

EE 491 WEEKLY REPORT 2

Date: January 31, 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)**

This week we have most likely ruled out Wifi P2P and have been tasked to research alternative options such as Serval Mesh, CyanogenMod, OxygenOS, and any other options that come up during research. Everyone was assigned a topic to research on. We decided on the tentative subgroups that will respectively work on the network aspect of the application, and the android aspect.

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

- ❖ Adit set up group email: dec1618@iastate.edu
- ❖ Set up Gitlab project on ece gitlab server during our Wednesday meeting on January 27, 2016.
- ❖ Jason got Serval Mesh setup on Nexus 7 on Sunday January 31, 2016.

✓ 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"> ● Found root instructions for Nexus 7 ● Found Cyanogenmod install instructions ● Tested Root & Cyanogenmod Instructions ● Tested Serval Mesh GitHub code ● Created Google Slides for next week's presentation ● Contacted Serval Project to request help in building their application 	4	8
Brad Anson	<ul style="list-style-type: none"> ● Developed a test application to capture pictures and videos ● Successfully configured video loopback on application ● Developed methods to store captured pictures and video on local device ● Configured Gitlab project ● Wrote .gitignore 	3	7
Adit Kushare	<ul style="list-style-type: none"> ● Set up group e-mail dec1618@iastate.edu ● Explored Oxygen OS to learn that it's not a viable option. ● Looked into Paranoid Android to find that Nexus 7 versions of that ROM have very little support. ● Rooted Nexus 7 and installed a custom recovery manager to be able to flash any android ROM on it. 	4	8
Erik Fetter	<ul style="list-style-type: none"> ● Explore sensor collection <ul style="list-style-type: none"> ○ +video & audio ● put my request in for nexus 7 	2	6
Matt Gerst	<ul style="list-style-type: none"> ● Research on Serval Project 	2	6
Shikhar Vats	<ul style="list-style-type: none"> ● Researched Cyanogenmod and its benefits ● looked into Adhoc networking with cyanogenmod 	4	8

✓ Comments and extended discussion

Planning on continuing with cyanogenmod/root and serval project.

● Sub-teams:

- Display/sensors: Erik, Brad, Adit
- Network: Matt, Jason, Shikhar

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

- ❖ Prepare Google Slides for presentation of Wifi P2P alternatives during the next meeting with Dr. Qiao scheduled on Wednesday Feb 3, 2016.
- ❖ Scratched the idea of using different OS's and focus more on CyanogenMod. Moving forward we have split up into two teams one focusing on network aspect and other focusing on the App dev /Data collection.

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

Presented our current findings for the ad hoc communication in the form of cyanogenmod, oxygen, and other ad hoc methods that require rooting. We were tasked with doing more in-depth research on each to find the pros/cons.