Homework 2: Heuristic Evaluation Carl Vondrick vondrick@mit.edu

In this document, we review the positive and negative points of the user interface for the ElderConnect application.

1) Add Contact: Call screen matches the real world cellular phones

Severity: positive, good Principle: learnability, matches the real world

The call screen mimics the iPhone user interface and other phones that users are accustomed to. This is ideal for users who already have cellular phones. However, the authors should note that the ElderConnect application is targeted towards people who do not have phones, so this positive point is limited in usefulness. In fact, this point may be detrimental to usability because users may have trouble understanding dial pads. The dial tone is an excellent addition.



2) Add Contact: delete button does not match standard icons for delete

Severity: negative, severe Principle: learnability, standards

The delete button on the Add Contact screen is written in ASCII and the button's function is not clear until it is pressed. The authors should change the button to simply read "Backspace" in order to match intuition.

3) Cannot delete contact

Severity: negative, severe Principle: safety

There is currently no way to delete a contact. If I type in the wrong number, I am stuck with the person on my contact list. There needs to be a mode to delete contacts.

4) Call screen requires extra button click

Severity: negative, minor Principle: efficiency

When clicking on a contact and then pressing "Call", it pops up a screen where users can further in numbers. This interface is inefficient since the number is stored and should dial automatically.



5) No back button when choosing to leave message

Severity: negative, minor Principle: safety and visible navigation

This screen should have a back

button to allow the user to make a call instead. Otherwise, the user must restart the process over entirely.

6) Count down is not readable

Severity: negative, severe Principle: readability

When leaving a voice message, there is a red count down to indicate to get ready to talk. However, the red does not contrast well with the gray background.





7) When leaving voice message, it is not clear when it is recording.

Severity: negative, severe Principle: safety, visibility of system status

When leaving a voice message, a recording indicator should show to inform the user that their voice is being recorded and they should speak.

8) User interface has progress bars during latency

Severity: positive, good Principle: latency reduction



During operations that may require significant of time to execute, the user interface correctly shows a progress bar.

9) Design is minimal and only includes key functions

Severity: positive, good Principle: aesthetic and minimalist design

There are no extra buttons or functions in the interface, increasing the learnability and efficiency of the user interface. The design is aesthetically pleasing.

10) There is no help or documentation.

Severity: negative, minor Principle: help and documentation

The interface lacks any help or documentation. Since this application is targeted towards senior citizens, there should be clear instructions on how to use the application. Fortunately, the interface seems quite learnable, so this is only a minor severity.

11) Buttons are large and close together

Severity: positive, good Principle: efficiency, Fitts' law

All the buttons in the interface are large and close together. This means the interface is highly efficient since it matches Fitts' law.

12) Emails are saved even user cancels job, then changes mind to email again

Severity: positive, good Principle: safety, protect user's work

When crafting an email, canceling, then changing one's mind to send another email, the interface correctly remembers the previous email, thereby increasing safety.

13) Colors that are important will not confuse colorblind users

Severity: positive, good Principle: color blindedness

Since the colors do not convey anything particularly important (or are redundant with text), there are no issues with color blinded users.

14) There are default contacts to teach users how to operate the interface

Severity: positive, good Principle: learnability, defaults

There are a few default contacts that teach the user about the interface. It quickly reveals to the user that the contacts are shown in the book format. These defaults are reasonable, and follow something similar to a Skype test call. However, the defaults need to be easy to delete (see above).



15) Buttons and layout across screens is consistent

Severity: positive, good Principle: consistency

The dialing screens are very similar, which maintains consistency. Moreover, the task screens have similar button layouts, which maintains consistency.

16) Interface should track state and show hints based off state.

Severity: negative, minor Principle: learnability, track state

Upon launching the application, it is not immediately obvious how to use the application. The system should track the state and show hints for actions that the user has never performed before. This would drastically increase the learnability of the application.