ABSTRACT:

MOBILE ASSISTANT FOR THE BLIND

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Using the computer is a hard task for the blind and visually impaired users. Screen reader programs attempt to address this problem, but they are, too, difficult to use for many. The goal of developing the Mobile Assistant (MOST) is to help the blind to perform their everyday work in the most simple way (e.g.: talking book reading, listening to music, send and receive e-mails, sms, make phone calls) through a non-graphical, menu-driven system specifically developed for blind users.

The first prototype version of the Mobile Assistant showed that we were able to produce a working, usable system that proved the success of our approach but the system did not reach production quality. In the MOST2 GVOP-AKF project, we will produce an improved, reliable system, which will be ready to be used by blind users on their own, without assistance. In order to achieve this goal it is crucial to make the handheld device (PDA) and the operating system messages audible (e.g.: announce the low batter status or the changes of the availability of the network (WIFI) connection, etc.). To ease further development of the system, it is also necessary to make the framework extensible for external programs, provide support for handling the internal or externally bluetooth connected mobile phone, playing and recording audio (mp3), and handling (receiving and sending) SMS messages. The project also aims to develop a high-quality Hungarian text-to-speech engine, provide access to the collection of the Hungarian Electronic Library from the framework, and access various Internet services such as on-line audio, news reading, etc.

In our talk, we will describe the goals of the project in detail, show the achieved results to date, discuss the developed software framework and our plans of improvements, as well as present the feedback from the first blind users of the Mobile Assistant.