Team JSEN - Julia, Szymon, Eddy, Ny

Lab - Client Visit 2 Notes

November 5th, 2019

Notes:

* She has an interest in the automatic medication dispenser
  + She says that it would prevent her from needing to be woken up early by the caretakers to take her medication
  + She likes the idea of pills being organized by day
  + Medication given at 6-7 AM
* She was really enthusiastic about the mystery game
  + She likes that it is audio-based
  + She wants us to write an original story for it
  + She likes the whodunit genre/style of mystery stories (specifically Ellery Queen)
    - Specifically, having the story be dialogue-based, must talk to the characters to reveal the story
  + She requests braille to label the buttons (A B C & D)
    - She thinks it would be cool if the buttons lit up, but the braille is the important part
* She did not have any interest in the ambient sound speaker
  + She has pandora on her TV, so this would be redundant
* She expressed her difficulty with controlling the television (but she is getting an echo dot or google home or something of the sort)

Response:

* Wish: Braille on the buttons
  + Time Feasibility: Yes, our team can finish the project by the end of the semester.
  + Tech Feasibility: Yes, we can access the necessary fabrication/development tools via the innovation lab. We can acquire technical knowledge by looking up any questions online (e.g. connecting a headphone jack to an arduino, playing audio files through an arduino connected speaker). Additionally, we can read Ellery Queen mystery novels so that we can get a feel for the type of mystery stories which she enjoys.
  + Yes, we can keep our costs for the final fabrication under $50.

Preliminary test plan:

* Ask client what different buttons she wants, layout of buttons, types of buttons (such as a button to repeat something), and what features she would want that would improve ease of use.

Update:

Ask client if braille labeled buttons are readable and if they are comfortable to use/navigate the story, any other buttons or features she would like to add after successful test run (audio plays at a good volume, buttons respond accordingly, end of script reached without errors).

Construction/Software Development Ideas:

* Plastic Square with Braille on it(?), to be glued onto the small buttons. (3D printed)
  + If the plastic square is large enough we can, have the LEDs “surround” the button on the breadboard, so that it lights up? Must be sure LEDs are shorter than button...
* Get measurements of breadboard/micro and change case dimensions accordingly.
* 3D print case? If so, we’d need to get filament probably
* We need to a microSD (of some memory) to hold the audio files, the story itself
* Set up a class(es) and variable(s) for processing program
* “The Four Johns”

List of Helpful Links:

<https://maker.pro/arduino/projects/arduino-audio-player>

<https://en.wikipedia.org/wiki/Ellery_Queen_(TV_series)>

Playing Audio from an Arduino from a Micro SD Card

<https://www.instructables.com/id/Audio-Player-Using-Arduino-With-Micro-SD-Card/>

<https://processing.org/reference/libraries/sound/SoundFile.html>

Ellery Queen Episodes:

<https://www.dailymotion.com/video/x4erush> - The Adventure Of The 12th Floor Express

<https://www.dailymotion.com/video/x4gtopn> - The Adventure Of The Hardhearted Huckster

<https://www.youtube.com/watch?v=IPuaBpYm0ZY> - Adventure of the Sinister Scenario

<https://www.dailymotion.com/video/x4fl5v6> - The Adventure of the Blunt Instrument

<https://www.dailymotion.com/video/x4ezx53> - The Adventure of Aggie’s Farewell Performance

<https://www.dailymotion.com/video/x4ezxzr> - The Adventure of Colonel Nivin’s Memoirs

<https://www.youtube.com/watch?v=M0SKpEt-1dk> - Ellery Queen: The Message In Red (Audio)

<https://www.dailymotion.com/video/x4gtpvy> - The Adventure of the Disappearing Dagger

<https://www.dailymotion.com/video/x4gcazs> - The Adventure of the Judas Tree

<https://www.dailymotion.com/video/x4ftd0e-> The Adventure of the Black Falcon

<https://www.dailymotion.com/video/x4gcaaw> - Too Many Suspects (Part One?)

<https://www.dailymotion.com/video/x4gcaol> - Too Many Suspects (Part Two)

<https://www.dailymotion.com/video/x6gpm8t> - Too Many Suspects (Full Version?)

<https://www.dailymotion.com/video/x4ftd48> - The Adventure of the Sunday Punch

<https://www.dailymotion.com/video/x4glgx7> - The Adventure of the Two-Faced Woman

<https://www.dailymotion.com/video/x4el98f> - The Adventure of Auld Lang Syne

<https://www.dailymotion.com/video/x4g3nnt> - The Adventure of the Wary Witness

<https://www.dailymotion.com/video/x4f7s8s> - The Adventure of Veronica’s Vails

<https://www.imdb.com/videoplayer/vi1978383641> - The Adventure of the Eccentric Engineer

<https://www.dailymotion.com/video/x4ertwb> - The Adventure of the Chinese Dog

<https://www.dailymotion.com/video/x4fl5dh> - The Adventure of the Pharao’s Curse

<https://www.dailymotion.com/video/x4gtnia> - The Adventure of Caesar’s Last Sleep

<https://www.dailymotion.com/video/x4glh5a> - The Adventure of the Tyrant of Tin Pan Alley

<https://www.dailymotion.com/video/x4el99w> - The Adventure of Lover’s Leap

Materials List:

<https://docs.google.com/spreadsheets/d/1vdkutZdqPAyylwdExBY_NoxxalkWebe0iG7P_ZsSXQ0/edit?ts=5dc604d1#gid=0>