



## D5.3 Iterative end user testing and validation report

May 28<sup>th</sup> 2018

Henk Herman Nap, Lotte Cornelisse, Meike  
Schellekens, Dirk Lukkien

## Document Information

### Purpose of document

This deliverable (D5.3) describes the iterative testing and co-design of the Palette platform, illustrated by means of screen captures and quotes from participants in the co-design phases.

### Organisation Responsible

Vilans is the organization responsible for this deliverable. KempenLife and Smart Homes are contributors and reviewers of the document.

### Authors and Contributors

Partner	Name	Contribution	Date
VIL	Henk Herman Nap	Author	
	Lotte Cornelisse	Main Author	
	Dirk Lukkien	Author	
	Meike Schellekens	Author	
Kemp	Rachel van Berlo	Main Author	
Smart Homes	Ad van Berlo	Author	

### Version History

Version	Date	Description	Author
0.1	6 <sup>th</sup> May 2017	First version	Lotte Cornelisse (Vilans)
0.8	19 <sup>th</sup> October 2017	Second version	Henk Herman Nap, Lotte Cornelisse, Meike Schellekens (Vilans); Rachel van Berlo (KempenLife) & Ad van Berlo (Smart Homes)
1	28 <sup>th</sup> May 2018 & May 28 2019	Definitive version	Lotte Cornelisse, Henk Herman Nap, Dirk Lukkien, Meike Schellekens (Vilans)



# Project Summary

## Background

Project PaletteV2 focuses on advancing the quality of life of seniors in our society. One of the main goals is to provide them the opportunity to actively participate in a range of social processes and developments. PaletteV2 wants to achieve this by providing them a user-friendly online platform that - through digital contact - gives them access to likeminded people and activities that are aligned with their interests.

## Purpose of PaletteV2

Palette helps older adults around their pension age to find activities and likeminded people in their local environment, to enable them to lead a fulfilling life and decrease the chance of loneliness. Reaching retirement age is one of the biggest changes in life, in which questions rise about having a meaningful day, making sense, and preventing loneliness. Today, 6 per cent of Europeans admit they have no one to talk to about their problems. There are about 44 million lonely people across Europe. Loneliness is bound to occur more often amongst persons who are single, widowed, have a migration background, have a lower economic status, and who are disabled. According to the Dutch National Institute for Public Health and the Environment (2019) around 10% of the 75-84-year olds and about 15% of the people older than 85 years old experience severe loneliness. There are various reasons that might explain why this number increases as people grow older. In the Netherlands, 33% of 75-79 years old live alone, compared to 73% of the people older than 90. In addition, in Dutch rural areas the average distance of 80+ older adults to their children (who are potential informal caregivers and social contacts) exceeds 30 kilometres. To avoid loneliness, close supportive relationships are required<sup>1</sup>. Research commissioned by the Dutch Ministry of Health showed that older people who receive care value - among others - a meaningful day as of the most important aspects of their life<sup>2</sup>. A meaningful day is a day in which an activity is planned, a day in which you can have a social connection to someone, a day with play, a laugh or joyful moment. In the lives of most people their active contribution to society has been a satisfying and motivating experience until retirement. For many years, their work was simply nice to do and a social meeting place at the same time. There is no difference between men or women at this point. Whether one is involved in production and services for far away customers and clients or in housekeeping and catering for the family, the reward is the same: we are valued for what we do, no matter if our contribution to the community is large or small.

The idea for Palette gradually developed during focus groups (see WP3) that focused on understanding daily life of people that are around their retirement age and how technology already shapes their lives; which services are already used, what problems they encounter, which services or aspects are missed, etc.

The Palette motto: *"Enjoy life together"*

---

<sup>1</sup> Dahlberg, L., Andersson, L., & Lennartsson, C. (2018). Long-term predictors of loneliness in old age: Results of a 20-year national study. *Aging & Mental Health*, 22(2): 190-196. DOI: 10.1080/13607863.2016.1247425.

<sup>2</sup> Gijzel, H., Nap, H.H., Herps, M., Mulder, S., Van Klink, M., Schrijers-Snoeijs, S., Kuperus, K., & Minkman, M. (2017). *De Wet langdurige zorg in de verzorging, verpleging en gehandicaptenzorg. Ervaringen uit de praktijk*. Amstelveen: KPMG/Vilans.



Palette helps users to have an easier and more joyful life. Retirement is no longer a barrier to have a good time with people in their neighbourhood. Research has shown again and again that taking part in community life helps people to stay healthy and happy. After 65, we may live 20-25 years or more. There are so many things to do in all those years. Palette provides a platform to find these things and enjoy time with others.

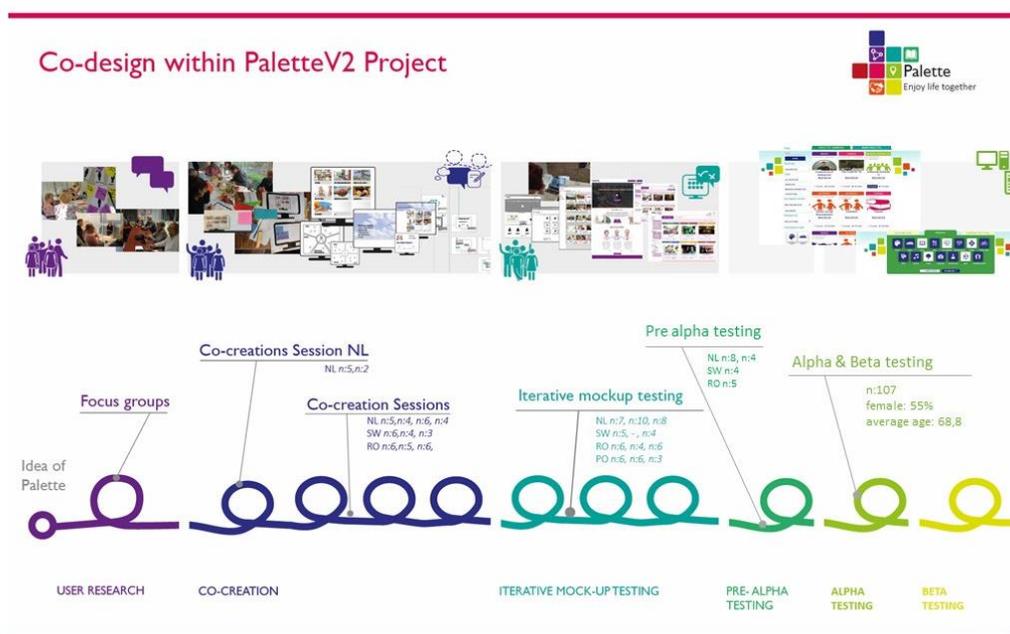
Within the PaletteV2 project, we built an online service environment, an easy to use platform that assists older adults in staying active participants in society. Based on dedicated, specified profiles, the Palette platform brings people and activities together. Many facets of society are digitizing and are taking place in the online world; many daily interactions are increasingly mediated by technologies. However, seniors' confidence in interacting with computers has a role in stress during computer interaction, advocating the need for a user-friendly system that gives older adults access to digitalized services. Unique is its adaptiveness to the ICT skills of the end-user, to reduce discomfort with the digital services. This was ensured amongst others through the continuous involvement of the target group during the co-design, testing and validation.

## The iterative Alpha and Beta process

The development of Palette was an iterative process, in which the target group was involved in every phase. In the image below, the cycli of the user centered design process are depicted. The cycli are depicted sequentially as: focus groups, co-creation sessions, mock-up testing, pre-Alpha, Alpha and Beta testing.

With each new cycle, feedback received from the end-users was translated into a new set of requirements which are then integrated and built into the platform by the technical development partners (WP4).

A working platform was developed based on the iterations up until the pre-Alpha test and the heuristic evaluation. This version of Palette is evaluated during Alpha and Beta testing. During the Alpha and Beta test phase, researchers also continually collected feedback from the participants on – among others - usability, technology acceptance, social connectedness and desirability, so improvements and new deployments were made by the technical partners.



# Table of content

## Table of content

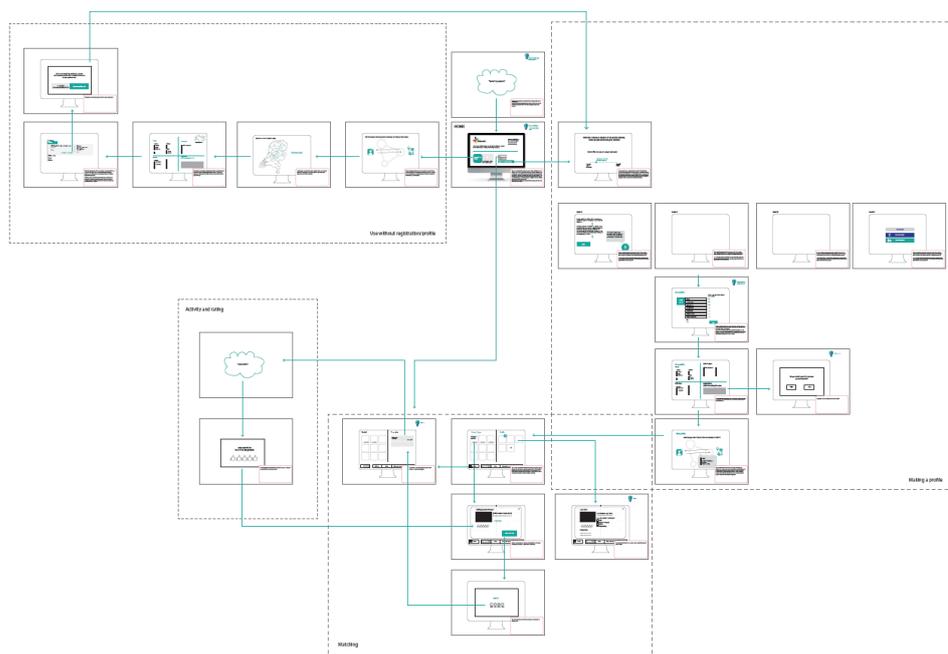
.....	1
Document Information .....	2
Purpose of document .....	2
Organisation Responsible .....	2
Authors and Contributors .....	2
Version History.....	2
Project Summary.....	3
Background.....	3
Purpose of PaletteV2 .....	3
The iterative Alpha and Beta process .....	4
Table of content.....	5
Introduction .....	6
Development of Palette in co-design with end-users .....	6
Method Iterative mock-up testing.....	7
Results Iterative mock-up testing .....	10
Mockup 1.....	11
Mockup 2.....	17
Mockup 3.....	21
Pre-alpha (Netherlands) .....	32
Pre-Alpha 1 .....	34
Pre-alpha 2.....	39
Conclusions pre-alpha testing .....	48



# Introduction

## Development of Palette in co-design with end-users

The Palette platform is developed in co-design with the possible end-users; seniors around their pension age. As described in Deliverable 3.2 (Usability Report) end-users were involved from the beginning to get insight about the needs and wished. The results from the several co-design sessions (see figure below) are analysed and presented in a list of requirements and a first framework of the Palette.



During the development of the actual Palette platform based on the user requirements and the frame work we also worked in co-design with end users. This is done by a phase called iterative mock-up testing.



# Method Iterative mock-up testing

Based on the conclusion of the co-design sessions a mock-up of the Palette concept was built by PSNC to test with seniors. The mock-up in this project is a functional clickable model of the platform to test the functionality and interaction. Since it is a functional model, the design (look and feel) was not included yet. Also, not all buttons, textboxes work, only the ones necessary for the research scenarios. After testing the mock-up with the seniors, the results were used to improve Palette and a new mock-up was made to evaluate it with seniors. In the period of the iterative mock-up testing three iterations were done. This chapter describes the method, results and conclusions of the Iterative mock-up testing.

## Method

### Guidelines for user testing

- Observation during a task
  - Think aloud
  - Suggestion to improve
  - Rate of difficulty (by researcher)
- IBM questionnaire

### Mock up 1

#### Palette intro

- Test iteration 1 of index page
- Test: do users understand who are current users of Palette?

#### Palette Profile

- Test iteration 1 of 'create profile' process
- Test understanding 'return to profile' button
- Test iteration 1 of setting details private / public
- Test understanding to add interests to profile after completion

#### Home Palette

- Testing 1st iteration of Palette overview page content
- Test categorization items timed
- Testing 'remove item' icon and interaction

#### Match with an item

- Test open question: you are looking for XYZ to see what search function do users use?
- Test Clickstream finding more information about an item
- Test adding item to favourite
- Test understanding specific event information
- Test access to 'favourite items'

#### Adding an item, yourself

- How would users create an even themselves?  
test: 'Your offer tab' vs button in offer



## Mock up 2

### Palette intro

- Test iteration 2 of index pages

### Palette Profile

- Test latest iteration of 'create profile' process

### Home Palette

- Testing latest iteration of Palette overview page content
- Testing 'remove item' icon and interaction

### Match with an Item

- Test open question: you are looking for XYZ to see what search function do users use?
- Test latest iteration of adding item to favourite
- Test what search function people use for item at a specific moment (today)
- Test what search function people use for item of indicated interest
- Timed test of the agenda function
- Click stream, finding more information about an item

### Add an item yourself

- How would users create an event themselves? 'Your offer tab' vs button in offer
- Finding information about your created event.

Clustering paper prototype exercise:

## Mock up 3

### Palette intro

- Test iteration 1 of try Palette' pages, before creating an account
- Test if participants will recognize and use the filter options?

### Palette Profile

- Test latest iteration of 'create profile' process
- Test specifically latest iteration of setting profile details to private/public

### Home Palette

- Testing latest iteration of Palette overview page content
- Testing new 'remove item' icon and interaction

### Match with an Item

- Test open question: you are looking for XYZ to see what search function do users use?
- Test latest iteration of adding item to favourite
- Test what search function people use for item of indicated interest
- Click stream, finding more information about an item

### Add an item yourself

- How would users create an event themselves?
- Finding information about your created event.



## Participants

	<b>The Netherlands (NL)</b>	<b>Switzerland (SW)</b>	<b>Romania (RO)</b>	<b>Poland (PO)</b>
	Location: smart home Eindhoven 2 researchers involved	Location: University Hospital of Geneva 2 researchers involved	Location: Geron foundation, Bucharest 2 researchers involved	location: FutureLab, Poznan 2 researchers involved
Session 1	<i>n:7</i>	<i>n:5</i>	<i>n:6</i>	<i>n:6</i>
Session 2	<i>n:10</i>	<i>?</i>	<i>n:4</i>	<i>n:6</i>
Session 3	<i>n:8</i>	<i>n:4</i>	<i>n:6</i>	<i>n:3</i>

## Procedure per country

### The Netherlands

Equipment:

Laptop with a computer mouse attached, Pen and Paper, Guidelines

Procedure:

Participants were welcomed in the test facility with a drink. Then the protocol was followed in accordance with the provided guidelines. In the case of new participants, a small verbal explanation was given about the Palette project after which one extra general questionnaire was filled in before initiating the test with the provided guidelines.

### Switzerland

Equipment:

Computer, Morae recorder to record the computer screen and interaction of the user, pen, paper, manual, questionnaire. Procedure see The Netherlands.

### Romania

Equipment:

Samsung 10 android tablets, pen, paper

Procedure:

Each session from each mock-up testing took place individually (each participant was tested individually by the researchers). First each of them signed the informed consent and after the tablet was handled to them with the main page opened. Each of them went through each task, in the meantime the researcher was taking notes, timing and explaining to them what they should do or how if they got stuck. At the end, each participant completed the IBM questionnaire and offered to the researcher more feedback regarding the usability of the mock up if necessary.

### Poland

Equipment:

Desktop computer with mouse and keyboard, pen, paper, questionnaire

Procedure:

Participants were welcomed and offered a drink and a sweet snack. They were introduced into the project and filled out a general questionnaire and signed an informed consent. Each participant was tested individually by the researcher. At the beginning of each iteration a small verbal explanation of the test was given, then the



protocol was followed in accordance with provided guidelines. During the tests researcher noted users' comments and feedback regarding the usability of the mock up.

## Results Iterative mock-up testing

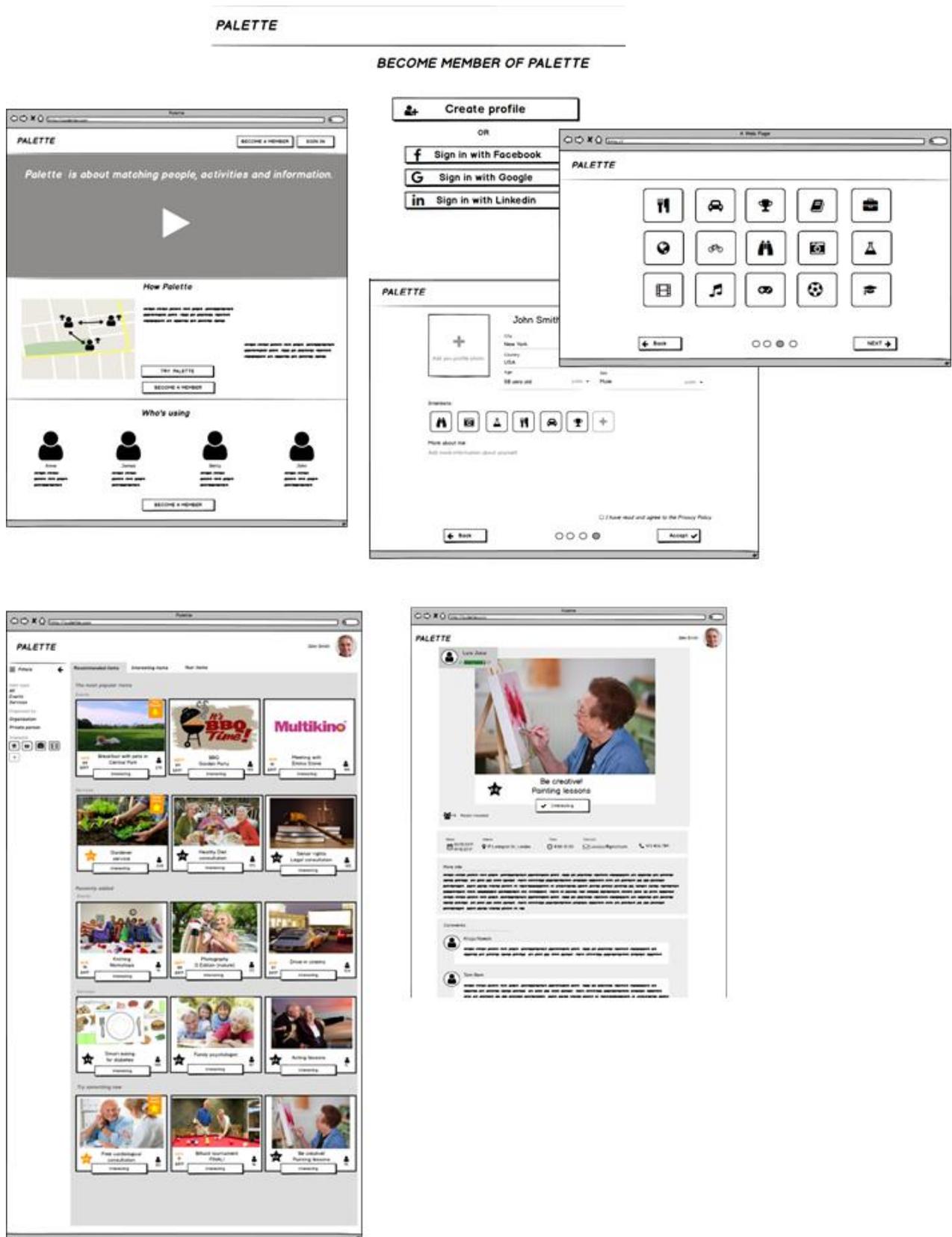
In this chapter the results of the three mock-up tests are presented with the main results presented in bulleted lists. The results described are both qualitative and quantitative and the chapter is finalized with a conclusion. Per mock-up the general most positive and negative results are described, followed by the qualitative results that fit the mock-up features, lastly the quantitative data is described.

Mock-up feature list:

- Palette intro (start) the first page a user sees [to get information, create an account of login]
- Palette profile [creating or changing your profile]
- Home Palette [home – overview with items related to your interest]
- Match with an item [ get information about an event, select item, chat about an item]
- Add an item yourself [ make an item other can match with]



# Mockup 1



## Testing mock-up 1

### General

#### Positive:

- With a guide at the beginning
- The use becomes pleasant
- The events are detailed with images
- Good images related to events
- Clear enough

#### Negative:

- Text is small
- Colour was not appealing
- Lack of more targeted and descriptive information
- Some titles need to be reformulated
- Put a calendar to see the activities we registered
- Need a tutorial for beginners
- My events is ambiguous better to put a button « Create an event »
- Description of the event: picture is big compared to the information (contact etc...) and this is the most important
- Really strange to put the picture of a man and the name « John Smith » I took time to realize it was my profile, so just put « your profile and with the picture of an Avatar like on WhatsApp

*“We should be able to see where we are on the website. Maybe a map of the website?” RO*

### Palette intro (start) the first page a user sees

- Who is using Palette is unclear to users.
- Movie was not recognized
- Replace « Who is using? » by « Who are our members » for the main page

*‘What I want to know immediately when entering Palette, what will the usages cost?’ NL\_P3*

*‘To see who else is using Palette it would be better to say xxx users in The Netherlands, or an opportunity to check if there are users in my neighbourhood that I can check by using my zip code.’ NL\_P16*

*‘The font style makes it hard to read everything. Also, this first page gives less information.’ NL\_P19*

### Palette profile

- Login and registration differ per participant. When choosing a way to make your profile it was remarkable that some users want to connect it to an existing account because of the amount of password to remember, however it was hard to find out which existing account they would like to use. Most users don't make use of Facebook. Also, a group of users do not have an email address that they can use for to become member.
- Interest were not clear enough and do not cover all interest they are looking for.
- Privacy policy is missing
- On this page she doesn't understand the meaning of « filter »"



- It would be good to add the « profession » in the profile and to precise the interests, ex: type of food you like etc...
- Don't understand the meaning of private, change the term for example by hide?
- Don't understand the meaning of public, change the term for example by visible?"
- It's strange to have the picture of « John Smith », it would be better to put « Your profile » and put a picture of an avatar
- Edit age information/privacy status by clicking on the age directly, change colour of the option when it's on private option (segregate colour: Soft grey)
- Edit age information/privacy status by clicking on the age directly
- It's strange to have again the « start using Palette » button, we should change into « using Palette »
- Easier if it's our Name and Surname and our picture, it takes time to understand that it is our profile
- Add « - » to delete interest more
- Easier with a tutorial
- Delete the « start using Palette » and put « using Palette »

*'I would like to choose history as an interest, is there an option to add an interest that is not suggested by Palette? 'NL\_P19*

*'it would be nice to have an option to deactivate your profile. For instance, when you are ill you don't want that others are calling you' NL\_P17*

*What does it mean if you connect it to linked in, which information is used in that case?' NL\_P12*

*"Where could I read the privacy policy" RO*

### Home Palette

- 3 tabs (recommended especially "your items" was unclear)
- Service/event unclear
- Users asked for a search option
- Order is not clear (related to when it will take place?)
- User did not see the label and did not understand the difference with the start and the thumb
- User did not understand the filter > unclear that it is buttons
- Arrow was recognized as "back function"
- Some user did not recognize the profile picture as option to go to their profile
- Function of the interesting button was not clear
- Would be great if we can search for an event by: date, interest, place
- Show if the activity is full!
- The picture is quite big, and the information is much smaller, would be good to see the information in bigger, it's the most important

*'it would be nice if there is a notification when the event reappears at Palette' NL\_P17*

*'That's something you really must know, the fact that you can click on the face of John/ profile.'*  
NL\_P3

*'I expect a search function but cannot find it. the left menu is quite unclear what are the services?'*  
NL\_P12



*'So here we have my previous interests, but I don't remember, was the cross something with healthcare?' NL\_P3*

*'I don't know what the (person icon + counter) stand for, how many people have clicked on this activity?' NL\_P3*

*'I would only select 'interesting' for the activities that I like.'* NL\_P3

*'So, where it says 'interesting', apparently I am already interested in this item.'* NL\_P5

*'pictures are nice, inviting'* NL\_P6

*'it would be nice to search and use filters. An extra filter could be distance.'* NL\_P16

*"Making the "+" sign more visible, colourful"* RO

*"I did not know what "My items" means. The ones I like are not mine?"* RO

*"The profile should be more visible"*

#### Match with an item

- Rating, star and popularity not clear and recognized
- Person rating unclear
- Star is unclear
- Back button is missing

*'You have to click quite a bit to get to where you want to be. (When in the painting event) The bar with information is very clear.'* NL\_P3

*"I hoped I could click the e-mail address, so it would connect to my outlook. The dates and how they are noted on the event are not very clear.'* NL\_P5

*'I suggest present more info, how many weeks, price, is it just one session or multiple sessions'*  
NL\_P17

#### Add an item yourself

- Rename « My Activities » by something else like « My activities proposal »
- Not only show interested participants
- Add the number of participants
- Add the maximum number of participants
- Delete notation
- Arrow close to the word filter not clear (arrow to hide the menu)
- Show when inscriptions will be/are closed
- « My events » is ambiguous, better to put « create an event », « propose an event »
- Would be good to have a calendar with all the days and the activities

*'I did not see the possibility to add items. (After a while) maybe i have to go to my items but that's illogical'*



*'this part does miss in the interface. I would expect it on the left side.'* NL\_P19

*'I would take a picture of my activity and add it here (at bottom of Palette page). I wouldn't want to impose and put my activity all the way on top of the page where others.'* NL\_P3

*"The "play" button - I think it means it's locked and I have to register first to try it"* PL\_01

*"The globe icon could be clearer. It's too small". "My items... what does it mean 'My items'?". "Maybe it should be a map, not a globe"* PL\_01

*"Is there a search option? I'd just go there and search"* PL\_01

*"One more thing that could be useful would be a calendar panel. Just for events that I could book [sign up for]"* PL\_02

*"In 'My items' I would add photos, favourite movies etc."* PL\_02

*"I see interests I could use. In 'My items' I would put things that I'm always interested in. In 'Interesting items' those that interest me only sometimes"* PL\_02

*"I need to have options defined, just like on Facebook"* PL\_04

*"I would write a comment with questions like: How can I get there? Where is parking?". "Someone who is organizing the events should write everything about it"* PL\_04

*"Showing similar items could be nice as well - other items similar to the one I'm currently looking at".* PL\_04

*"Some items belong to multiple categories. Viewing items by category might be better for me".* PL\_04

*"Eliminate LinkedIn; profile photos should be optional as should be the year of birth"* PL\_04

*"No cost or participation details are given for items"* PL\_04

*"I wouldn't necessarily give my exact date of birth". "I'd say what I'm good at and what I can help with [referring to choosing interests]".* PL\_05

*"The 'More about me' section could be divided into other sections to help people give more information about them". "Maybe 'interests' should be more detailed"* PL\_05

*"The word 'interests' should be larger". "There should be a word 'add' next to the plus button [for interests] and interest names should be listed as well"* PL\_05

*"I don't really know how to add events"* PL\_05

*"Filters are confusing. The filter headers should be more visible"* PL\_05

*"I'm always giving as little information as possible about me on the Internet. It's different when I meet somebody in person"* PL\_06



*"I don't like scrolling. I'm used to everything being on 'one page'". "I always look for information at the top [of the page]" PL\_06*

*"I expected to get more details after clicking on 'Interesting'". "I like those thumbs" [referring to rating] PL\_07*

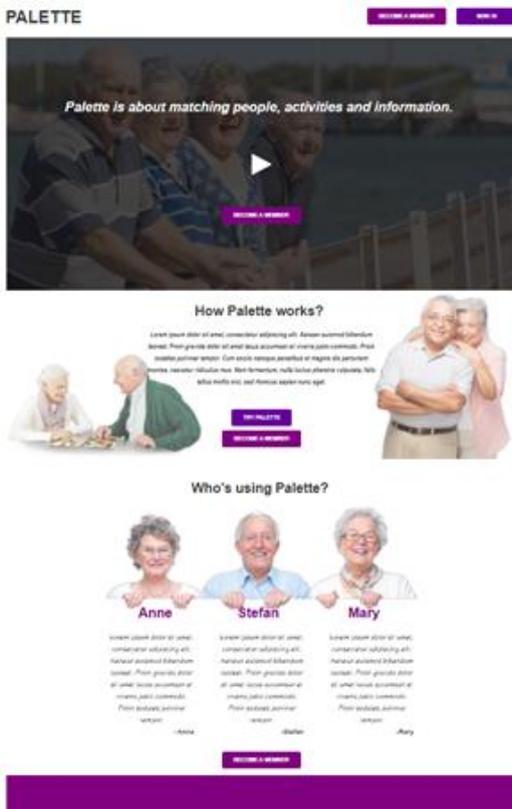
Development: mock-up 1 >> mock-up 2

based on the results from testing mock-up 1, the following functions are developed/optimized.

- Interesting items moved to filter, name changed to “my favourite items”
- Recommended items changed to “Palette Offer”
- “Event” and “service” headers added
- Button “interesting” changed to star and X buttons
- Added a calendar view
- Added a search bar
- “add your own item” on home page (two options now)
- Added Palette home button
- “user choice” and “popular item” reward deleted
- Improved filter with distance (5km, 25km, 50km) option

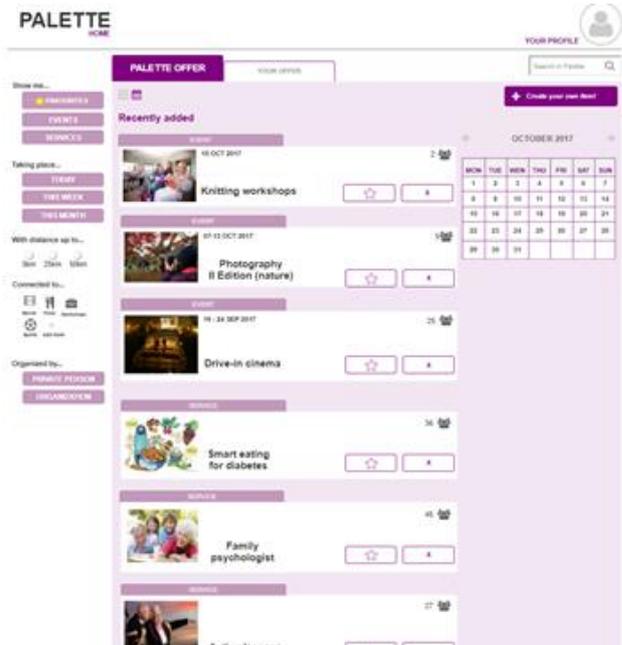


# Mockup 2



## PALETTE

### Create profile.



## Testing mock-up 2

### Palette intro (start) the first page a user sees

*'Palette is clearly for seniors' (as shown on the pictures) NL\_P20*

*'This should be really interesting for people that will retire in a year or so, so they know what is possible, what they can do. It also seems useful for associations and for municipalities, currently they aren't communicating that well what activities there are available.'* NL\_P21

*'Currently I'm not a member, unclear is: What's the advantage of becoming a member? What does it cost? Is it interesting for me? I could expect this info in the movie'* NL\_P7

### Palette profile

- User do not want to give the date of birth
- Users want to know what the restrictions for the password are
- User don't get feedback when if the profile was completed
- Users asked for the privacy policy

*'For the password it's not clear what kind of characters I should use.'* NL\_P17

*'City, i would say place of residence, since i live in a small village.'* *'Phone is new in the summary of your profile.'* NL\_P19

*'The make profile button should be visible after you agree with the privacy policy because it is mandatory.'* NL\_P16

*'Add the option to confirm the password, that very important'* NL\_P16

*"When I choose the interests, are they going to appear in the order that I choose them? For example, if I click first on "movies" is this going to appear my number one interest? I think it would be better if they will appear on my profile in the order that I choose them."* RO

*"It took me a while to understand that the information is public by default and I can click the box to make it private."* RO

### Home Palette

- Users had difficulties to find the calendar view
- Unclear if something is clickable
- Most of users didn't know how to go back to Palette offer (they used back arrow)
- Text of interest in filter is too small
- Star not clear in each country

*'The item pictures are nice, they really appeal to me.'* NL\_P

*'It's nice to scroll through items, who knows if I might encounter something new.'* NL\_p3

*'It seems all these are my favourites?' Try something new are items outside my interest zone?' NL\_P5*



*'It is not clear to me that you can click on an item. Maybe you can add a button with: "more information.'* NL\_P20

*'That cottage icon (means agenda) what does it mean?'* NL\_P3

*"I didn't see the calendar to use some other option. The calendar it's not visible"* RO

*"I had a hard time finding the search bar"* RO

*"Same problem with the calendar and if I go there, it's not that easy to go back on my profile"* RO

*"Not all the items are very clear, and I would like to click on more items"* RO

### **Match with an item**

*'The general information section with phone number e-mail etc. is very clear.'* NL\_P21

*'The cross in the event info page, I would remove it, because what does it mean?'* NL\_P7

### **Add an item yourself**

*I first would click events, I would not have sought it at your offer tab.'* NL\_P21,

*'Activity or service? I would say an activity is something like walking. A service is something you can do for someone else like walking with someone's dog.'* NL\_P16

*"Does the star mean I would like to take part in the event?"* PL\_02

*"There should be a link, so I could buy tickets from home"* PL\_02

*"There should be information about cost"* PL\_02

*"I would show my email only to trusted people, I would not give my real date of birth"* PL\_04

*"There should be additional filter today, this week, this month and "in the future" or "this year""* PL\_04

*"Calendar should be added to filters"* PL\_04

*"There is no list of users who are taking part in the event. I don't know who would see events I have organized. There is no instruction how to add a new item."* PL\_04

*"There is no demo how to use Palette. Additional information is needed."* PL\_04

*"Interest types are too general. I wouldn't give my day and month of birth."* PL\_05

*"It would be better if show/hide were two separate options, drop list requires two clicks. There is no information that I had registered successfully. How do I know that I became a user?"* PL\_05



*"There should be an arrow to go back to the main page "PL\_05*

*"There should be a legend - what do all of those icons mean? This for example doesn't look like a calendar" PL\_05*

*"If I chose filter 'events', it shouldn't ask me if I want to add service or event item. It should know that I am on an events page. "PL\_05*

*"Too few filtering options. Filter menu should follow the scrolling. "PL\_05*

*"I do not like adding my birth date. "PL\_06*

*"The calendar icon should be bigger and placed in somewhere else. "PL\_07*

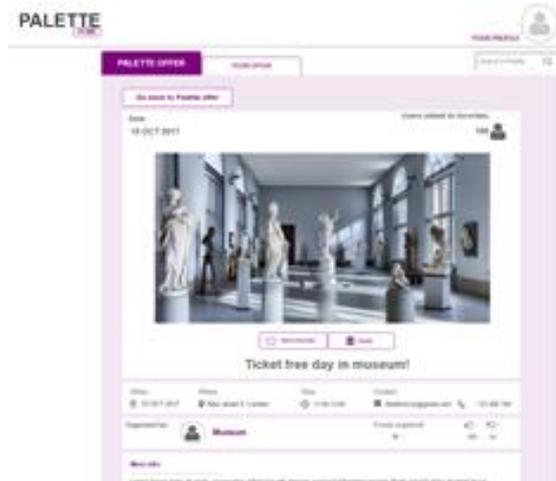
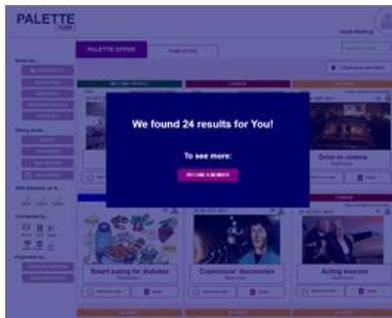
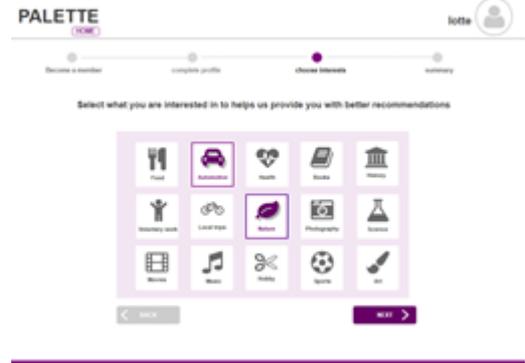
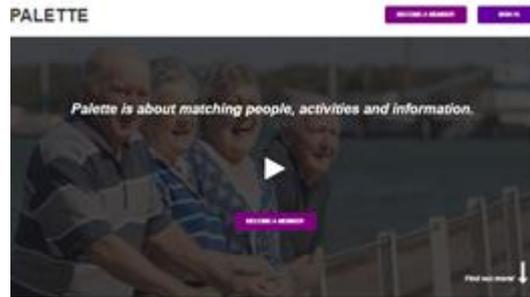
Development mock-up 2 >> mock-up 3

based on the results from testing mock-up 2, the following functions are developed/optimized.

- Event/service changed to Activities/Courses/Services/Meeting people
- Different colours of items added
- Added some interests: voluntary work & hobby
- X replaced by trash icon
- Calendar view added to filter
- Find out more arrow added to make clear the option to scroll down
- Text boxes and the texts enlarged
- After action feedback added: "congratulation You successfully became a member of Palette", "item added to favourite" "item ... deleted" "We found 24 results for you"
- "Go back to Palette offer" button added
- In profile, Show/hide: two separate buttons added
- Become a member added as 4th dot in registration process



# Mockup 3



## Testing mock-up 3

### General

#### Positive:

- Once learning is done it becomes easier
- Pleasant and easy to use
- Great site improvement

#### Negative:

- For a beginner it takes time to find the information on the pages
- « Try Palette » must be visible at the top of the page (ends too quickly, let the opportunity to see the events)
- Attention to the faces of people too old
- You must be able to access the profile by clicking on the picture of the user
- Form: say what is mandatory
- Organized by: my name should be proposed

### Palette intro (start) the first page a user sees

- User did not associate the platform with themselves but with “elderly”
- Information should explain if the use of the platform will cost money
- Text is too small
- In some Countries the try Palette button was not recognized
- Put "Try Palette" upper (difficult to find)
- Logo is not very understandable -> ex: video game controller? museum?
- Image volunteer, local stays and brush not very good
- Difficult to find the functionality "Try Palette"
- The try of Palette ends too quickly we cannot see the events
- The pop-up blocks too early
- She wants to see more before the pop-up

*'I see some users and the option to become member, i can log in. I do not know what discover more is. I think this is a video.'* NL-P16

*'I read the text, that sounds interesting I can click a movie, there's an arrow indicating I can discover more, does it mean I should click there?'* NL\_P7

*'i think that you can get more info or go to the end of the page (scroll function) what i would like to know: is it for free, what about the privacy and are there behaviour conditions.'* NL\_P12

*"I had a hard time to find the "try button". RO*

### Palette profile

- Lot of information is asked from users, too many steps for some users
- Did not select the button that belong to the item they wanted to change
- Unclear what public means
- Public/private button too far away topic (like country, date of birth)
- Put the size "I read, and I accept" bigger
- Interest in order of preference in profile



- Pop-up is too fast
- Password: possibility to see it to avoid errors
- No ability to modify the information in the profile
- Not clear what is required --> required fields with an asterisk

*'Confirmations throughout the 'become a member' process are pleasant.'* NL\_P7

*'I could use more handles to fill in these details: Do I need to put a - in my phone number entry? Password entry with required signs etc.'* NL\_P7

*'You can choose for private or public, private is clear but public not clear, it should be visible for members.'* NL\_P12

*'Where can I read the privacy policy? What is going to happen with all this data? Could I not fill this in later? Skip for now?'* NL\_P5

*'Can i fill in everything? What kind of password do i have to add, what are the restrictions, also use numbers and symbols?'* NL\_P17

*"I think it's necessary to write your e-mail just once. Too much writing for the beginning"* RO

*"I have difficulty to see all the writing, but maybe it's because I don't have enough practice with the tablet"* RO

### Home Palette

- Favourites should be a separate filter
- User do use the back button of the internet browser
- Home button is not used
- The items overview is visually very noisy
- The number of attendees or the max amount (10/15) of attendees should be given instead of persons that selected it as favourite
- In Romania the filter menu was not used

*'It's just that I had never used the filter before, that's why I am a bit hesitant to try it, but if you explain it to me, it makes sense.'* NL\_P3

*'I'm really drawn to the item photo's, but it's unclear to me: are they my interests or general items?'* NL\_P5

*'Are these items (in Palette page) specially selected for me? That's a bit unclear'* NL\_P7

*'I would like a tutorial: there's a lot of information, you can start everywhere, where should I start?'* NL\_P7

*'NL\_P7*

*'Knitting, does this really match my interests? There's no sorting mechanism now is there? You want to see at first glance the most interesting things.'* NL\_P5

*""Your offer" has a tiny box that you cannot see when it is inactive. Plus, the contrast between the active box and the inactive one is too low."* RO

*"The icons in the filter menu are too small."* RO

### Match with an item

- Reformulate "connected to" -> "my interests"
- Click on email --> and this action opens the email software



*'Now it becomes clear what is the necessity of adding it to favourites, so I can easily find these items back, after I try it, I understand the usefulness of it. The more I understand the functions of the website, the more interesting it gets'* NL\_P7

*'It's really easy, you push the button to read more and you get the information.'* NL\_P3

### Add an item yourself

*'I'd then add the date and time and all the details. It would be easy for me because I've organised events before.'* NL\_P21

*'I had already seen the button, so it was easy.'* NL\_P3

*'I am doubtful: should I click your offer or place an item, I try click your offer, so I can go back to the tab to see that the item is there. Can I click two options? It would fit both in activity and in meeting people.'* NL\_P7

### Try Palette

- Users want to see an item in the try Palette option without the purple screen
- Users need more time to try

*'This 'try Palette' option is really disappointing, if this is all I can see, and I must become member, I will no longer be interested'* NL\_P19

*'I'd like to test the interests I can select one by one and see what Palette has to offer for me.'* NL\_P21

*'When I try Palette, I'd like to know, is it for free or do I have to pay for it? Make clear if it will cost money.'* NL\_P5

*'I miss the cross in the top right corner. I thought that show Palette offer would give more options to select, now i cannot go back. I want to see the offer and what it is about.'* NL\_P16

*"It's a bad idea because I cannot really see much without becoming a member."* RO

*"There is no possibility to share my creations like photos, poems."* PL\_06

*"It will be better if everyone could see the offer of Palette, not only registered users"* PL\_06

*"The search box is too small."* PL\_02

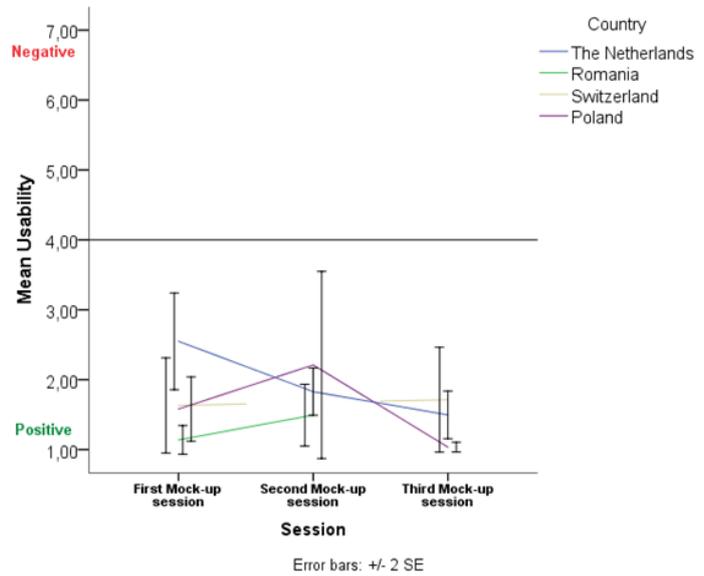
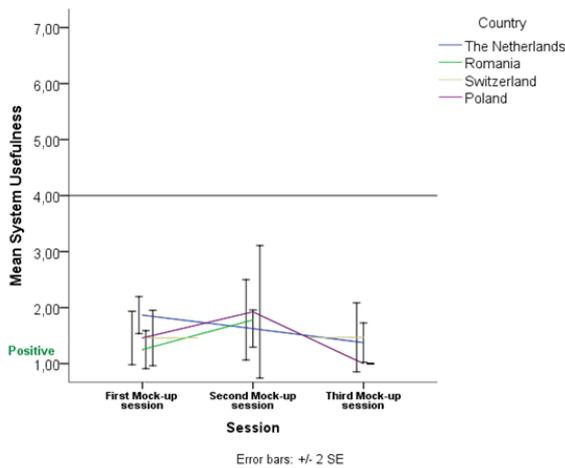
*„Oh, it is so nice” referring to the message: „Congratulation! You successfully became a Palette member.”* PL\_07



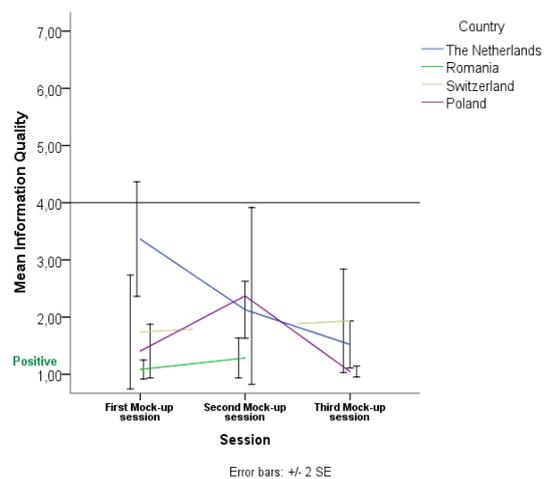
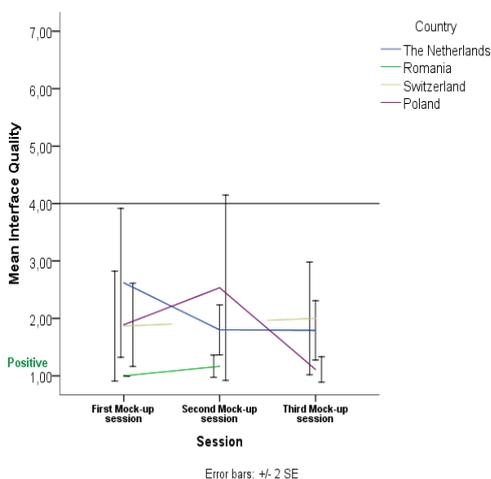
## Usability Results

Usability: IBM (Computer System Usability Questionnaire)

Usability of the Palette platform was measured by the IBM computer system usability questionnaire (Lewis, 1995)<sup>3</sup>. This questionnaire measures the users' satisfaction with the usability of systems. The questionnaire is composed of 19 questions. Each question is a statement and a rating on a seven-point scale of 'strongly disagree' to 'strongly agree'. You can calculate four scores from the responses to the items: the overall satisfaction score (OVERALL), system usefulness (SYSUSE), information quality (INFOQUAL) and interface quality (INTERQUAL). The 19 items are supplemented by two questions in which users list their three most negative aspects and three most positive aspects of the platform. The term "system" that was used in the questions, was replaced by "the Palette platform".



The data shows that the usability of the different mock-ups was below the scale mid-point of 4, i.e. on the positive side of the scale, for The Netherlands, Romania, Switzerland, and Poland. Usability was rated highest in the first mock-up testing and third mock-up testing.



<sup>3</sup> Lewis, J. R. (1995). IBM computer usability satisfaction questionnaires: psychometric evaluation and instructions for use. *International Journal of Human-Computer Interaction*, 7(1), 57-78.



## Conclusions iterative mock-up testing

The iterative mock-up testing gave way for a few key improvements and key features of Palette. Firstly, we found that different users make use of the different ways to find items on Palette. Three options are used which are the *search bar*, the *filter* on the left and finally *scrolling*. We found that generally, more computer literate users use the first two options and less computer literate users seem to prefer the scrolling action to find items.

To clarify the meaning of the interests, the icons must be accompanied with text. Some disagreement still exists about the meaning of the interests and which activity should fit to which interest. Furthermore, the interactive elements of Palette website must be improved i.e. it is important to clarify which interface items are clickable and users require more information from the website when its 'thinking' or another type of verification that their action is being processed. Lastly, we can conclude that users want more information prior to becoming member of Palette.

Different ways to find items

- Search bar
- Filter
- Scroll

Combine icons and text

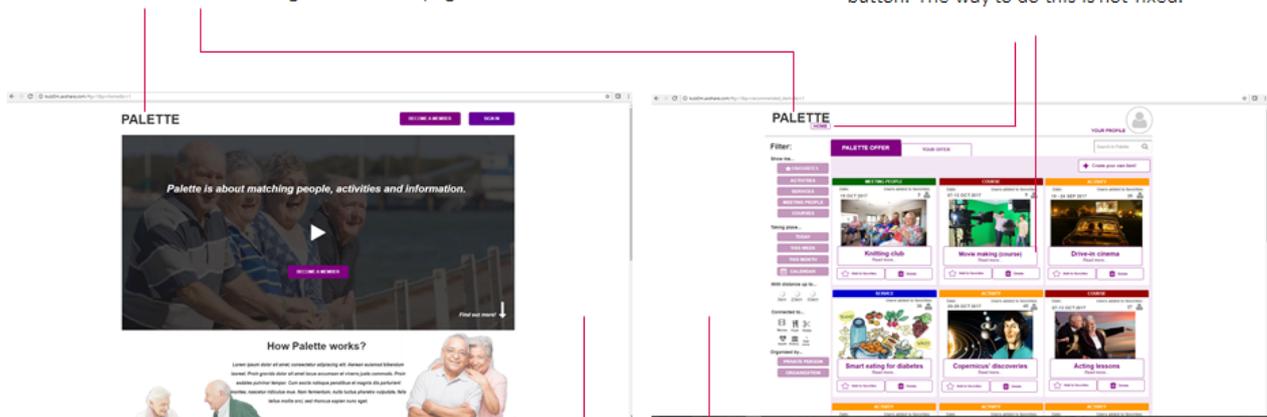
Make clear which parts of the interface are clickable

Give the user feedback

Manage expectations

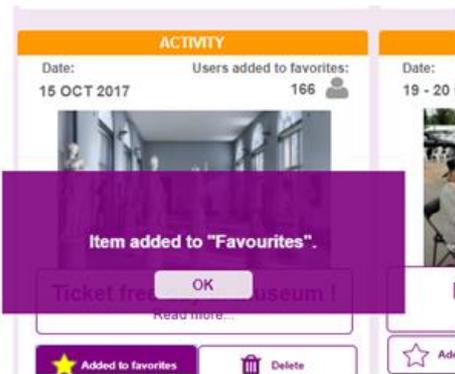
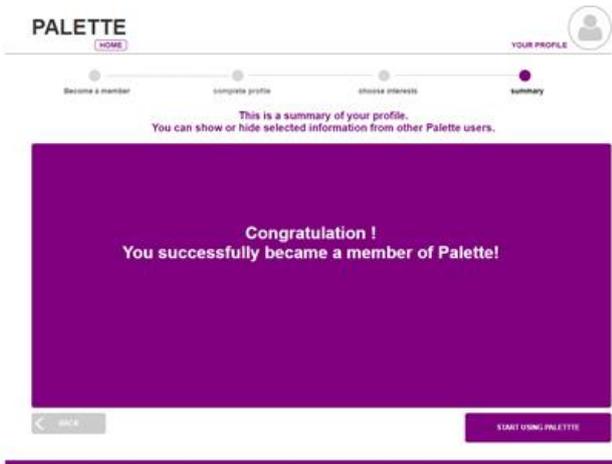
The interface should contain a home button to go to palette home (overview with all items) In current mock-up it was confusing that the home button looks like the logo on the intro page

Make clear which parts are clickable. It became clear that the filter menu and the start were less used without a contour. It should look like a button. The way to do this is not fixed.



White area might be used. According to use the items of the interface (especially the text) should be enlarged.





User feedback is important, if one adds something to favorites of changed things in the profile there should be feedback that it is "saved"

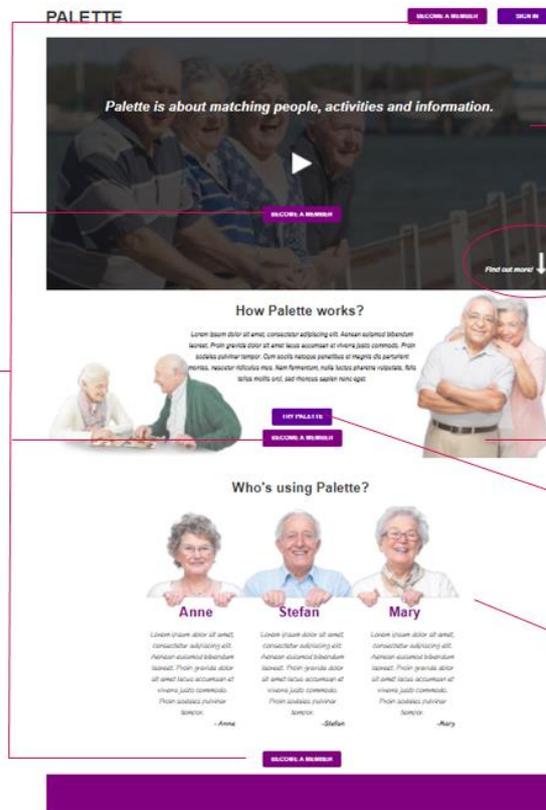


text should be bigger

Use both icons and text

Use icons (arrow) on buttons to go back and next

The design of the icons is not fixed



4 buttons with the option to become member is too much, suggestion: 2

It is important to manage expectations on this page. In pre-alpha version we should replace the lorem ipsum text. Information users are looking for: is it free to use the platform, what about privacy.

User explain that a movie with information will help them to know what palette is about

Make clear that users can scroll in the webpage. Can be something else for instance a scroll bar. Use of text will help them to understand it, suggestion: "scroll to find more information"

Users like the use of pictures is however they did not identify themselves with these older people

Try palette should be explained better

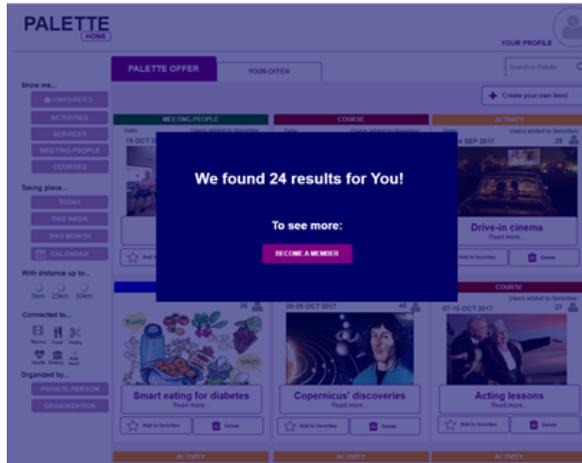
User did not identify themselves with these user. For some user this is an adding value (trust)





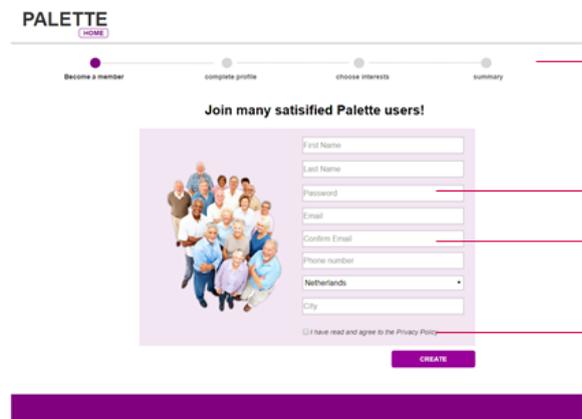
Visualisation of how many steps are needed

Country: might also be a list of counties where you can select one.  
City: idea: while typing options (like google maps does) are given.



This was not enough information to decide if one wants to become member.

Suggestion: show an item more in detail (can be an example made b palette team or an item of a user who wants to share it also with not palette users.)

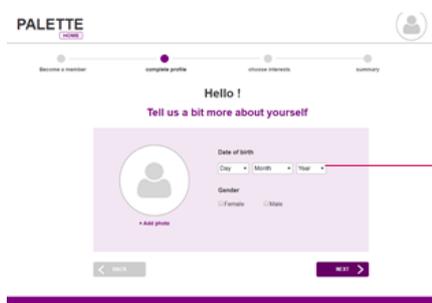


Indication and progress of making the profile is very important. Advised to place it on top. Design may change.

Shows the requirements for a password (use of different characters)

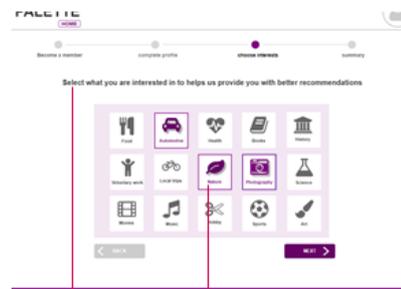
Do not ask twice for the email address (some users did not have a email address)

Option to download / print the privacy policy



Users asked is it important for the platform to know my age? Suggestion is to use ranges

Text to explain that you can select multiple interest and that interest are used to find most interesting items is needed.

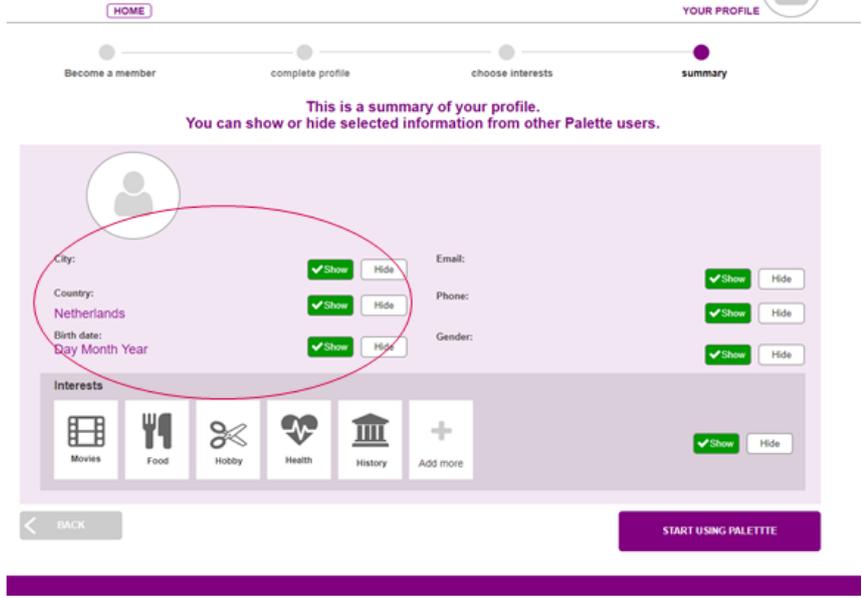


Feedback about with items you already selected is needed.

The design of how it looks is not fixed



# PALETTE



Option to select show/hide information should be close to the topic which you show/hide

Favorites  
**Type of item:**  
 Activities  
 Service  
 Meeting people  
 Courses

Filter menu should always be present in the home page, not an expanding menu

2 Different "tabs" one for items palette offers and one with your offer



Should be on the left side. Should have a title

Calendar should be integrated with filter

Should be clear what kind of item it is.

Due to different types of users there should be three ways to find an item you like.

- Overview with items in which you can search(scroll)
- Search bar
- Filter menu



Make clear that the user can scroll to view more items



Date and (if available) time should be presented on item

Should be clear what kind of item it is.

There should be a place on the item to present a picture

User are less interested in how many user added it to favourites that want to know many people will join the item. For courses it was mentioned that is would be valuable to see how big the group is and if there are still options to joint like: 11/15

Should be clear that one can click on the item. Adding the "read more.." did help users to understand that the item is clickable

Suggestion is to make the entire item clickable. Maybe the use of shadow will work

Option to add it to favorites, star is still unclear for some users.

Option to delete an item, after a pop-up it will e removed from the overview page

Not necessary to have the option to go to you offer when you are looking to a item at this level. However it should be clear if you are looking to an item you organize or is organised by others,

Back button was not clear enough in this way

Should be bigger

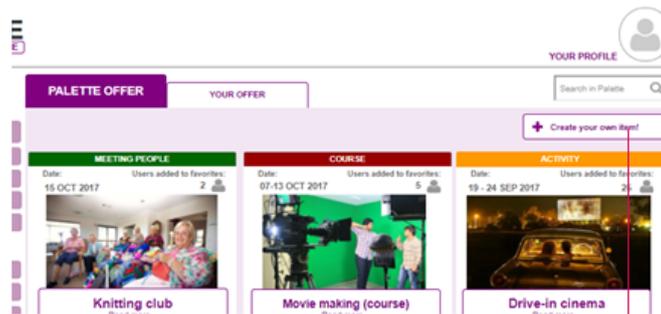
Unclear what delete does mean if you are in this level of the interface, suggestion is to remove it

There should be an option to add it to you outlook/google agenda

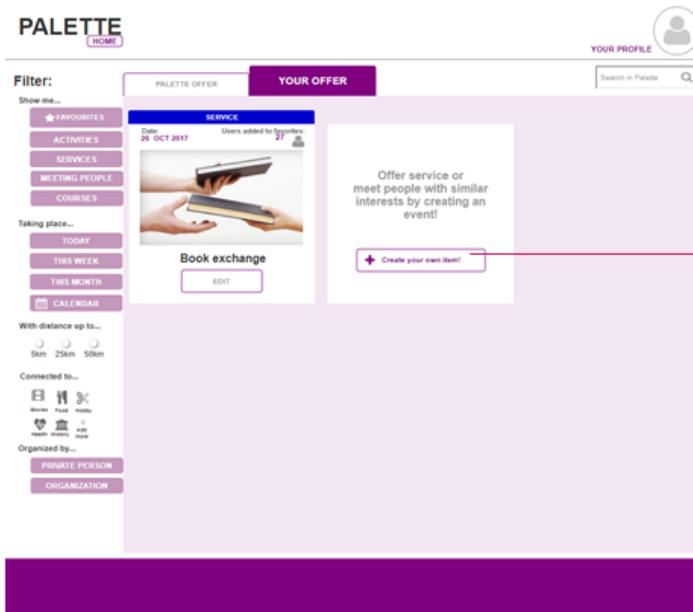
Should be bigger

Option to chat about a item. Still unknown how and if user get an message when an answer is given.





Shortcut to add an item yourself on first page



Option to add an item in the "you offer part"

At the moment we are not sure about how the add an item option will look like. This will be tested in pre-alpha version and should be comparable with the make your profile functions

Open question which should be further detailed and evaluated in pre-alpha study

- To be further tested, adding an event yourself'
- When item is deleted, does it go to 'try something new/ else section?'
- It is unclear for users now that the offer is specially for them.
- When people create an item of themselves: Can the website already give suggestions to what interest type and cluster it is? Is there a curation system to do this correctly?'
- What will the Palette Page look like when there are 1000 items over the course of 2 months?'
- It's unclear for people when they start using Palette what it costs, this is important
- Make options for different skilled users
- What is the meaning of favourite items
- To be further tested, giving comments and respond on items/ each other



## Pre-alpha (Netherlands)

Based on the conclusion of the iterative mock-up testing, a (partially) working prototype was built by the WP4 consortium members. Next to that several online meetings took place with a UI designer (SIVCO) to design the look and feel of the platform. The first working prototype of Palette included the following functions: *try Palette, create profile, Palette offer, my Palette*. An important note is that the final UI design is not yet implemented in the pre-alpha prototype. The pre-alpha testing was performed in two separate iterations. Chapter 6 describes the method, results and conclusions of pre-alpha 1. The method and accompanying guidelines of pre-alpha 1 are the same as have been used for the iterative mock-up testing. (guidelines mock-up 3 are the same as guidelines pre-alpha).

### Method

Guidelines for user testing

- Observation during a task
  - Think aloud
  - Suggestion to improve
  - Rate of difficulty (by researcher)
- Time task
  - Time
  - Effectiveness
- IBM questionnaire

Specific Research Questions/Objectives per Iteration (which defined the questions in the protocols):

### (Mock-up 3) Pre-Alpha

Palette intro

- Test iteration 1 of try Palette' pages, before creating an account
- Test if participants will recognize and use the filter options?

Palette Profile

- Test latest iteration of 'create profile' process
- Test specifically latest iteration of setting profile details to private/public

Home Palette

- Testing latest iteration of Palette overview page content
- Testing new 'remove item' icon and interaction

Match with an Item

- Test open question: you are looking for, to see what search function do users use?
- Test latest iteration of adding item to favourite
- Test what search function people use for item of indicated interest
- Click stream, finding more information about an item

Add an item yourself

- How would users create an event themselves?



- Finding information about your created event.

### Participants pre-alpha 1

	<b>The Netherlands (NL)</b> Location: smart home Eindhoven 2 researchers involved	<b>Switzerland (SW)</b> Location: University Hospital of Geneva 2 researchers involved	<b>Romania (RO)</b> Location: Geron foundation, Bucharest 2 researchers involved	<b>Poland (PO)</b> location: FutureLab, Poznan 2 researchers involved
Pre-alpha 1	n:8	X	X	X

### Procedure

#### The Netherlands

Equipment: Laptop with a computer mouse attached, Pen and Paper, Guidelines

Procedure:

Participants were welcomed in the test facility with a drink.

Then the protocol was followed in accordance with the provided guidelines.

In the case of new participants, a small verbal explanation was given about the Palette project after which one extra general questionnaire was filled in before initiating the test with the provided guidelines.

#### Results pre-alpha 1

In this chapter the results of the pre-alpha test are presented.

The two iterations of the pre-alpha testing are described sequentially as they were tested in the guidelines.

The following list of functions were tested:

- Palette intro (start) the first page a user sees [to get information, create an account of login]
- Palette profile [creating or changing your profile]
- Home Palette [home – overview with items related to your interest]
- Match with an item [ get information about an event, select item, chat about an item]
- Add an item yourself [ make an item other can match with]



# Pre-Alpha 1

Palette Search in PALETTE Hello, User Name

PALETTE OFFERS YOU OFFER

### Create your own event:

Title of the item...

Type of item

Set date  Set time

Country  City

Fill in the address...

Number of people  Upload a picture

Description of the event...

Create event

TERUG NAAR MIJ AANBOD

### Maak een dienst aan

Naam van de dienst   
Je moet een naam invoeren

Upload a picture

Voer een beschrijving in (Optioneel)

Interesses

Startdatum

Einddatum  Aanvangstijd

Eindtijd

Plaats   
Zoek naar plaats

2017 © PaletteV2

Palette Search in PALETTE Hello, User Name

Filter: PALETTE OFFERS YOU OFFER Create your own event

Show me... FAVOURITES ACTIVITIES Taking place... TODAY CALENDAR Distance up to... 5 km Related to... Automotive Nature Music Photography Add more Organized by... ORGANIZATION

Meeting people	Course	Activity
15 Oct 2017 12 interested	15 Oct 2017 6 interested	15 Oct 2017 5
Copernicus' discoveries Read more	Movie making Read more	Drive-in cin Read more
Favorite Remove	Favorite Remove	Favorite Remove

Service	Course
15 Oct 2017 13 interested	15 Oct 2017 6 interested
Smart eating for diabetes Read more	Acting lessons Read more
Favorite Remove	Favorite Remove

Offer service or meet people with similar interests by creating an event!

Create your own item!

Filter: PALETTE AANBIEDINGEN JOUW AANBOD

Type... ACTIVITEITEN DIENSTEN MENSEN ONTMOETEN CURSUSSEN Zal plaats vinden ... KIES DATUM OPTIE KALENDER Afstand tot ... KIES AFSTAND Gerelateerd aan ... KUNST

ACTIVITEIT	MENSEN ONTMOETEN
Sat, 17 March 2018 2 interested	Fri, 23 March 2018 1 interested
Wandelen READ MORE	Moestuin onderhouden READ MORE
WIJZIG DELETE	DELETE WIJZIG

## Testing pre-alpha session 1

### General

#### Positive:

- Friendly website
- By trying it out, I got more and more positive about the website
- Clear division in the screen
- Icons were good for the overview
- Clear pictures
- Diverse activities / offer
- Good overview of information
- It's a new way of working for me
- Filter possibilities
- If you know how to, the website is easy to use
- Joyful to work with
- Nice flow of screens
- The researcher gave good explanations during the test
- Varying colours for varying items, courses, activities etc.

#### Negative:

- Clarify the icons
- Everything was new for me
- Language, English is an issue
- The pagination 'page 1-2' is not clear
- Filter is not self-explanatory
- With every screen I had new questions
- Large pictograms
- I couldn't look up items per day (didn't understand agenda filter)
- It was difficult to find page 2
- Within a time, it was difficult to fill in the create item page
- By doing I discovered how it worked, but I really needed support for this
- Your offer "+" plus sign isn't clear
- More information is necessary in the service category
- I have privacy issues with the amount of credentials that I must fill out

#### Palette intro (start) the first page a user sees

- Users experience problems with partially English language on index page and in video.
- Most users recognize (and click) the video on the index page.

*'It's all in English, even the writing, that's a problem for me.'* - NL\_P25

*'I can click here to watch a video or presentation.'* NL\_P09

#### Try Palette

- The Dropdown arrow in try Palette does not function
- Try Palette should give more information
- The high amount of (fake) matches is sometimes experienced as implausible



*'If I type my city, it says there are 0 matches, but I will still continue.'* - NL\_P09

*'The dropdown arrow doesn't work in the menu.'* NL\_P23

*'It's a bit strange that there are 59 results, but I can't see what they are. If I could that would give me more reason to become member'* NL\_P23

*'This try Palette can be more useful/ clearer'* NL\_P09

*'Some symbols (interests) aren't clear'* NL\_P28

### **Palette profile**

- Users did not know the meaning of the pictograms used for interests
- Some users do not understand the meaning of 'hide' 'show' functionality or the fact that it's clickable
- The website doesn't remember which interests were selected in *Try Palette*, which is cumbersome to fill in again for users.
- Users expect safe password requirements (i.e. 6 characters, capital, number)
- Often users are suspicious about filling in their personal credentials

*'Pictograms aren't in the same position as they were at try Palette'* NL\_P28

*'hide/show, what does that exactly mean?'* NL\_P22

*'Is it important to give my phone number and e-mail address?'* NL\_P25

*'it would be nice if it could remember me'* NL\_P26

*'There is a lot of repetition to create your profile'* NL\_P24

*'Save what was filled in in the try-out so one doesn't have to repeat itself'* NL\_P25

*'I expect at least 6 character for a good password'* NL\_P22

*'What do they use this for? If I don't watch out it will cost me money'* NL\_P23

### **Home Palette**

- The offer page is experienced as crowded and confusing by some
- It's unclear for users if activities cost money, no price indication is displayed
- Filter / personalization options aren't convincing

*'I see activities, biking, services. Explains what seems fun to him. It's very difficult website, it's very confusing.'*  
NL\_P\_25

*'It really doesn't tell me anything about the costs, or an option with all the free activities.'* NL\_P28

*'I get to see a lot of services, but I don't want those.'* NL\_P24

*'I give my interests and then I see activities that don't interest me'* NL\_P24



*'Uses service filter, doesn't change much' NL\_P23*

- **Match with an item**
- Users can navigate to specific item information quite easily
- The filter is not self-explanatory to use and is often overlooked
- Most users scroll infinitely to find the item
- The pagination button is rather small and difficult to identify

*'aah so that information is written here' NL\_P25*

*'it's quite easy, I start to get it a bit more now' NL\_P25*

*'you can't see the website 'think' NL\_P22*

*'You of course have to search a bit through the overview.'* NL\_P26

*'scrolls through overview page. Clicks on groceries, doesn't find the filters' NL\_P25*

*'did I overlook something? I don't see a second item.'* NL\_P22

*'it would be nice to see who else are interested' NL\_P24*

- **Add an item yourself**
- Tab "my Offer" was not recognized by all users
- No user understood the hamburger menu as a clickable button
- Title was often overlooked
- People do not see urgency of selecting 'interests'
- some users skipped the picture, others did that as a first action
- Setting time interface was not very intuitive, took some time to understand.

*'Doesn't include picture. Doesn't know what type of interests to select' NL\_P27*

*'setting time didn't go well, could have different controls' NL\_P23*

*'The clock is weird, also the end-time really depends on the event.'* NL\_P22

*'End-date is a bit weird. Same as end-time, sometimes you don't know until when an event takes place' NL\_P28*

*'Do I really have to fill out this entire form? It makes me tired.'* NL\_P25

*'It's hard to tell if the information is saved' NL\_P22*

*'Should I really set the interests?' NL\_P22*

*'I miss being able to add an association or more volunteers here' NL\_P25*



## Conclusion pre-alpha 1

In between the first and second pre-alpha testing, the differences, or in other words improvements that can be distinguished are the following:

The Try Palette page can be a useful tool to inform users before they become a member of Palette about what they can expect. The Try Palette page however should include more information and less errors. The pre-alpha furthermore revealed basic UX problems that can be improved such as: clarifying the hide/show function, getting rid of the 'welcome back' pop-up window when a first-time user has become member, improving the password setting process and clarifying the home button. Continuous work can be done in clarifying if a user's action was successful and whether it is being processed by the website. Lastly, the create event page which enables users not to search, but to create an event themselves can be improved; Certain information about the event creator should be displayed more clearly.



## Pre-alpha 2

Following the pre-alpha 1 test, the pre-alpha 2 test was devised to test further developed features of the Palette prototype. The prototype has now evolved to a functioning website. During the Pre-alpha 2 test, both the functioning website prototype was tested as well as a mock-up to test newly introduced features and concepts. After testing the pre-alpha 2 prototype with the senior users, the results were collected and used to improve prototype and decide if new features are worthy to be further developed. These improvements were implemented in the new alpha version. This chapter describes the method, results and conclusions of the pre-alpha 2 testing.

### Method

Guidelines for user testing

- Observation during a task
  - Think aloud
  - Suggestion to improve
  - Rate of difficulty (by researcher)
- Time task
  - Time
  - Effectiveness
- IBM questionnaire
- Observations mock-up

### Tasks

#### Pre-Alpha - 2 website

Palette intro

- Test iteration 1 of try Palette' pages, before creating an account
- Test if participants will recognise and use the filter options?

Palette Profile

- Test latest iteration of 'create profile' process
- Test specifically latest iteration of setting profile details to private/public

Home Palette

- Testing latest iteration of Palette overview page content
- Testing new 'remove item' icon and interaction

Match with an Item

- Test open question: you are looking for, to see what search function do users use?
- Test latest iteration of adding item to favourite
- Test what search function people use for item of indicated interest
- Click stream, finding more information about an item



Add an item yourself

- How would users create an event themselves?
- Finding information about your created event.

### Pre-Alpha - 2 mock-up

Features tested in the mock-up:

- How ...
- Finding ...

### Participants Pre-Alpha 2:

	<b>The Netherlands (NL)</b> Location: smart home Eindhoven 2 researchers involved	<b>Switzerland (SW)</b> Location: University Hospital of Geneva 2 researchers involved	<b>Romania (RO)</b> Location: Geron foundation, Bucharest 2 researchers involved	<b>Poland (PO)</b> location: FutureLab, Poznan 2 researchers involved
Pre-alpha 2	<i>n:4</i>	<i>n:4</i>	<i>n:5</i>	X

### Procedure per country

#### The Netherlands

Equipment: Laptop with a computer mouse attached, Pen and Paper, Guidelines

Procedure: Participants were welcomed in the test facility with a drink.

Then the protocol was followed in accordance with the provided guidelines.

In the case of new participants, a small verbal explanation was given about the Palette project after which one extra general questionnaire was filled in before initiating the test with the provided guidelines.

#### Switzerland

Equipment:

Computer, Morae recorder to record the computer screen and interaction of the user, pen, paper, manual, questionnaire

Procedure:

According to the manual document

#### Romania

Equipment:

Samsung 10 android tablets, pen, paper

Procedure:

Each session from each mock-up testing took place individually (each participant was tested individually by the researchers). First each of them signed the informed consent and after the tablet was handed to them with the main page opened. Each of them went through each task, in the meantime the researcher was taking notes, timing and explaining to them what they should do or how if they got stuck. At the end, each participant completed the IBM questionnaire and offered to the researcher more feedback regarding the usability of the mock up if necessary.

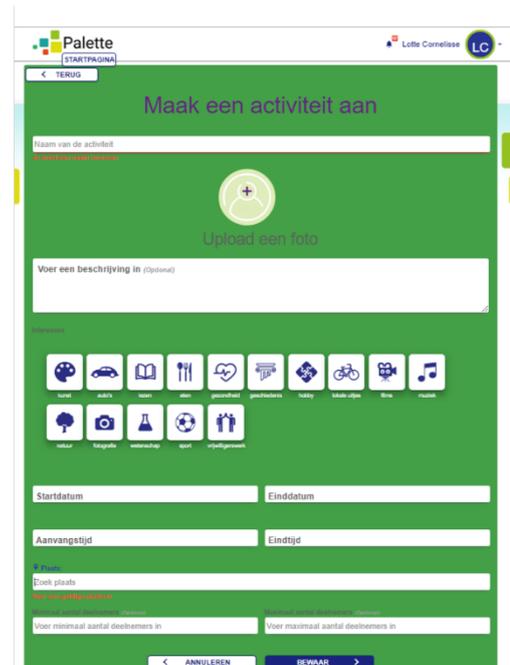
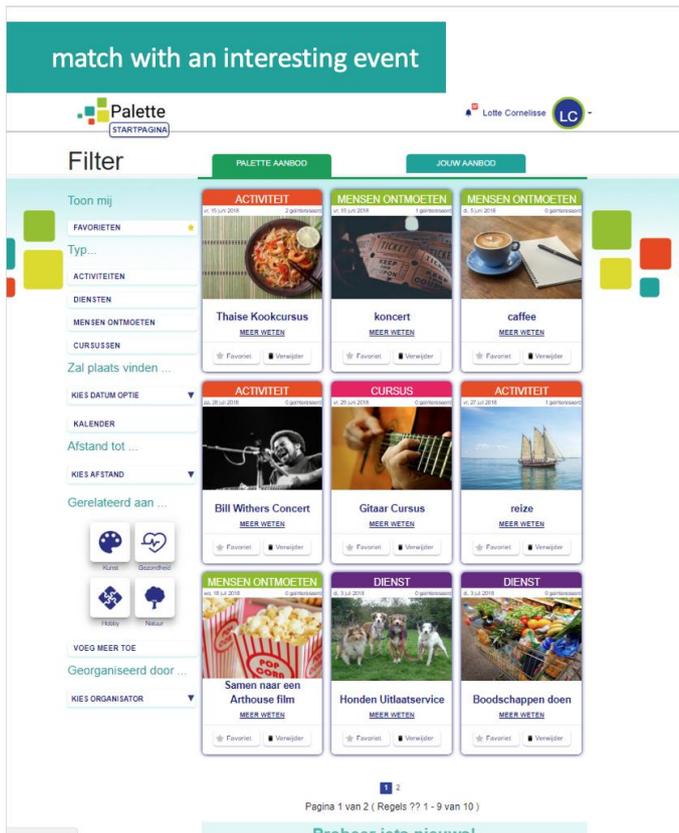


## Results Pre-Alpha 2

Screenshots of the Pre-Alpha online prototype of Palette:

- Terms & conditions were added to the create profile process





## Testing pre-alpha 2

### Overall

#### Positive:

- Clear set-up and language
- Nice pictures
- Easy to use
- It feels like you can work with it quite quickly
- Icons are clear
- The platform is useful
- Nice Palette overview page, the card lay-out
- Making something 'favourite' is easy
- Pretty colours
- The website is a good idea
- Essentially its quite simple,
- It's a good idea
- Useful for those who want to socialize

#### Negative:

- Privacy / terms of conditions could be more clearly present
- Hovering my mouse doesn't give me more information
- No search options
- Text is difficult to read (Font issues)
- Design of the tabs do not seem finished, location seems off
- I cannot test Palette without becoming a member.



- Scrolling can be difficult
- Going back to the index page is difficult
- Screen looks full and chaotic due to many colours
- Interest do not seem linked to events
- Filters do not seem to function
- Becoming a member and creating an account seem difficult
- The number of interested people is not displayed clear enough
- The filter works for all offer pages, this is confusing

#### Palette intro (start) the first page a user sees & Try Palette

- Generally, the main options and information are well received and understood by users.
- There is some confusion what the difference is between become a user and log in.
- Point of improvements could be made in placing try Palette higher on the page.
- Credibility of Try Palette has not been improved yet

*'Website asks me to log in or become a member, I can also watch a movie' NL\_P29*

*"Try Palette should be situated higher on the page" SW\_P5"*

*"I did not see the "Try Palette" button" RO\_P02"*

*"72 items are a bit much, it's not very credible" NL\_P3*

#### Palette profile

- Various concerns were given about the terms & conditions check box.
- Error codes for the user input are premature (red text fills the box)
- For advanced user's quick navigation between profile tabs is missing
- It's unclear how users can return to the profile in case of errors after finalizing the process
- Validation doesn't work if you just type in the city name. It must be selected to proceed to the next step.

*'Where are the terms & conditions I agree too? NL\_P29*

*"remember info at try Palette in the create profile would save time" NL\_P29*

*"I have to agree with terms I haven't even read yet. That's strange." NL\_P32*

*"Can't see how to access my user profile quickly." SW\_2*

*"I cannot change my personal information like birth date for example if I made a mistake" SW\_3*

#### Home Palette

- Users recognized the Palette offer.
- Users are suspicious of fake content or whether its personalized or the algorithm doesn't work

*'Hmm I didn't put music as my interest, but it is showing me concerts. So, it's not personalized to my preferences. Now I have to go and remove all of the unmatching items to make it relevant for myself.' NL\_P31*

*'The pictures are nice, it works well for people when it's this visual.' NL\_P31*



*'these are my favourites? But I don't think it suits my taste. 'NL\_P30  
I am not seeing right now what I am looking for. Also, it's a small village where I live so it would be a  
small offer. NL\_P30*

#### Match with an item

- Users suggest search bar
- Suggestions are done to specify the location i.e. by postal code in case of bigger city

*'A search bar would be easy' NL\_P29*

*'Use postal code for distance, I am from the west side of my city, I don't want to go to the east side of  
my city.' NL\_P32*

*'choosing icons might be hard, because museum could be a part of culture interest. NL\_P29'*

#### Add an item yourself

- Quite some users didn't choose a picture or interests
- Setting the time / date is complicated for users
- The create event button is difficult to find

It's not self-explanatory at this point why people should choose interests when creating an event. Furthermore, setting specific properties of the event is difficult (UX), arrows are too small, or the interface is unnecessarily difficult to understand. Some users have difficulty to find the create the event button at all.

*"The functionality to set start and end time is very complicated" SW\_3*

*"why do I have to choose interests at this point? That's weird" NL\_P31*

*"The arrow to set the number of people that can attend are very small" SW\_5*

#### Mock-ups pre-alpha 2

The mock-ups of the pre-alpha 2 test included a variety of new features:

- **Help support and e-mail validation**

A first step in making the log-in process easier for users is to provide contextual help, i.e. information about a specific form, next to that to ensure users aren't bots, an e-mail validation process was mocked up.

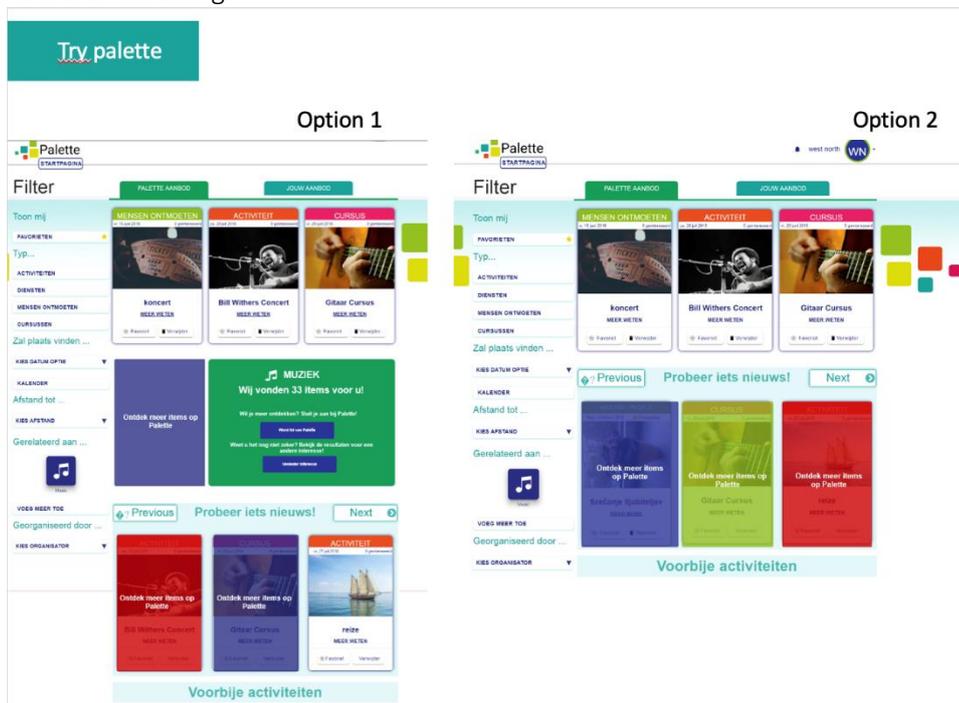


## Help, support and email validation



- **Try Palette**

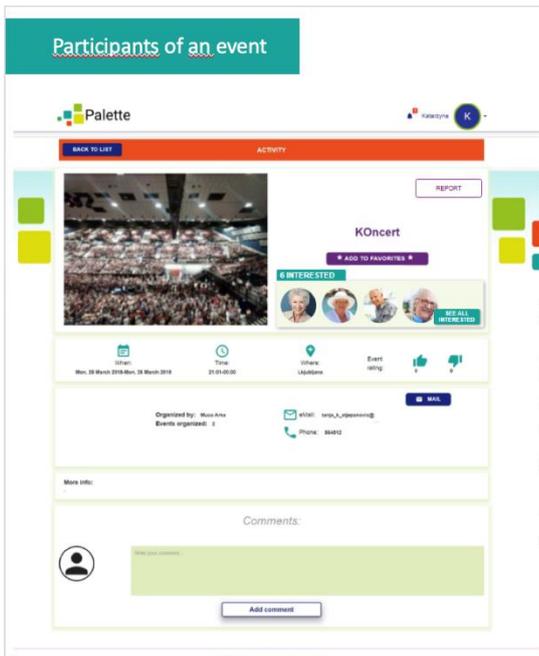
3 versions were created to test how users could be given a glance at the Palette content without being a member yet. Different ideas were worked out to ensure that users' interest would be aroused, without however revealing too much content.



- **View participants of an event**

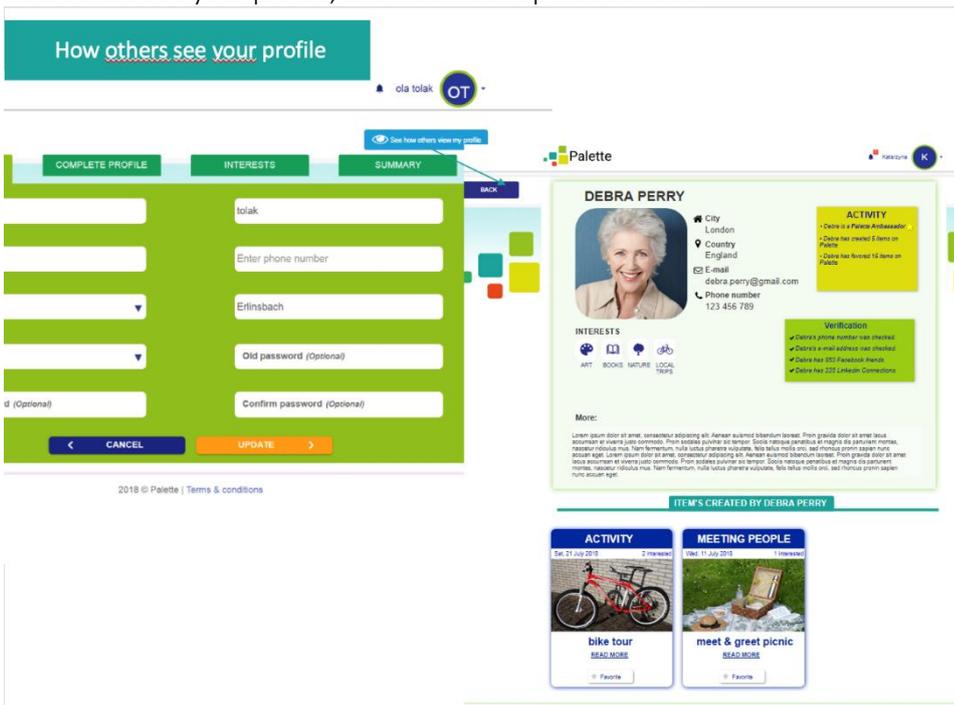
Since Palette is about connecting people through activities, considering trusting who else is joining an event, the feature of a profile was designed.





- How others see your profile

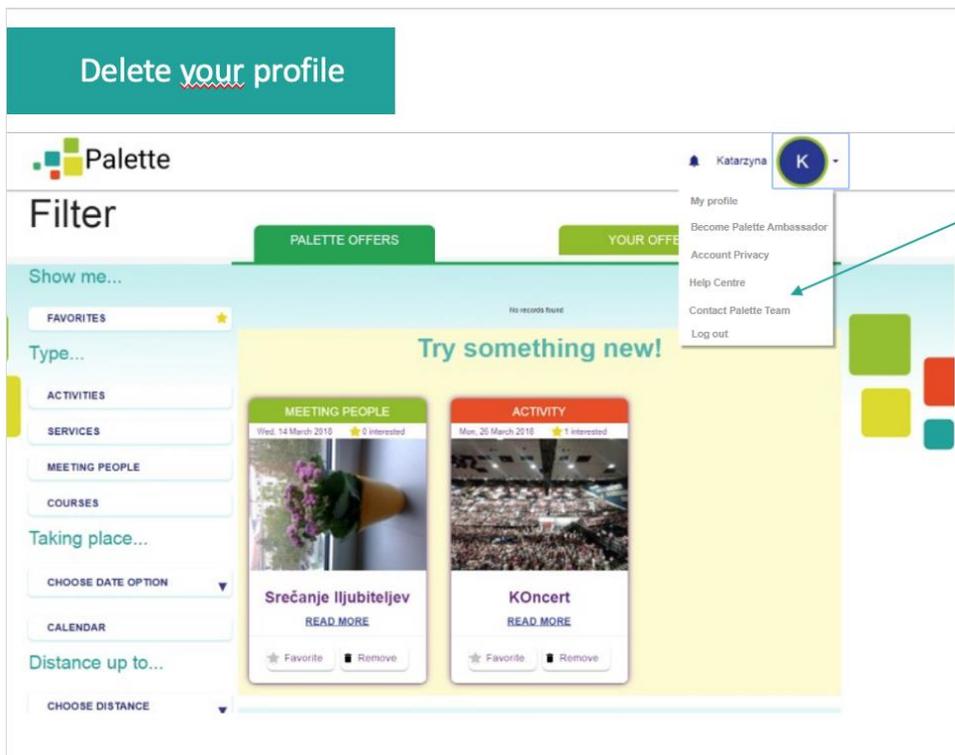
We wanted to give users various tools to create and edit their own content and profile, a key feature is knowing how others see your profile, the first mock-up was devised.



- Delete your profile

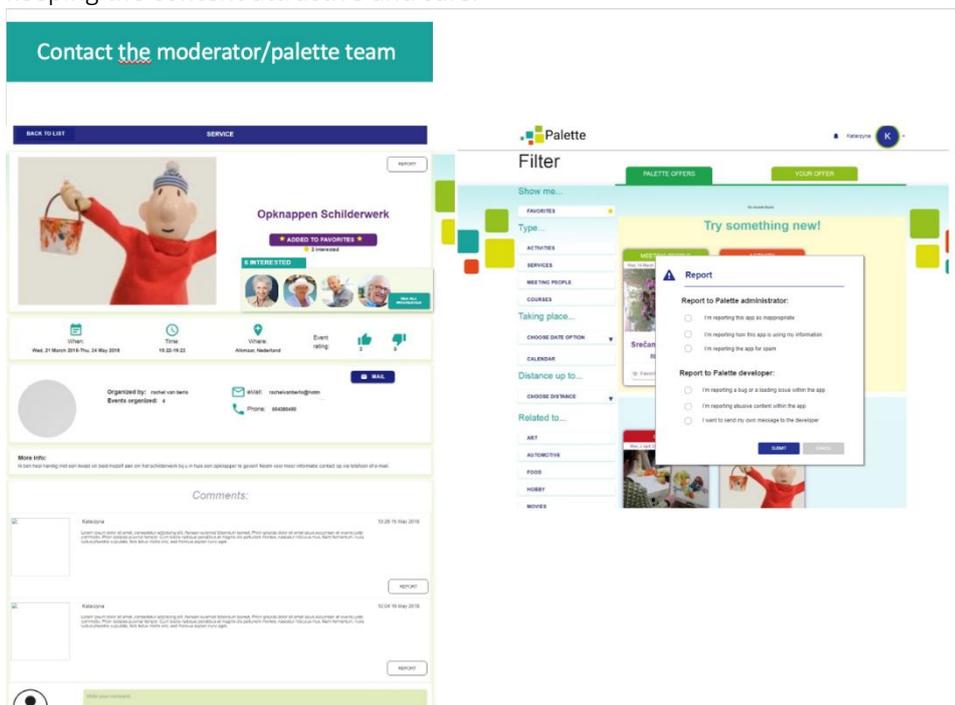
In the case that users want to leave Palette indefinitely, to ensure that users feel in control of the website, delete your profile was designed.





- **Contact moderator/Palette team**

The Palette content is provided by individuals and organizations, active curation is necessary to ensure that the content is both attractive and safe. Therefore a report function was drafted so users can contribute to keeping the content attractive and safe.



## Conclusions pre-alpha testing

To enable the end-users to use Palette in full, finding other seniors by engaging in shared activities based on their common interest, we found that quite some secondary and tertiary functions need to be implemented to make it a stand-alone platform that is ready for a growing number of users. For instance: the user profile page, reporting to moderators, moderator views, being able to check if people attended, newsletters to keep users attached to the platform, delete your profile, clear communication tools such as commenting on items. The mock-ups that were tested in the pre-alpha 2 offered insights into how to improve and implement these features.

The pre-alpha and pre-alpha 2 furthermore offered insights and revealed new errors in the development of the primary functions of Palette. The most important insights include: We found that when people create an item, they do not recognize the importance of interests. It appears as if users do not understand the ways in which it connects their items to the offer page of other users. It's important to inform our users of the exact function of interests. It is recommended to simplify the create item and create profile processes. Users are quickly suspicious of the quality of the offer page and whether the offer is fit to them personally. When we regard the iterative approach to improving the means to inform users before they become members of Palette, an instruction video on how to use the website would be a good addition.

UX-improvements:

- Consistency: when clicking the calendar filter, the button should colour the same as when other buttons with similar functions are clicked.
- The red autofill when users forget a form in the create profile process pops up too fast
- Grey on Green readability issues
- People don't know they should scroll on index page
- It should be easier to correct mistakes after having filled out your profile

Open question which should be further detailed and evaluated in Alpha test

- I am using Palette Poznan; can I view what is happening on Palette Warschau?
- How do we set the distance filter and the geographical point from which Palette searches for new offers?

