



D3.4 Starter Version

DAPAS - Deploying AAL Packages at Scale

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Abstract:

This deliverable aims to describe the Starter Version system of the DAPAS solution. It contains content about some details like the aim of the version, the provided functions and equipment, as well as information about the installation.

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0.1. Versions and Changes

| <i>Version</i> | <i>Date</i> | <i>Changes</i> | <i>Name</i> | <i>Organisation</i> |
|----------------|-------------|----------------------------|-----------------|---------------------|
| 0.1 | 21.01.2020 | Generation of the document | Simone Stückler | EXT |
| 0.2 | 17.02.2020 | Initial content | Aritz Badiola | DEU |
| 0.3 | 27.02.2020 | Added content | Salva Gilpérez | IDE |
| 0.4 | 05.03.2020 | Included feedback | Aritz Badiola | DEU |
| 0.5 | 12.03.2020 | Finalized document | Aritz Badiola | DEU |

0.2. List of Authors

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| IDE - Ideable Solutions | Salva Gilpérez |
| EXT - exthex GmbH | Sabrina Stani |

0.3. Abbreviations

| <i>Abbreviation</i> | <i>Descriptions</i> |
|---------------------|----------------------------|
| AAL | Active and Assisted Living |
| | |
| | |

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1. ABOUT THIS DOCUMENT

1.1. Role of the deliverable

This deliverable aims to describe the results of the Starter Version of the DAPAS solution. It contains content about some details like the aim of the version, the provided functions and equipment as well as information about the installation. The different parts of the project will be presented individually, in order to have a complete and deeper vision of the whole system.

1.2. Relationship to other DAPAS deliverables

The deliverable is related to the following DAPAS deliverables:

| Deliverable | RELATION |
|--|---|
| D2.1 User Requirements | This deliverable describes the user requirements and services for the DAPAS solution |
| D2.2 System Specification | This deliverable describes the system specification of DAPAS |
| D2.3 Rollout and Support Specification | The Rollout and Support Specification includes information related to the living environments of the clients and the plug and play capabilities of the packages |
| D3.3 Pre-Version | This deliverable describes the Pre Version of the DAPAS solution and is therefore related to this deliverable. |
| D3.5 Value-Version | This deliverable describes the Value Version of the DAPAS solution and is therefore related to this deliverable. |
| D3.6 Premium-Version | This deliverable describes the Premium Version of the DAPAS solution and is therefore related to this deliverable. |

Table 1: Relationship to other DAPAS deliverables

2. Starter Version

2.1. Objectives

The aim of the Starter Version was to release the first version of the DAPAS solution, including the main applications and functionalities developed and integrated after the Pre-Version, taking into account the specified technical and functional requirements defined in “D2.1 User Requirements and Services”, “D2.2 System Specification” and “D2.3 Rollout and Support Specification”.

2.2. Installation

In relation to the installation of the system, the most important aspect to take into account are the technical requirements.

2.2.1. Hardware requirements

| Hardware | Use |
|----------|--------------------------------------|
| Internet | To provide connection to the backend |
| Tablet | To display the package to the client |

Table 2 : Hardware for Starter Version

2.2.2. Living requirements

| Component | Requirement |
|-----------|--|
| Internet | 4G mobile internet available in all rooms or will be provided, Power outlet for router |
| Tablet | Power outlet for tablet charger |

Table 3: Living requirements for Starter version

The installation phase of the Starter Version started with 1st of January 2020. Since the Starter Version only includes the tablet as well as, in some cases, the router, the installation process is very simple. More information can be found in “D3.3 Deployment and Support Concept”. In addition, we have created a detailed Installation and Support Manual for the end user organizations. The tablets are prepared as much as possible in the pre-installation phase which makes sure that the Plug-and-Play Concept at the homes of the participants is guaranteed. More information about the actual installation process can be found in “D4.2 Installation Report”.

We have also created a user manual for the participants itself. It consists of two parts, general information about the usage with the tablet as well as a specific part with information about the functions. The user manual is kept as simple as possible and is only an add-on because the DAPAS Starter Version is mostly self-explanatory in the usage.

The following figures show some pictures of the installation process with the participants.



Picture 1 & 2 : Installation Starter Version & testing with users

2.4. Final product functions

The DAPAS Starter Version is developed for mobile devices. It is aimed to be used by DAPAS users at home on tablets with the android operative system. The tablet includes the DAPAS solution with several components. The DAPAS Launcher, the Serious Game component with the Concentration Game as well as the Kwido component for communication functions and receiving reminders on the tablet. In the backend several different components of different partners are integrated. More information about the technical system overview can be found in “D2.2 System Specification”.

The DAPAS Starter Version provides several features summarized in the following table:

| Feature |
|---|
| Wellbeing/activity status based on manual setting and communication |
| Wellbeing/activity status based on app/service usage |
| Video call |
| Send messages |
| Calendar |
| Serious games - Concentration game |
| Medication reminder |

Table 4: Features of the Starter Version

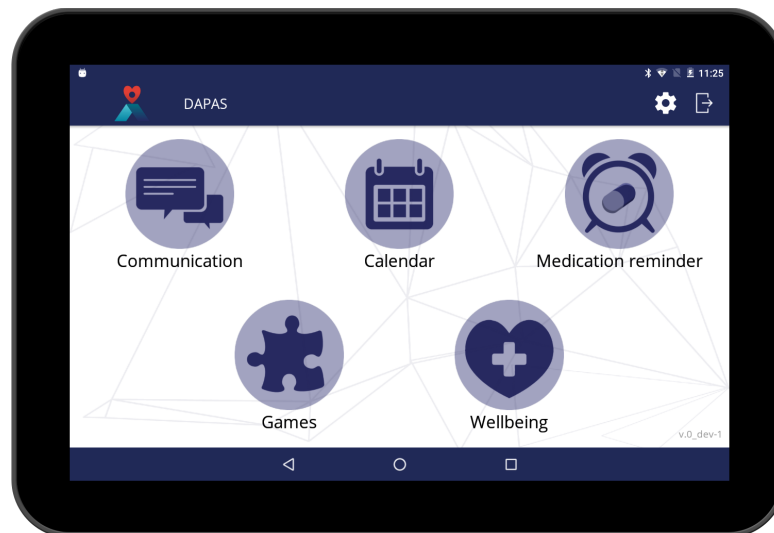
A deeper explanation about the launcher, as well as the different functions, is provided in the next subsections, in order to give a clearer idea about what is provided in the package of the Starter Version and how the different parts look like and work.

2.4.1. DAPAS Launcher

After login into the DAPAS Launcher the user will have access to all features through the Launcher. It is specifically designed to help the user to access all the DAPAS features from one single device.



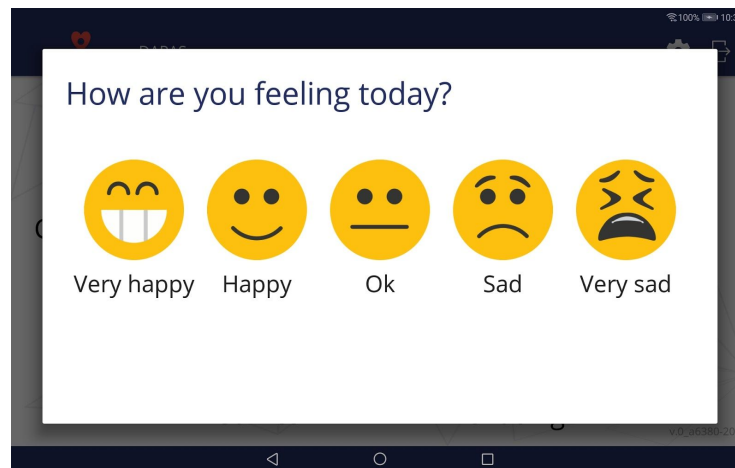
Picture 3: DAPAS launcher login



Picture 4: DAPAS home screen

2.4.2. Wellbeing/activity status based on manual setting and communication

This feature allows the user to set their wellbeing status. Based on this information the users will receive suggestions on what to do if they are not feeling good for a period of time.



Picture 5: User's feeling selection

2.4.3. Wellbeing/activity status based on app/service usage

To measure and analyse the activity status of the participants we are tracking information about their usage of specific functions on the tablet. These tracking files are analysed and anonymized at the evaluation period of this version to identify which functions are used the most and which not.

2.4.4. Video call

The video call system, located within the communication module, offer the following possibilities:

- Receive video call from the DAPAS team of healthcare professionals or caregivers
- Establish a video call to the DAPAS team of healthcare professionals (previously registered as Contacts at the DAPAS system) or caregivers



Picture 6: Functions inside Communication section

2.4.5. Messages

Also located within the communication module, this feature allows the interaction through messages between the DAPAS user and the DAPAS team of healthcare professionals or caregivers, with the possibility to attach also images to the messages.

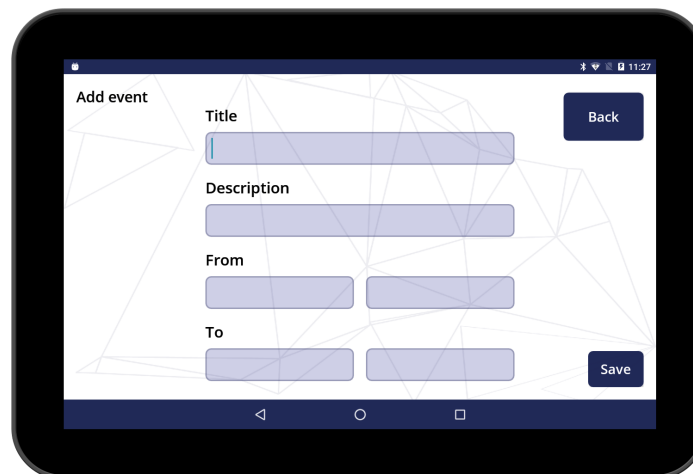
2.4.6. Calendar

The DAPAS user calendar shows all the information considered important for the DAPAS user to remember such as medication, health controls scheduled, or home visits from the DAPAS team.



Picture 7: Functions inside Calendar section

Calendar events can be created by the caregivers at the platform or by DAPAS users directly from their home device.



Picture 8: Add event function

2.4.7. Serious games - Concentration game

What is a “Concentration game”?

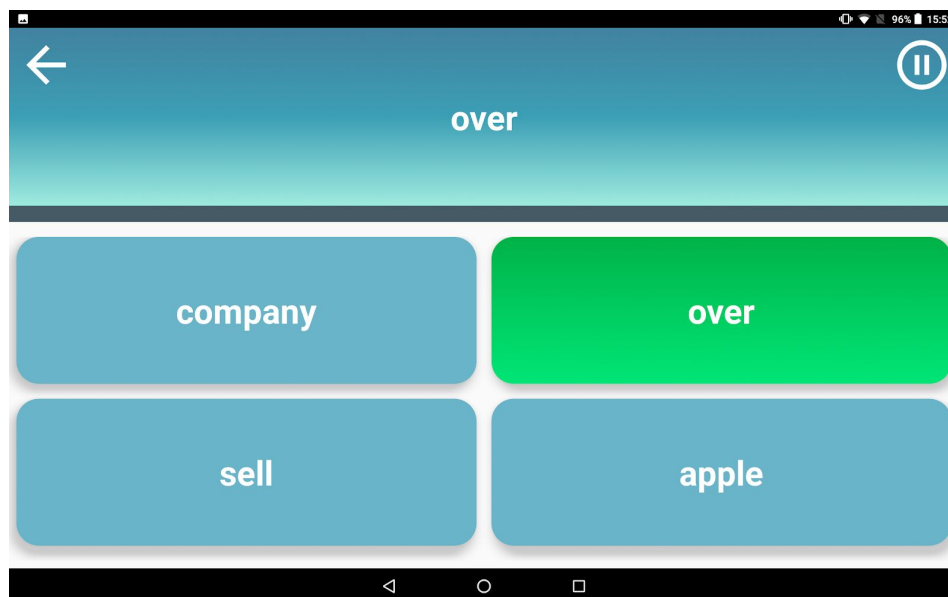
In this version of the project, one serious game is included with the name “Concentration Game”. This game consists in selecting the word that appears in a group of words that matches the word that is indicated on the top of the screen.

Objective

The objective of this game is the cognitive training of the player, specifically working the mental speed related with word identification and matching. The game provides different levels of difficulty, so the user will be able to start from basic training to a more advanced one, increasing her/his mental speed and ability to read faster.

How it works

As said before, the game itself consists in matching a specified word with the corresponding one inside a group of different words. The user will have a specified time to select the proper word from the list of words, so, if the user selects the proper word in the given time he/she will score 1 point, but if the time is over the game will automatically give 0 score to that word and it will jump to the next one. 10 words are played per game, being possible to get a maximum of 10 points as score. It is more easily understandable looking at the next figure.



Picture 9 : Concentration game

There are 3 levels of difficulty for playing the game, from easier to harder, and the user can select the level of difficulty depending on what he/she feels fits better her/him.

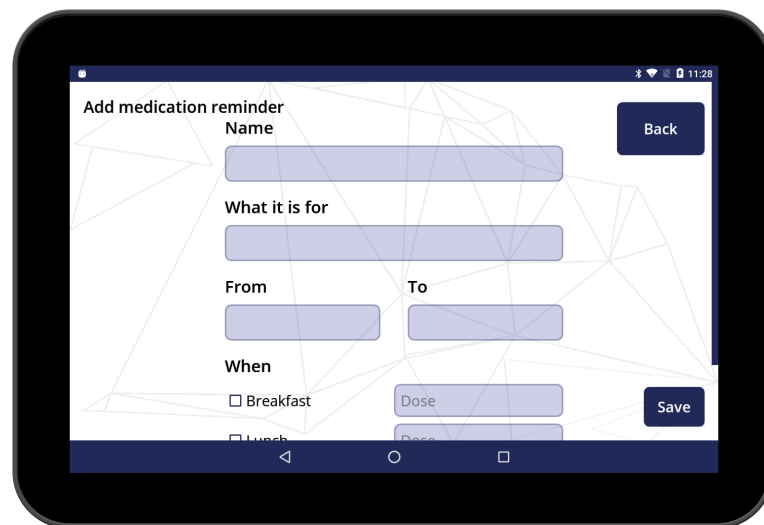
2.4.8. Medication reminder

Medication reminders are important for the DAPAS user to follow their medical treatment as prescribed.

This feature allows the DAPAS user to visualize their treatment and also to add new medications and edit them. Reminders can also be set by the connected caregivers.



Picture 10: Functions of Medication reminder section



Picture 11: Add medication reminder function

2.5. Feedback

During the usage of the DAPAS Starter Version we are continuously gathering feedback from the users. We have introduced a support process to handle upcoming bugs or requested features. The participants are able

to inform about those bugs and requests every time. Bugs are corrected immediately and as quickly as possible. Feature requests are collected and analyzed and then decided if they will be implemented. Those changes will be effective after the version changes. Bugs are included into a ticket system. Feature requests are collected in an excel sheet and then analyzed and decided if they will be implemented for the next version change. With that process we are getting constant feedback and are able to improve our system continuously.

2.6. Conclusion

The Starter Version of DAPAS has been successfully released, including the development, adaptation and integration of the different functions of the product. For this task, the specified user requirements and system specifications have been taken into account, applying them in the development and integration part. The product has been successfully installed, so the users will be able to test the different functions of DAPAS, including the video call, message sending, wellbeing/activity status, calendar, concentration game and medication reminder.