Purpose From its earliest stages, Alzheimer's disease (AD) causes memory problems leading to disruptions on everyday functioning. To improve autonomy, we designed an electronic organizer to help elders organize their daily life. Unlike pen-and-paper organizers, the electronic organizer remains compact and presents contextual features such as a ringer to remind people of upcoming activities. However, the commercial electronic organizers do not meet the needs of older adults with AD. The interfaces are too complicated and the available functionalities are beyond their needs and abilities. An electronic organizer, MOBUS, was developed at the DOMUS laboratory of the Université de Sherbrooke. It is dedicated to people with cognitive disorders, where interfaces remain simple and functionalities are designed to foster autonomy. MOBUS has been tested with adults with executive function disorders, schizophrenia or head trauma[1]. They were able to learn how to use the device and their social interactions improved. In order to meet the specific needs of older adults with AD, we developed a modified version of the MOBUS organizer called AP@lz. We present the development process held between the clinician and the software developers. **Method** The electronic organizer is developed on a cell phone equipped with GPS. To fulfill the clinician's requirements, a user-centered approach was used where a Lo-Fi prototype was presented at the beginning[2,3]. Many meetings (12 in all) were held between the DOMUS team and the clinician to refine the final product's functionalities and interfaces. **Results & Discussion** Five functionalities were developed in AP@lz (*Figure 1*): (i) *Appointments* contain a list of personalized activities, where the person selects an activity, date and time and indicates if he/she wants to be reminded 1 hour or 24 hours in advance; (ii) *Personal* contains the person's name, address and phone number; it also includes a "photos" option where recent or older photos are displayed like a slideshow; (iii) *Medical* contains the person's medical history and list of medications; (iv) *Contacts* displays a list of people to call. To reach a contact, the user has just to select the name; and finally (v) *Notepad* provides a way to enter various information such as a grocery list. These functionalities were designed to be easy and pleasant to use by people not familiar with the latest technology. We focus on the interdisciplinary process to ensure the final product is useful and manageable by people with AD. We plan to test AP@lz with two groups of older adults, one without cognitive impairments and one with AD.

References

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3. Rettig M. Communications of the ACM 1994;37(4):21-27

Figure 1. AP@lz Home page