AAL
PROGRAMME

TSBank
Time and Skill Bank for Active Aging

D3.1 – Base Software

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EXECUTIVE SUMMARY

This document establishes the connection between the end-user needs for the technical development. The analysis of the user needs and scenario and use case developments will be used to document the envisaged solution with description of technical requirements and mockups development.

DOCUMENT CONTEXT

ROLE OF THE DELIVERABLE

This deliverable explains how the development team build the platform, from the end user requirements presented in D2.5. This report explains what the idea behind the system is, meaning that explains the methods on how the pages were developed and the functionalities available for the users which will be delivered on the system content in D.3.4.

RELATIONSHIP TO OTHER PROJECT DELIVERABLES

Deliverable	Relation
D2.5	Title: Base software *The end-user requirements represents the guidelines on which the development team will be using to develop the Base Software of the platform.*
D3.4	Title:System content *The software from D3.4 is the major outcome of this WP from where the Business Logic and Framework are explained in this present document.*

1. PROJECT DESCRIPTION

1.1 - GENERAL DESCRIPTION

The core concept of the TSBank is to give the elderly a way to use their time and skills in a way that is useful to society, enabling them to be active and feel needed, which will greatly contribute to their well-being and reduce their dependence on the caregiving infrastructure. The matching process follows a series of steps to ensure a correct match is made:

1. The elderly register with the online tool via a simple interface and inserts the tasks they are willing to help on, thus ensuring they are adapted to their capabilities.
2. People looking for a specific service looks in the platform, and the system matches their request with the available elderly support work, putting both in contact.
3. Once the support is done both parties are requested to vote/comment on each other, creating a "trust rating" that enables future help requesters to make a better selection.

The TSBank project is built upon the concept of helping the elderly help others, in the process improving their self-esteem and social engagement, which in turn improves their wellbeing.

While existing social networks can also be used to provide the proposed matching of volunteer work/needed service, such solutions are too generic and difficult to use for the suggested target demographic. The TSBank solution differs from them in that it is focused on the elderly and their volunteer work, allowing to have a greatly simplified interface and more efficient match-making capabilities.

1.2 - SYSTEM DESCRIPTION

TSBank will develop, validate, and deploy an online platform – silverskills - that allows the elderly to volunteer their skills and time to perform work on a set of areas. People looking for support can then consult the platform for volunteer elderly that match the sought needs, and the platform puts both parties in contact.

The TSBank platform will be built on a modular system, where there's a single base core of features on top of which there are a series of modules dedicated to specific volunteer work areas. The platform can be expanded to include virtually any area for the elderly to volunteer on, while the TSBank project will implement three areas to serve as the start points for the system: Tourism, Pet Sitting and Consultancy. With these three modules, TSBank contributes for an increase of the quality of life, autonomy and participation in social life of elderly people. At the same time, it serves as a starting point for self-confidence in the use of ICT tools through the use of perception of knowledge and experience transfer by making skills and competencies visible in local communities, boosting elderly acceptance and perceived value of ICT solutions. Other important aspects of the system will be the usability and design, which will have to be developed according to the limitations of the elderly users.

2. INTRODUCTION

This document presents the Platform Base Software under the TSBank project for active ageing.

Link to the site: www.silverskills.eu

This document presents the framework used to develop the web platform, the business logic of how the users will be using the platform and the evaluation tools on which Increase Time will use to evaluate technically the performance of the website.

This document presents the information on how the concept was putted into the software development, explaining the reason and the actions for each section and content of the website.

3. FRAMEWORK

This chapter will identify the Framework of the platform, explaining the whole concept by bridging the requirements collected from the WP2 to the technological development.

TSBank project is focused on the integration of seniors in society and improving their life quality, motivate them to be more active by sharing their time and skills. A platform will be developed to enable the communication between people looking for a wide experience or knowledge in a specific area.

The users who will be looking for a service could be from a wide range of age, but as the whole purpose of TSBank is the social integration of the older citizens, the target people of volunteers already identified in between 62 and 75, the development of the platform needs to have a special attention to the usability of this specific targeted users.

The building of the platform's framework started with addressing some of these questions:

- How the information should be displayed?
- What are the functionalities?
- How the performance will be measured?
- What content (text and images) the platform will have and how it should be displayed?
- What are the users' main technical priorities?

The current document will explain the methodology used to develop system of the platform by addressing the questions above.

First it was defined a website's structure, taking the initial step from the mock-ups already presented in the D2.5 System architecture and technical specifications.

The main functionality on the website navigation is the main links for different content through an easy, useful and fast access to critical information on the website functionalities.

This information should be displayed in a simple and clean way, and in the platform it can be listed in four major categories:

A. Name and Logotype – identification of the platform
B. Main Menu – boxes of selections for navigation
C. Language – National Languages available on the website
D. Authentication – Functionality for personal information and interaction

A. Identification

The branding of a product is very important nowadays, from the name until the whole marketing concept. The name of the platform started to be discussed and proposed to change "TSBank" for another name. The discussion inception was due to the initial of Time and Skills together with Bank could not work as it would not be easy to identify the meaning and purpose – the consortium prefers to have a name that could already express what the service is about, and not be related with other areas as Banking by having the word "Bank" in its identification.

The consortium initially started to create an open list where all the partners could participate and contribute with proposals for the names. The names most voted were:

- ▪ Mint - Intercultural Meeting
- ▪ InterCult - Sharing your experiences
- ▪ silverskills
- ▪ Act4Age
- ▪ ProAct

The most voted name was **silverskills** – concept build from two words that targets two important aspects for the platform – the end users and what the product will be trading.

After naming the platform, the design of the logo started to be discussed and prepared. The objective was to obtain a logo that could identity or express the aim of TSBank and the primary end users. The main idea when designing a logotype for a product or service is that the logotype should reflect the values and aims of the business as a whole[1]. As an identity for silverskills, as the platform must consider the technological knowledge of seniors and also to appeal their attention, the idea is to have a simple lettering, not too futuristic and which could be easily identified by senior citizens. Three proposals for the logotype were developed, all using grey colour on the word "senior", and even on the first and last proposal were used the same colours of TSBank logo, even though that all had different presentations on the lettering and icon. Below are presented the three versions developed:

Figure 1.1 – Logotype Proposal One

The idea of the first logo (Figure 1) was to represent the seniors and the community, using the grey for seniors and blue for the community. The community represented a different number of individuals with a senior behind of them as a support or helper. The individuals are represented in the same module for design, apart from the colour, telling that the senior is part of the community.

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[1] Just Creative - Branding, Identity & Logo Design Explained
http://justcreative.com/2010/04/06/branding-identity-logo-design-explained/

Figure 1.2 – Logotype Proposal Two

It was developed a logo by using different colour for the work "skills", and playing with the initial of the two words, it was developed a round shaped character "s". It ended a version a little more abstract than others, simple but it did not directly link to seniors or community.

Figure 1.3 – Logotype Proposal Three

The last proposal, as in logo one, was tried to represent the society in the logo but here, excluding the seniors. The idea was to reflect only the beneficiaries of the platform in the image, and let the senior association only to the name and used colour (grey).

The decision

The choice fell on the first proposal as it kept the same identity and colours of the TSBank logo, transmitting the TSBank concept through the image. We think that the best way to express the project concept is by having a senior represented along with different people, representing the community as a whole.

The logotype was defined, nevertheless it was designed a more simple lettering for the platform image, as the letter "e" and "k" are too roundish, making a final adjustment on the font selection for the logotype. The logo will be the image of the platform will be used in different circumstances, being an important aspect in terms of communication:

- Stationery (including Letterhead, business card or envelopes);
- Marketing (Dissemination material for the Project and Platform will incorporate the logotype – new dissemination material containing the presentation of the platform will include the final version of the logo, e.g. poster and flyer);
- Identification (a permanent presence during the platform navigation as will be present in all webpages);
- Message (emails or other forms of communication).

The Logo with the lettering refined is presented below.

Figure 2 – SilverSkills Logotype

Following the recommendation expressed by the reviewers of the MidTerm Review meeting of TSBank, the name SilverSkills was changed to "silverskills" - without any capital letters. The following logo expressed below is the final version of the platform's logo.

Figure 3 – silverskills logo final version

B. Main Menu

Most of the websites contains a main menu in upper section. This best practice for being easy to identity and access from all the users has been applied on the websites crossing different businesses. Considering this aspect, the users when connected to Silverskills they would expect to find a navigation on the upper section, near the identification of the platform (logotype).

The Main Menu structure will consist on the links for the key pages for the different users that will be navigating in the website. The structure development of the website must link to important information to be consulted for knowledge or to perform actions, both by volunteers and beneficiaries. The links of the main menu is divided in four options:

- About – section to make a presentation of the platform and the associated project;
- Advantages – section to present the main points why elderly volunteers should enlist and why should persons looking for a specific service should use the platform;
- Services – section to present the services currently available in the platform for both parties;
- Contact – section to inform how the users can get in contact with the platform.
  About – The About section references the TSBank project on which basis the platform is being developed for the pilot participants or new visitors that wanted to know more about the platform get the opportunity to be introduced to the key concept of the website development and also making the link for the AAL Programme. The silverskills platform is the tool that supports the TSBank project to achieve its main objective, it is important to state the ambition of TSBank consortium in aiming the

increase of wellbeing and quality of life from the use of elderlies' time and skills in a very useful way. The Four key aspects are clearly identified after the introduction lines about the platform and the project. Using the points discussed in the consortium for the Project Presentation (D5.2) and the Value Propositions of the project and the platform (as part of development of the Business Plan) it is clearly state the issues that TSBank is aiming with the assistance of this tool.

Advantages – The advantages of the platform are displayed is an interactive section where it is presented the advantages from both type of users on using the platform. The concept of this development was to have an attractive way to present the advantages as this information will be important as a first contact of the users with the platform. The information is displayed in 6 cards that can be rotated through a simple click. Initially is presented the topics of the advantages with an image associated. Following the best practices of adapting the technology to the elderly citizens, the cards are not only presented with images but also with a text to be easier to identify what exactly the card is about. Focusing more on the platform system, the advantages images and respective titles chosen to present and to convince the attention of the users are:

- Brokerage Matching Platform – the main technological functionality of the platform;

- Chat for Interaction – a feature part of the previous functionality that is one of the platforms competitive advantage;

- Easy…and low priced! – An easy process of using the platform and managing the services are performed with easy methods. Moreover, an affordable price for the beneficiary is guaranteed.

- Trustful rating system – Important to highlight the trust rating system, bringing some gamification into this service, increasing the level of trust for selecting the volunteer and also an healthy competition among the volunteers for a higher rate.

- Promote seniors to have a more active role – the advantage of the platform which an important objective of the project. The promotion of a more active role by the elderly citizens is a very serious awareness that the consortium is very interest and dedicated to promote.

- Check our services – the last card is a link to the services available on the platform which, for being an important feature, is also accessible from the main menu and explained next.

For the Web Content Accessibility, images are not displayed alone in the cards, having a title of the respective advantage above, considering the best practice for alternative text of WCAG 2.0.

Services – The services available on the platform can be either access by the clicking on the last advantages cards presented before or by clicking on the main menu in "Services". The services

are clearly listed and were structured to be easier to understand by all the users, displaying the respective useful information about each service. Below you can find the structure used for each service and the reason for being in the structure:

Image	Title
	Description
	Sub-Categories

Figure 4.1 – Structure for Service Categories - version 1

Image	**Category Logo**	Title
	Description	
	Sub-Categories	

Figure 4.2 – Structure for Service Categories - version 2

Image – to select an image that could clearly identified the type of service to bring attention to the users telling that the service is available, and also to the elderly volunteers to consider to volunteer in the specific service.

Title – The name of the service, displayed in bold and with a higher font size to, along with the image (and also as an alternative) could clearly identify and present the service.

Description – A brief description of the service more useful for the beneficiaries to make a presentation of each service, announcing the availability of a service in the platform.

Sub-Categories – Each service can be divided in many different sub categories. The concept of making this division for each service was for helping both of the users. The sub-categories list will benefit the users that would be looking for a specific service would have a list of sub-categories available in the platform and also when they are analysing the profile of the volunteers to select them for a service by taking into consideration the past services performed by the volunteers on a specific sub category. On the other hand, this division of services in sub-categories also benefit the volunteers, as when they receive a request for a specific service, a sub category is always tagged on it, being easier for them to evaluate the willingness for performing the activities/services.

The second version for the structure of the services added the logo for the specific service category.

Category Logo - three logos were developed and used to identify the three different services available in silverskills. These logos will also help the users to easily identify the categories of each activity, as these are used in the user's profile to manage own services.

FAQ - The FAQ page is a page specially developed for clearly present the platform objective and describe the users' benefits.

The need of implementing this phase resulted from questions of pilot participants to know exactly how the system works so they could they take the most benefit from the solution. From the frequently asked questions, information to expand the information regarding silverskills in the homepage was added, by presenting the objectives and benefits from a more technical perspective.

The questions are structured in three different sections: *General* (addressing potential issues or uncertainties which is related to all users or interested people to know more about the platform), *Demand* (specific information related to the users who will be looking for help) and *Offer* (specific information related to the users who will be sharing their experience).

<u>Contact</u> – The contact section was developed in a simple way possible, as the user when is looking for this specific information it is looking for direct information presented in a clear way. The contacts displayed are associated with an image to be easier to identify the type of contact that is shared on this specific section. The images chosen are icons that represent the action to get in contact with silverskills, and are icons that some of the users can be already familiarised with, as they are simple, easy for interpretation and also normally present in other websites.

C. Multi-Language

The Language displayed on the website can be changed on the upper section on the right side. The need of the platform to be tested in pilot locations and also for future commercialisation, led to the translation of all the content of the website to the national languages of the partners along with the English Language. The partners had in consideration the recommendations from WCAG 2.0 (3.1.1 Language of Page - idiom) by not translating word for word in risk of losing the cultural meaning. The image for representing the language of the website is the national county's flag of the respective option selected for language. Every update of content performed on the website which involves text will demand the respective translations to be fully covered to be used on the different locations. The Website was initially developed in English followed by Italian and Romanian for the pilot end-users. The languages Portuguese, French and German were also added to the platform.

D. Authentication

The development of the sections for sign in into the platform system will be explained here its reasons and structures. The need of having a personal and unique account for each user is by having a personal account for looking for services or volunteering for services. The accounts must not be shared as all the services requested or volunteered belongs to a single person and only that person is responsible for the action during the service and the consecutive rating. As there are two different type of users already identified, there will be needed two types of accounts.

To perform the registration on the platform (only one time per user) the user can use the link SignIn on the top right corner. After selecting the type of user for the platform the respective registration form will be asked to be filled by the user.

<u>Note</u>: The actions associated for each type of user are explained on the following chapter – Business Logic.

The D2.2 Ethical and Legal Issues states two important aspects to be considered for development:

- "Person's right to access all his data under processing;
- The right to demand rectification, blocking or deletion of incomplete, inaccurate data"

The registration form for the service beneficiaries:

Figure 5 – Registration form for the Client

The information requested for the Demand side are divided in three types of data:

- Personal – The person's name is requested to be used as identification.
- Account – Email and Password are requested as the individual data for accessing the system
- Contact – The contact information contains the location of the client, composed by country, state and city.

The registration form for the service volunteers:

Figure 6 – Registration Form for the Volunteer

The information requested for the Volunteer are divided in three types of data:

- Personal – The person's name and birthdate are requested to be used as identification.
- Account – As for the Client, Email and Password are requested as the individual data for accessing the system. Additional fields are presented for the Volunteers to add their Photo and Description as their visit card, skills (service categories) which they are willing to share for performing services and the language skills to communicate with clients.
- Contact – The contact information contains the location of the client, composed by the address, country, state, city and phone.

Note: The security model is explained on the D3.3 addressing the legal issues and security constraints.

4. BUSINESS LOGIC

The Business Logic presents how the platforms works, describing what are the actions that can be performed by each type of user and also how the system responds for different actions to manage the users and their actions.

The platform is a matching system between the demand of services and the willing to perform volunteer activities.

To explain the Business Logic of silverskills, it will be explained the different actions expected by the system and the ones that can be performed by the users.

The system

The system is the platform silverskills that can be used in computers and mobile devices along with the backoffice responsiveness and the support team of development.

Support Team – A team that can gives support online, assisting the users of the platforming to perform their actions or to solve any issue reported. The team responsible for this support is the partner iTime, and the email contact is shared in the website on the contact section.

Platform – The platform was designed considering the data collected from the WP2 in order to build a strong, robustly secured and easy to use system. The most critical aspect on the development of the platform was on how the matching system would work and how the communication process should be established since the beginning of a service request until its conclusion.

The platform logic is described on the following diagram with a description of the tasks after it.

Client

Registration
Log In
View/Change Profile
Make a Request
Consult the list of Volunteers
Use the chat to discuss the needs of the
service
Choose the volunteer
Wait for confirmation
Consult the status of the service
Possibility to Cancel the Request
Rate the Volunteer
Make a new request

Volunteers

Registration
Log In
View/Change Profile
Look for open services
Consult the list of services open with
matched skills
Share on the chat the availability to perform
the service
Accept/Deny the service
Wait for confirmation
Perform/Cancel the Service
Close the Service when completed
Rate the Client
Answer contacts from other Clients

Figure 7 – Platform Logic

The Platform Logic illustrated on the above diagram presents the actions that are performed
by the client and volunteer.

The Client and the Volunteer, if they have not registered before, need to register on the platform (please see Authentication) – this action only needs to be performed once. By introducing the email and password the user is able to log in to perform the activities related with the services.

Client – The client, after logged in into own account, can view and edit the information on its personal profile or making a new request for service.

The mock-up of the homepage presented in D2.5, had a search for typing what service the individual was searching for. After considering usability for this function it was decided to exchange the search bar for a Request Form, where the user select the type of service from a list provided by the platform. Nevertheless, it was decided to have a field in the form where the user could describe exactly what we were looking for with opportunity to give more details (field Description). This concept allows the volunteer to know exactly what service category the client is looking for (easy to identify when looking for new requests available and is useful for his/her personal management) but also has a detailed description of the request.
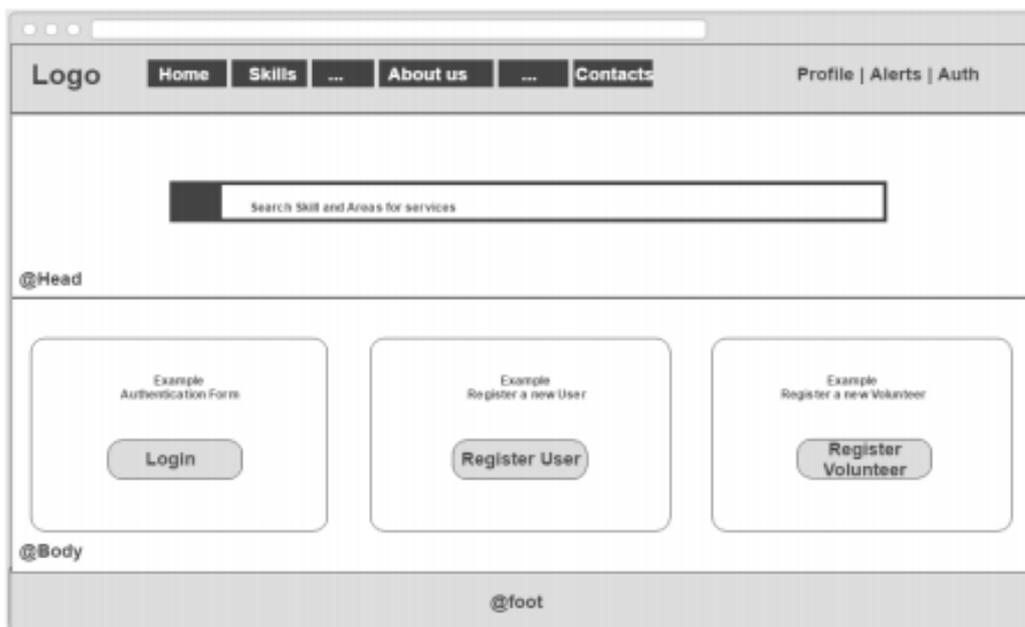
Figure 8 - Mockup with a search bar

After considering usability for this function it was decided to exchange the search bar for a Request Form, where the user selects the type of service from a list provided by the platform. As the concept of developing the methodology for the offer and demand of skills, it was decided to have a field in the form where the user could describe exactly what was looking for with opportunity to provide more details (field Description) - the search bar functionality was abandoned. This concept allows the volunteer to know exactly what service category the client is looking for (easy to identify when looking for new requests available and is useful for his/her personal management) but also has a detailed description of the request.

The client will select the information about the request he would like to make, the Request Form is presented below.

Figure 9 – Request Form by the Client

The Request Form filled by the Client must include the following information needed for the back-office to perform the matching system and will also be useful for the respective Volunteers to evaluate their availability:

- Data for the service can be introduced numerically or by using a calendar.
- Location of the service – Country, State and City where the action of the service will take place.
- Service Information – Category (from Tourism, Pet Sitting and Consultancy), Service (Sub-Category) and a Description of the service explaining what the Client is looking for and to share among the community of volunteers.

Request for a Service

After the client fills the Request Form, it will be given a list of volunteers that match with the type of service that was selected. The volunteer, if is having the Service Category has a skill on its Profile, that request will appear giving the opportunity to both of them start chatting. The client can talk to any of the volunteers that are matched and only makes the choice once he/she is certain about his/her choice. Along with the choice of the client, the volunteer has always to accept the request by the client in order to formalise the service – a notification email is sent informing that the service was matched.

While the service is at an ongoing process, both of the users have the possibility to cancel the request. If the volunteers cancel the service – a notification email is sent informing that the service was cancelled.

Service Acceptance or Cancelation

If the service was not cancelled by any user, it means that the volunteer is performing the activity. By the end of this activity, the volunteer will confirm its conclusion and an email is sent to inform the client that the activity is concluded and to rate the volunteer performance. The volunteer will be able also to rate the client considering how was the interaction between them and how the process was facilitated to understand and perform the activity. The rating will be extremely useful for other users that could be collaborating together in the future. The rating on volunteers, besides the advantage that the client can have on consulting the history of services from a volunteer that is possibility to collaborate, can also work as a challenge between the community of volunteers registered on the platform competing for a higher rating.

Results

The business logic of how the platform is developed is in fully compliance with TSBank concept by increasing the level of activity of seniors, making a stronger link of the seniors into society with intercultural and intergenerational exchange of experiences and also improving the quality of life of seniors for them to not be confined at home or demanding more attention and time from their caretakers.

5. SILVERSKILLS PRESENTATION

In this chapter will be presented a detailed presentation of silverskills - the system which will engage both users looking for a service and elderly volunteer into a single platform. This platform is focused on three main services: Tourism, Consultancy and Pet Sitting. People looking for support can then use the platform for volunteer elderly that match the sought needs, and the platform puts both parties in contact.

[LOGO] About Advantages Services Contact	Language|Accessibility|Sign Up | Log In
[content]	
[footer]	
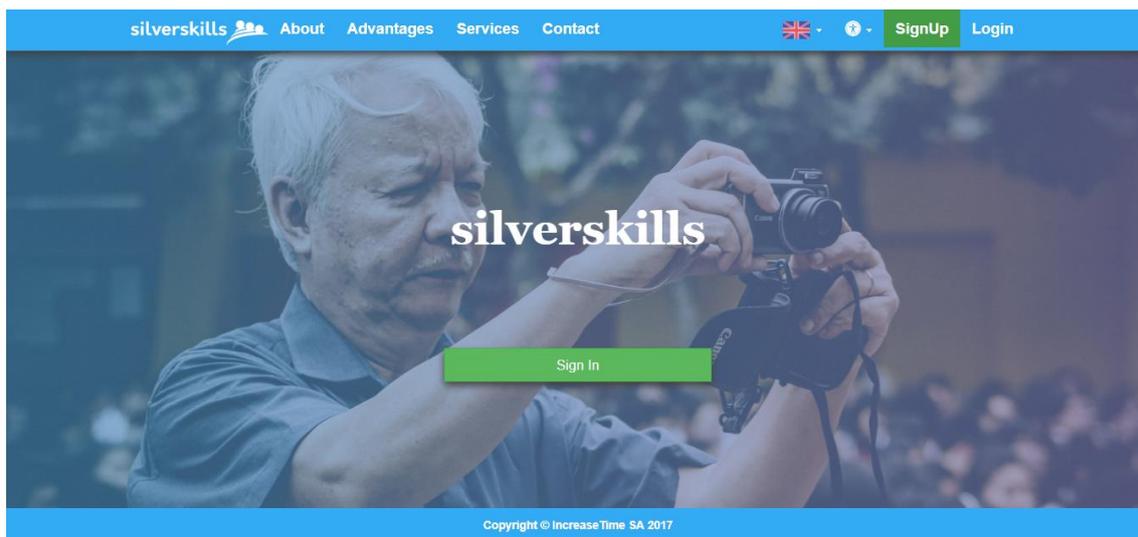
Figure 1.1 - Homepage - version 1

Figure 1.2 - Homepage - version 2

The second version of the Homepage includes the addition of the presentation video of silverskills to introduce the platform to the visitors and also the inclusion of the FAQ page in the main menu.

5.1   Homepage

The Homepage [www.silverskills.eu] is the main page which can be recalled from any page where the user is by clicking in the logo (placed on the upper-left corner).

All pages are divided in three sections:

- **Top Section** – this is a fixed section to help the user on its navigation – it contains the Logo and the fixed menu guiding the user to navigate through the major pages. The menu has two sections, one on the left with the main sections of the Website and on the other on the right, with a jump menu.
    - o   Main Menu [on the left]:
        - ▪   *About* – information about the platform and how the two types of user are engaged;

        - ▪   *Advantages* - presents a list of advantages of silverskills, as well the TSBank project in overall.

        - ▪   *Services* – describing the services available on the platform from the elderlies registered;

        - ▪   *FAQ* - presenting the information on the frequently asked questions.

        - ▪   *Contact* – the section has the contact details about developer team.

    - o   Jump Menu [on the right]:
        - ▪   Make a Request: Only displayed when the Client is online, is the starting point for making a service request;

- *Language:* The website is available initially in four languages, including English, Italian, Portuguese and Romanian as the options available for presenting the text content on the platform. The Language selected is identified with a respective country flag in this section of the menu.
- *Accessibility:* The accessibility options available in silverskills are the increase/decrease text size and also the Grayscale View for making a higher contrast on the website. In here the original colours are replaced with different shades of gray.

  o **When offline**:
  - Sign Up - heading to the sign up section allowing the user to select the type of user will be in silverskills community.
  - Log In - to access into your account with your personal credentials.

  o **When online** (both for client and volunteer):
  - *My Account* – the page to view and edit your personal information;

- **Centre Section** – this is an adaptable section for not only to perform actions (selections) but also to receive information – it contains all the content of the different pages on which the user can navigate on. The pages information can be changed according the selections available in the main menu and the right jump menu – both on Top Section explained above. After the user being registered and logged in, new pages will be available to manage its personal information and services which will be both explained afterwards.

- **Bottom Section** – a static section at the end of all pages stating the website's copyrights and functional information for using the website.

5.2   About, Advantages, Services and Contacts

By scrolling down on the Home Page or using the Main Menu, the user can access both the *About, Advantages, Services* and the *Contacts* page.

The *About* page, with a print screen below, presents the concept of the platform and the reason and objective behind the website development. The information in *About* page, is normally a type of information which is important to be consulted by new users who just have the first contact with the Website. The Silverskills' purpose and what specifically can offer to the community and its inclusion from the elderly citizens. A mention to TSBank project and AAL Programme is a temporary content to give this information to people who will access the website without knowing the connection between the Silverskills platform and the AAL Sponsorship in TSBank.
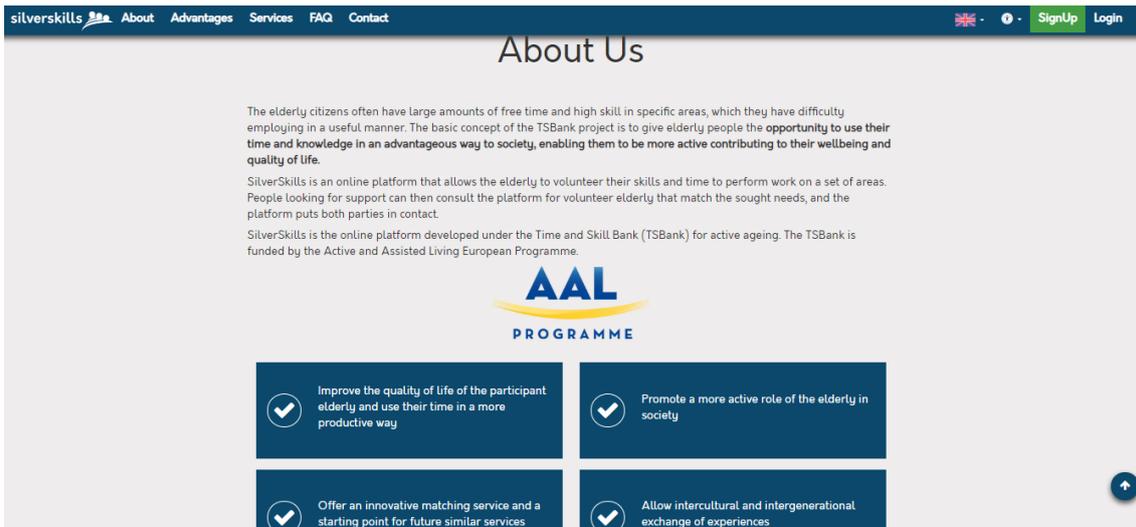
Figure 3 - About

The Advantages page, right after the About, is a page to present the platform in a more interactive way. In here, it is presented the reasons why users should become clients and why volunteers should sign and offer their skills to the platform. Six cards are displayed with topics of Silverskills, and to see the full description the user must click on the cards to display them. The last card it will present the type of services currently available in the platform, leading the user to the *Services* page.
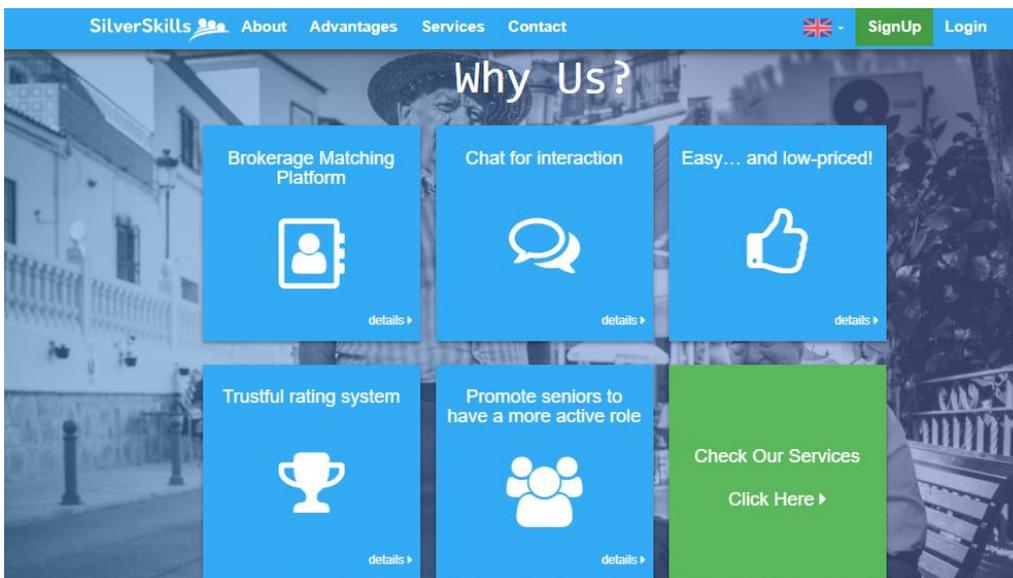
Figure 4.1 -Advantages – version 1
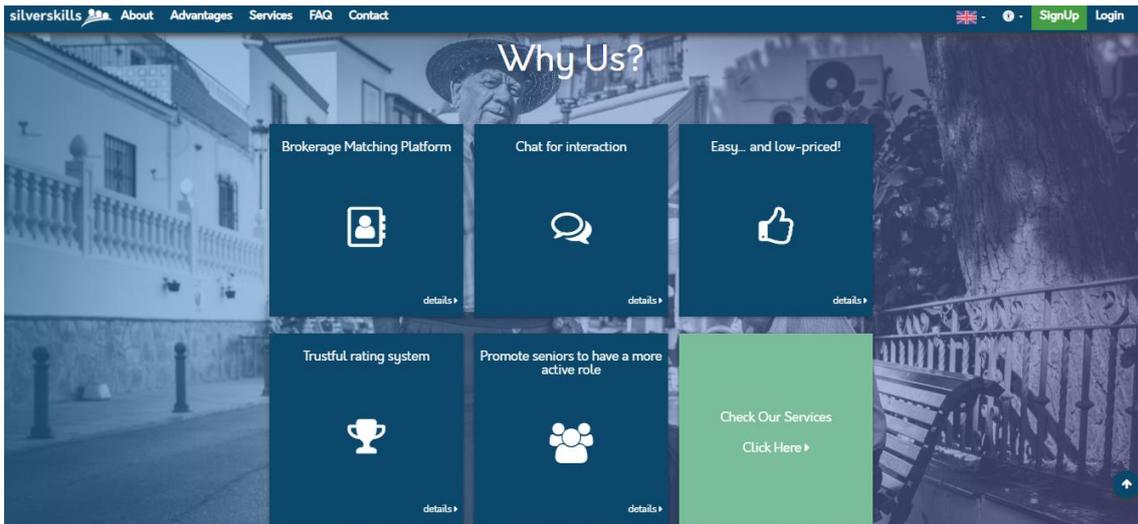
Figure 4.2 – Advantages – version 2

This page presents the Services available in Silverskills from the volunteers signed.

The Structure is presented in a simple and attractive way, displaying next to the Service Title, an image that represents the service on the left, and below it is possible to read a description of the service together with a list of services' subcategories – a list of activities to be easier to identify the type of service the client is requesting when creating a request for a service.
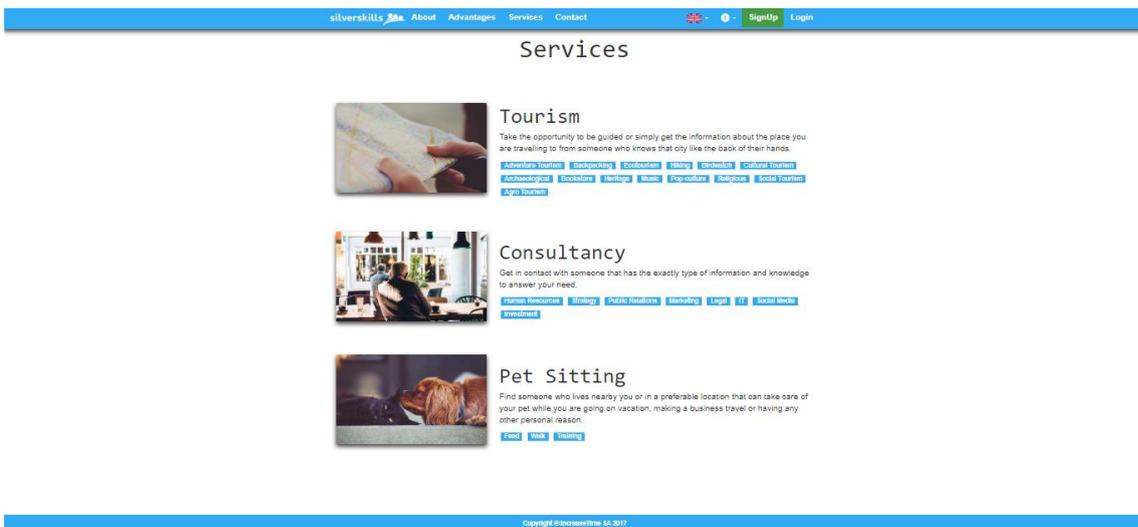
Figure 5.1 - Services - version 1
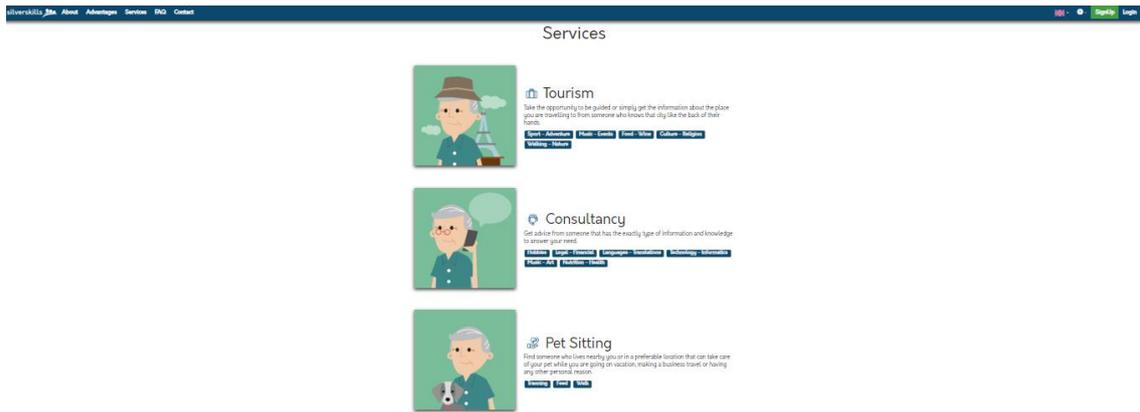
Figure 5.2 - Services - version 2

The Contact page, with a print screen below, presents the contacts of the organisation responsible for the development and maintenance of the website – iTime. The information of contacts contains the address location of iTime, the link to the Facebook page of silverskills to follow the updates, and the support email to be used for requesting assistance about any question about the service or technical issue.
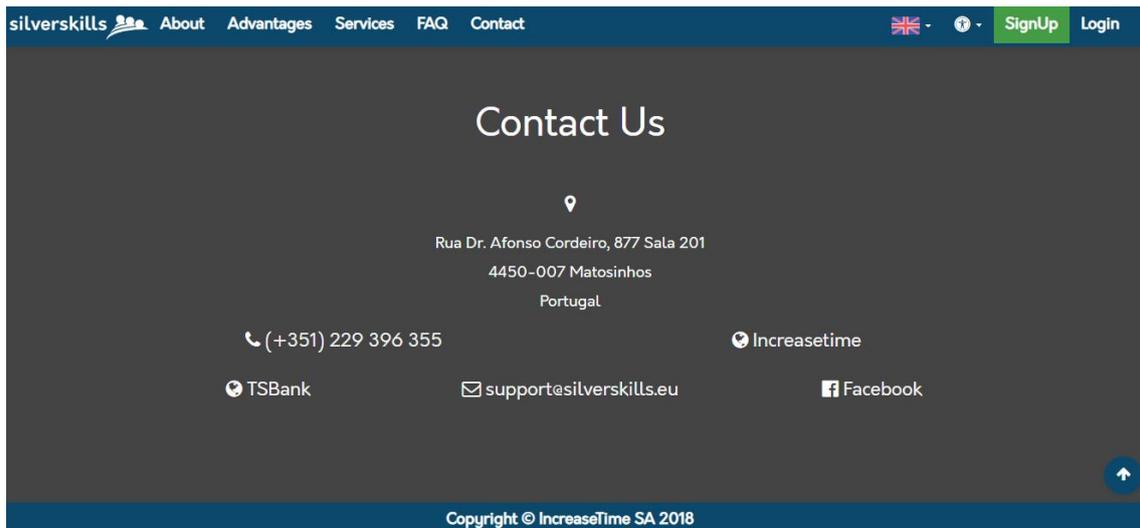
Figure 5 - Contacts

5.3 FAQ

The FAQ page explains the functionalities of silverskills application, answering the most frequent questions made during the pilot activities and the topics which needs a presentation and clarification to the users. This page is divided in three sections:

- General - topics which is related to both type of users: volunteers (offer) and customers (demand).
- Demand - topics which are especially related to the customers.
- Offer - topics which are especially related to the volunteers.

The page was designed considering the complexity and the considered range of topics needed to be explained. In order to not repeat information and to better identify the type of information, this structure helps the user to search exactly for the information that is looking for. The FAQ page is presented on the figure below.

Figure 6.1 - FAQ page

For each question, the answer is available by making a simple click on the question. The user can select multiple questions by the same method and also hide the questions by clicking again on the question of the respective exposed answer. This page assisted the pilot activities by giving support to the participants, all the text content as similar to other content on the platform, is available in multi-language.
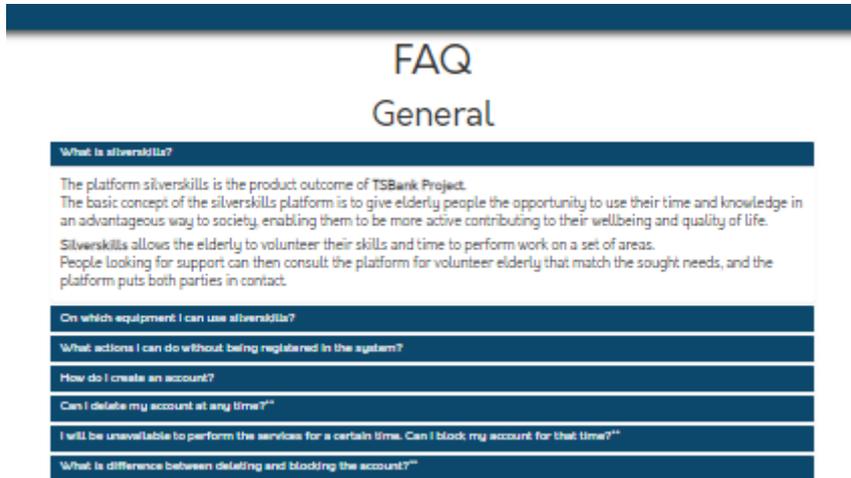
Figure 6.2 - FAQ example

5.4 Registration and Access

There are two types of users in silverskills platform – the volunteer and the client.

For registering, please click on the right upper menu in **Sign Up** button. This section can also be found in the Homepage.
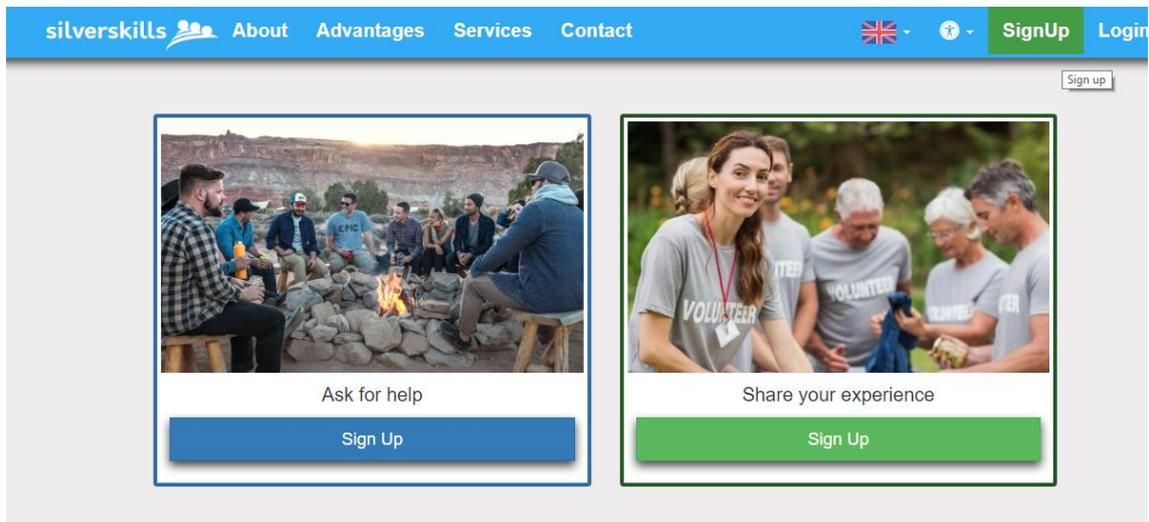
Figure 7.1 - Sign Up - version 1
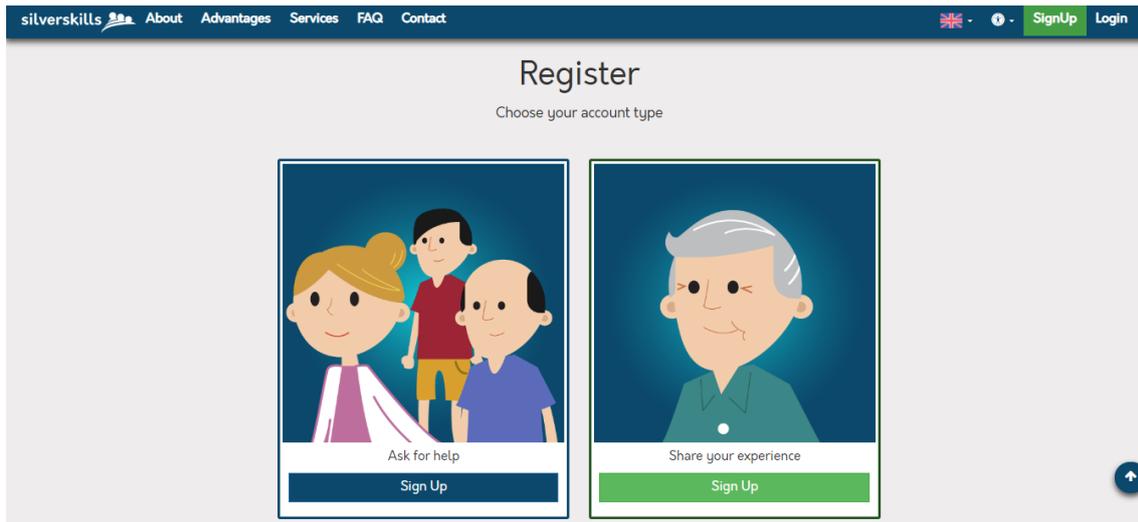
Figure 7.2 - Sign Up Links - version 2

The first version of Sign Up was presented with authorised photos from web. To give a unique design to the page and not using real persons to identify both targeted users, the development team specially designed branding material to present the platform.

Click on the **Sign Up** button on the left if you will be looking for services, or click on the right side in case you will be volunteering your time and skills. Different forms will be presented according to the choice you have made, as presenting on the figure below, the form on the left is for the users who will be looking for help by submitting requests for specific services, while the form on the right will be displayed if the user will be a volunteer for services in silverskills.

Figure 7.3 - Sign Up Forms

For the client registration, all the fields are mandatory, as those do not include sensitive data. While for the volunteer registration there are three sensitive date asked which are not mandatory to fill in: birth date, photo and address. To make the registration, it is possible to access the Registration section scrolling down the Homepage (after the Services).

For someone who is looking for a service, the user must follow these conditions:

- **Name** – The Name must be at least 3 characters long;
- **Email** – The Email field must be a valid email address (xxxx@xxx.xx)
- **Password** – For security reasons, the Password must be at least 6 characters long, and must contain at least one upper and lower case character and one number.
- **Confirm Password** – The password chosen before must be confirmed - exactly the same inserted before.
- **Location** – Must be chosen with the presented order:
  - ○ Country;
  - ○ State; and
  - ○ City where the user lives.

For the Volunteer, besides those fields, the user is also invited to share this information:

- **Birthdate** – The user should select the day, month and year of his/her birth;

- **Photo** – The platform invites the user to upload an image format file;
- **Location**
  - Address - This information is not mandatory considering legal issues on confidentiality, the reason of this field existence is for being more precisely on the volunteer location that can be helpful to determine the choice for a volunteer.
- **Description** – In this field, the user is invited to present some information about personal preferences of the services, hobbies or any other information which could be a visit card for possible future silverskills' users looking for services.

The user needs to fill the fields and respect the requirements to complete the registration. In case some information is missing or is incomplete, the system returns an error noticing that new information is needed to complete registration. To confirm the information, user clicks on the button SignUp at the bottom of the form. An automatic email is sent to the chosen address for the user to confirm its identity.
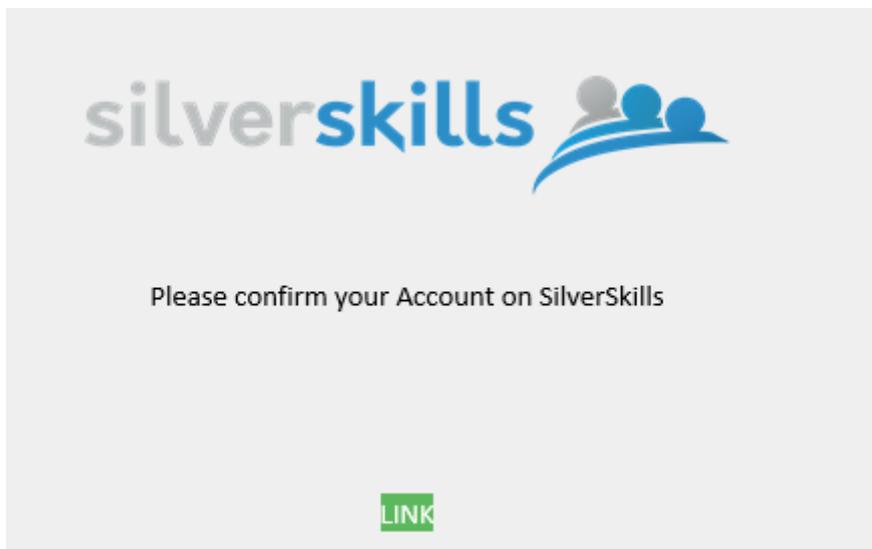
Figure 7.4 - Email to confirm SignUp

On the personal email, the user will receive the email above, which needs to click on the button "LINK" to confirm the registration. Without this confirmation the registration is not complete and the account is still not available.

After the confirmation the user can go to the log in section by selecting on the top right main menu, clicking on Login button. The email and password used on registration process are in here asked.

Figure 8.1 - Login

In case the user forgets its own password, it is possible to recover the password by clicking on the link "Forgot your username or password?". The new page will ask for the email used on registration.

Figure 8.2 - Forgot Password

In case the email written by the user is not registered in silverskills, the system will return a message "The Email field is not a valid e-mail address". Otherwise, the system will be sending an email for the user to confirm is identity and set a new password.
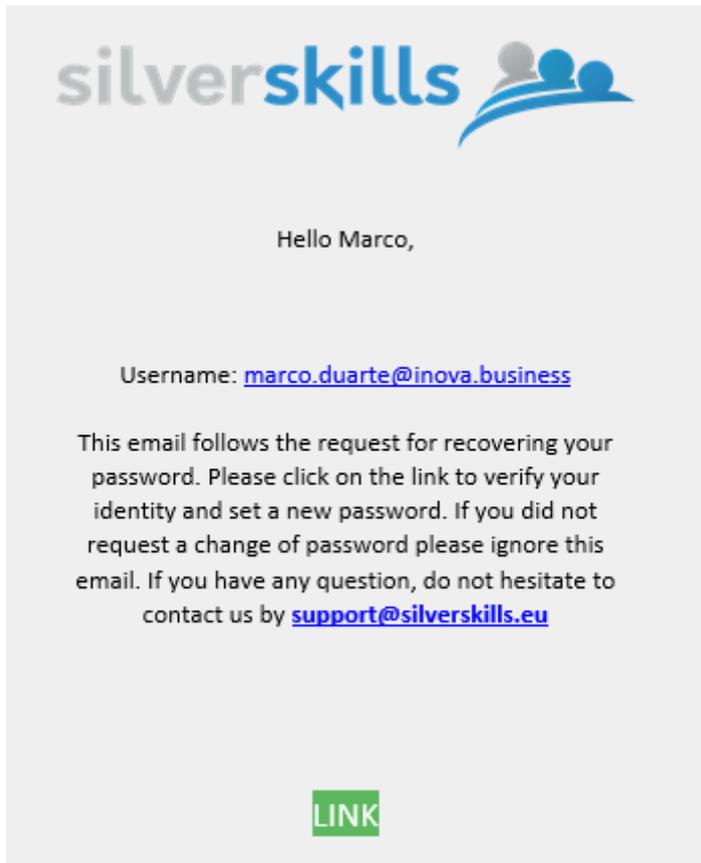
Figure 8.3 - Reset Password

Following these procedures, to explain how the users will be using and interacting in the platform, there were two different users created:

- **User looking for services** - Marco
- **User volunteering time and skills** - André

5.5   Requests

This chapter describes the actions which involves the creation and management of the services.

The client can create a request on the upper menu at **Make a New Request** button.

The client will fill the information about the request for a service, regarding when it will be, where it will be and a description of what it will be about. The Request Form is presented below.

Figure 9.1 – Request Form - version 1

Make a new Request

When?

Date*

dd/mm/aaaa

Where?

Country*

Select Country

State*

City*

What?

Category*

Service*

Languages

Select your languages

Description

Describe Service

Done

Want to know more about our services? Click Here

Figure 9.2 – Request Form - version 2

The user needs to answer three aspects important for the service:

- **When** does he/she want the service to be completed? – Date;
- **Where** it will take place? – Country, State and City.
- **What** service will it be? Category – Choose between Tourism, Consultancy or Pet Sitting); Sub Category related from the Category previously chosen (also from a list) and a Description of the Service to specify any important detail.

The second version, updated from the feedback received by the participants, the development team included the language which the users speak as it is an important criteria for the matching.

For the example presented, the user is searching for someone who could take him or giving a good reference for a Portuguese Fado House in Porto, in the North Region of Portugal for the weekend started on the 30th of September 2017.
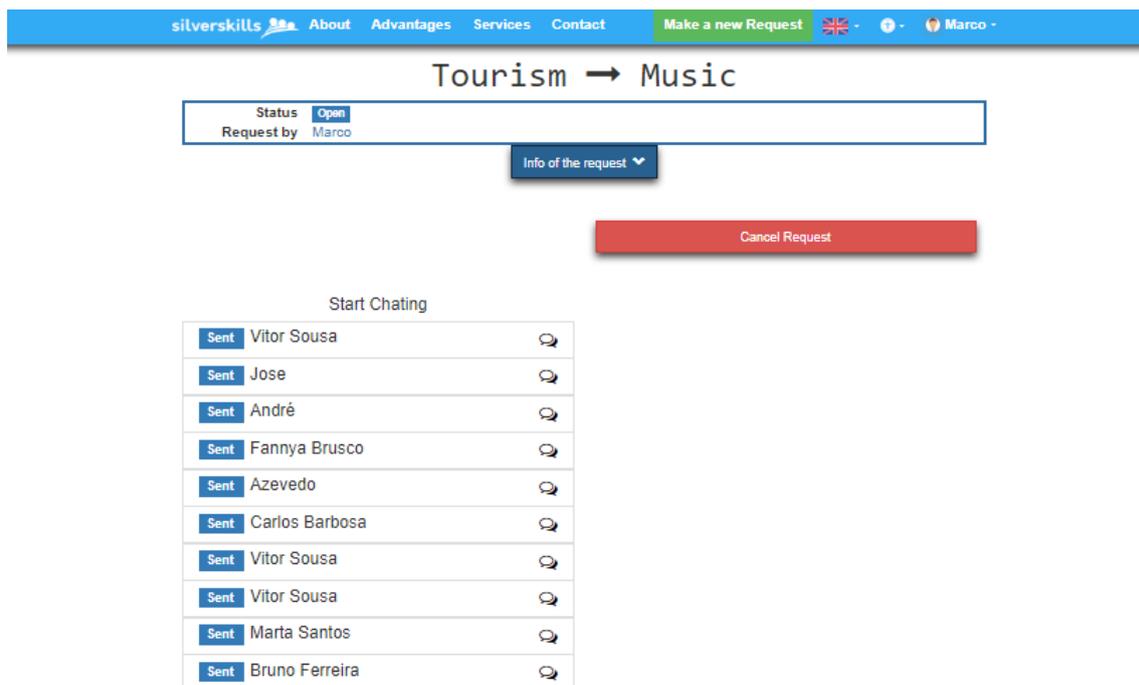
Figure 9.3 - Request submitted

The list of pre-selected volunteers will be receiving an email informing about this new request opened. An example of the email sent to the user André is presented below.
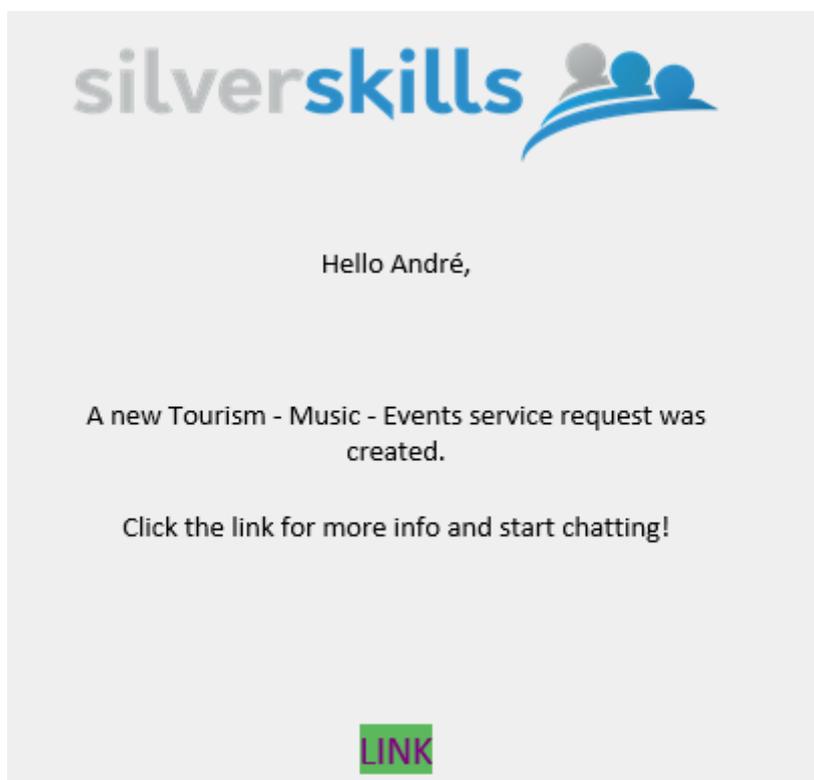
Figure 9.4 - Automatic email on the new request

After creating the new request the platform automatically presents the request created with the Category and Subcategory chosen, and a short information about the request - the status of the owner of the request.

The request status can be:

- **Open** - Presented with a blue background, this is the initial stage for each request.
- **Ongoing** - Presented with a blue background, this is when the individual who was looking for a service had select the volunteer to perform the service described on the request and this has also accepted to perform the service.
- **Done** - Presented with a green background, the volunteer finished the service.
- **Canceled** - Presented with a red background, one of the users involved in the request, client or volunteer, had canceled the request.

It is possible to see more information about the request by clicking on the **Info of the request** button, displaying details about the request as listed on the following Figure.
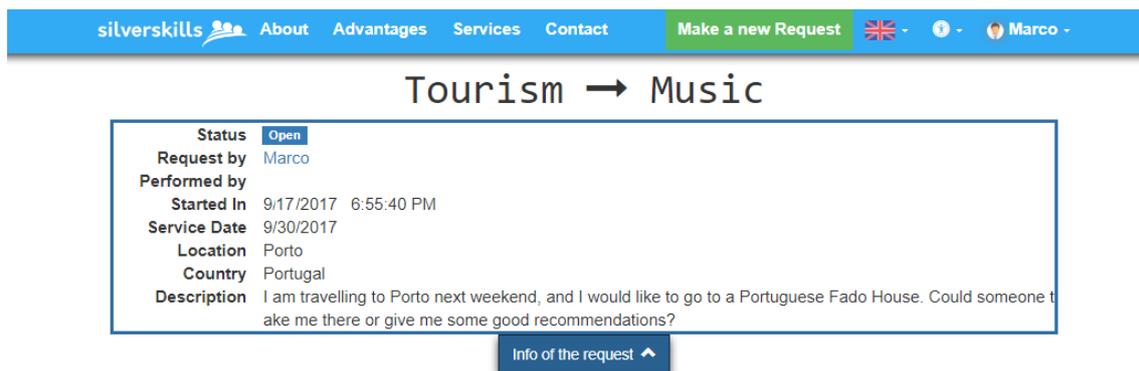
Figure 10.1 - Information of the request - version 1
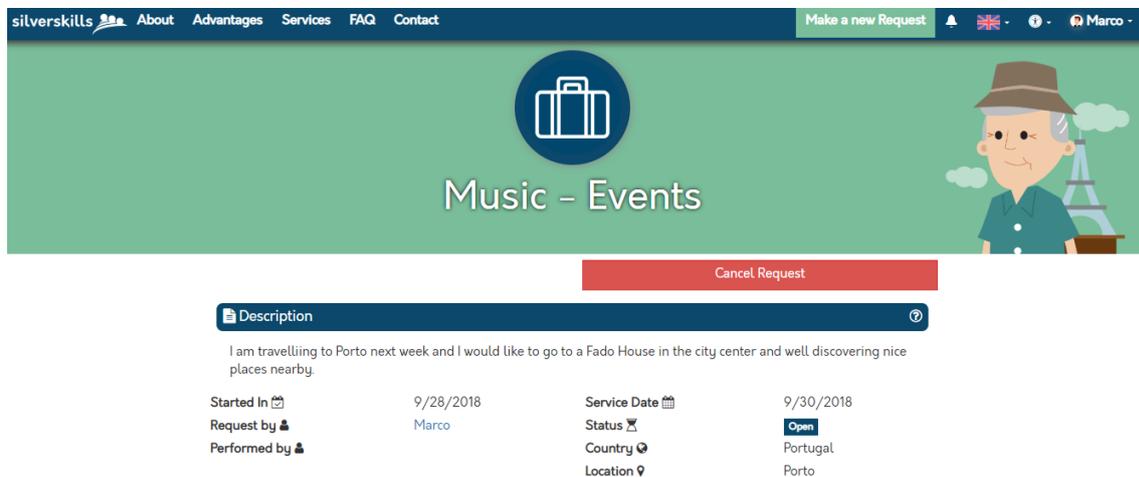
Figure 10.2 - Information of the request - version 2

The Information of the request, besides the Status and the person who made the request, also gives information about the following points:

- Performed by - Who will or had performed the service. If a user is not been selected yet (as in this example), it will be in blank.
- Started In - The date when the request was created.
- Service Date - The date to when the service is planned for.

- Country - the country where the service will be taking place.
- Location - The city where the service will happen.
- Description - the original description added by the request owner.

The platform will suggest a list of volunteers that matches most the criteria selected for this request – in this case, Tourism in the city of Porto, Portugal. A **Cancel** button is always shown in case the user would like to cancel the request.

For the second version, the interface has been updated, representing the logo of the respective service area in the center and a background image of the same area, respecting the same branding on the Service Page.
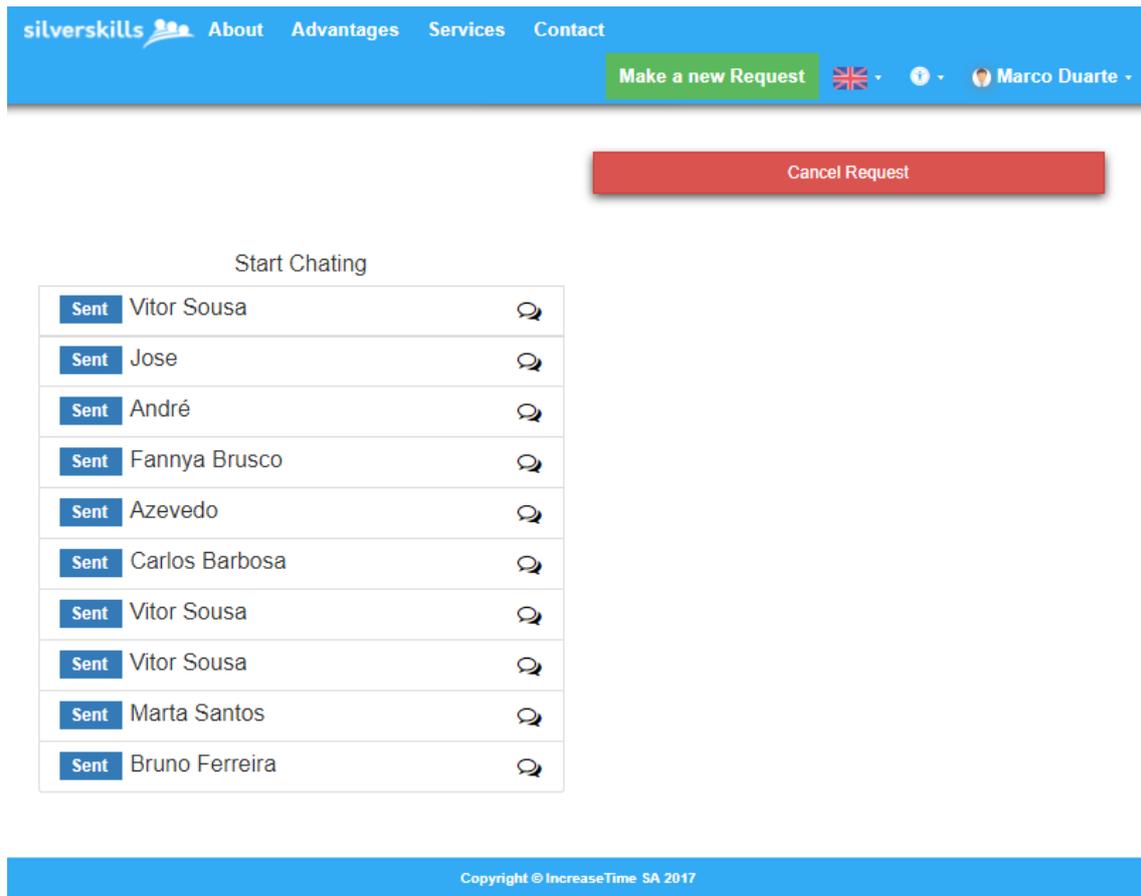
Figure 10.3 – List of Volunteers available to answer the Tourism Request in Porto.

The user can see the information about each user by clicking on the specific Name for more info and start chatting with the volunteers to make its decision. An example of a chat is presented below.
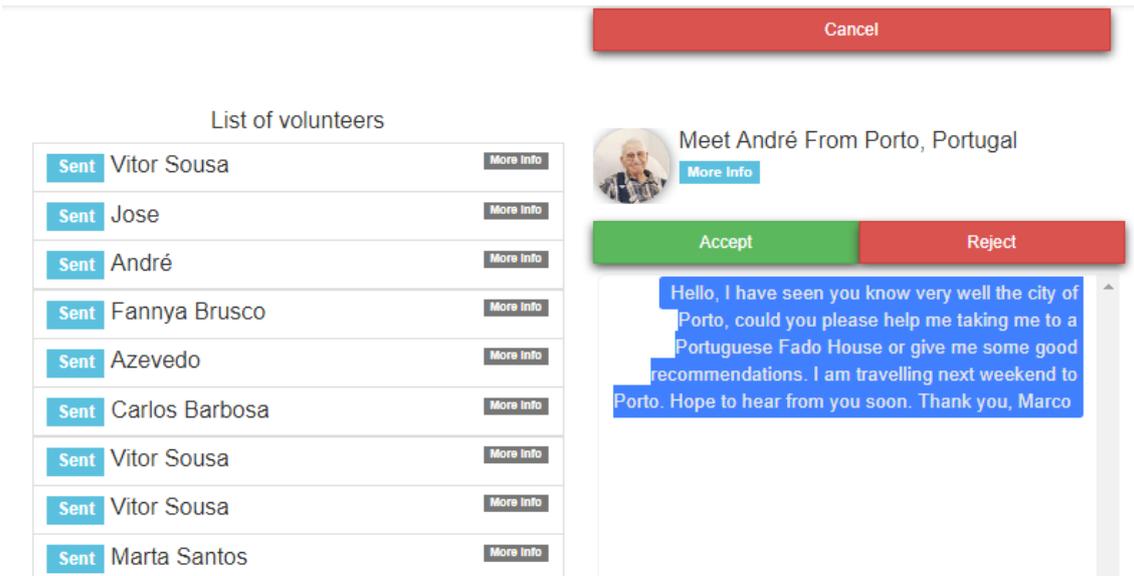
Figure 11.1 – Chatting with a Volunteer - version 1
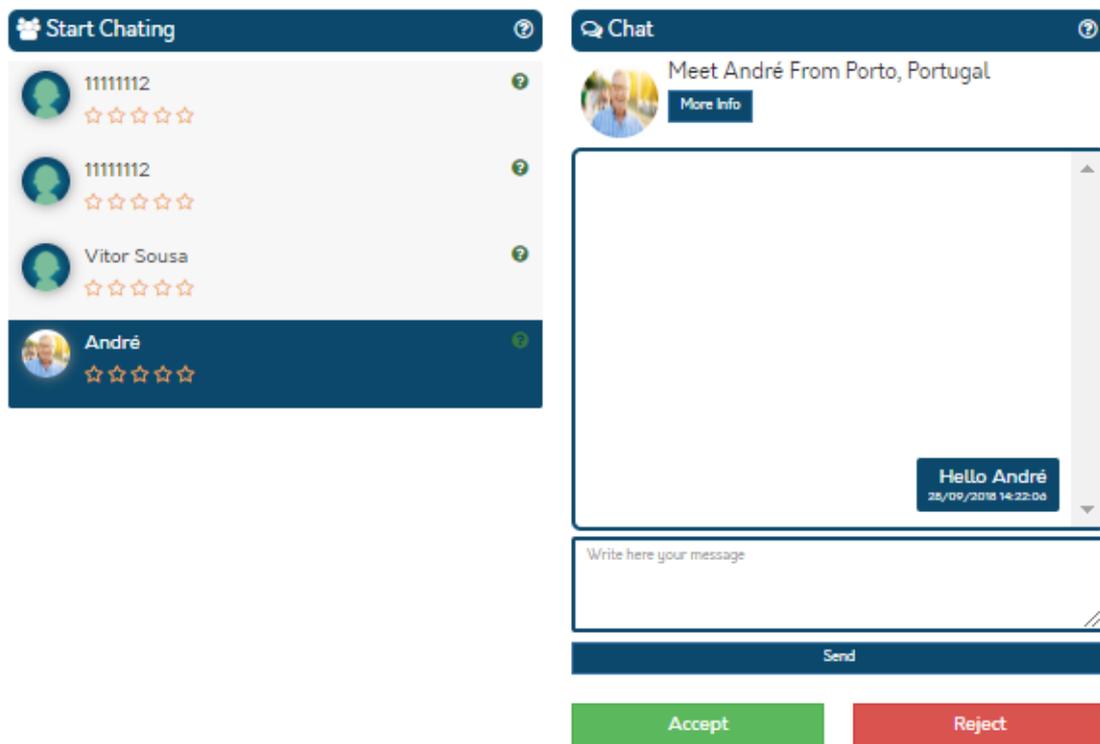
Figure 11.2 – Chatting with a Volunteer - version 2

The volunteer André can then answer the request made by the client by accessing his personal account, and looking for services in "Your Services". In Figure 8 the volunteer answers the Client Marco.
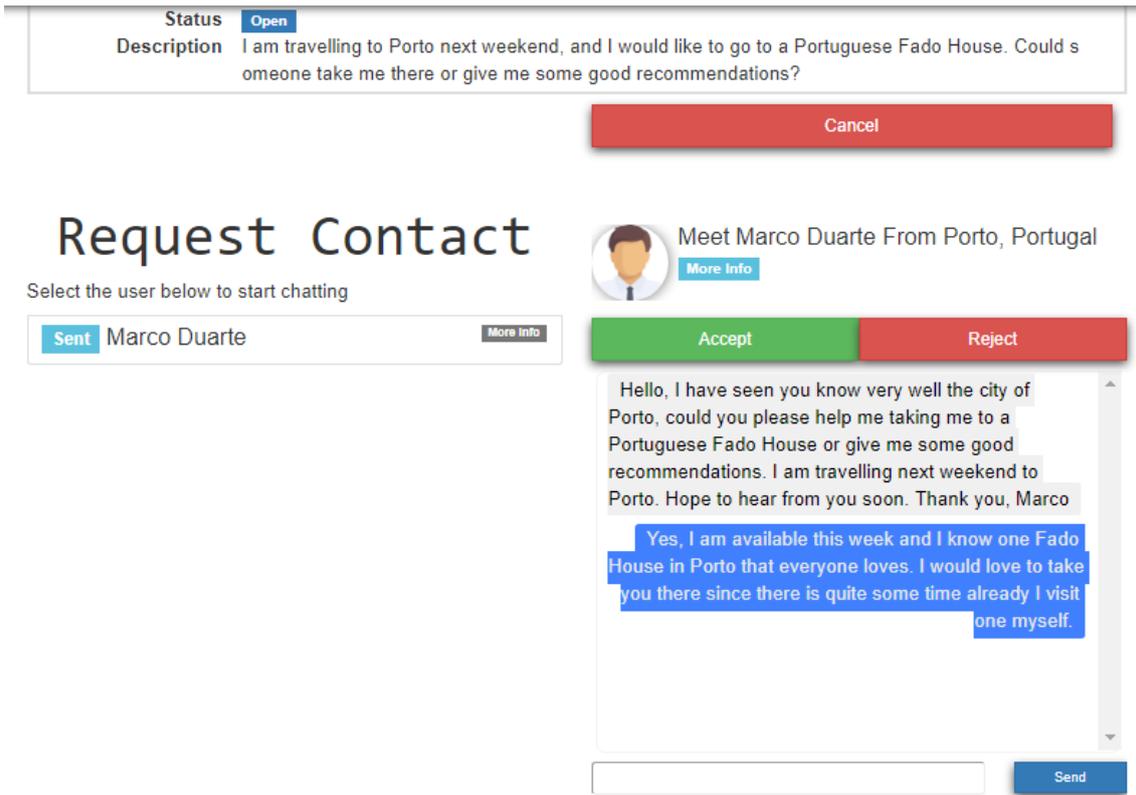
Figure 12.1 - Volunteers answers to Client

The Client could talk to someone else, but he seems he can trust in André, and he will choose him by clicking on **Accept** button which results on the message displayed at Figure 9

Figure 12.2 - Client Accepted the Volunteer.

Then, the volunteer also accepts the request from the Client as illustrated on the Figure 10.
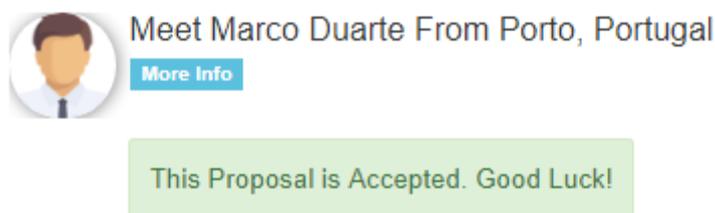
Figure 13 - The volunteer accepted the Client request

In this example the Client first made the choice, but it could be the other way around, where volunteer accepted first the request and the client would accept later. The only thing that

matters to have a valid request is that the one who accepts first needs to wait for the confirmation of the other – both of the users need to accept the other user.

When the service is completed, the volunteer can go to the "Your Services" page and select the **Complete** button informing that the service is complete and advance to the rating. The client will receive a email notification warning that the service is completed and can also proceed rating the Volunteer.

Figure 14 - Feedback of the service

The result will appear in the Rating section right after clicking on **Send** button to send the feedback.

Figure 15 - The overall rating

As displayed on the figure above it is possible to view the overall rating of the user on his/her profile, between the name and the profile photo. For this rating it will be taking into consideration all the ratings received by other users from the different past services.

Regarding the rating from specific past services, this information is shown at the end of the page on the user profile, as presented on the figure below. The user can review at any time the history of the ratings received along the time.

Figure 16 - View Rating on Profile

To monitor personal information and services, both client and volunteers should visit their account. For this, the user's can access by clicking on their names (must be logged in!), and after the option "My Account".

On the same way, the volunteer also gives feedback to the client as presented on the following Figures.

Figure 17.1 - Volunteer profile - version 1

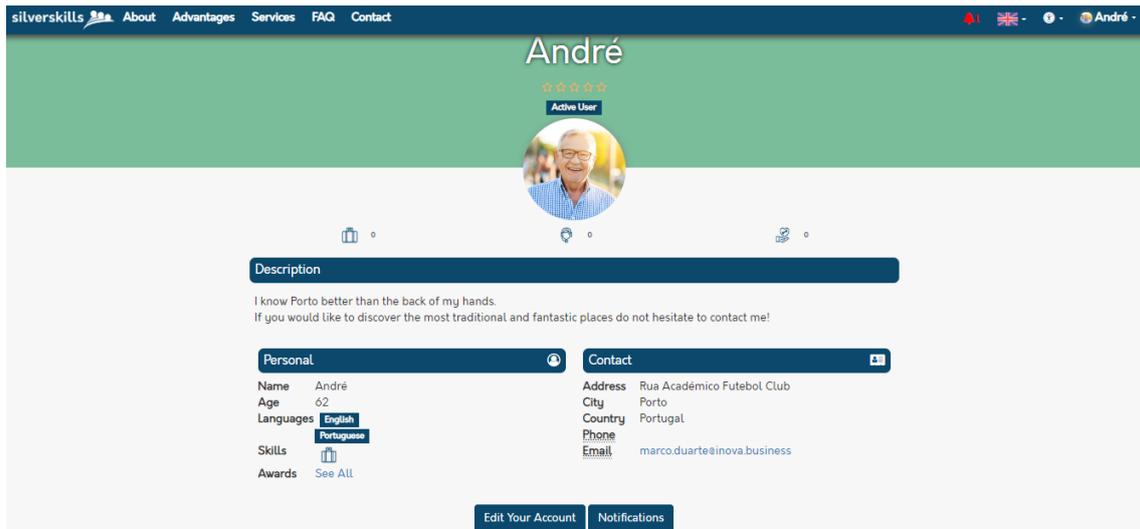Figure 17.2 - Volunteer profile - above section
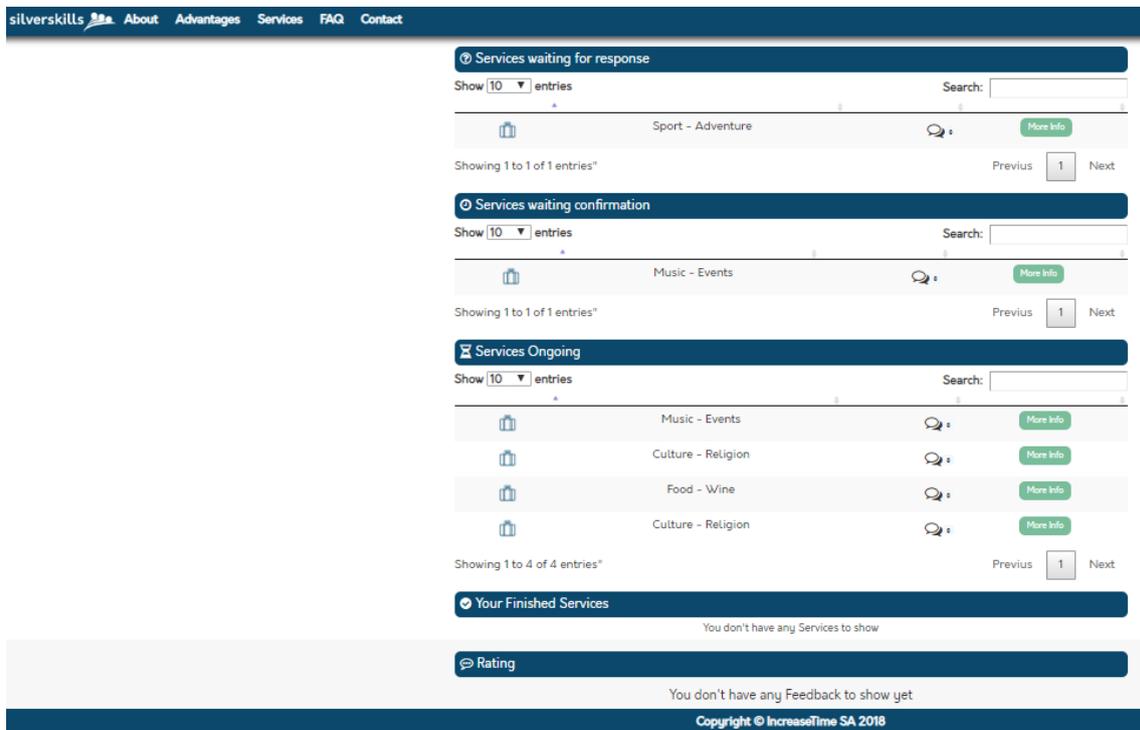
Figure 17.3 - Volunteer profile (services section) - below section

Figure 17 .4- Rate of the volunteers

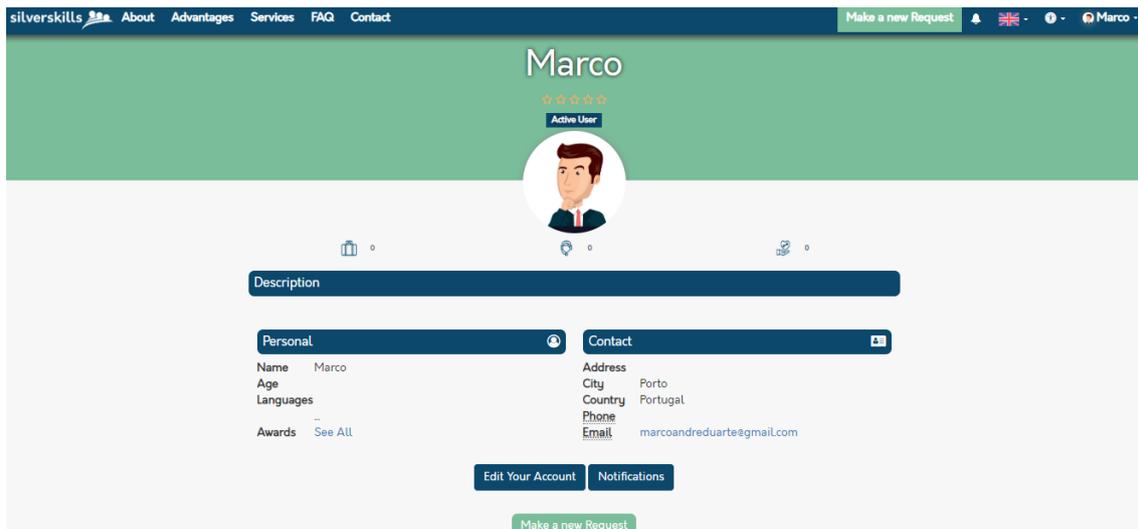Figure 18.1 - My Account - version 1

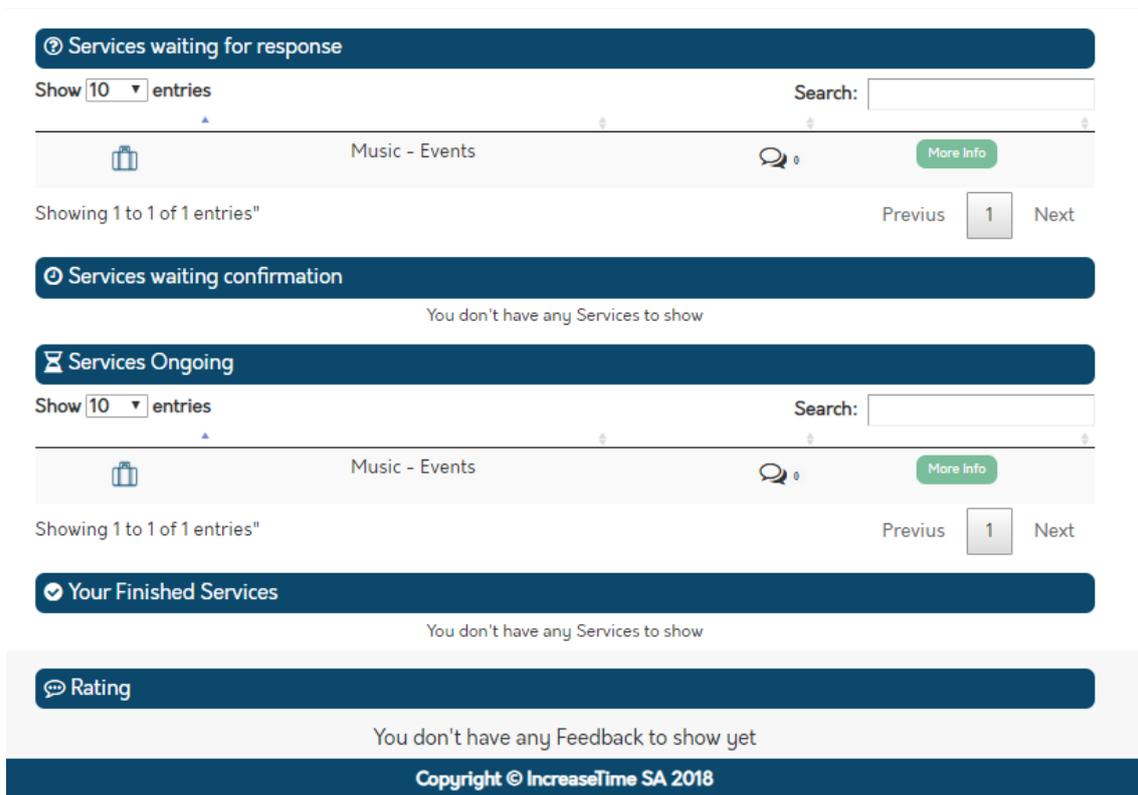Figure 18.2 - My Account - version 2

Figure 18.3 - My Account - service section

In My Account page it is possible to review and edit the personal information, including:

- Name;
- Overall Rating;
- User activeness (active/inactive)
- Photo;
- Number of services made per category (numbers below the respective icons)
- Description; and

- Information on Services waiting for response, Services waiting confirmation, Services Ongoing, and Your Finished Services.
- Rating of each service.

All the personal and contact information can be edited by clicking on the **Edit Your Account** button, which will take to a page where it is possible to edit the information initially requested on the registration (Sign Up).

The page to edit the information of the user is similar to the one used for registering, and in here the user can update his/her information.

The functions Lock Account and Delete Account are available in this page.
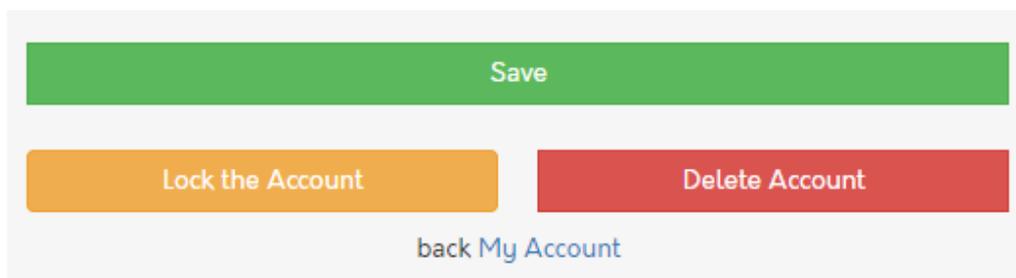
Figure 19 - Options at Editing Account

The first option, Save is to update the new information of the user to its own account.

The Lock Account option allows the user to be inactive for a certain period, informing other users that will be unavailable to be part of any activities. This option - raised by the feedback from the pilot participants - is extremely useful for volunteers for not receiving invitations during a certain period due to any particular reason are not available, and it is also effective to Clients in order to not be choosing a Volunteer from a group of only available persons. To lock the account, the system asks the user to provide its personal password to confirm the willing to block the account.

Figure 20 - Lock Account

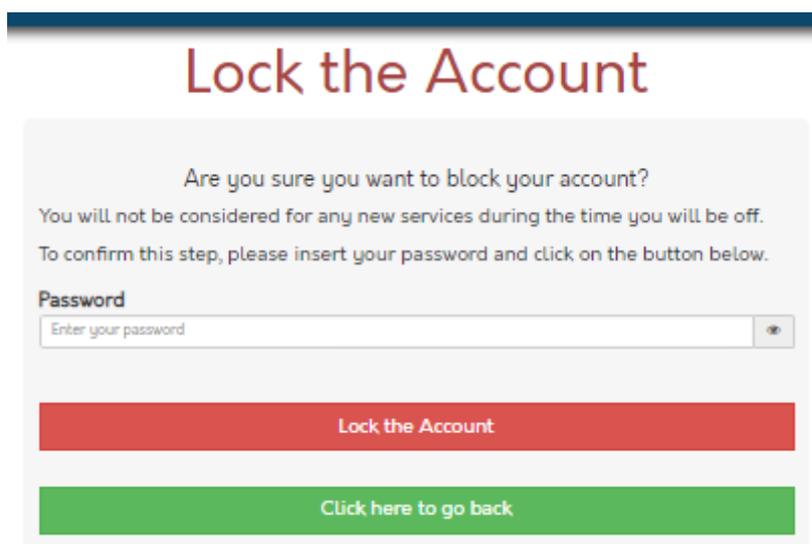In case the user will not be willing to keep using silverskills, the system offers the possibility to delete its own account. By performing this action, the user profile will be extinguished and the relationships between the services created and the respective user will be deleted, meaning that the services and feedback given will keep counting for rating, but the user which was deleted will be identified as an inexistent user.
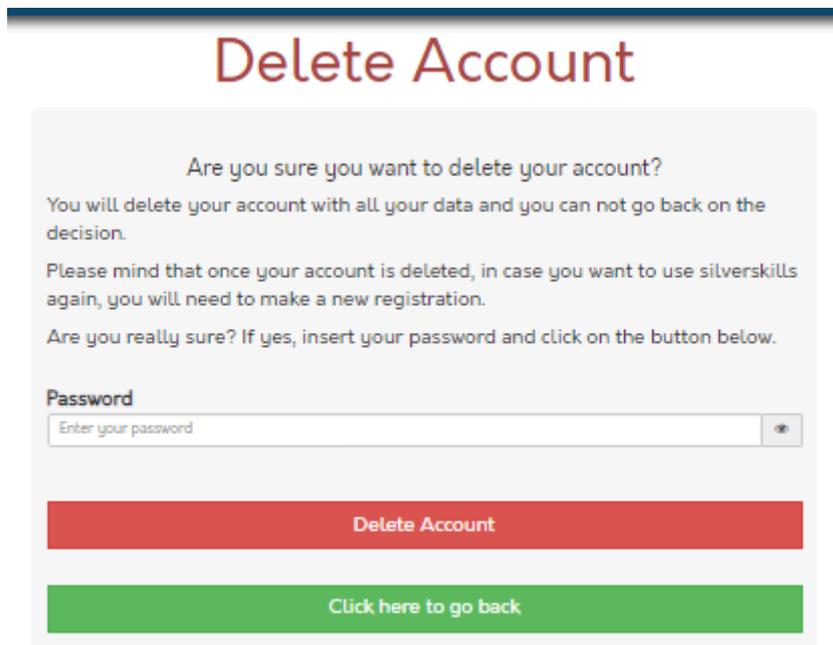

Figure 21 - Delete Account

To lock or to delete the account, the system asks the user to provide its personal password to confirm the willing to lock or delete its account.

In My Account Page it is also possible to view and manage the created requests that will be open by the clients and the services that are already concluded, on Services Waiting Confirmation, Services Ongoing and Your Finished Services.

Services waiting confirmation - This section presents the requests already created and which the user has made

Services Ongoing - The client can access a list of services that was created by him/her and manage them by clicking on **More Info** button to start or keep chatting with the volunteers until the service is completed. On the other side, the volunteer in this page can view the request that is being opened by the clients according to the skills which the volunteer subscribed for - the volunteer can interact via chat with the clients and offer his/her time for performing the requested activities.

Your Finished Services - in this page, the client can review the services that are already concluded and keep communicating with the Volunteer that performed the activity of his/her request. This section will be important for the client to review the past services and all the information associated to them. On the volunteer side, this page will show the services that are completed. All this information will be used for the summarise the number of services that were achieved by the users on the respective service categories.

At the end of My Account page it is listed the rating received by the volunteers or by the clients. The Rating section is composed by:

- Name of the user
- Rating value
- Comment on rating.

The user can quickly access the user information from the respective service performed, by clicking on the name of the user. The Name of the user has a link that will navigate directly to the user information and keep track on the user's performance.

The Gamification was a system implemented in order to achieve two goals: to motivate the users for using silverskills and keep active to perform the activities, by creating healthy competitiveness between users. The list of the awards is accessible on the Awards link at the **My Account** page.

The gamification awards are:

- Total services completed without differentiation between services, to simplify (5 bronze medal – 10 silver medal – 20 gold medal – 30 bronze cup – 40 silver cup – 50 gold cup – more than 50 more gold cup).
- Number of services completed in each area (a coin printed with the image that represents the service area along with a number of services completed 25 - bronze coin - 50 silver coin - 100 gold coin).
- High feedbacks (5 stars) received (5 feedback of 5 stars received = bronze thumb up, 10 feedback of 5 stars received received = silver thumbs up, 20 feedback of 5 stars received received = gold thumbs up, 30 feedback of 5 stars received received = bronze silverskills logo, 40 feedback of 5 stars received received = silver silverskills logo, 50 feedback of 5 stars received received = gold silverskills logo).
- Feedbacks sent(5 feedback sent = bronze pencil, 10 feedback sent = silver pencil, 20 feedback sent = gold pencil, 30 feedback sent = bronze ink pen, 40 feedback sent = silver ink pen, 50 feedback sent = gold ink pen, a type writer for the users which has sent more than 50 feedbacks).
- Registered Time in Years (a heart is printed with a number which represents the years that the user is been registered for).

The logo appears in opaque while they are not been achieved. Once they are achieved the images are changed automatically to the original colors identifying the ones that were achieved by each user.

6. PLATFORM ANALYSIS

In order to improve, it is demanded to measure first. For TSBank, we want to analyse the data through different perspectives:

- Technical (from Google Audits and WCAG 2.0);
- Quantitative (from Surveys (multiple choice questions) and Google Analytics);
- Qualitative (from Surveys (open questions) and Google Analytics).

SURVEYS – To be given to the pilots' participants at the end of their participation, so they could express their experience on using the platform and what is their vision of the platform in the market. The results from the surveys would also give recommendations to improve certain aspects revealed during the pilot activities. The surveys are described in the Deliverable 4.1.

Google Audits – tool to analyse the website to ensure that the data is trustful and actionable. For the platform to be running perfectly in a desktop computer and mobile device (tablet and smartphone) it is needed to ensure that the data has:

1. Integrity – the information is being integrated to be displayed in perfect conditions;

2. Quality – the mode on how the information is structured is clear and appealing to be more pleasant during user's navigation; and

3. Maturity – to ensure we are tracking the crucial issues to our business. Here, besides the Google Audits, the development developers will also use a tool to verify if the information presented in the platform is tailored to the end-users – WCAG 2.0.

WCAG 2.0 – a free web accessibility tool by Evaluera, will ensure the Platform content more accessible to elderly people or people with physical or cognitive limitation. The accessibility will be analysed to ensure the best practices for those particular end-users are addressed in the platform and the recommended actions will be reported and addressed.

Google Analytics – one of the most used web analytics services. This powerful tool can analyse the performance of the website, study the paths of the users through the different pages on the website and analyse the time spent on a particular page. The Google Analytics can also analyse e-commerce activities, which could be useful in the future considering the fees' payments.

The analysis of the website is made during the website launch for the pilot trials and the end of the project, which is respected to the project's last year (from September 2017 to August 2018).

SPREADSHEET – The consortium will benefit from a spreadsheet where the Bugs, Improvements and New ideas can be reported and managed during the maintenance of the Website. The file for this evaluation is "Silverskills Evaluation.xlsx", and it was used during all the pilot activities to ease and improve the platform evaluation process.

The analysis of the platform is developed by Increase Time and will be presented on the D4.1.