

## **EE 491 WEEKLY REPORT 3**

**Date: February 4, 2016**

**Group number:** Dec1618

**Project title:** A Community Awareness System for Android Devices

**Client:** NSA, Dr. Daji Qiao, Dr. George Amariuca

**Advisor:** Dr. Daji Qiao, Dr. George Amariuca

### **Team Members/Role:**

- Jason Wong: Team Leader
- Erik Fetter: Communication Leader
- Matt Gerst: Team Webmaster
- Shikhar Vats: Key Concept Holder
- Brad Anson: Key Concept Holder
- Adit Kushare: Key Concept Holder

### ✓ **Weekly Summary (Short summary about what you did this week)**

The networking sub-team settled on choosing CyanogenMod and Serval Mesh as the base for our projects core networking features. The sensor collection sub-team created a test app containing basic sensor functionality. We reconfigured our meetings times so that sub-teams meet once a week and the entire team meets once a week.

### ✓ **Past week accomplishments (please describe as what was done, by whom, when)**

- ❖ Jason, Matt, and Shikhar successfully built serval mesh apk on Wednesday February 3, 2016.
- ❖ Jason found source of bug causing enabling of Ad Hoc Mesh mode to crash the app.

## ✓ Individual contributions

| <u>NAME</u>  | <u>Individual Contributions</u>  | <u>Hours this week</u> | <u>HOURS cumulative</u> |
|--------------|--|------------------------|-------------------------|
| Jason Wong   | <ul style="list-style-type: none"> <li>● Successfully tested Serval Mesh on Debian</li> <li>● Discovered bug with building Serval Mesh on Mac OS X</li> <li>● Started the Project Design Plan Specification document</li> <li>● Researched possible Android devices to purchase</li> <li>● Research Serval Mesh API</li> </ul> | 6                      | 14                      |
| Brad Anson   | <ul style="list-style-type: none"> <li>● Cleaned up Git repository</li> <li>● Obtained &amp; cleaned up loaned ECpE Nexus 7 device</li> <li>● Removed extraneous code from Camera Activity</li> <li>● Adjusted .gitignore</li> <li>● Began research into building independent camera activity</li> </ul>                       | 4                      | 11                      |
| Adit Kushare | <ul style="list-style-type: none"> <li>● Created the module in the Android app to test recording from the mic.</li> <li>● Created .gitignore</li> <li>● Researched ways of gathering audio /video in the background</li> </ul>   | 4                      | 12                      |
| Erik Fetter  | <ul style="list-style-type: none"> <li>● Create basic app to poll available sensors</li> <li>● research sensor collection to suit our needs</li> </ul>   | 4                      | 10                      |
| Matt Gerst   | <ul style="list-style-type: none"> <li>● Tested the serval mesh project</li> <li>● Researched the serval mesh projects/api</li> </ul>  | 3                      | 9                       |
| Shikhar Vats | <ul style="list-style-type: none"> <li>● Successfully built the serval mesh api</li> <li>● Looked into potential android devices to use for the project</li> <li>● Researched the working of serval mesh</li> </ul>  | 3                      | 11                      |

## ✓ Comments and extended discussion

❖ Shikhar waiting on his second nexus request to get approved.

✓ **Plan for coming week (please describe as what, who, when)**

- ❖ Matt, Jason, and Shikhar need to study Serval Mesh to determine how the mesh neighbor discovery works, and available APIs by the next meeting on February 10, 2016.
- ❖ Adit is planning on working on sound collection and playback of sound, Erik is working on a simple WifiP2P implementation to practice with serving our sensor data to a network module, Brad is working on creating a camera app that can collect pictures/video without needing to push a button, simply based on a service request.

✓ **Summary of weekly advisor meeting (if applicable/optional)**

Presented possible solutions to the community networking aspect, and the preferred option was to use CyanogenMod and Serval Mesh. Advisor wants us to research into how Serval Mesh does its mesh networking and report back next meeting. We were also tasked with choosing a few devices we'd like to purchase for future testing.