EE 492 Biweekly Report 2

Timeframe: 01/26/18 – 02/09/18

Group: 38

Project: Sensors for Measuring Chemical Content in Soil

Client and Advisor: Dr. Liang Dong

Team Members – Broken down into 3 group roles (Control Box, Sensor, and Software).

Colin Cox – Software

Jarrod Droll – Sensor

Rachel Hoke – Sensor

Wage Miller – Control Box

Scott Rowekamp - Software

Tyler Thumma – Control Box

Summary: (Short summary about what you did these two weeks)

Control Box – Work was continued on designing the PCB in Ultiboard. Completed first version of PCB.

Sensors – Approved new sensor design and are in the process on training on the laser cutter.

Software – Scott continued researching different technologies to use for the server application. Colin created an android application to acquire and store sensor readings gain from the control box

Accomplishments: (Describe what was done, and who did it (individual or group))

Control Box – Tyler and Wage finished the first version of the PCB. They then met with Xinran (the grad student) to verify the work and talk about changes and improvements. Parts should start to be ordered next week for physical assembly.

Sensors – Rachel and Jarrod finalized the sensor design with Dr. Dong and Yuncong. Xinran is preparing to order the sensors start of this next week. Rachel and Jarrod began laser printer training in order to print shadow mask for sensors.

Software – Scott work with the client to determine the requirements for the server so the it start being planned out in the next period. Colin got the first major release of the user application developed and tested.

Pending Issues:

Control Box – None at this time.

Sensors – Timeline pushed back due to maintenance on PCB machine on campus. As a result, sensors are being sent out for fabrication.

Software - Need to finalize requirements for server so android app development can proceed in implementing a data sync api.

Individual Contributions:

Name	Contribution	Hours	Cumulative Hours
Colin Cox	Completed Full Featured app and tested it with control box. Addressed coner cases.	5	10
Jarrod Droll	Finalized sensor design with Dr. Dong and Yuncong. Began laser printer training.	5	10
Rachel Hoke	Finalized sensor design with Dr. Dong and Yuncong. Began laser printer training.	5	10

Wage Miller	Finished first version of the PCB. Met with grad student to verify work and talk about changes / improvements.	5	10
Scott Rowekamp	Continued work on the server.	5	10
Tyler Thumma	Designed 1st version of PCB with Circuit, Power Boost, and Charger. Discussed with the grad student for improvements that could be made.	5	10