



SenApp - Seniors Learning with Apps

539394-LLP-1-2013-1-DE-GRUNDTVIG-GMP

Document type: D5.1 Testing Design

Title: Testing Design

Work Package: 5

Editor: ESE

Dissemination Level: Public

Status: final

Preparation Date: December 2014

Version: 1

Contributors

	Name	Organisation
1	Estelle Ziegler	ESE
2	Ariane Girault	ESE
3	Sónia Hetzner	ILI
4	Amrei Tenckhoff-Eckhardt	ILI



539394-LLP-1-2013-1-DE-GRUNDTVIG-GMPI - This project has been funded with support from the European Commission. This communication reflects the views only of the author, and the commission cannot be held responsible for any use which may be made of the information contained therein.

Change log

Name	Date	Description
Estelle Ziegler	27/10/2014	Deliver of the first draft of the document.

SenApp Partners:



University of Erlangen Nuremberg
Institute for Innovation in Learning
Sónia Hetzner
E-mail: sonia.hetzner@fim.uni-erlangen.de
URL: <http://www.fim.uni-erlangen.de>



E-SENIORS association
Monique Epstein
E-mail: epstein@free.fr
URL: <http://www.e-seniors.asso.fr/>



Jaume-I University
Senior Citizens' University
Pilar Escuder-Mollon
E-mail: mollon@uji.es
URL: <http://mayores.uji.es>



Grupul pentru Integrare Europeana
Georgeta Chirlesan
E-mail: g.chirlesan@gie.ro
URL: www.gie.ro

Table of Contents

1. About the Project SenApp	4
2. Propose of D5.1 Testing Procedure Plan	5
a. First Stage Focus Groups	5
b. Second Stage: Testing	6
c. Third Stage: Testing & Piloting.....	7

1. About the Project SenApp

The project SenApp - Seniors Learning with APPs - aims at developing a Training App for seniors in four European countries to support them effectively and individually to become competent ICT user. This project focuses on the need for e-Inclusion of senior citizens in Europe, the latter still being very much under-represented when it comes to competent and self-directed use of ICT. The digital divide still concerns, to a major extent, the older population. The primary goal of the proposed project is to develop and implement a mobile learning training Approach (eLearning environment for Tablet-PCs) in four European countries [DE, ES, FR,RO] motivating and supporting senior citizens engaging in the digital society by accessing the digital world the very popular, less expensive and easy to handle tablet-computers (IOS and Android system). The project aims at optimally supporting seniors in the process of accessing and becoming involved in the information and knowledge society, by applying the well-proven formula of using ICT as a learning medium as well as a learning content. In the project, the potentials of ICT for the older generation will be utilised by developing a non-formal, flexible and accessible App-based ICT qualification course (meaning in ICT skills and especially ICT competences) that matches the very specific needs of this highly heterogeneous target group. Furthermore, the use of eLearning as training mode will best support flexibility of content and learning schedule, which is a fundamental requirement of training offers for this large and much diversified group. To this end, the project will develop a) a mobile learning environment dedicated to Tablet-PCs, i.e. a learning and management system adapted to the requirements of seniors and mobile learning and offered to the seniors as a training App; b) develop 25 learning units conceived and tailored to the learning needs of seniors in four European countries. In order to cope with the diverse impairments and disabilities of seniors, special focus will be given to multimedia-enriched didactic elements (demonstrations, audio-visual elements, interactive exercises). The segmentation of the content will be adapted to the seniors' learning pace and attention span. The modular course concept makes it possible to choose and aggregate a variable number of learning units into one course in the training App environment, to respect prior knowledge, demands and preferences. The training course will be developed and offered on a fully adapted open source learning and management system that obeys the rules and principles of accessibility. The open source approach will be a key aspect for the long-term sustainability of the project.

In this way, the SenApp project wants to contribute in an innovative way to the e-Inclusion of seniors. The effective and flexible App-Training Approach will be designed and developed in a way that makes it possible to localise the training system to every country and language interested in using it. Furthermore for a long sustainability of the project outcomes the learning contents will be divided into two main development areas: the ICT concepts, which are timeless and will last over a long time and the application of concepts for a certain system, which have a limited actuality time, but should be easy to update. In this way it will be

easy to readapt the contents to new market developments in an economic way. Authoring guidelines and an implementation eBook will guarantee that every interested organisation can take over the approach and adapt it to specific requirements. The project expects to highly contribute towards the digital society and the Europe 2020 goals.

2. Propose of D5.1 Testing Procedure Plan

We propose to do the tests in 3 phases as follow:

- a) First stage: focus groups
- b) Second stage: testing
- c) Third stage: testing & piloting

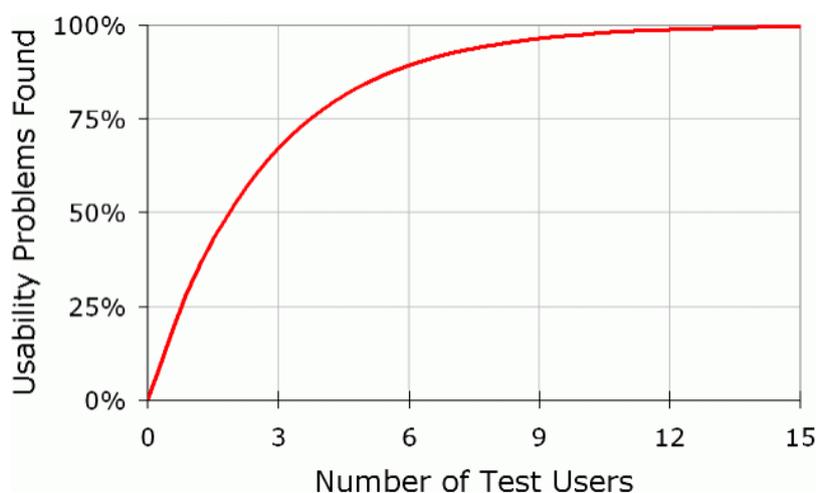
a. First Stage Focus Groups

The goal of this phase is to collect feedback of users regarding first mock-ups of the app. All what we need to initiate this phase is a few sketches. This first step allows us to find the first ergonomic issues.

The idea is to gather 5 users. First, we welcome them. We have to have a presentation of the project ready. It is important that the participants understand what their role is and that they are helping us to develop an adapted tool. The main principle is to let seniors talk freely about their thoughts, feelings, ideas and observations about the SenApp application. A moderator facilitates the focus group by framing the discussion, which means presenting, demonstrating or showing them the first steps of the project. The participants are encouraged to freely give their honest opinions about the product, including suggestions to make it better. During the focus group, the facilitator, whose role is to support the moderator, needed to be invisible and to take notes about users' reactions. If he/she feels that an intervention from him/her is needed because of too much digression or because extra information is needed, he/she was able to ask a question or make a statement in order to make the participants react.

Why 5 users? According to Jakob Nielsen, "the best results come from testing no more than 5 users and running as many small tests as you can afford"[1].

¹ <http://www.nngroup.com/articles/why-you-only-need-to-test-with-5-users/>



It is important that all partners have the same presentation of the project in order to have comparable feedback from users. E-Seniors will provide a presentation of the project, in English. We will then collect feedback from the partners in order to develop a version suitable for each partner. Each partner will, then, have to translate the presentation in its own language.

Participants to the focus group will have to sign an informed consent especially since focus groups have to be audio recorded. Seniors need to be aware of it; it is important to specify that audio recording will only be used for a research purpose. E-Seniors will provide a template of it also. An attendance sheet will also be necessary.

What about compensation? A financial compensation is not necessary. Partners have to provide coffee and snacks to create a friendly atmosphere where participants feel free to express themselves.

Feedback need to be faithfully transcribed to be useful.

The recruitment will try to involve partner's members. Partners have, therefore, to use their own network of seniors. Each partner is free to choose its target group according to the users ICT level.

b. Second Stage: Testing

This phase will occur in Germany and Spain between February and March 2015. A group of 10 users will test the first 10 learning units and the learning environment in both countries.

Outcomes of this phase will be used to re-define and update the training concept, material and technology.

In order to get the best profit (feedback, suggestions for improvements) of this first testing phase a real course is simulated, including formative evaluation of:

- learning environment, from a technical, functional and user friendliness perspective
- 10 basic learning units (see curriculum)
- Tutorial support

ILI will use its goods connections to seniors' organisations to compile a representative test group and to engage an experienced tutor for their support.

Seniors testers will evaluate the course and its specific aspects by giving quantitative and qualitative feedback of their pre-experiences, experiences during the exercise and learning success using online and paper-based questionnaires with a five items Likert scale, open interviews and analysis of comments and questions in the discussion fora of the learning environment or questions to the tutor (online or f2f). Additionally participants will be asked to describe their learning activities at home using a learning diary describing occurring frustrating or motivation aspects and emotions. Due to the small number of participants quantitative measures will be analysed as descriptive data set. Qualitative analysis of given answers will be done by clustering and counting equal answers to main topics in order to identify trends or general value of each device concerning difficulty in use, easiness of use, confidence of use and motivation and suggestions for improvements, missings or failures.

c. Third Stage: Testing & Piloting

The last testing phase will happen from mid-April until end of June 2015. The four partners are involved in this phase therefore four groups (one in each country) of 15 users will test the product. This phase will help the consortium to find out the last improvement possible on the SenApp product.

The 15 users won't have to test the product in the same time. For some users, especially level 0, a training session will have to be organized to help them to deal with the device (tablet).

A harmonized procedure will have to be settled in consultation with the whole consortium.