PaeLife Newsletter

Project description

PaeLife is a European Ambient Assisted Living Joint Programme (AAL JP) Project with a consortium of eight partners from Portugal, France, Hungary and Poland. Our Project focuses on individuals who are recently retired and who are used to some level of technology usage and who want to keep themselves active, productive and socially engaged.

PaeLife is our proposal for a Personal Life Assistant, a new solution of Human-Computer Interaction, making it easier and more natural for elderly to interact with computers and technology.

Partners

- Microsoft Corporation (Portugal)

- Instituto de Engenharia de Sistemas e Computadores, Investigação e Desenvolvimento em Lisboa (Portugal)

- Budapest University of Technology and Economics (University, Hungary)

- The Bay Zoltán Nonprofit Ltd. (R&D Institute, Hungary)

- Knowledge Society Association (Secondary End User, Poland)

- Genigraph (Company, France)

- Troyes University of Technology (University, France)

- Universidade de Aveiro (University, Portugal)

Lisbon Consortium meeting (7th-8th of July)

The sixth Paelife Consortium meeting was held on the 7th and 8th of July 2014. This meeting took place in the beautiful city of Lisbon, Portugal (organized by Microsoft) and was attended by all Project Partners. In this meeting, the partners discussed the current Project status and the final stage of this collaborative initiative. One of the most relevant topics was the discussion of the PaeLife Pilots that are going to take place in Poland, Hungary, France and Portugal.

The interface of the contacts' activity

General status of the development

With the main modules features of AALFred ready. The development team is now focusing in improving the multimodality in order to make the application ready for the first field trials. For Automatic Speech Recognition: The Interaction Manager was improved to support a new grammar format that improves the speech recognition and allows dynamic recognition (useful for recognizing the names of the user contacts, for instance). The full grammar for AALFred was also reviewed and refined to enable the total control of the app using speech. Furthermore, the new version of the Interaction Manager also provides automatic translation of the grammar for all the languages of the project. There is also an option for a native speaker to review and correct the automatic translation to improve even further the grammar in each specific language.

For Text to Speech Services: The first elderly Text-to-Speech voices were produced and integrated into AALFred for Portuguese and Hungarian. To take the most advantage of this, a new feature called Help Assistant was introduced in the latest version. This feature will give audio tips using the brand new TTS voices. These tips are meant to instruct and guide the user in using AALFred. The tips are also dynamic and they change according to the experience of the user to avoid becoming annoying. Nevertheless, the user can always ask AALFred for more detailed help on how to do a specific task.

For the gestures: The gestures modality was also improved and integrated everywhere in the app to allow swipes for navigation and a special cursor that can be controlled using the users hand movements.

As a bonus to all the multimodality support, some new features and improvements were also introduced:

- Contact Activity Aware that will show which of the user contacts have been more active lately;

- Elderly keyboard improved and with better focus feature;

- New categories added to Find My module;

- Improved resolution for smaller screens.

Preliminary AALFred user tests in Hungary

Following the user-centred approach adopted by PaeLife, the partners involved in the evaluation tasks have been making several tests before the field trials with senior users during the last 3 months. After the gesture modality, user tests focused on the release of the second version of the AALFred application. In these trials users have had the opportunity to discover the brand new AALFred and test its modules and services. After the tests in France

4 users were also involved in the AALFred user tests in Hungary. Like the tests made at UTT, the tests in BZN focused both on the usefulness of the services and the usability of the interface. All of these 4 users had already been involved in the gesture modality tests. They were very pleased to discover how AALFred works after the last improvements. As 3 of the users will also participate in the field trials it was a good practise, too. Following these user tests, a set of development-oriented recommendations have been produced (for example the interface for making an appointment).

Field trials – generally

Field trials started in July and will take 3 months in Poland and Hungary and 1 month in France and Portugal. These tests will involve 2 elderlies per a country per month. Before starting the tests the PaeLife project is introduced and an informed consent form is signed by all participants. For the test a set of a Samsung tablet, a Kinect and a TV will be given to the elderlies and set-up in their homes. The elderly will use AALFred as part of their daily life and report (in a printed media diary) all their activities, feedbacks, and bugs of the AALFred application. Members of SSW, BZN, MSFT and UTT will help, keep contact and meet these older adults regularly to discuss about their experiences in using AALFred and to collect all the feedback which will be delivered to the developers for further improvements of the application. Another point of focus of the development team will be the multimodal interaction. The modalities will also be improved based on the user's feedback and restructured to offer a more homogenous and coherent way of interaction through the whole app. For example, it will be much more easy and natural for the user if the speech and gesture interaction is coherent with the ones used when managing the contacts.

First month's feedbacks of the field trials in Poland and in Hungary

July was the first month of the field trials and the available second version of the AALFred was tested without speech and gesture modality. Tests were done in Hungary and Poland; participants used only a Samsung tablet. The first feedback was very positive: they enjoyed the new AALFred interface and found it very simple to use although some errors and bugs were still present. Even so elderlies could immediately see the easy to use, user-centred property of AALFred. The users in July were ladies in Hungary (Györgyi (72), Andrea (58)) and also in Poland (Elzbieta (65), Teresa (64)). They recommended some useful modifications for some of the features and also suggested changes in the interface. Bugs were also reported in the media diary. All the gathered feedback was then transferred to the developers. Some issues

could be solved and some suggestions integrated in the third version of AALFred, which already works with speech and gesture commands. This new version will be used in August (the second month of the field trials).

Speech Data Collection

The Speech Data Collection Campaign, which involves the collection of speech provided by people using an online platform tool, is now ongoing in France, Hungary and Poland. We are confident of reaching the aim of 100 hours of pure speech (speech without pause) over the next few months of the project.

The Speech Data Collection Campaign, which involves the collection of speech provided by people using an online platform tool, is already finished in Poland and still ongoing in France and Hungary. Nevertheless, we are confident of reaching our initial goal in France and Hungary over the next few months of the project.

The Speech Data Collection is essential for the development of the PaeLife final product, where speech will form an important part of the multimodal interface. Therefore, we are always looking for people who would be willing to contribute and be a part of this project.

The requirements for participation are to be over 60 years old, to be born in one of the countries stated below, and to have good reading skills.

If you are interested in participating in this project, or know anyone who would like to donate their voice and who meets the criteria above, please contact the main coordinator of the following countries:

- **Hungary:** Tibor Fegyó - fegyo@tmit.bme.hu

- **Poland:** Artur Kolesiński - artur.kolesinski@ssw.org.pl

- **France:** David Hewson - david.hewson@utt.fr

These coordinators will be able to give you further information and guide you through the process. As we require many elderly people to provide their voices, it would be great and immensely appreciated if we could have you on board and count with your participation!

After the data collection recordings are complete we will start the PaeLife data validation procedures to assure the quality of the recorded data. This will involve a data transcription and annotation process based on clear guidelines that were defined taking into account the PaeLife Project high quality standards.

Further information

In order to be informed regarding the PaeLife community and its activities online, please join us on:

- Twitter

- Linked In

- Slideshare

- Blog