

Group number: May 1715

Project title: Internet of Machines

Client &/Advisor: Vermeer, Allison Thongvanh

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

o **Weekly Summary (Short summary about what you did this week)**

This week we looked at several different possible projects we could focus on to illustrate the end goal of gathering key data from a source to a central server. This included researching the capabilities of the hardware provided to us by our sponsor (the Raspberry Pi microcontroller), researching currently-implemented Internet of Things solutions, and examining supplementary software and hardware associated with the Raspberry Pi that could be used for this project.

o **Past week accomplishments (please describe as what was done, by whom, when)**

- Matt Gustin – Found several possible projects to look at for reference as to how we will implement our solution.
- Dean VanEvery – Researched sensor hardware we may use to collect data for storage on the central server
- Sam Ellis – Researched software solutions, including differences in Windows 10 IoT core and Raspbian operating systems
- Kojo Otchere-Badu – Researched projects which might be beneficial to Vermeer.
- Cody Lample - Evaluated possible project brainstorm, and what hardware/software would be applicable to them.
- James Kluesner - Researched possible project platforms (quadcopter etc.) from which data will be transmitted from.

o **Pending issues (if applicable)**

- Still looking for an adviser with knowledge of integrated programming.

o **Individual contributions**

| <u>NAME</u> | <u>Individual Contributions</u> | <u>Hours this week</u> | <u>HOURS cumulative</u> |
|--------------------|--|-------------------------------|--------------------------------|
| Cody Lample | Evaluated Project Ideas | 2 | 2 |
| Dean VanEvery | Researched available sensor technology | 1 | 1 |
| James Kluesner | Researched Project Platforms | 1 | 1 |
| Matt Gustin | | | |
| Sam Ellis | Assessed viable software solutions | 3 | 3 |
| Yulin Song | | | |
| Kojo Otchere-Badu | | | |

o **Comments and extended discussion**

The open-endedness of our project has required a lot of extra planning that, while extremely engaging, will hopefully not cause any issues with our project schedule. We already have several good ideas regarding how to approach this project, so much of the remaining initial prep work will come down to narrowing our options.

o **Plan for coming week (please describe as what, who, when)**

- Sam Ellis: Speak with faculty whom may be willing to act as an adviser to the team.