Experimental script

1. Beginning of Day/End of Day Activity

Beginning of the Day

1. Obtain user appointment information from online posting (www.lusitani.com/users.html)
2. Insure that an adequate number of gift bags are on hand for all users being tested that day.
3. Have all experiment related materials available prior to meeting users
4. Verify that appropriate supplementary equipment/accessories/devices are present to conduct experiment and record data. (i.e power cable, microphone, extra pens,note pad)
5. Meet user at their home or in an alternate designated area as detailed in the appointment list.

End of the Day

1. Collect all questionaires, instruction sheets and notes together in one manila folder.
2. Back up experimental data to secondary data source in accordance with the Data Backup Procedures and place the data disc in the folder with the written materials.

2. User Study Execution

Initial Preparation

1. Greet the user and introduce yourself as the SCE project team member that will be conducting the user study.
2. Ask the user if he or she has a preferred area where they would like to conduct the experiment and set up the laptop with the prototype system in that area. Emphasize that the area should provide enough space for the user to write down answers on paper.
3. Verify that screen resolution is 1024x768 with 32 bit color for all users by right clicking on the desktop and choosing "Personalize" and then "Display Settings."
4. Launch the prototype by clicking on the desktop shortcut labelled "prototype."
5. Formally welcome the user to the study and explain the purpose of the experiment:
6. Explain that the system they are about to use is a prototype of a system that Southern California Edison would like to implement for its customers so that they can better manage their energy usage and set goals to reduce their monthly bill. Make clear to the user that the system is currently in the beginning phase of development and that their input will help guide the future development of the system to better serve customer needs.

Questionaire

7. Ask the user to fill the questionaire and explain that the user should ask for clarification if they do not understand a particular question.
8. Recover the questionaire when the user is finished.

Experiment

9. Give the user the task instruction sheet and explain that they will be filling this out as the system is used. Instruct the user to read the instructions and answer the questions in the spaces provided. Insure that the user knows to ask questions if they get stuck or do not understand a particular activity or question. Encourage the user to spend a minute or two to familiarize themselves with the instructions to get an "big picture" idea of the task set.
10. Start the CamStudio software in accordance with the instructions in the Recording Procedures section.
11. Instruct the user to begin the experiment by following the task instructions and to notify you when they are done.
12. If the user asks a question, initially try to draw their attention to items in the interface that they may be missing. If problems persist then help them directly and remind them to mention their difficulty in the concluding questions section of the task instruction sheet. Note down these occurrences and specify what problems were encountered by the user in a note pad.
13. When the users are done, recover the task instruction sheet and staple it to the questionaire.

Conclusion

14. Stop the CamStudio recording and save the file as described in the Recording Procedures section.
15. Thank the user for their participation and explain that their input is a great help to the future development of the system.
16. Give the user the SCE gift bag and explain that this is given in appreciation for their contribution to the project.
17. Recover the laptop and all materials and depart the users home.

Recording Procedures

Screen resolution must be set at 1024x768 with 32 bit color for all users.

Audio and Video Recording
Screen actions and User audio will be recorded using CamStudio software.

Part A: Set Up
1. Click on desktop icon "CAMSTUDIO" if not already running.
2. Verify that the screen capture settings are set to capture the entire window.
   - Region->Window must display a checkmark.
3. Verify video codec settings by opening the video options menu:
   - Options->Video Options. Verify that microsoft video 1 codec is being used.
4. Verify audio recording settings
   - Options->Audio Options ->Audio Options for Microphone.

- in **Recording Format** choose "44.1 kHz, mono, 8-bit" if not already done so.
- in **Audio Capture Device** choose "microphone" if not already done so.

5. Verify Audio video synchronization
   - Options->Audio Options ->Audio and Video Synchronization
   - verify that the radio button "Do not shift audio and video streams" is chosen. click 'OK'.

Part B: Recording
1. Click on desktop icon "CAMSTUDIO" if not already running.
2. Click on red circular record button.
3. At the prompt: "Click on Window to be Captured" click on browser window.
4. CamStudio control panel minimization should be automatic. If the control panel remains visible minimize it before allowing user to begin.

Part C: Run the experiment

Part D: Saving the recording.
1. Click on blue square "stop" button.
2. At the file name prompt type in the filename according to the following standard:
   - <user last name>-<user first initial>-<date of experiment: MM-DD-YY>.avi
   - example: SMITH-J-05-14-08.avi
   - ensure that the file is saved to a desktop folder designated for experiment related data named "Project 5 Data."
3. close the program.

Back-Up Procedures

All data will be backed up to a secondary data store at the end of each day. Backup will consist of storing a copy of all audio/video data collected onto a recordable DVD disc.

1. Insert a blank DVD into the writer drive.
2. Launch Nero Burning Rom Software by clicking "Nero" desktop icon.
3. At the pop-up menu prompt choose "DVD-ISO" from the available disc burning choices.
4. Click on the "Label" tab and label the DVD with the current date using format MM-DD-YY
5. Click "New" to prepare the program to burn the data.
6. If the Nero program window is maximized make the window float such that the experimental data folder (named "Project 5 data") is visible on the desktop along with the Nero program window.
7. Drag the project 5 data folder to the nero program such that the folder appears in the window.
8. Burn the disc by using the "Burn" icon or by clicking Recorder->Burn Compilation.
9. The window changes to show the progress of the data writing. Check the box marked "Verify data" in the lower left corner to insure that the data is properly written.
10. Once the burn is done (after several minutes) use windows explorer to check that the file is playable.