Group number: May 1715

Project title: Internet of Machines

Client &/Advisor: Vermeer, Keith Bryant and / Dr. Sang Kim

Team Members/Role: Dean VanEvery/Team Leader, Cody Lample/Key Concept Holder, James A Kluesner, Matthew Gustin/Webmaster, Sam Ellis/Communications Leader, Kojo Otchere-Badu

o **Weekly Summary**

Connected the arduino and raspberry pi modules to pipe data from raspberry pi-based sensors to arduino-based LoRa shield. Refined packetization of sensor data on node side, and refined transmission script for database manipulation.

o **Past week accomplishments**
  - Matt Gustin –
  - Dean VanEvery – Began Scripting receiver conversion
  - Sam Ellis – Refined testing script, added script to generate dummy data & json
  - Kojo Otchere-Badu – Tested code for forming packet
  - Cody Lample - Cleaned up C code formatting. Performed sensor testing.
  - James Kluesner –

o **Pending issues**

Still having issues with properly chaining data between raspberry pi and arduino modules.

- o **Individual contributions**

NAME	Individual Contributions	Hours this week	HOURS cumulative
Cody Lample	Test LoRA range and continue to clean up code	2	20
Dean VanEvery	Began Scripting receiver conversion	2	15
James Kluesner		3	
Matt Gustin		2	
Sam Ellis	Added cache functionality to database script	2	21
Kojo Otchere-Badu	Tested code for forming packet	1	20

- o **Plan for coming week**
  Devise a way to pipe data from receiving arduino to receiving pi to the database. Begin testing transmittable distance for the two modules, as well as testing transmitting with obstacles.