sddec18-09: Hidden Guardian

Week 10 Report April 14 - April 23

Team Members

Jennifer Frank — Team Lead Keng-Yik Ho — Chief Engineer Jacob Stilwell — Computer Programmer Matthew Pedretti — Hardware Engineer Thomas Kirby — Backend Developer

Summary of Progress this Report

Our final week we worked on the first steps in implementing our new approach and focused on our final presentation. Due to the need to rework our project, we spent many hours rewriting our design documentation, project plan and updating our presentation slides. The technical work we completed was putting together the speaker, getting the Bluetooth functioning (with a maximum distance of 30 feet) and amplifying. We've switched from an SQLite database to an SQL database due to our change in approach and new information about its ability to be remote so we worked on getting the SQL database setup. We also made ground on our mobile application front end and have worked on the ability to get the sound from the audio jack to the speaker via bluetooth.

Pending Issues

Our pending issues are what we handle next semester. Our first priority is to finish database setup if we have not done so by the end of this year. We've had issues with access rights and hopefully those will be smoothed over soon as we are working with ETG. We also will need to finish getting the audio data from the head jack to the speaker/database. Those are the loose ends that will need to be tied off, and the rest of the pending issues will be the new tasks we will tackle in May.

Plans for Upcoming Reporting Period

| Project Tasks | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 | Week 13 | Wee |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|-----|
| Database is recieving text from microcontroller | | | | | | | | | | | | | | |
| Get hardware set up and communicating | | | | | | | | | | | | | | |
| Get Javoix speech to text working | | | | | | | | | | | | | | |
| Android app's keyword feature is succesfully working | | | | | | | | | | | | | | |
| Implement a way to have confidence flags for text data | | | | | | | | | | | | | | |
| Work on mobile application front end | | | | | | | | | | | | | | |
| Write documentation for users | | | | | | | | | | | | | | |
| Focuson testing | | | | | | | | | | | | | | |
| Spend extra time for new ideas (implement website on VM) | | | | | | | | | | | | | | |
| Prepare for final presentation | | | | | | | | | | | | | | |

Individual Contributions

| Team Member | Contribution | Weekly Hours | Total Hours |
|------------------|---|--------------|-------------|
| Jennifer Frank | This week I worked on login and search functionality for mobile application but mainly focused on updating documentation and preparing for the final presentation. This includes creating new timelines and diagrams, adding visualizations and transitions to our presentation and coming up with questions that we may be asked before we go into our presentation. | 16 | 78 |
| Keng-Yik Ho | This week I worked on getting a signal from 3.5mm port and transmit through bluetooth of Raspberry Pi. Other than that I have run some test on the TDA 7266 amplifier. The test I ran would be finding out its gain, it maximum power when running on low voltage conditions. I have also constructed a working bluetooth speaker using a bluetooth module, an amplifier and a 8 ohm speaker. | 12 | 58 |
| Jacob Stilwell | I focused on reworking the SQLite functionality on the mobile application to be sql. then I designed a simple visual layout to get the info and show it on the app. Then I started to test if it will connect to the database | 7 | 43 |
| Matthew Pedretti | This week I have been working on prepping things for the presentation. Mainly this includes finding data relevant to our presentation, and working on the project documents. | 10 | 81 |
| Thomas Kirby | N/A | N/A | 66 |