SmartSenior

Smartphone aid for smarter seniors

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Problem

- Seniors struggle and need help operating smartphones
- Dependency on others to learn
- Anxiety and unfamiliarity with interface
Solution

- Step-by-step tutorials with actual smartphone interface
- Intuition-building exercises to gain familiarity
- Goal-oriented tasks
Overview

- Heuristic Evaluation Results
- Revised Design
- Prototype Status
- Demo
Heuristic Evaluation Results

Lack of introduction/settings [Severity 4]

App had no splash screen introduction, no indication to user of an audio feature.

Fix:

- Splash screen
- Notice to user about audio instructions
Heuristic Evaluation Results

Unclear/missing help button [Severity 3]

Some tutorials don't have help button, sometimes unclear.

*Fix: Introduce help button in tap tutorial.*)
Heuristic Evaluation Results

Cannot repeat instructions [Severity 3]
No way to repeat audio instructions.
Fix: Repeat instructions when "Help" is pressed.

[mockups]
Reminders of current task [Severity 3]

Some tasks require reading an instruction on a previous screen but no instructions on next screen.

- Helpful for building intuition
- Reduce anxiety of making mistakes
- Instructions available through Back and Help buttons
Heuristic Evaluation Results

No indication of progress [Severity 3]

Hard to tell how much a user has progressed through the tutorial.

Still thinking about adding a progress bar.
Consistent audio instructions [Severity 3]

Some tutorials have audio instructions all the time, more advanced ones only have it when you make a mistake.

*Fix: All tutorials will consistently read aloud instructions.*

*Possible unnoticed limitation of Proto.io*
Revised Design Overview

UI Changes

- Bolder colors to distinguish SmartSenior app from screenshots
Revised Design Overview

Functionality Changes

- Audio settings
- Introduce help button in tap tutorial
- Detection of long press in tap tutorial
Prototype Status

Tools Used

- Xcode for iOS programming
- Interface Builder for UI design
- Photoshop for mockups
- Git/GitHub for version control
Prototype Status

Implemented Features

- Splash screen and home screen with list of tutorials
- Audio settings
- Tap tutorial
- Framework for all other tutorials
Prototype Status

Unimplemented Features and Plans

- Implement other tutorials
- Search functionality
- Record voice for tutorials
  - Want to finalize text first
- Design logo
Prototype Status

Wizard of Oz Techniques

- Recorded audio files that auto-play to mimic actual voice instructions
- Hack to detect taps of incorrect length
  - No activity on app -- tapping for too little time
  - Long-press -- tapping for too long

Hard-coded Data

- None -- no data needed for our app
Prototype Status

Issues and Questions

- Progress bar
- Level of interactivity
- Adding new elements on top of an already existing design
Demo
Summary

- Simple task completed
- Have addressed most severe violations