

EE/CprE/SE 491 WEEKLY REPORT 4

9/30/2018 – 10/6/2018

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

- **Weekly Summary**

The overall objective of this week was spending a few hours getting basic programs to run on the transceiver by connecting with the arduino. We've had two meetings focused on technical progress and worked on the project plan. This week everyone in this team contributed pretty much and had pretty sufficient communications with each other.

- **Past week accomplishments**
 - Tyler Fritz
 - Successfully compiled programs to both the leaf and home nodes.
 - Soldered new leaf node together and added radio to it.
 - Got web server front end running. Just need to connect it with DB now.
 - Ahmed Abuhjar
 - Assisted team in setting the web server for the project. Got familiar with Wia Dashboard that we could use as our temporary web server until we fully develop our own.
 - Assisted team in putting together another leaf node to get it ready to run the program for testing. We soldered components including the radio transmitter into the motherboard.
 - Dong Xing
 - Communicating with teammates about design thinking & project plan.
 - Working on the project plan writing, checking and editing format or grammar mistakes .

- Haoyue Ma
 - Working on the project plan with team.
 - Designing a process diagram of our project
 - Compiling the code for sensors to ensure that there is no error in the code.

- Yuanzhe Wang
 - Worked on the project plan.
 - Assisted team to program the home node and leaf node.
 - Learned how the NRF24L01 connect to the leaf node.

- **Pending issues**
 - Since this week, we worked on the project plan version one for most of the time and designed thinking for the left time. For the project design things, we almost did no more things rather than the last week, but only reprogrammed the codes for sensors few times.

- **Individual contributions**

<u>NAME</u>	<u>Individual Contributions</u>	<u>Hours this week</u>	<u>HOURS cumulative</u>
Tyler Fritz	Successfully compiled programs to both the leaf and home nodes. Soldered new leaf node together and added radio to it. Got web server front end running. Just need to connect it with DB now.	9	18
Ahmed Abuhjar	Determined what could be the best topology for the sensor and master nodes to be used in our project	5	17
Haoyue Ma	Writing Project plan,using design thinking to design the process diagram of our project, Dr. Geiger's presentation	5	19
Dong Xing	Working on the project plan and design thinking ideas by communicating with group members .	5	13

Yuanzhe Wang	Checked the connected errors. Ordered needed stuff from ETG office.	4	18
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- **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.*)

- We are still waiting for the required materials' delivery. Once we get them, we could start testing.

Contributors: everyone in this team.

- Start testing collecting and transferring data
 - Contributors: Haoyue, Dong ,Ahmed

note: it's currently difficult to divide up tasks because we are blocked by the home node and leaf nodes not being set up. We are all working to remove this blockade.

- **Summary of weekly advisor meeting**

- We will start working on the leafnode and trying to testing it as soon as possible once we get everything material we need.
- We learned more about the goal of the project and cleared up a good deal of confusion across the group.