The field must not be left empty. Clicking **Save** saves any changes to the story title and the updated read-only story title plus **Edit element** button return.

#### 12.1.2.        Edit story description

The read only story description is replaced by an <u>Add story description</u> text input field. **Edit element** button is replaced by a **Save** button. Clicking **Save** saves any changes to the story description and the updated read-only story description plus **Edit element** button return.

#### 12.1.3.        Change default image

Every image type item in a story has a **Default image** radio button. The image of the checked radio button is the default image of the story, used in the Story mini of the story.

At the bottom of the item box list there is a **No default image** radio button. If this button is checked, the story will not have a default image. The Story mini of the story will appear with a placeholder instead.

The first image type item added to the story automatically becomes the default image.

#### 12.1.4.        Edit tags

The tag links are replaced by an <u>Add story tags</u> text input field (autocomplete), containing the tags currently assigned to the story. **Edit element** button is replaced by a **Save** button. Tags can be freely added and deleted. Clicking **Save** saves any changes to the tags and the updated tag links plus **Edit element** button return.

#### 12.1.5.        Edit categories

The category links are replaced by an <u>Add story categories</u> text input field (autocomplete), containing the categories currently assigned to the story. **Edit element** button is replaced by a **Save** button. Categories can be freely added and deleted. The field must not be left empty. Clicking **Save** saves any changes to the categories and the updated category links plus **Edit element** button return.

## 12.2.      Items

Items can be added to a story in the Story page. Editing existing items of a story is similar to adding a new item.

### 12.2.1.      Add item

At the top of the list of item boxes three Add item icons are displayed. Clicking on them brings up the pop-up layer for the corresponding media type.

These Add item icons are repeated at the bottom of the list of item boxes.

Text
The pop-up layer for adding text type items (which may be considered essays, memoire shards or even blog entries) contains the following elements:

- **Title** (text input field) – This field must not be left empty.
- **Tags** (text input field (autocomplete) - Tags (keywords) relevant to the item can be added here. This field may be empty.
- **Input** field with basic WYSIWYG text editor functions
- **Cancel** (button) – Clicking on it closes the pop-up layer without saving the item.
- **Save** (button) - Clicking **Save** saves the item and closes the pop-up layer. The story page is refreshed, the newly added item appears in an item box at the bottom of the list of item boxes. Clicking **Save** with **Input** field blank closes the pop-up layer without saving the item.

Image
The pop-up layer for adding image type contains the following elements:

- **Title** (text input field) – This field must not be left empty.
- **Tags** (text input field (autocomplete) - Tags (keywords) relevant to the item can be added here. This field may be empty.
- **Select image** (button) – clicking on it brings up the browser's file upload window. After selecting the image, the following controls appear:
    - **Filename** (status) – read-only. name of the file selected for uploading
    - **Clear selection** (button) – Clicking it clears the selection.
- **Cancel** (button) – Clicking on it closes the pop-up layer without saving the item.
- **Upload** (button) - Clicking **Upload** starts uploading the selected image and closes the pop-up layer. The story page is refreshed, the newly added item appears in an item box at the bottom of the list of item boxes.
  Clicking **Uploaded** with no image selected for uploading returns the error message *"There is no image selected for uploading."*

Embedded multimedia (video and audio)
The pop-up layer for adding embedded multimedia type items (which may be either video or audio material, previously uploaded to a video sharing site) contains the following elements:

- **Title** (text input field) – This field must not be left empty.
- **Tags** (text input field (autocomplete) - Tags (keywords) relevant to the item can be added here. This field may be empty.
- **Input** field for pasting embed link. Must be a syntactically valid URL.
- **Cancel** (button) – Clicking on it closes the pop-up layer without saving the item.

- **Save** (button) - Clicking **Save** saves the item and closes the pop-up layer. The story page is refreshed, the newly added item appears in an item box at the bottom of the list of item boxes. Clicking **Save Input** field closes the pop-up layer without saving the item.

### 12.2.2.     Edit item

Owner cannot edit items linked from other Members' stories. Clicking the edit element brings up the pop-up layer for adding a new item with fields filled in with their current contents. The pop-up layer appears with this reduced set of elements for every media type:

- **Title** (text input field) – This field must not be left empty.
- **Tags** (text input field (autocomplete) - Tags can be freely added and deleted. This field may be empty.
- **Cancel** (button) – Clicking on it closes the pop-up layer without saving the item.
- **Save** (button) - Clicking **Save** saves the item and closes the pop-up layer

## 13.        Slideshow

This layer is identical for every user type.

This layer is accessed by clicking on the **Slideshow** button in the Story page. The slideshow displays a full screen view of the image type items in the story viewed in sequence. Autoplay timeout is 5 seconds. This value can be changed in Back Office. Longer viewing time is available by Pausing the slideshow. Shorter viewing time is available by manual paging.

The button functions are also available from the keyboard. (Associated keyboard keys in brackets.)

- **Back** (Left Arrow, Up Arrow)
- **Pause/Resume** (Spacebar)
- **Forward** (Right Arrow, Down Arrow)
- **Exit** (Esc)

Slideshow replays until exited.

## 14.        Link to story

This pop-up layer is brought up when a Member clicks on the **Link to story** button in an Item box while viewing a story in the Story page.

If Member wants to add the item to a new story, he clicks on the **Add to new story** button.

If Member wants to add the item to one of his existing stories, he can do so by clicking on the title in the list of his existing stories.

- **Add to new story** button
  Clicking on it closes the pop-up layer and opens the page Add new story in a new browser window/tab with a blank story header and an infobar stating that the selected item of the original story is linked. Member has to fill out the story header, etc. as in making a whole new Story.
- List of existing stories - the Titles of the stories owned by Member are displayed in alphabetical order in a scrollable (as necessary) list.
    - Title of story (link) – clicking on it adds the item to the selected story, the pop-up layer is closed. The story page of the story, to which the item has been linked, is opened.

In either case the item is not actually copied but linked. The original owner of the Item remains its owner. Therefore, copied (linked) Items may disappear, if the original Item is deleted.

## 15.        Help page

This is a single, system wide help page. It is a collection of help entries with a TOC on top. Topic sensitive help links throughout the portal point to one of these entries.

**Visitor, Member, Owner, Content Admin**
This page is identical for these user types.

- Getting started (link) – Clicking on it opens a new browser window/tab with a flash tutorial. An example will be provided. Each deployment will have to produce their own specific tutorial.
  The tutorial file will be replaceable, see chapter Back Office.

Optionally, this page can include a Support by Skype  (or any other instant message service) link:

- Support by Skype (link) - Clicking on it initiates a Skype
  Requires a dedicated Skype account to be set up, managed and operated by Sys Admin.

**Sys Admin**
Has link to Back Office to edit help content.

# 16.      Information pages

These pages are identical for all types of users.
The content of these pages is managed in the Back Office by Sys Admin.

## 16.1.      About

This page lists basic information about the portal: description of NoBits, mission statement, etc.

## 16.2.      Legal Statement

This page lists a legal statement of issues which are not addressed in Terms of Use or Privacy Policy.

## 16.3.      Credits

This page lists the names of contributors to NoBits.

## 16.4.      Terms of Use

This page lists the terms of use of the portal.

## 16.5.      Privacy Policy

This page lists the privacy policy of the portal.

# 17.          Back Office administration interface

Sys Admin functions are not available through the NoBits portal. Sys Admin functions have a dedicated portal. URL of the Back Office portal is: <to be specified later>

Back Office functions are not applicable to Visitor, Member, Owner and Content Admin user types.

**Sys Admin**


## 17.1.          Main

The main page displays portal-wide statistics. Available types:
- Monthly statistics:
    - new label (link pointing to Taxonomy)
    - new user (link pointing to User)
    - new story (link pointing to Story)
    - new item (link pointing to Story)
    - new comments
    - new messages
- Abuse report count (link pointing to Abuse reports)

The sidebar is always present on the left side of every page of Back Office. It contains the following menu items (links):
- Main page
- System parameters
- Information pages
- Flash tutorial
- Users
- Taxonomy
- Tags
- Story
- Emotional tagging categories
- Abuse report


## 17.2.          System parameters

All the adjustable system parameters are listed in this page. Giving complete listing of these parameters is outside the scope of this chapter.

Some examples:
- Help (Support) Skype account
- System e-mail address
- Maximum number of messages in Inbox
- Sending of e-mail notification about reaching the quota (yes/no)
- Global on/off switch of count based quota handling
- List of attachable file types
- Maximum uploadable size of a single file

- Total storage used by uploaded attachments
- Global on/off switch of attachment handling
- Global on/off switch of attachment quota handling
- Autoplay timeout delay
- etc.

## 17.3.        Help and information pages

The Help and Information pages are editable. In this page these pages are listed with an editor. The editor interface can handle basic HTML formatting. Uploading of images and other media is not supported.

## 17.4.        Flash tutorial

The flash tutorial file can be uploaded and replaced (refreshed) in this page.

## 17.5.        Users

The user account related functions and settings can be managed in this page:
- Appointing Content Admin accounts
- Assigning Members to Content Admins
- Setting accounts inactive (Inactive users cannot log in, but their content remain intact.)
- Deleting accounts

## 17.6.        Taxonomy

The underlying taxonomy of the browsing functionality can be managed from this page:
SCRUD (search, create, read, update, delete) functions for categories, subcategories and their labels.
Any taxonomy item can be marked as the starting point of browsing.
Alternative taxonomy boxes are possible (for sidebar), to be used for special occasions (anniversaries, holidays, etc.). Settings for such boxes can be controlled in this page.

## 17.7.        Tags

The tags accumulating in the system can be controlled from this page with SCRUD functions. Tag unifying is possible: mistyped tags can be fixed. Regular use of this function can ensure portal coherence.

## 17.8.        Story

Any story in the system can be edited from the Back Office. In this page search functions are combined with the in-place editing functions described here. Sys Admins have a simplified story editing interface, fostering swifter.

Management of highlighted stories: stories can be marked for the recommended feed. Search can be filtered for highlighted stories.


## 17.9.          Emotional tagging categories

A maximum of five different scales can be defined for a deployment. The first is the default, added to every story and its items upon creation. The labels (title) of the scales and the end values can be freely defined. Only scales defined here will be available to Owners to choose from.

Examples:

-   Label: Entertainment value
    (How much is this story entertaining for you?)
    End values: None…Very entertaining

-   Label: Mirth
    (How did you feel reading this story?)
    End values: Made me sad….Made me happy

-   Label: Personal involvement
    (How much are you involved with the contents of the story?)
    End values: None…Deeply

Rating categories can be added and removed in individual stories by Owners as described here.


## 17.10.          Abuse reports

This is the Inbox of Sys Admin, which can be accessed from the portal. In Back Office his Inbox is filtered to show Abuse reports (messages about offensive content, aggressive users, etc.) only. Its functionality is identical with Incoming messages.

# B　Comments on functional specifications from Market Logic

## 18.　Summary

The purpose of this part is to give a detailed feedback on functional specifications from a potential user perspective. This chapter refers to Virgo Systems functional specifications.

From our understanding most of the functionalities potential users mentioned as important - based on the market research conducted so far - have been realized (*see Table 1*).

The following functionalities that came out in the research to be useful from a user perspective are not supported in the functional specifications (ranked by importance):

- repository where work can be carried out together;
- interaction for elderly users with their grandchildren via a TV STB;
- ability to create photo albums;
- ability to download a CD, book- or diary-like structure and print memory compilations;
- parental control of memory content;
- ability to categorize memories as positive or negative.

Further clarification is needed if the following functionalities (ranked by importance) are covered by the functional specifications or not:

- create and edit simultaneously the same memory content via more internet connected device;
- easy upload process from various internet-connected devices (particularly scanner, mobiles with camera);
- upload simultaneous and processing large amounts of artefacts for personal profiles and the overall system;
- enter stories with a digital pen and share these;
- automatic comparison of old and new photos and memories;
- build a virtual shrine or memory collection of people passed away;
- notify users if someone comments on their artefacts - via calm technology;
- consume artefacts through ambient devices;
- prompt users for input.

## 19.      Details

| Rank | Functionalities (user perspective) | Included in functional specs? |
|------|------------------------------------|-------------------------------|
| 1 | Allow easy consumption of memories through easy-to-use friendly user interfaces (few buttons, easy navigation etc.) | **YES** (2.1 Design principles) |
| 2 | Create photo album and/or slideshow of artefacts together with grandchildren, family and close friends far away, with or without simultaneous editing, voice annotation and possibly video chatting | **YES** (11 story page; share ownership; p.30) |
| 3 | Ability to upload artefacts: photographs, handwritten notes | **YES** (12.2.1 add Item (Image); p.32) |
| 4 | Ability to upload stories typed through the computer's keyboard | YES (12.2.1 add Item (Text); p.32) |
| 5 | Create slideshows of past events based on artefacts with involvement of peers having memories of these events | **YES** (13 Slideshow, p.33) |
| 6 | Allow the simultaneous creation and editing of the same memory content via more internet connected devices | **FamCorner** |
| 7 | Have a repository of the work carried out together | **AMS** |
| 8 | Ability to upload audio files, video files; possibility to attach these to artefacts | **YES** (12.2.1 add Item (Embedded multimedia); p.33) |
| 9 | Create slideshows of specific past events based on artefacts with involvement of family | **YES** (13 Slideshow, p.33) |
| 10 | Create and join virtual interest groups via walls, forums | **YES** (11 story page; make private; p.30) |
| 11 | Allow the creation and editing of memory content by family and/or close friends | **YES** (11 story page; share ownership; p.30) |
| 12 | Create drawings/illustrations online of reminiscences together with children - face to face | **YES** (12 In-place editing; p.31-33) |
| 13 | Enable comments on postings (artefacts, stories etc.) | **YES** (6.2 Settings tab; owner – checkbox; p.17) |
| 14 | Create slideshows of past events independently based on artefacts with allowing remote editing option for specific individuals viewing the slideshows (not necessarily simultaneous) | **YES** (13 Slideshow, p.33) |
| 15 | Share/display memories in museums, while artefact publishers receive updates about interactions triggered there | **YES** (11 Story page; Subscribe/Unsubscribe; p.28) |
| 16 | Create drawings/illustrations online of reminiscences together with children - remotely | **YES** (12 In-place editing; p.31-33) |
| 17 | Allow browsing of memories and artefacts: search based on tags, keywords, date, locations and content (artefact text extraction) | **YES** (9 Search page; p.26-27) |
| 18 | Allow interaction for elderly with grandchildren via a TV STB (consumption/editing of memory files) | **not portal related** |
| 19 | Allow commenting, rating of others' artefacts through portal and ambient devices | **YES** (11 Story page; Make comment /Like/Unlike; p.29) |
| 20 | Allow establishing a connection to / network with owners of similar memories (based on time, location, event etc.) | **YES** (11 story page; share ownership; p.30) |
| 21 | Create photo album and/or slideshow of artefacts together (with voice annotation) | **YES** (13 Slideshow, p.33) |

| | | |
|---|---|---|
| 22 | Create different access rights, separate areas (family vs. community - who can see what) | **YES** (11 story page; make private/ ownership; p.30) |
| 23 | Have easy upload process from various internet-connected devices (e.g. computer + scanner, mobile with camera etc.) | **not portal related** |
| 25 | Allow artefact publishers to view comments, ratings for their artefacts (via portal and ambient devices) | **YES** (6.2 Settings tab; p.17-18) |
| 26 | Allow simultaneous upload and processing of large amounts of artefacts for personal profiles and the overall system | **FamCorner** |
| 27 | Allow downloading (CD), book- or diary-like structuring and printing of memory compilations | **NO** |
| 28 | Enter stories with a digital pen and share these with peers and/or family | **not portal related** |
| 29 | Create easy access and registration to start using the service, without the obligation to share much personal information | **YES** (5 Login and registration; p.11-13) |
| 30 | Automatically compare photos and memories of "old days" with matching ones of today | **?** |
| 31 | Connect to popular social networking sites to allow transfer of notification and comments, and to extend interaction & contact base | **YES** (11 Story page; story header; p.28) |
| 32 | Allow building a virtual shrine / memory collection of people passed away | **legal consideration** |
| 33 | Notify users if someone views / comments their artefacts - via portal & mobile devices | **YES** (7.6 Notifications tab; p.25) |
| 34 | Notify users if someone views / comments their artefacts - via calm technology | **not portal related** |
| 35 | Allow consumption of artefacts through ambient devices (mobile and calm technology) | **not portal related** |
| 36 | Allow parental control of memory content targeted at children | **NO** |
| 37 | Prompt users for input (Facebook, calendar, e-mail etc. alerts) | **YES** (4.4 and 11 related to Social networking or chapter 6.2) |
| 38 | Allow categorization of memories: positive or negative | **YES** (17.9) |

*Table 1 – customer required functionalities*

# C　　ANNEX

## 20.　　User Issues to test concerning AMS and APS from Atlantis Consulting SA

A) User input devices for importing artifacts

- Are there any artifact input devices the users are familiar with?
- Degree of familiarization with a digital pen
- Degree of familiarization with a scanner
- Degree of familiarization with a digital camera
- Degree of familiarization with a digital card reader.

B) Artifacts to be imported into the system

- Type of digital artifacts to be imported into the system
- Average number of digital artifacts to be imported per user
- Type of artifacts to be digitized
- Average number of artifacts to be digitized and subsequently imported per user

C) Expected system load (FOR EXPERTS ONLY)

- Approximate number of users to upload artifacts:
  - 1st trial of the prototype (1st half of 2011)
  - 2nd trail of the prototype (2nd half of 2011)
  - During demonstration period (2012)
  - 1st year of operation

- Expected range of user volume (in users / year):
  - During trials
  - During 1st commercial year
  - During 2nd commercial year

- Expected number of concurrent users:
  - During trials
  - During 1st commercial year
  - During 2nd commercial year

D) Digital artifacts to be processed

- Average number of non-text images (e.g. photos, posters) per user
- Average number of text images (e.g. text-based clippings, typewriter based extracts ) per user
- Average number of hand-written - hand-printed text images (letters, notes, comments) per user
- Average number of digital pen based hand-written text images (memoirs) per user

E) Artifact management and processing

- Type / kind of data users want to assign to artifacts (as metadata).
- Which criteria users would like to have available, when searching for artifacts?
- What type of searching is required (e.g. keywords, chronological, category based, full test searching)?
- Artifact classification into categories (e.g. sports, leisure, education, army, professional life, vocations, scenery, portraits, personal, kids, family, etc.)
- Popular means to upload content onto a WEB site (e.g. form uploading, FTP, fax)
- Type and volume of data to be provided during registration (e.g. name, country, sex, age, profession, education (years, institute, etc.), …).

F) Billing / revenue sources (FOR EXPERTS ONLY)

- Anticipated target audience
  - Type, percentage
- User billing scheme (e.g. per artifact, per month, per traffic, per subscription, FREE)
- Suggested revenue sources
- Suggested complementary services to be considered.

## 21.  Nobits – User Stories & subsystems: Artefact Management System (AMS) from Atlantis Consulting SA

| User Story # | AMS involvement | AMS Interfaces with other subsystems |
|---|---|---|
| 1, 10, 18, 19, 20, 22, 25 | • Management of access rights to artefacts<br><br>• Creation of a new artefact record<br><br>• Storing of a new artefact object into the repository (the actual object is received and processed from the APS)<br><br>• Storing of artefact basic metadata (date, title, category, comment, etc.)<br><br>• Storing of artefact advanced metadata, as received from the APS (as a result of the artefact processing). | • With portal and ambient devices (phone, other):<br>  o Receive user ID<br>  o Receive access rights per artefact, for a list of users<br>  o Receive artefact basic metadata<br>  o Send access rights per user / artefact<br>  o Send new artefact ID<br><br>• With the APS:<br>  o Receive the artefact object from the APS<br>  o Receive artefact related data (e.g. OCRed text) resulted from the processing |
| 6, 27, 28, 32 | • Association and storing of additional data (e.g. recording, audio story, video, annotation, comment) to an existing artefact | • With portal and ambient devices (phone, other):<br>  o Receive user ID<br>  o Send artefact ID(s)<br>  o Receive textual elements of the additional data<br><br>• With the APS:<br>  o Receive the non-textual elements of the additional data from the APS (both in original and processed form) |
| 8, 17 | • Management of artefact collections (e.g. albums, after death collections, thematic collections, etc.) | • With portal and ambient devices (phone, other), Activity module:<br>  o Receive user ID<br>  o Send artefact ID(s) |

| User Story # | AMS involvement | AMS Interfaces with other subsystems |
|---|---|---|
| | | o  Send artefact data, metadata for a given artefact ID |
| | | o  Receive access rights per collection, for a list of users |
| | | o  Receive collection metadata |
| | | o  Send new collection ID |
| | | o  Receive artefact ID(s) for a collection ID |
| 10, 14 | • Association and storing of digital pen input to an existing artefact | • With the digital pen application (its rendering environment / device could be considered as one more ambient device…) and/or the APS: |
| | | o  Receive user ID |
| | | o  Send artefact ID(s) |
| | | o  Receive metadata for the new input |
| | | o  Receive text data of the new input |
| 16 | • Creation and management of thematic or regional user groups | • With portal and ambient devices (phone, other): |
| | | o  Receive user group metadata |
| | | o  Send user ID(s) based on criteria |
| | | o  Send group ID |
| | | o  Receive user ID(s) per group ID |
| | | o  Receive access rights |
| 24, 33, 34 | • Provision of various search types <br><br>• Download of an artefact <br><br>• Download of artefact associated objects / data | • With portal, ambient devices (phone, other), Activity Module: |
| | | o  Receive selected search criterion and user input data |
| | | o  Send matched artefact ID(s) |
| | | o  Send artefact data and metadata for a given artefact ID |
| | | o  Send artefact associated objects and |

| User Story # | AMS involvement | AMS Interfaces with other subsystems |
|---|---|---|
| | | data for a given artefact ID |
| 31 | • Provision of artefact(s) and associated objects / elements of a given user | • With the Activity module:<br><br>   o Receive user ID<br><br>   o Send user artefact ID(s)<br><br>   o Send artefact data, metadata, associated objects, etc for a given artefact ID |

## AMS Domain Model

1) USER

- authenticate
- add
- update
- remove

2) OAUTH

- ????

3) ARTEFACT

- create
- remove
- updateAccessRights
- updateMetadata
- addData
- removeData
- addAdvancedData
- removeAdvancedData

4) ARTEFACT COLLECTION

- create
- remove

- updateMetadata
- addArtefact
- removeArtefact

5) ARTEFACT BASIC DATA (raw, txt from OCR, Digital Pen image, Digital Pen txt)

- create
- add
- remove

6) ARTEFACT ADVANCED DATA (sound, video, annotation, comment)

- create
- add
- remove