Group number: Dec1713

Project title: IoT Monitor

Client &/Advisor: Geiger

Team Members &/Role:
Ian Harris: Team Leader - Web Role
Tim Lindquist: Key Idea - Leafnode Role
Gregory Steenhagen: Webmaster -Web Role
Steven Warren: Communication -Leafnode Role
Terver Ubwa - 3G Node
Khoi Cao - 3G Node

o Weekly Summary

We worked on getting the hydroscopic sensor testing setup this week in laboratory 3014. A tarp was spread out and dirt was laid in an even coating to maximizing surface area accelerating drying. The webpage also got some work done to it and each of the members submitted a bio of himself to use in it. Took the Iowa State template for the website, and began inserting our information into it. Found a library for the long range radios.

o Past week accomplishments

- **Ian Harris:** Realized we were behind on our informational website, cranked that out. Polled teammates for "meet the team" information. Helped spread dirt for it to dry.
- **Gregory Steenhagen:** Pulled the Iowa State template code and began integrating that into our info website.
- **Khoi Cao:** Got the data transmitting via SMS worked. (In progress) Debugging the issue with Adafruit library API unable to send the op-code command continuously.
- **Terver Ubwa:** Further studied up on JSON format. Studied Fonatest code (sample code for the 3G module) so it can be incorporated in our design structure. Read up on the compactibility of our 3G module with different network carriers. Dried the soil sample.
- **Tim Lindquist:** Started programming long range transceiver with new libraries. Finalized design for hydroscopic sensor. Dried out dirt on tarp upstairs in 3014 lab.
- **Steven Warren:** Spread out dirt to be used for the hydroscopic sensor testing.

looked into the long range library to be used for the long range radios. Made bio for website

Pending issues
- **Ian Harris:** I have an email currently pending to ETG about acess outside of the Iowa State Network. Need to fill out bio section of information website pending info.
- **Gregory Steenhagen:** Work with Ian to get access outside of Iowa State's network for our website.
- **Khoi Cao:** Working with ETG representative to obtain the best service plan. Set a plan to build RF receiver once the issue of 3G node was resolved.
- **Terver Ubwa:** 3G module not receiving network signal for transmission. This is because we are still looking around and weigh our options for the best data plan suitable for our project.
- **Tim Lindquist:** Need to start hydroscopic testing. Waiting on dirt to dry.
- **Steven Warren:** waiting on soil to dry

o **Individual contributions**

NAME	Individual Contributions	Hours this week	HOURS Cumulative
Ian Harris	Contacted ETG, helped spread dirt, cranked out the majority of our info website.	5	28
Gregory Steenhagen	Contacted ETG, helped spread dirt	5	20.5
Khoi Cao	Debugged the Adafruit API library issue with op-code command	5	25
Terver Ubwa	looked up 3G compatibility with different network carriers, Dried up soil sample, further studies on JSON format.	5	29
Tim Lindquist	Created personal bio for web page. Started programing long range transceiver.	3	42

	Finalized hydroscopic probe design.		
Steven Warren	Made Bio, spread dirt, looked over nrf library	3	39

o   Comments and extended discussion

Dirt should be dry this week and testing will be able to continue. Need to locate scale before testing starts.

o   Plan for coming week
- **Ian Harris:** The plan is to fill out the bio section of information website, resolve any solutions ETG provides, and help with hydroscopic sensor testing since the web-app is slowing down a bit for now until hardware is resolved, start looking ahead at setting up a database so we can store data once hardware is complete.
- **Gregory Steenhagen:** Finish integrating the Iowa State template into our website, and continue working on the REST api.
- **Khoi Cao:** Sync up with Terver to fix the issue with the 3G node transmission by this week. Have a the system to function properly in order to demo to the professor.
- **Terver Ubwa:** Get a suitable data plan and start transmitting to the server using the 3G module. Have a complete implementation of the code for transmission in JSON format.
- **Tim Lindquist:** Do hydroscopic sensor testing. Get long distance transceiver working.
- **Steven Warren:** Do hydroscopic sensor testing. Get long distance transceiver working.

o   Summary of weekly advisor meeting

No meeting this week, Geiger was out of town.