

Homework #1

Achieved Features:

1. Touch screen capabilities. Modern Smartphones. Reality matches projection.
2. Messaging. Gmail. Reality exceeds projection.
3. Wireless internet access. Wifi. Reality matches projection.
4. Small portable briefcase like hardware device. Ipad. Reality exceeds projection.
5. Video calls. Skype. Reality matches projection.
6. Wireless/cordless power/battery capabilities. Reality matches projection.
7. Ability to print wirelessly without a cable. Any modern browser print application. Reality falls short.
8. Natural language processing. Siri. Reality falls short.
9. Calendar Reminders. Google calendar. Reality matches projection.
10. Search queries. Google. Reality falls short.

Out of Reach Features:

1. Speed, fluidity & instantaneous loading. Faster processors and more cores would be needed to improve computer speeds and applications.
2. Graphics projections of data. Ability to synthesize data, extract context, and build projections on what this data represents.
3. Ability to summarize messages/calendar to do. Extraction of keywords and important details and create a summary from this information.
4. Set up of events/meetings with other people through natural language. Understanding of context, details, and organizing contact information/communication of two people.
5. Butler like reminders/information seeking without asking. Better natural language processing/understanding of users needs.

Interface Guidelines

1. Organizing the display: Flexibility for user control of data display. An example is when the professor asks for the deforestation paper by a colleague and the data is effortlessly presented and displayed to the user.
2. Minimal input actions by user: Professor asks the computer to create a meeting for the next day through speech input and this processing is done by the computer through natural language to create the event.
3. Getting user's attention: audio. The device/tablet makes a noise on startup, alerting the professor it has just been turned back on.
4. Getting the user's attention: Color/Highlighting. When searching for articles to display, the most relevant article is highlighted with a brighter background than the rest of the articles.

5. Getting the user's attention:blinking. To show that the memory card was inserted correctly, and that someone is calling the icon for these 2 items begin to blink to get the users attention.

Interaction Styles:

Definitely the predominant interaction style in this video is natural language.

1. Reduce short term memory load. In reminding the professor the time of his lecture, the interface reduces his memory load and keeps him from making mistakes.
2. Offer informative feedback: Feedback is provided with a flashing icon when the user inserts a memory card.
3. Consistency: All the windows have the same white border with black edges, the fonts are the same for different sections, and in others there are icons for key items.
- 4.Design dialogue to yield closure. When the professor asks to review articles he has not read, the computer then asks him if he wants to narrow down his search to only journal articles, and finally gives a summary of the articles until the user yields the article he is looking for.
5. Prevent errors. With speech inputs and natural language processing error is reduced as the user does not have to type in anything and simply says what he wants, while the computer provides feedback.

1. One example of the golden rule violation is in permitting the reversal of actions. Nowhere is there a back arrow on the screen in any of the windows to go back or close a window.
2. Another violation has to do with consistency. The computer alerts the professor that his mother called after the fact but alerts him right away that his colleague is calling, an inconsistency.