Agent & the Magic Lamp

This idea is based on the popular story of Aladdin and the Magic Lamp. In that story, a genie appeared whenever Aladdin rubbed the lamp. In our lamp, we expect that rubbing the lamp would invoke user's agents. Magic helped Aladdin to invoke genie and we expect technology to help modern users to interact with the software agents (modern day genie?).

Interaction

- The user can start the interaction by tapping the touch pad. Also, tapping can be used to choose between different application agents. Agents can be associated with different applications such as email, information filtering, and stock trading, etc.
- Once an application is selected, tapping can be used to choose specific attributes.
- The user can increase the values of the preferences by rubbing upwards and decrease the values by rubbing downwards.

The lamp is not meant to replace the traditional desktop interface, but to augment it. In addition, we expect that the lamp would be more appropriate for controlling and monitoring the agents when the user is on the move. For example, if a user goes to a music performance, she would like to let the message filtering agent know that she needs to be alerted only if the message is from her family.

Application

Software agents are usually abstract entities. Although they act autonomously on behalf of the user, they need input from her occasionally. For example, a message notification agent might want to know the appropriate alerting modes (audible or vibration) for different situations. The user needs an easy and intuitive way to interact with her agents.

Also, many of the agents need user's preferences for proper functioning. For example, an email filtering agent would need to know which messages are important, which messages would like to receive immediately, which messages can be shelved for later notification etc.

Technology

The main sensors used are touch pads, mounted on the side of the Magic Lamp. We expect that they detect rubbing as well as tapping reliably.

The sensor data is transmitted wirelessly to a PC that evaluates the data, as well as connects to the mobile agents.

To indicate what parameter is modified currently, the lamp can give spoken feedback—"the genie answers!!' For that purpose, it contains a chip with a limited amount of digitized words; additionally, it can receive audio data from the server that interacts with the agent.

Transmitter

Touch pad

Deva Seetharam and Stefan Marti, October 13, 2000