

sdmay23-17: CySecAgri

Week 3 Report

October 8 - October 14

Team MembersTom Ruminski — *IoT Infrastructure*David Wolfe — *IoT Infrastructure*Joe Hunter — *Flutter Application*Rian Lamarque — *AWS Infrastructure*Elijah Hanson — *AWS Infrastructure*Syed Al-Hussain — *Flutter Application***Summary of Progress this Report**

Devices selected for IoT infrastructure

Node - Pre-built sensor

Gateway - RaspberryPi and LoRaWAN Transceiver breakout board

Network server - AWS IoT Core

Communication protocols selected between components

LoRa/LoRaWAN and WiFi+TCP/IP

Pending Issues

Need to obtain a RaspberryPi

Plans for Upcoming Reporting Period

Research how to configure LoRaWAN transceiver with a RaspberryPi

Order parts for further development

Individual Contributions

| Team Member | Contribution | Weekly Hours | Total Hours |
|--------------|--|--------------|-------------|
| Tom Ruminski | identified appropriate network topologies, physical communication layers, and devices to support our selected IoT design | 8 | |
| David Wolfe | Finished coding a very basic connection between our python mock basestation and the AWS IoT Core. Helped select IoT sensors to support architecture decisions. | 6 | |
| Joe Hunter | Created a Gantt chart for the team, worked on the project plan, and continued to work on the Flutter app. | 4 | |

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|-----------------|--|---|---|
| Rian Lamarque | Created IAM group with individual users to work under the same account. Deployed IoT Core test basestation to simulate sending of messages to lambda function. | 6 | 0 |
| Elijah Hanson | Used AWS IoT core to make a test basestation that used a python script to send MQTT messages to the cloud | 6 | 0 |
| Syed Al-Hussain | Researched IoT applications and more Flutter learning | 4 | 0 |
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Gitlab Activity Summary

Nothing to report.
