

EE/CprE/SE 492 WEEKLY REPORT 4

Mar 4 th 2019 - Mar 10 th 2019

Group number: 45

Project title: IoT environmental monitor

Client &/Advisor: Dr. Geiger

Team Members/Role:

Tyler Fritz – Software Developer,

Dong Xing – Hardware developer,

Ahmed Abuhjar – Hardware Developer,

Haoyue Ma – Hardware developer,

Yuanzhe Wang – Hardware Developer

o **Weekly Summary**

o **Past week accomplishments**

Tyler Fritz: Worked on setting up the backend of the web server. I got it built and running but the front-end crashes every time it tries to connect to it. Crazy, the front-end is running SQL on the database and it expects a different schema to what the back-end uses. I'm very confused.

Ahmed Abuhjar: Finished modifying and designing the PCB layout for the leaf nodes. Request to order the radio transceivers we're using for our leaf nodes.

Dong Xing: contacted employees to order necessary items and connected some circuit works.

Haoyue Ma: Checked the connection between the home node and temporary web server. Started working on the code for homenode receiving the data from leaf nodes.

Yuanzhe Wang: Tested the moisture sensor resistance vs moisture level.

o **Pending issues**

- Sometimes members may misunderstand with each other's needs by just typing words, we will need some necessary meetings more frequently.

o **Individual contributions**

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Tyler Fritz	Setting up web server backend.	8	18.5
Ahmed Abuhjar	PCB design for leaf nodes.	12	22
Haoyue Ma	Work on the code for homenode receiving the data from leaf nodes.	4	14
Dong Xing	Items check and order	3	13
Yuanzhe Wang	Tested the moisture sensor resistance vs moisture level.	6	18

o **Plans for the upcoming week** (*Please describe duties for the upcoming week for each member. What is(are) the task(s)?, Who will contribute to it? Be as concise as possible.*)

- **Tyler Fritz:** Fix all the errors in the webserver.
- **Ahmed Abuhjar:** Assemble and test the radio transceivers and send the PCB layout for fabrication.
- **Haoyue Ma:** Build the connection between the homenode and our own web server if possible. Continue working on the code for homenode receiving data from leaf nodes.
- **Dong Xing:** check with teammates and keep contacting with employees to order necessary new items, if needed, will help the others with design work.
- **Yuanzhe:** Make sure all sensors have same sensitivity with water.

Summary of weekly advisor meeting

This week, Geiger improved some PCB circuit board design according to our work, listed some helpful ideas about the items which might be useful for our design.