



**MY-AHA**  
Contract # 689592

## **My-AHA**

### **Deliverable D2.15**

## **Concepts/Update to Support End-User Development & Appropriation II**

### **Update of Deliverable 2.9**

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#### *Abstract*

The document presents the design and development solutions concerning the system MY-AHA, with specific focus on my-Dashboard, updating the document (D2.9) released at month M9.

[End of abstract]

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## Executive summary

Deliverable D2.9 highlighted three objectives in order to establish the relationship between the subject and the healthcare professional (HP): (1) to create a good interpersonal relationship; (2) exchange information; and, (3) make decisions about the type of treatment (Ong et al., 1995).

The three objectives are well addressed both in the Original Platforms and my-Dashboard. As reported in D2.6, my-AHA is a modular system, connecting in a complex architecture multiple actors and platforms. One potential barrier for elderly users of the my-AHA platform is the technological layer. It is therefore imperative that the end user interface of the platform will be designed to help elderly users to adopt it, to receive stimuli toward healthy practices and an active aging. Furthermore, an effective communication between subject and Healthcare Professionals can facilitate the process of care through indirect pathways, encouraging mutual understanding and the reinforcement of the therapeutic alliance, resulting in a greater treatment adherence. Effective verbal communication provides visible benefits for both parties: empathy from the HP can enhance the emotional status of the patient, in a positive loop promoting the psychological well-being through the reduction in negative emotions and an increase in positive emotions. This relationship and cooperation among primary and secondary users, as well as included systems and platform, implies organizational preconditions that the design of the system has to address. In a socio-technical perspective, my-AHA system and its technical features have to be deeply interrelated with the organizational and social context. This requires a holistic approach, able to bring to a comprehensive, empathic understanding of users' needs.

Moreover, my-AHA system will exploit the several strategies and features of all the my-AHA platforms, aiming at stimulating and reinforcing proactivity and positive behaviour in their target. Throughout the platforms, seniors will be able to assess their risks, follow interventions and monitor results. This amount of opportunities and tools converge and are linked with the My-Dashboard, a web-app working as a hub. In particular, it will be the core touchpoint for My-AHA primary users, both toward the available platforms and the Secondary Users.

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## Abbreviations

Abbreviation	Description
HP	Healthcare professional
RCT	Randomized Control Test
W3C	World Wide Web Consortium

# 1 Introduction

This report updates the previous document D2.9, which details the design and development solutions concerning the system MY-AHA, with a specific focus on the appropriation, that is the process by which people adopt and adapt technology, fitting it into their practices.

A specific focus is dedicated on the My-Dashboard, the communication layer between primary end users and healthcare professionals, also working as a hub able to introduce and connect all the My-AHA platforms and simplify the access in a single coherent environment.

All the features described in this report will be implemented and used during the Randomized Control Trials starting in the next months.

## 2 Strategies for supporting the appropriation

*“MY-AHA is a modular system, connecting in a complex architecture multiple actors and platforms. One potential barrier for elderly users of the my-AHA platform is the technological layer. It is therefore imperative that the end user interface of the platform will be designed to help elderly users to adopt it, to receive stimuli toward healthy practices and an active aging” (cit. deliverable D2.9).*

Deliverable D2.9 highlighted three objectives in order to establish the relationship between the subject and the healthcare professional (HP): (1) to create a good interpersonal relationship; (2) exchange information; and, (3) make decisions about the type of treatment (Ong et al., 1995).

### 2.1 MyAHA appropriation features

The three objectives are addressed both in my-Dashboard and the Original Platforms. In this paragraph, the main appropriation features applied by the my-AHA platforms are provided divided in the different intervention domains.

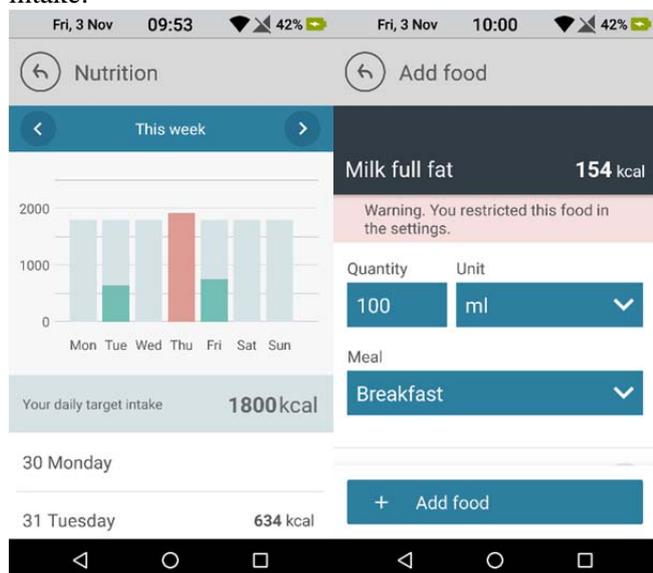
#### 2.1.1 Nutrition

##### Rewarding

Rewarding the users for healthy choices or positive lifestyle changes. Collecting badges or points can be a way of rewarding the users for their healthy choices. For example, by eating enough vegetables, you can earn a vegetable badge. The badges can be collected in different levels. Each level represents a healthy choice. Users also have the possibility to share the badges with their social environment.

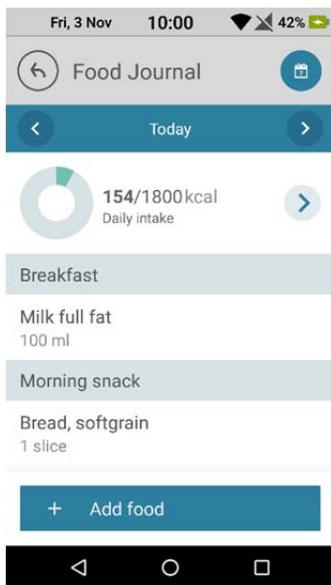
##### Positive and negative feedback

The users receive direct and immediate feedback regarding the ingredients they log into the food diary. For instance, users will be able to know if they are too low in carbohydrates, or over the recommended calorie intake.



##### Stages of changes

The food journal gives the users information regarding their current lifestyle and shows the possible effects of their food intake on their health. It makes the users aware of any possible problems and offers the user information and daily menu is regarding a healthy lifestyle.

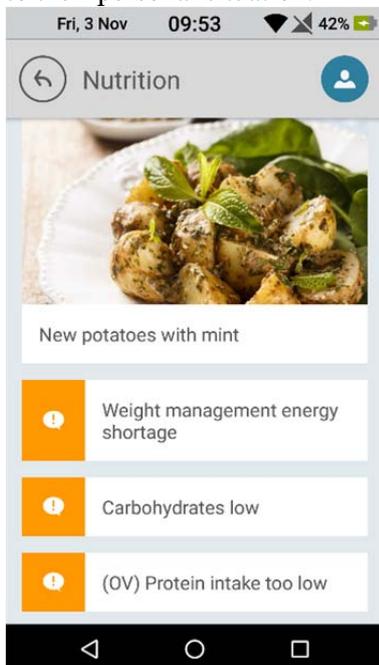


### **Social support**

The possibility to connect with family, friends, advisors and health professionals gives the users the opportunity to create an online social network for social support. The users define which information they want to share with these specific groups, can share their goals and the progress of them. Users also can share the badges they have earned and the progress they have made regarding health measurements. For instance, if they have lost weight they can share this information with their social network. In this way, they can receive positive response to their healthy behaviour and receive social support from their own network.

### **Personalized advice**

In addition to the food journal, the nutrition application offers personalized recommendations based on the data in the food journal. This information makes the feedback the end users receive personalized and tailored to their personal situation.

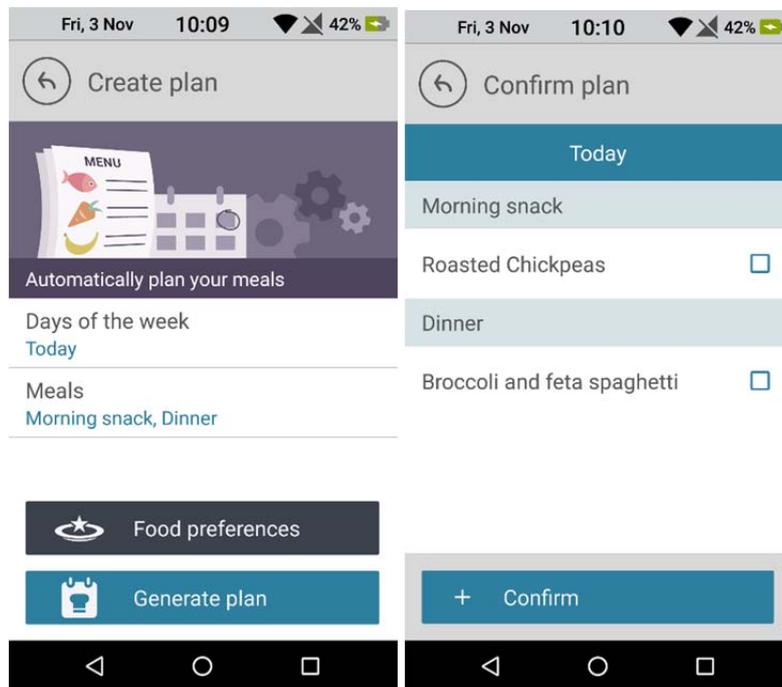


### **Expertise**

The recommendations and information the users receive have been created by healthcare professionals. These HP use the most recent national and international professional guidelines to create personal advice and recommendation for the users.

### **Generating meal plan**

Offering example daily menus to the users makes easier for them to change their eating habits. They do not have to think how they need to change their diet since they receive readymade menus from the program. The application the user can automatically create meal plans according to their needs.



#### **2.1.2 Physical activities**

Currently, the only ICT-based physical activity intervention is iStoppFalls. Here, it is necessary to simplify the appropriation process and handling of the iStoppFalls system as much as possible in order to maximize its acceptance among the targeted user group of older adults, who will then be willing to integrate it in the routines of their daily lives and adhere to the proposed interventions. Results from the early living lab phase indicated that the area of input and control devices with tablet PC, gesture and voice control options, as well as the structure of the iTV and usability of the exergame, offered much potential for technological simplification and thus improvement.

The event system tracks the use of various input methods using a more quantitative approach. The following events should be tracked:

- Use of voice recognition on tablet/set-top-box and Exergame
- Use of gesture control
- Use of tablet app as remote control
- Number of games / exercises started and cancelled

Benefits:

- Tracked data can be evaluated, participants' preferences become visible
- Maximization of acceptance of the iStoppFalls system among its users;
- Enabling smooth integration of the technology into daily life routines.
- The participant can choose which input method he wants to use to control the iStoppFalls-System.

2.1.3 Cognitive abilities

**On-the-shelf Technologies**

The cognitive training is available both for mobile platforms (Android smartphone and tablet) and Windows Platform (PC and Smart TV).

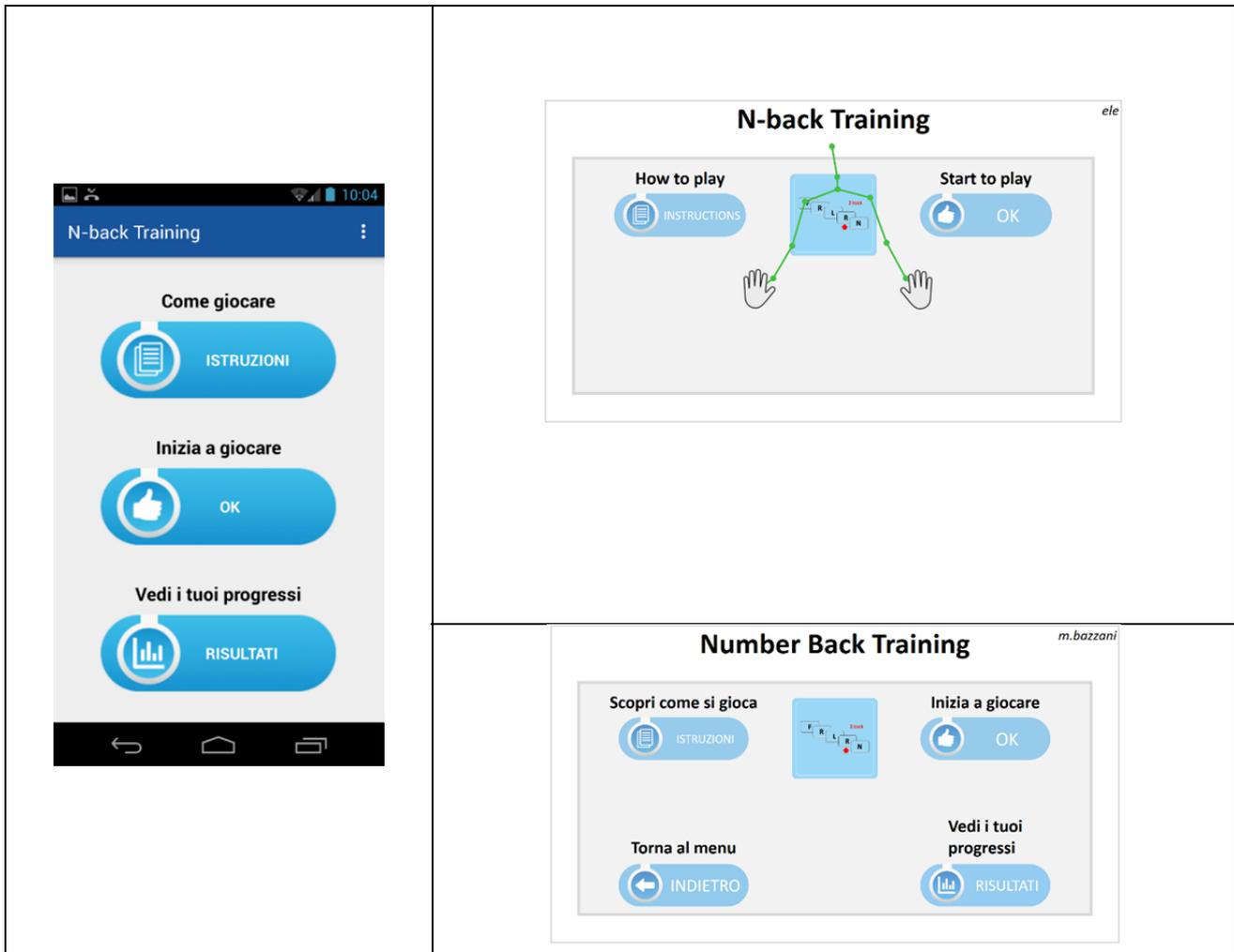


Figure 1 - Different layouts related to the technology used

**Embodiment (postures and gestures)**

The Kinect version of the Cognitive Trainings is available with two types of gestures for the interaction, “pushing” and “grabbing”. The picture below shows this feature.

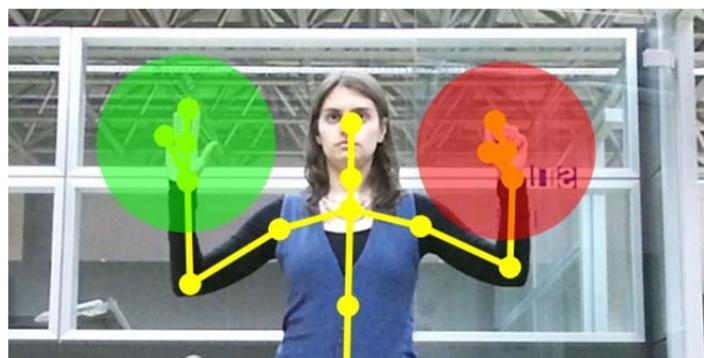


Figure 2 - Gesture recognition: pushing (green - right hand) and grabbing (red - left hand)

**Personalization**

Cognitive trainings are customizable considering the capabilities of the lary users and their hobbies/interests (see for an example the possibility to change the type of the stimuli in the number back training).

The screenshot shows a 'Change Training' dialog box with the following fields and values:

- Training Name: N-back
- ITI (ms): 200 (Default value 200)
- Presentation Time: 1800 (Default value 1800)
- Feedback Duration (ms): 200 (Default value 200)
- Presentation Time Variation (ms): 0 (Default value 0)
- Stimulus Type: animals 4 (Selected from a list including animals couple, appliances, and beneath the Caribbean)
- Starting n: 2 (Default value 2)
- Number of Blocks: 1 (Default value 15)

**Figure 3 - Personalization of the parameters for the cognitive trainings**

**Levels**

The level of difficulty of the cognitive trainings is automatically adjusted in function of the performance of the lary users. Please, refers to D3.6 for a more complete description of the mechanism of the automatic levels.

**Feedbacks on results**

The cognitive trainings present the results in many ways: (1) inside the training, (2) inside the cognitive platform, (3) through the “results” section of my-Dashboard. Each of them collects different information and provides different visualization (texts, charts).

The figure contains two screenshots:

- Left Screenshot:** A 'Number Back Training' completion screen. It features a thumbs-up icon and the text: 'Game completed! Would you like to continue? Well done. Let's try again on the same level. Next level: 1'. At the bottom are two buttons: 'CONTINUE' (with a right arrow) and 'END' (with a close X).
- Right Screenshot:** A 'My Interventions' card for 'WORKING MEMORY (N-BACK TRAINING)'. It lists:
  - Frequency: 1 Session, 3 times per week (equally spaced, e.g. Monday, Thursday, Saturday).
  - Session duration: 20 minutes
  - How does it work?: n-back training works in conjunction with visual spatial n-back training; hence, alternating on a bi-weekly basis between n-back training and visual spatial n-back training (example: Week 1: 3 sessions n-back training, Week 2: 3 session visual spatial n-back training, Week 3: 3 sessions n-back training, Week 4: 3 session visual spatial n-back training)

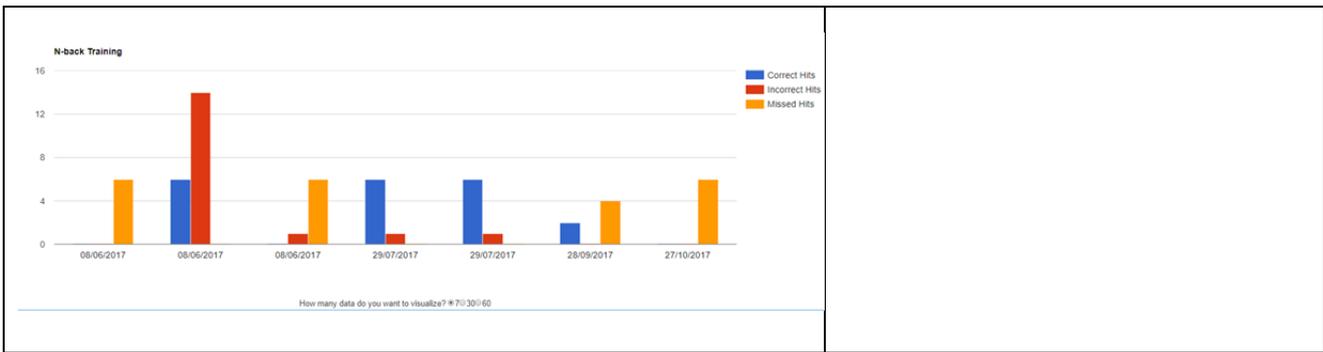


Figure 4 - Cognitive results views

### 2.1.4 Socio-psychological wellbeing

We will provide a variation of social interventions to the My-AHA users, based on individual measures like user preferences and social risk value. In doing so, we offer social interventions to the users, tailored to their individual profile. The system will provide social interventions in two possible ways, 1) social interventions will be recommended to the user, based on their profile, 2) the user selects a preferred social intervention on their own. Users will be given the opportunity to deactivate proactive system recommendations for social interventions. Figure 5 illustrates an exemplarily screen of the social event manager currently available in the my-AHA application.

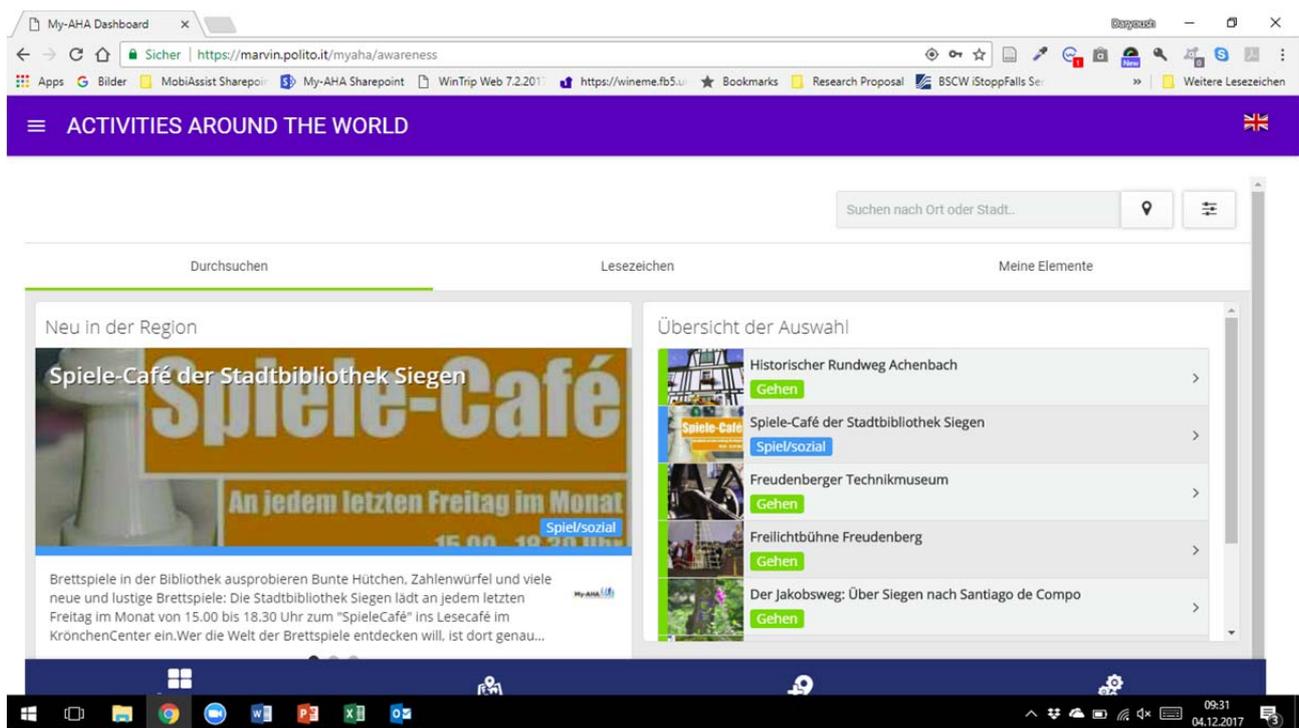


Figure 5 – Social event manager

In addition to the social event manager, my-AHA will provide a social media platform (SMP) where users are able to communicate and exchange information with each other. Upcoming events, for instance group meetings, exercises, etc. will be organized in the calendar within the SMP. Figure 6 illustrates an exemplarily screen of the SMP.

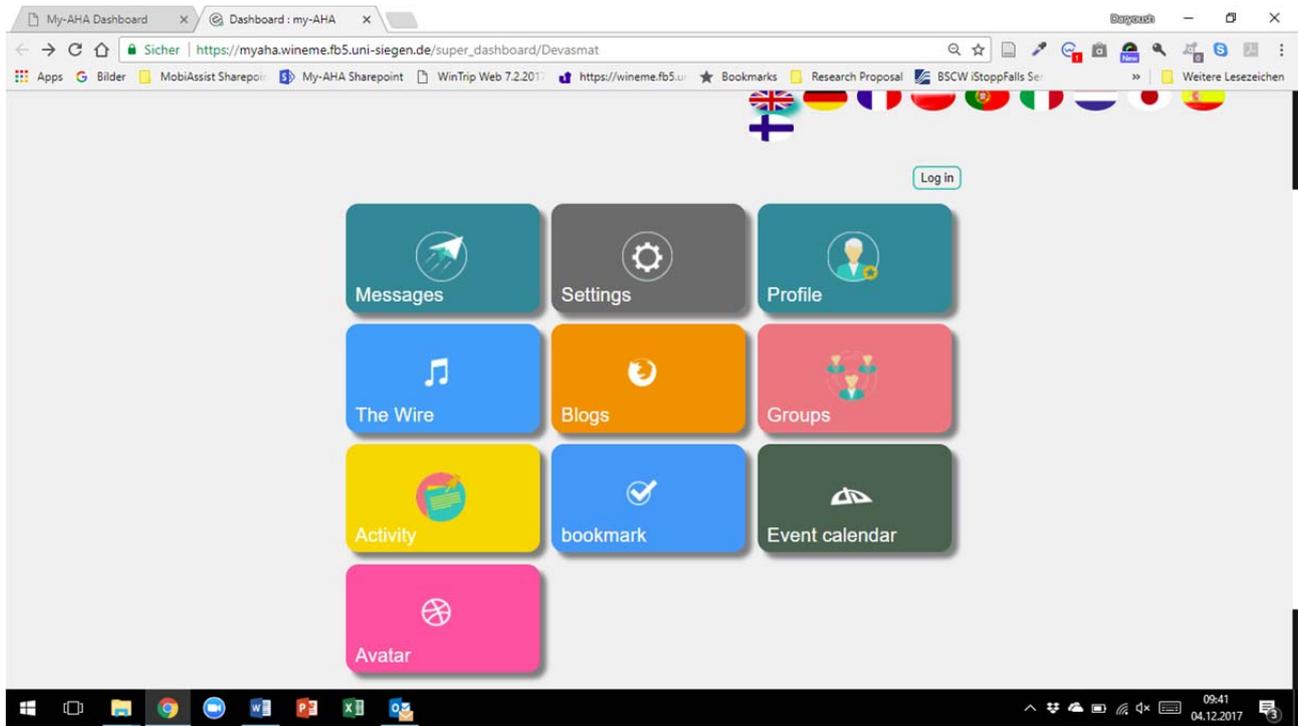


Figure 6 – Social media platform

## 3 The My-Dashboard overview

As defined in D.2.9, My-AHA is an ecosystem of platforms, devices and applications aiming at allowing people to carry out a health and active aging. Throughout the platforms, seniors will be able to assess their risks, follow interventions and monitor results. This amount of opportunities and tools converge and are linked with the My-Dashboard, a web-app working as a hub. In particular, it will be the core touchpoint for My-AHA primary users, both toward the available platforms and the Secondary Users.

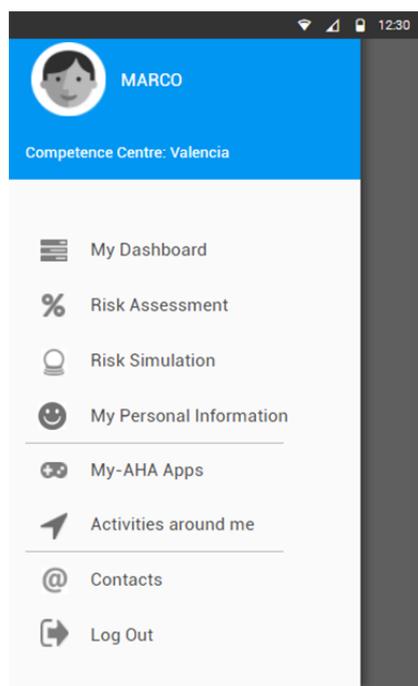
The chapter 3 of the deliverable D2.9 well summarized the textual and visual design techniques used for describing the expected system behaviours, automated tasks, information and communication features, from the users' perspective. The identified and described design scenarios, the appropriation features (previously reported) under a user perspective, the in-depth analysis of some specific aspects ranging from the usability to the utility have been prototyped in my-Dashboard.

In the next sections, the concept of My-Dashboard is described in detail, highlighting structure, functionalities and appropriation features.

### 3.1 The structure

According with the requirements (see D2.5 and D.2.9), My-Dashboard has to comply with 3 main functions: risk assessment, healthy aging interventions and monitoring. These functions can be both self-managed and exploited with the supervision of other persons (e.g. caregivers, health professional, ...). Considering the target the application is going to address, the design assumed these pillars to build both the information architecture and navigation, well visible in of the app (Figure 7).

Beside some elements of personalization (user profile image, name and a reference contact), the main branches of the app are:



- **My Dashboard:** it is the core of the app, where the user takes off when entering and where receives the overview of his/her situation. My-Dashboard is the main gate to the Health domains, where the goals and interventions are displayed.
- **Risk assessment:** in this section the risk domains addressed by My-AHA are presented and monitored, on the base of the available information, coming both from the user inputs and the connected original platforms.
- **My Personal Information:** the capability of the system to calculate the risk and to provide a personalized health program leverages on the data collected in this section.
- **My-AHA apps:** it is the list of the original platforms, provided as overview of all the available features and technical supports and also to allow the user to manage the connected apps.
- **Activities around the world:** on a map-based view, the seniors can see and search here the available AHA activities (as described in D6.8).

**Figure 7 – Main menu, or structure of My-Dashboard**

In the follow, each single section is described as a step of a customer journey throughout the application. The designed features, from the first access to the main functions, try to assume the user perspective and support the usage and hopefully the healthy routine building in the targeted users.

### 3.1.1 First and further access to My-AHA



**Figure 8 –  
Welcome page**

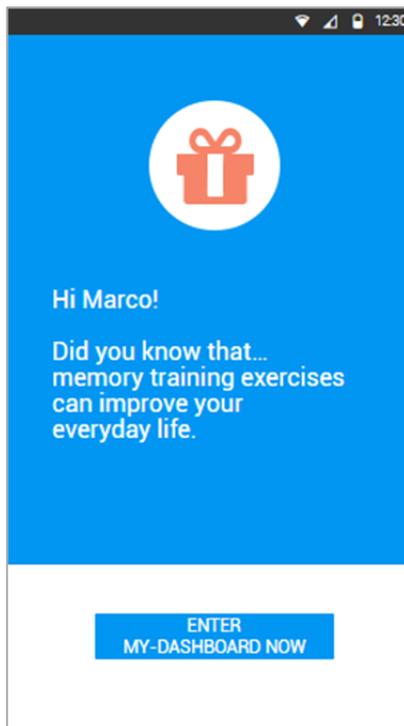
The concept of My-AHA as a service includes the possibility that different types of users will access to My-Dashboards. As described in the service scenarios (see D2.9), My-AHA will serve mainly the primary users engaged by Healthcare Organizations: seniors with risk of frailty. Moreover, it is foreseen that common citizens would also be able to take interest and be engaged by the program and use of My-AHA. In any case, the first touchpoint the users will meet is the My-Dashboard.

The web app welcomes users on a screen that offers different possible actions (Figure 8):

- **Discover My-AHA as a project:** a short description of the project, the scope, reinforced visually by a small gallery, and the context provided by the European Research program and the consortium are given.
- **Discover My-AHA as a tool** of knowledge and prevention of some risks: through a simulation, the user can “play” with the risk factors and discover how they interact and impact on the likelihood of the main risks addressed.
- **Enter My-AHA:** from this point, users can both proceed to first registration or log into the app for the further accesses. The registration to the app is a very important phase, that allow the system to collect the basic information to create the user profile. Beside some administrative data, a minimum dataset of personal information is required, in order to start to build the user profile and allowing to not present him/her the dashboard completely empty. The complete screen is available in the Annex A1, Figure 19.

The personalization of the user experience starts here, with the preferred language selection, to make the interaction as easier and friendly as possible, also in consideration of the topics and contents presented. In the appendix A1, the flows of the registration, login and password recovery are shown in detail.

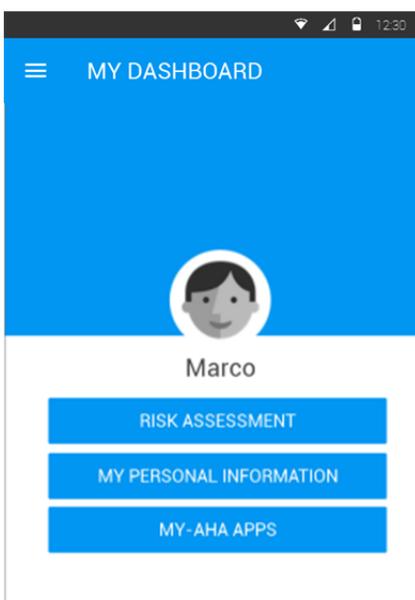
### 3.1.2 On-boarding



**Figure 9 – On-boarding tip**

- A more traditional informative approach leverages on informative tips: dedicated micro-contents on Health and Aging, provided over time to the registered users, in order engage and commit them. The idea is to start every session of usage with a sort of gift for the user, a sort of proactive reply to questions on the health and aging, also useful to introduce the domains tackled by My-AHA. To this purpose, a number of informative pills coming from literature have been rewritten. The On-boarding tips are provided after the login (see Figure 9), in the preferred language selected by the user. Every informative tip is associated with a Call to Action, a button labelled to suggest practical and motivating actions.

## 3.2 My-Dashboard



The interaction with web-app is built up to the core screen that is the destination where the user arrives after the log-in. It is the point where the information converges and from all the admitted sources. This section run at the same time an informative and a functional role. The design has iteratively explored several and different variations of layout in order to properly mix these two components, preventing the informative overload but making visible and clear the actions.

As the Figure 10 shows, the core screen of My-Dashboard intends to create a personalized environment, referring directly to him/her: calling the user by name, he/she should be facilitated to understand that the information provided concern him/her situation.

Actions and information are divided in two main areas.

On top of the screen, three buttons offer the actions required to start and maintain the healthy aging program. In particular:

- The Risk Assessment is the base both for the system and for secondary users to suggest any kind of intervention. Moreover, it is an important tool to monitor the progresses over the time,



**Figure 10 – My-Dashboard core screen**

and for that reason it is showed in first position: it is important both at the first access and after a while, during the process.

- My Personal information is an important part of the knowledge base allowing both system and secondary users to assess risks and take decisions. This section is especially important at the beginning of the user journey, but it is in second positions, to be available in case of updates.
- Last but not least, My-Apps: the connection between My-Dashboard and the original platforms is necessary to enable the users to follow the interventions and to monitor their progresses. These data are in fact, the other part of the knowledge base allowing to assess and personalize the health program. This feature is fundamental, but it is required at the beginning, and less when the service is running.

The second half of the screen is dedicated to the Health domains, that are all the domains MY-AHA addresses in terms of intervention. All the domains are showed since the beginning, when the app is empty. This is useful to provide the user always a complete view of the health issues addressable, on which he/she is call to assume an active role. The domains are always available to be explored and possibly activated. Each card contains details on the 3 main properties of each domain:

- The connected Apps: this is the condition that allow to “activate” one domain; the apps in fact are required to follow the interventions and to monitor progresses.
- The presence of Goals suggested by the system on the base of the Risk Assessment
- The presence of Interventions prescribed by a secondary user.

Due to the importance of monitoring the activities related to each domain, the presence of connected apps rules the status of the domain, that can appear:

- Active (switched-on and blue bordered) when at least one original platform is connected
- Not active (switched -off and dotted-bordered) when no platforms are connected.

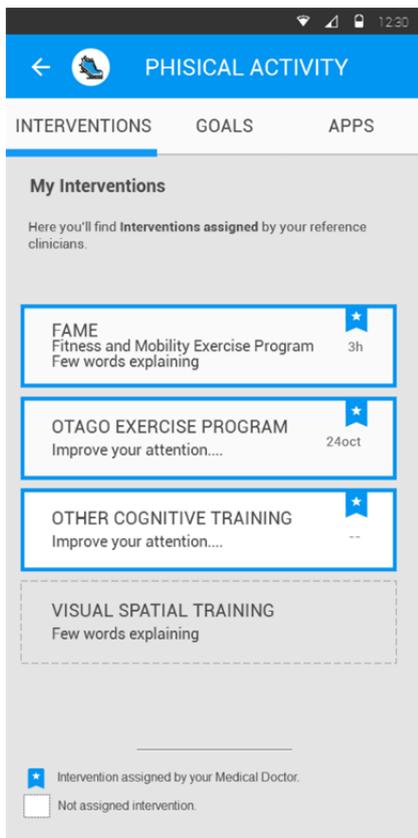
Additional graphic elements highlight the displayed information (see **Fehler! Verweisquelle konnte nicht gefunden werden.**); a dedicated badge identifies the interventions and coloured dots refer about the compliance with the activities suggested or prescribed, providing a synthetic view of the domains covered and activities to be done.

### 3.2.1 Health domains

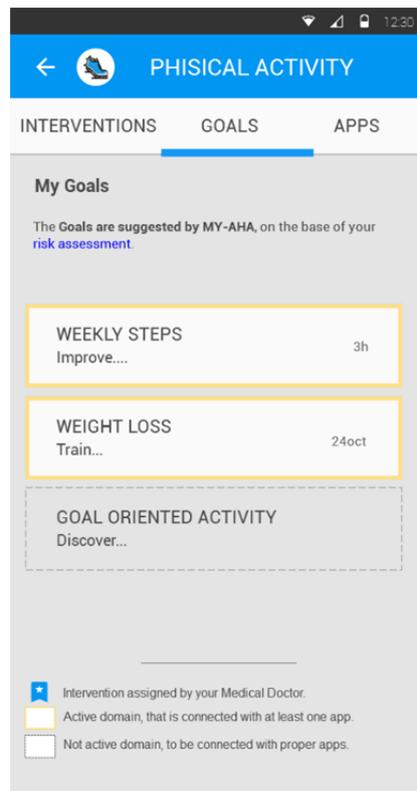
My-Dashboard allows the user receive at a glance the situation concerning the different features that My-AHA includes: a plethora of platforms, several interventions and goals to reach. Exactly these concepts have been expanded in dedicated section, one per domain. Each health domain consists of 3 sections (tabs): APPS available to work on that domain (Figure 11 - Health domain structure (Interventions list) ); GOALS (Figure 12); INTERVENTIONS (Figure 11).

The user, tapping on the card of a Health domain arrives in a section providing the overview on it, offering the actions accordingly the context:

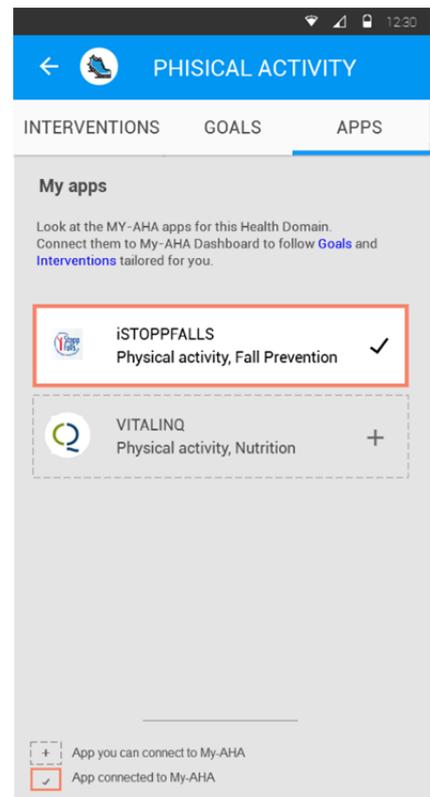
- If no apps for the selected domain is connected to my-AHA, the user lands on APPS screen and he/she is driven to proceed to complete the first operation required to start use the program.
- If at least one app for the selected domain is connected, the user lands on INTERVENTION screen.



**Figure 11 - Health domain structure (Interventions list)**



**Figure 12 - Health domain structure (Goals list)**



**Figure 13 - Health domain structure (Apps list)**

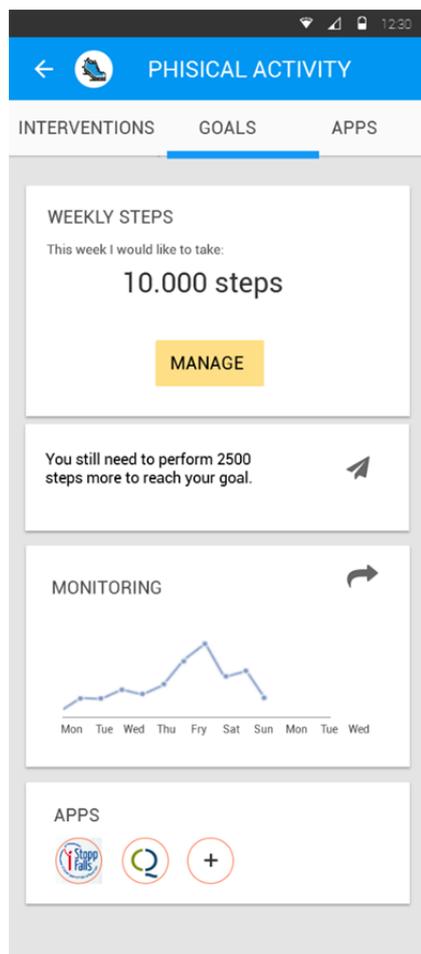
Since the original platforms are several, under the single domain only the apps useful for it are shown. Also in this case, as per every list present in My-Dashboard, all the options are displayed, in order to inform the user and provide the opportunity to get information about and use the not yet “activated” options. Graphic solutions allow to put in evidence the differences (borders and background different per status), plus simple icons explained in each page.

An important element of the concept is the Goal, a clearly defined target that the person is aiming to achieve. In particular, the Goal is an objective level of change in performance that the person is aiming to achieve by undertaking one or more interventions. In My-AHA Goals derive from the results of Risk Assessment, as a suggestion to reduce the risk and motivation to follow the Interventions. Goals are designed to be measurable and variable over time. For example: a physical weakness revealed by the assessment will suggest a goal aiming at doing weight based training at gym 3 days per week will suggest for the first month might be to do training once per week, and in the second month it might increase to twice per week; until the overall goal is achieved and the Risk Assessment results reduced.

“Intervention” refers to the whole of the exercises included in the My-AHA active ageing program and that can be prescribed by the secondary user.

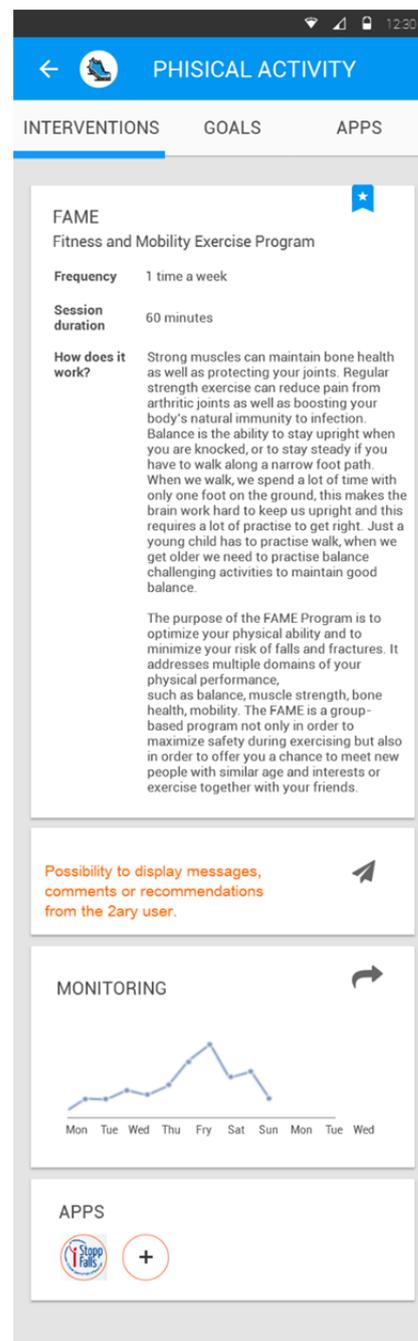
In order to present goals and interventions clearly and exhaustively, a layout has been designed to hold different kinds of information and actions. In both case, the layout is organized in cards, described in the following (Figure 14 and Figure 15).

The tree sections provided per each Health domain are browsable through a horizontal navigation, that leaves the sections always available. An overview is provided in Annex A1, Figure 21.



**Figure 14 – Goal layout**

- Goal description
- Motivational hint
- Sharing options
- Chart of performance
- Links to useful apps



**Figure 15 – Intervention layout**

- Intervention description (Frequency, Sessions, Instructions)
- (Hypothesis) Messages from the 2ary user
- Sharing options
- Chart of performance
- Links to useful apps

The sharing option is an important feature for appropriation. For some of the information presented in the Dashboard (Goals and Interventions Monitoring, Risk Assessment) different levers of sharing have been defined:

- Public: by means of the Social Media Platform integrated with My-AHA; in this case progress is monitored in a “public” context: the user shares their results with other people who have the same goal from the same or also others trial sites.
- Private: by means of the default sharing features available on mobile devices, (i.e. email, sms, WhatsApp, etc), the user can decide to share one information, with the scope to support the remote and collaborative reporting, for example with the secondary user, a local P, personal trainer, etc.

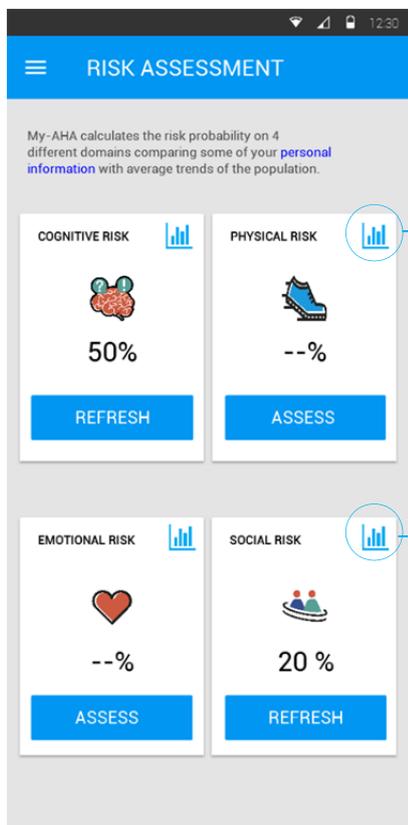
### 3.3 Risk Assessment

My-AHA addresses four Risk domains. Per each of them a set of parameters has been identified by experts and then “translated” into operational components of My-Dashboard, in order to be displayed and made interactive for the primary users.

Respecting the general aim of the app, of providing a tool to overlook, learn and manage the multiple dimensions that affect the healthy and active aging, also for the Risk Domains the design starts from an overview ( Figure 16).

The Risk assessment procedure, by using the Personal information manually updated by the person and the data collected by the original platforms, produces a synthetic output that is a Risk score. When not enough data are available, the system ask for providing them. In the other case, the person receives a Risk Score that can monitor when he/she prefers. A further level of insight is provided by a visualization based on graphs, that inform about the progression of the single risk on the average population. When the Risk score of the user is available, it is showed on the graph, in order to make easy for the user understanding his/her position in the picture.

The Risk assessment is then related with the Goals: according to the user profile and the specific situation, the user can receive suggestions on a goal to address. The connection between the Risk assessment and the Goals in the concept is expresses as a Call to Action (Figure 17).



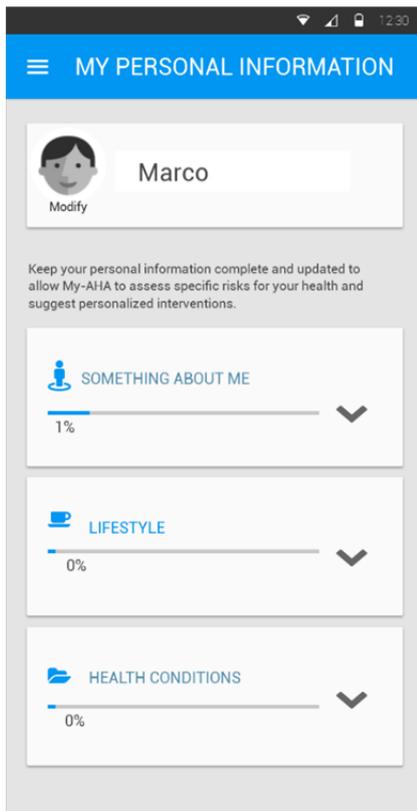
**Figure 16 – Risk domains assessed by My-AHA**



**Figure 17 – Graph layout for each risk domain**

- Risk score
- Brief description of the Risk domain
- Sharing options
- Graph highlighting the Risk bands with colour.
- If the risk score is available, it is showed on the graph to stimulate insights in the user.
- Calls to Action
- Graph description
- Keys to read the graph

### 3.4 Personal information



**Figure 18 – My personal information**

My-AHA system aims at providing a service as much personalized as possible. In this direction the Personal Information provided by the users is core. During the registration phase, the form collect the basic dataset, needed to calculate the minimum personalization. The user is invited in different point of the app to complete and keep updated the personal information.

This section has been designed in order to group data per types and also to collect in one unique form the health-related information, with a priority given to those it is expected can vary more and therefore can be updated more often.

In the Annex A, the whole section is showed (Figure 23).

#### 3.4.1 The data collection on Risk Factors

The forms collect information about the Risk factors identified in the project. In order to inform the user about them, ad hoc explaining contents have been drafted and translated by the project experts. Formatted to be mobile-compliant, the informative cards on Risk Factors are available to the side of the related input field. When the person wants to receive information on a Risk Factor, he/she receives a short description first, that can be expanded. The long version can contain links to external resources and pictures. An example is provided in Annex A.

#### 3.4.2 The Risk Simulation

On the base of the same data collected in the My Personal information, My-Dashboard offers to the users, both registered and not registered, the possibility to discover more about the risk factors and the combination of different demographic and health conditions. The Risk simulation is offered since the welcome screen, to allow to play with the app before to use it; it can be used of course in any moment of the experience, by the main menu.

The simulator leverage on the possibility to play with a factionary character the user can describe by tuning the risk factors. The interaction happens in very few screens on order to provide an overview of the condition the user is manipulating. The Risk Simulator is showed in the Annex A.

### 3.5 My-Apps

A specific section of My-Dashboard provides to the user the whole list of the original platforms available. The list uses the graphical patterns applied in other sections to highlight the applications connected or available to be connected. Per each a single app, a page describes features and domains in which it would be useful. Afterwards, the Call to Actions recall the procedures accordingly to the technical conditions, to

connect the app to My-AHA and/or manage the credentials. The flow of section is showed in the Annex A, Figure 26.

## **3.6 Style guide**

### **3.6.1 Visual design**

The concept of the app has been design and developed iteratively, with the support of the large group of experts within the consortium. Thanks to the user tests carried out in the Living lab, the mock-up has been progressively refined to solve the problems highlighted by the users.

The Mock-up has been then used to work strategically on the process and on the single procedures, allowing to cope with both user drive and technology driven issues.

The GUI has been designed following the Material design guidelines<sup>1</sup> in order to provide a coherent and accessible experience. It is a wireframe that provide also the flow diagram of the procedures. Even though the visual design is not part of this wireframe, some guidelines have been provided concerning the use of colours and the affordances allowing distinguishing the active and not active options. When used, the icons and colour are explained with footer lists of symbols.

In the annex A an extract of the style guide is provided.

### **3.6.2 Labelling and tone of voice**

A special attention has been dedicated to the microcopy, in order to provide text helping elderly users to understand the complexity of the contents, functions and procedures required. In every screen a short text explains what the person will find and will be able to do. The content is crucial in order to drive the person throughout a complex process (from the Risk assessment, to the Intervention, to the Monitoring, back to the Risk assessment) and with a sensitive topic such as the health and frailty. For these reasons a big effort has been

- Notification and feedback
- Positive concepts when possible

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<sup>1</sup> <https://material.io/guidelines>

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## References

- [1] <http://www.activeageing.unito.it/>
- [2] **Ong**, L. M. L., de Haes, J. C. J. M., Hoos, A. M., & Lammes, F. B. (1995). Doctor-patient communication: A review of the literature. *Social Science and Medicine*, 40(7), 903–918. Doi:10.1016/0277-9536(94)00155-M.

## **Annex A My-Dashboard mock-up**

The mock-up of My-Dashboard is presented here as a collection of the main actions and sections provided. The mock-up is also online, available to be interactively explored, at the following url: <http://zllum5.axshare.com>.

# A.1 Welcome, registration and log-in

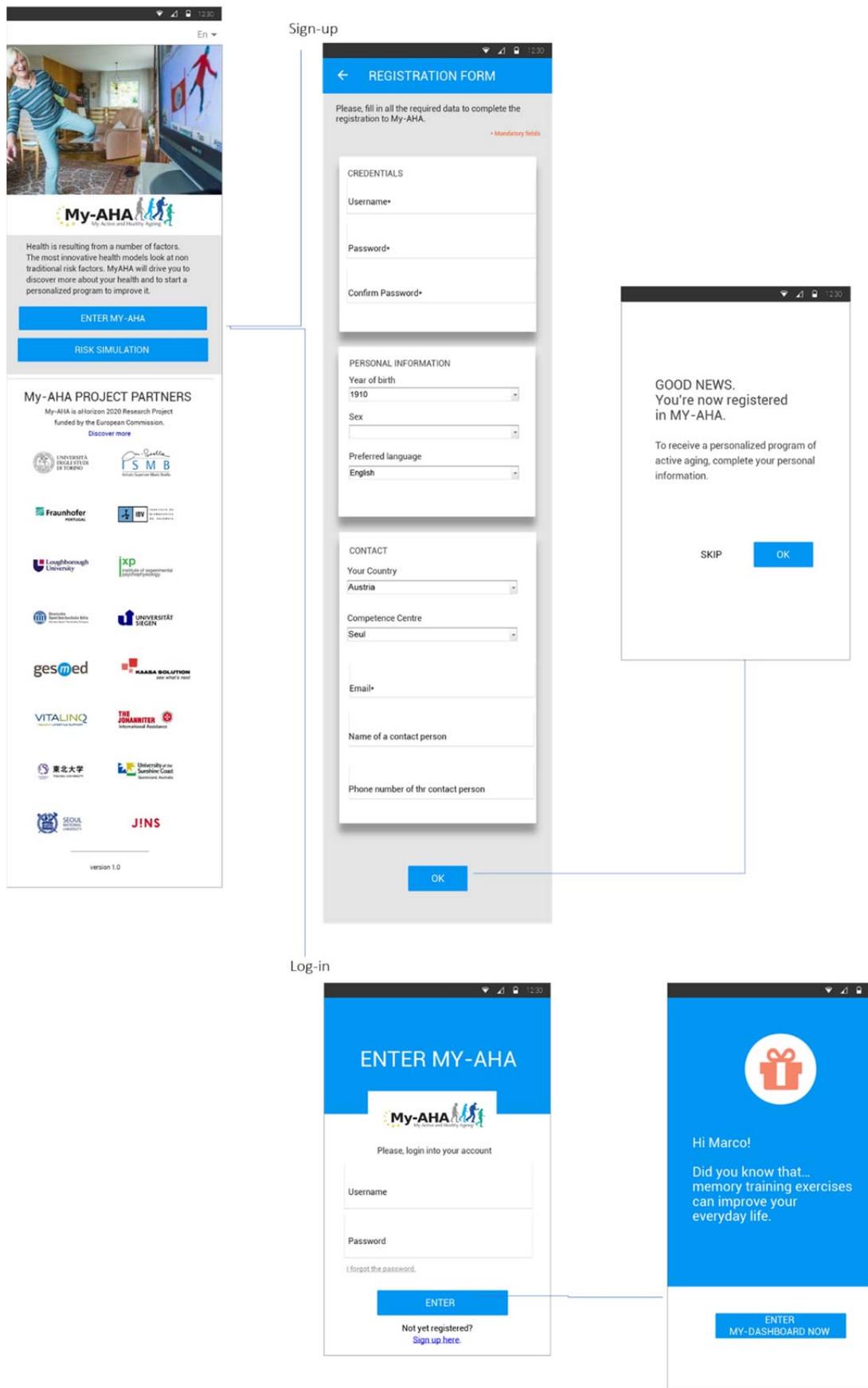


Figure 19 – Welcome, registration and log-in

### A.1.1 Password recovery procedure

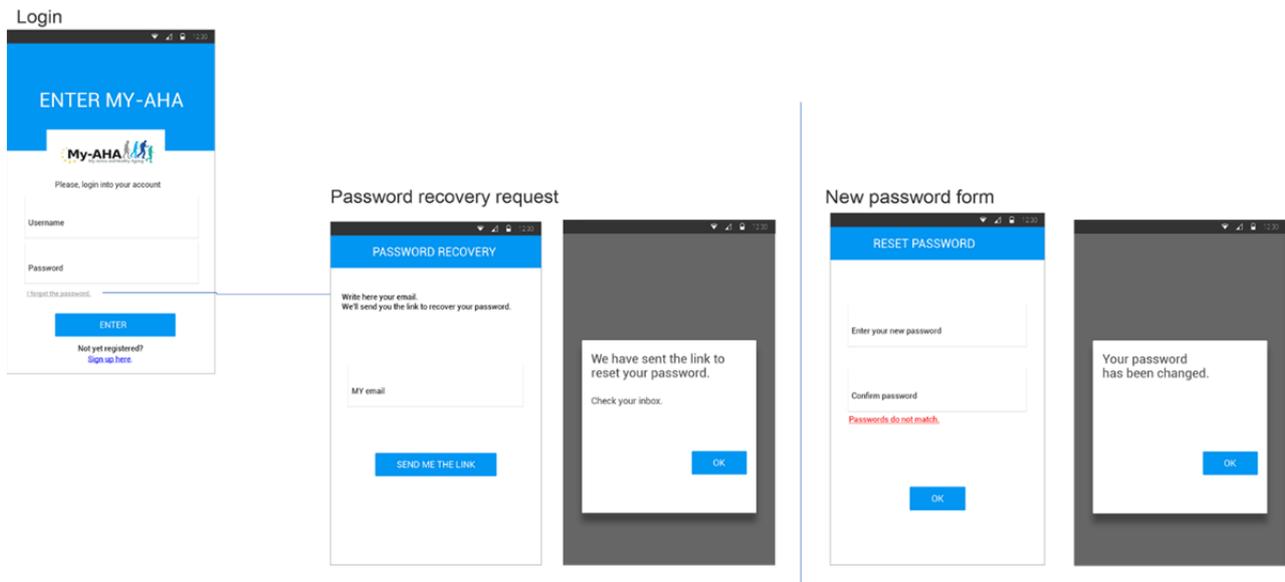


Figure 20 – Password recovery procedure

### A.2 Health domain structure

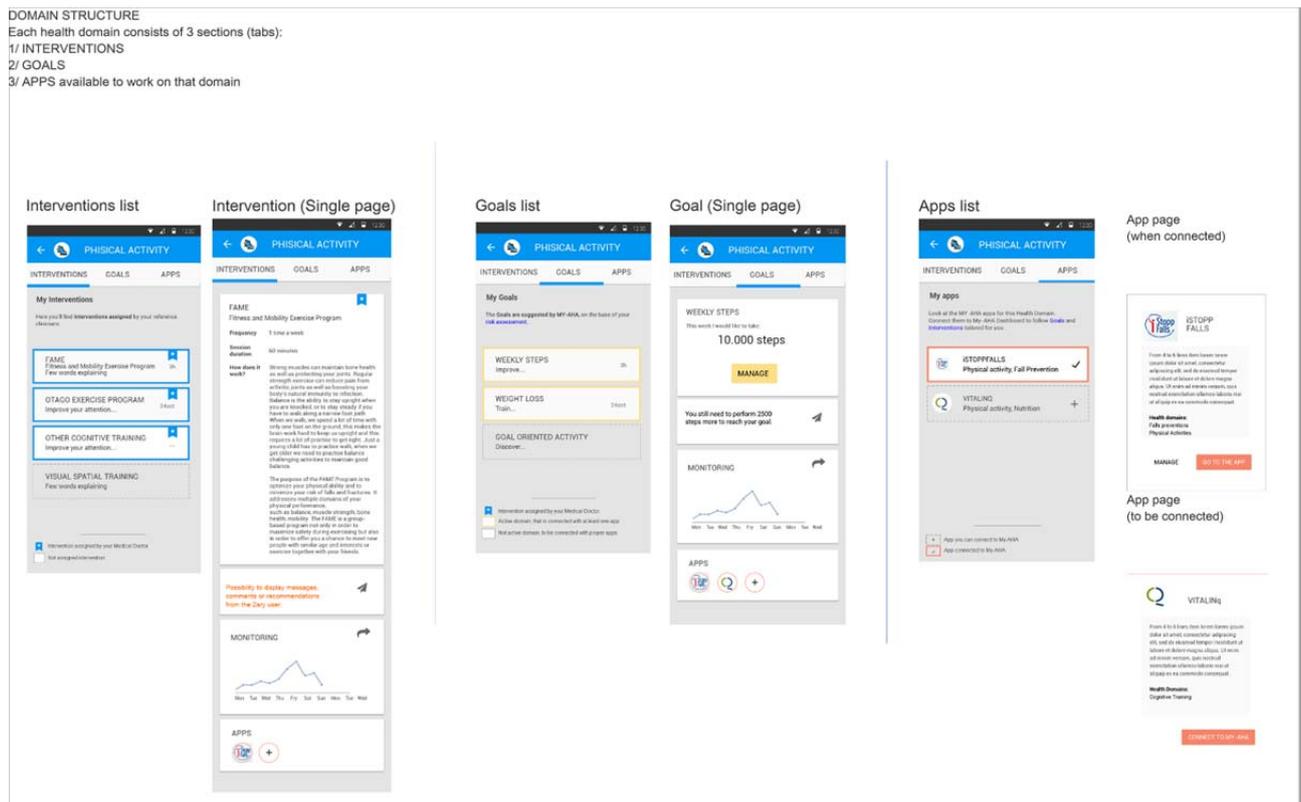


Figure 21 – Health domain structure – Overview

### A.3 Risk assessment

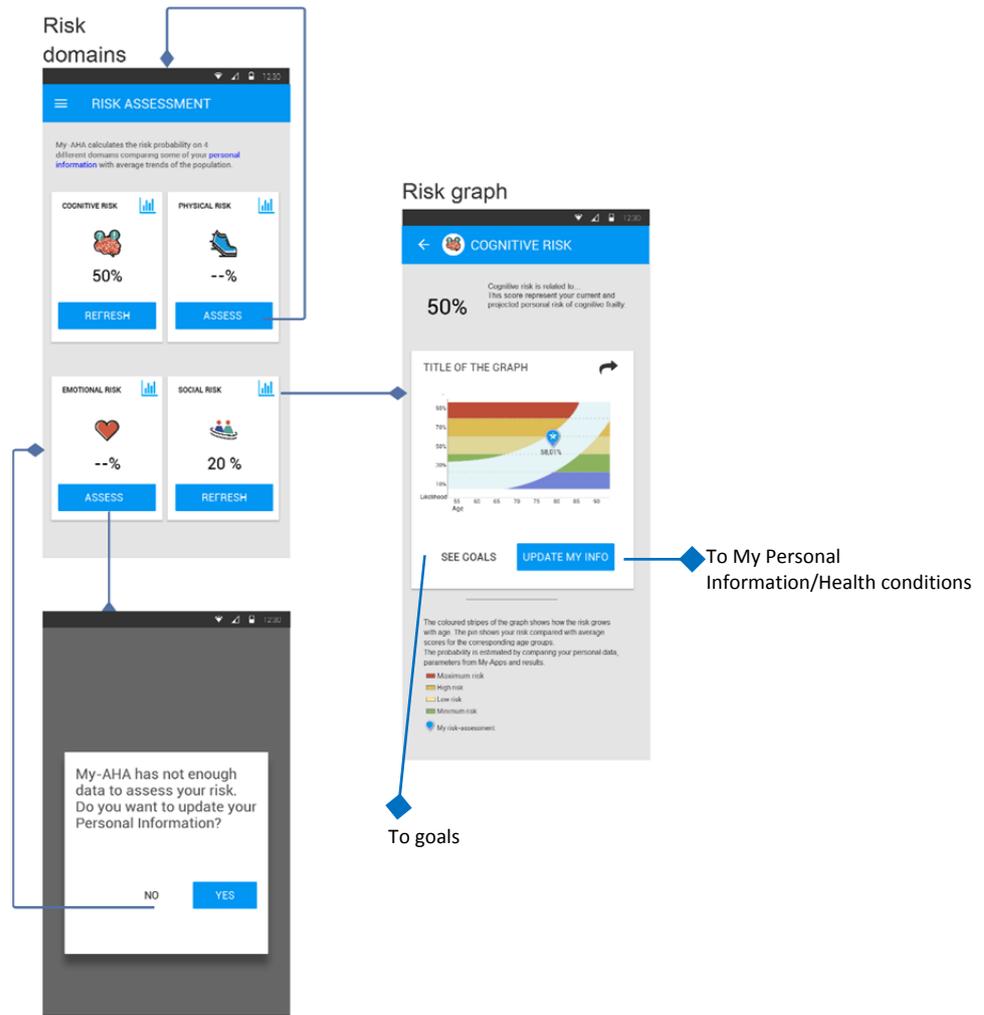


Figure 22 – The Risk assessment – Overview

# A.4 Personal information

Information menu

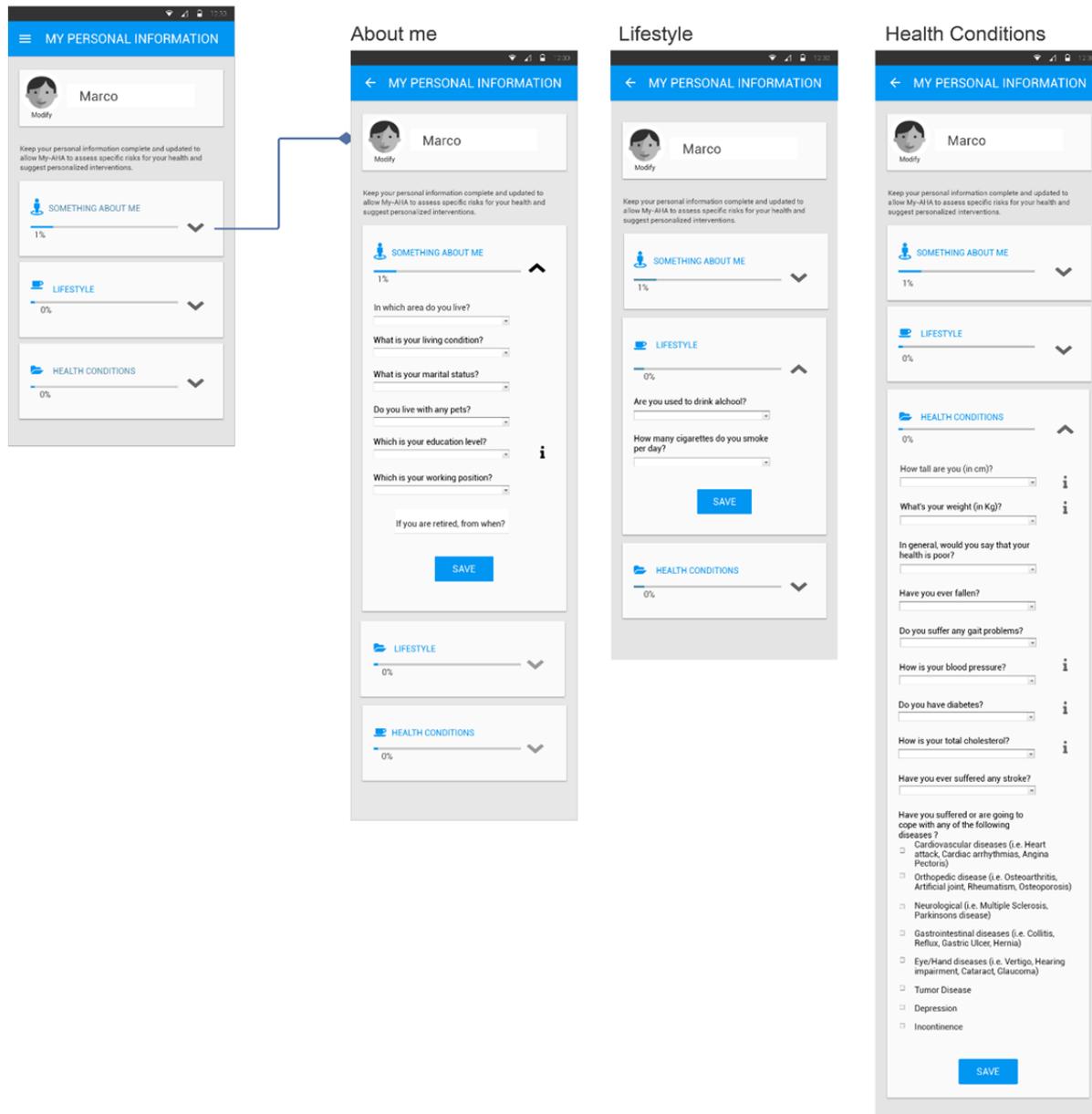


Figure 23 – Personal information forms

# A.5 Risk simulation

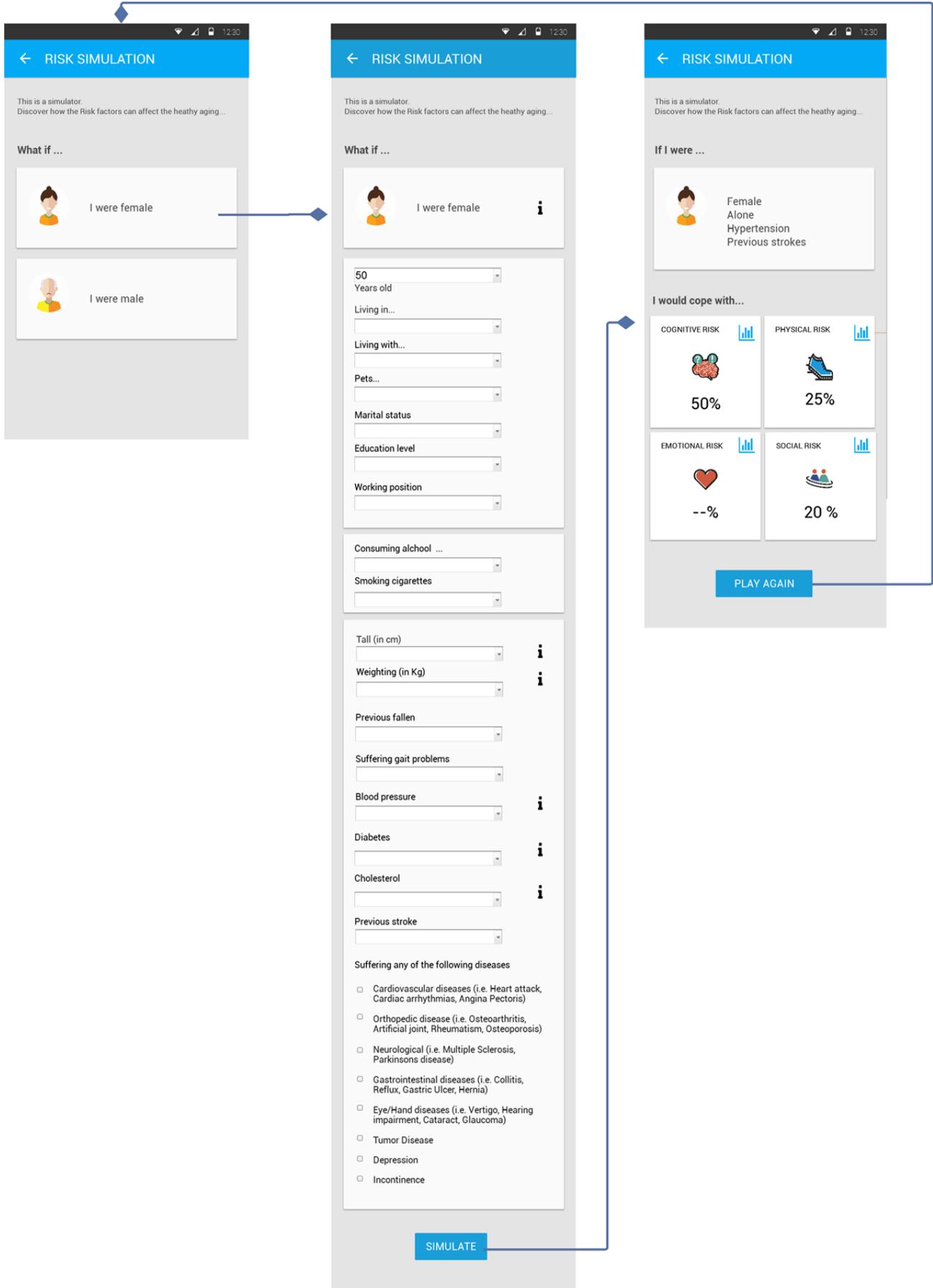
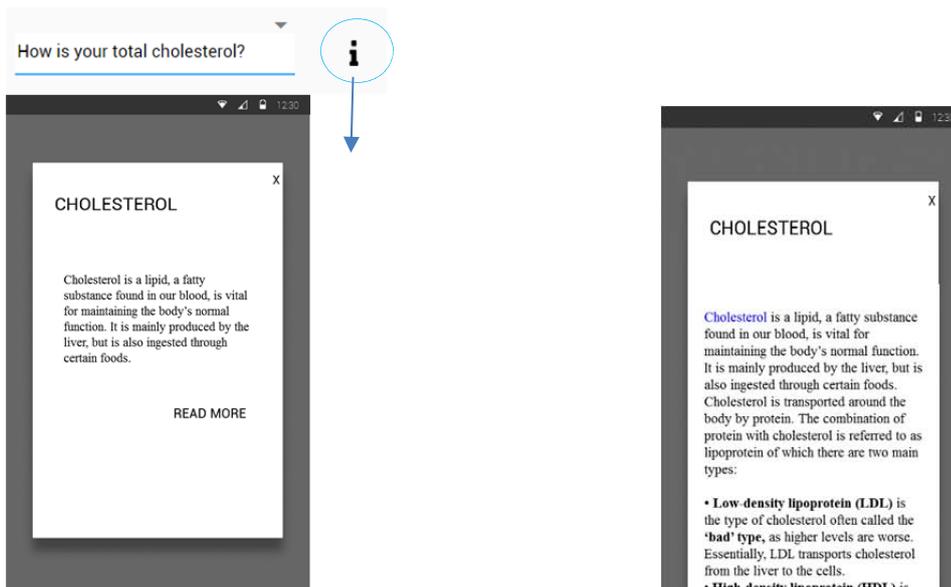


Figure 24 – Risk Simulation

**A.5.1 Information on Risk Factors**



**Figure 25 – Card on Risk Factor (short and long)**

**CHOLESTEROL**

Cholesterol is a lipid, a fatty substance found in our blood, is vital for maintaining the body's normal function. It is mainly produced by the liver, but is also ingested through certain foods.

**CHOLESTEROL**

Cholesterol is a lipid, a fatty substance found in our blood, is vital for maintaining the body's normal function. It is mainly produced by the liver, but is also ingested through certain foods. Cholesterol is transported around the body by protein. The combination of protein with cholesterol is referred to as lipoprotein of which there are two main types:

- **Low-density lipoprotein (LDL)** is the type of cholesterol often called the **'bad' type**, as higher levels are worse. Essentially, LDL transports cholesterol from the liver to the cells.
- **High-density lipoprotein (HDL)** is generally called the **'good' type** of cholesterol, as higher levels are better. HDL transports cholesterol away from the cells and back to the liver where it is either broken down or passed out of the body.

The **problem with cholesterol** is that when you have too much 'bad' (LDL) and not enough 'good' cholesterol (HDL) in your blood it means there is too much cholesterol in the blood for the cells to use. The **excess of bad cholesterol** may build up in the artery walls in the form of fatty material, which can lead to an array of health problems, including cardiovascular disease (stroke). Cardiovascular disease and in particular stroke is a common cause for certain types of **dementia**, such as vascular dementia.

The risk for developing **high blood pressure** is particularly high if you have a high concentration of LDL and a low concentration of HDL cholesterol.

Cholesterol levels are commonly determined with a blood test and measured in units of millimols per litre of blood (mmol/l). As a **guideline** for a healthy adult, your total cholesterol should be below 5 mmol/l, your LDL under 3 mmol/l and your HDL above 1 mmol/l.

High cholesterol may be caused by a whole array of factors. Some of the most common factors include:

- **Diet high in saturated fat**
- **Smoking**
- **Lack of physical activity**
- **High alcohol consumption**
- **Disease of the liver or kidney**
- **Diabetes**
- **High blood pressure (hypertension)**

In severe cases medication can be given to **lower cholesterol levels**, such as **statins**, but generally, cholesterol levels can be greatly improved through:

- A balanced and healthy diet
- Regular exercise
- Giving up smoking
- Lowering alcohol consumption

If your **cholesterol is too high** or you would like to prevent it from becoming too high, then you might be interested in our physical activity and nutrition programs.

Suggested readings:  
[Obesity and vascular risk factors at midlife and the risk of dementia and Alzheimer disease.](#)

CLOSE

# A.6 My-Apps

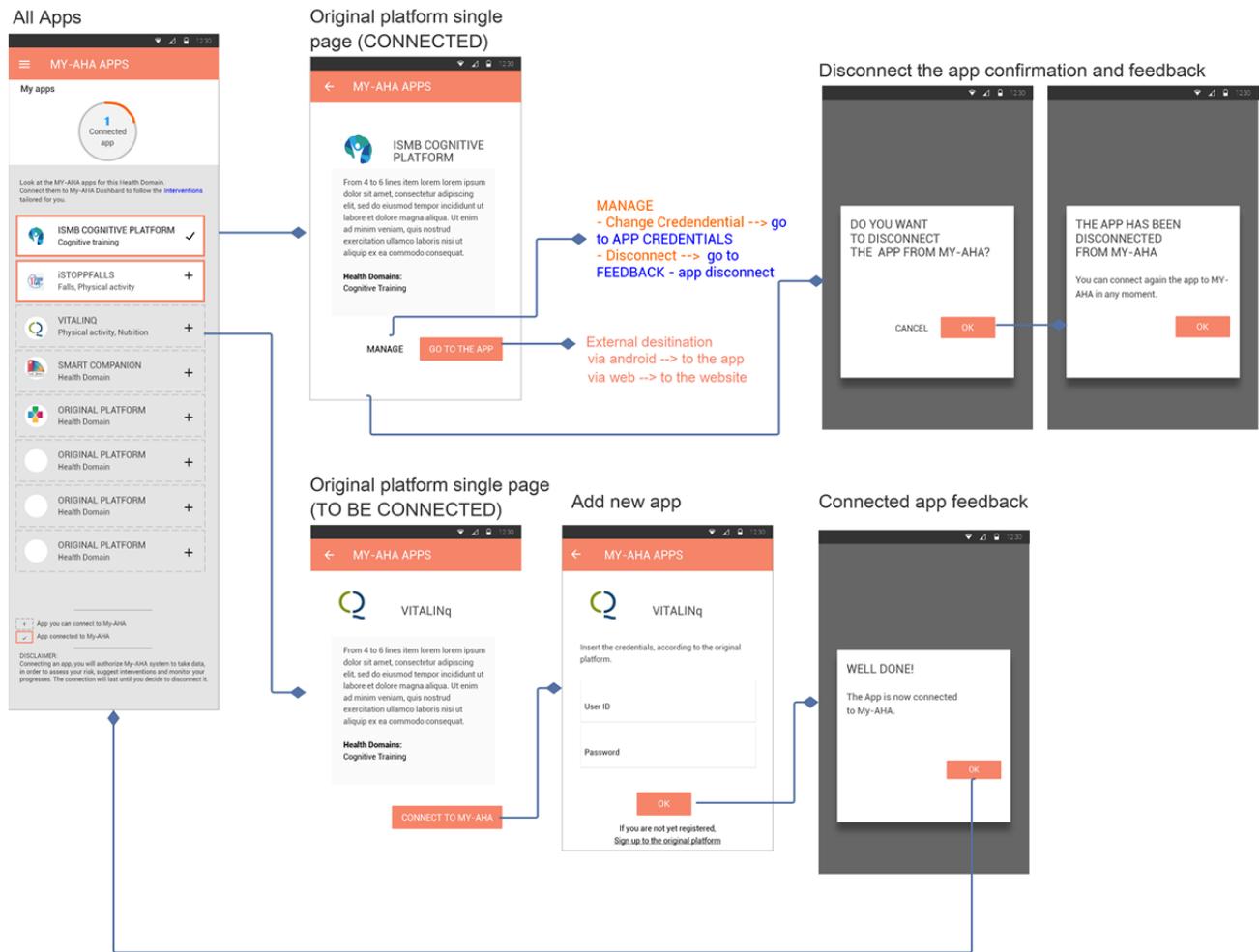
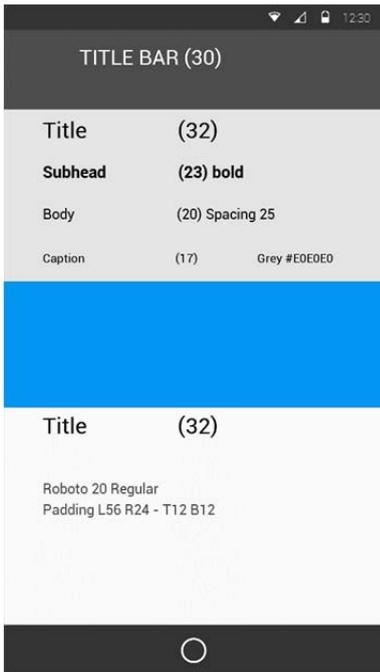
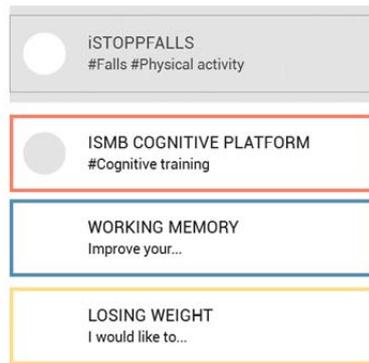


Figure 26 – My Apps overview

# A.7 Style guide



**Figure 27 – Screen layout**



**Figure 28 – Colour palette and Lists affordances**

- Header, buttons, order of the active options in a list of HEALTH DOMAINS.
- Background, Not Active options in lists.
- Buttons, borders, actions that bring out of the APPS (link toward the original platforms).
- Buttons, borders, actions concerning the GOALS.

- NOT ACTIVE OPTIONS: empty background on the grey field. Dotted border.
- ACTIVE OPTIONS: White background
  - Orange border for APPS
  - Blue borders for HEALTH DOMAINS, DASHBOARD, PERSONAL INFO
  - Yellow borders for GOALS

**SPACING**

Options are separated each others

**TEXT**

2 lines of text, the 1st in CAPITAL LETTERS

Logos and icons on a white circle



**Figure 29 – Domains icons**