Team Name: Smart Park

Date of Submission: 10/17/21

Meeting Date & Time: 10/17/21

Meeting Location: Virtual

Meeting Duration: 60 mins

|  |  |  |
| --- | --- | --- |
| Team Members | X = Present | Notes |
| Martin Kariuki | x | Virtual attendance |
| Alexander Chiem | x | Virtual attendance |
| Max Burrell | x | Virtual attendance |
| Damian Avery | x | Virtual attendance |

Progress:

During this week we discussed and planned our new priorities going forward. This entailed sharing individual lessons learned, scheduling an intellectual property appointment, and outlining the next phase of the prototype. For the CS side the focus is to learn how to get data from the gateway to a database of choice for future app integration. For the EE side the priority is to learn how to wire up a sensor or sensors (Time of flight, magnetometer) to Arduino LoRa transceiver. We will also be looking to learn how to read the data collected by the sensors through the Arduino.

We will begin to purchase and implement different power sources to be used for each sensor package. We will also explore our solar panel options for battery longevity. Housing and materials for protection of significant components is also in the back of our minds as we move forward with our prototype.

Damian Avery:

Researching how to wire magnetometer to transceiver. Learning how utilize magnetometer IDE library.

Martin Kariuki:

Researching how to utilize time of flight IDE library code to read/decrypt data collected by sensors.

Alexander Chiem:

Researching, configuring, and packaging sensors to Arduino module as well as testing different power supplies and monitoring power consumption of transceiver.

Max Burrell:

Researching packaging for agricultural environments. Different materials or housings that can be used to protect devices from extreme temps for future implementation.

Project Tracking (current work): Assignments and activities are to be tracked until completed.

|  |  |  |  |
| --- | --- | --- | --- |
| Team Member | Assignment | Due Date | % Complete |
| All members | Gateway (already configured Go Create) | 10/08/21 | 100% |
| All members | Create Prototype | 10/22/21 | 25% |

Plan (future work):

|  |  |
| --- | --- |
| Assignment | Due Date |
| Test Prototype | 10/22/21 |
| Packaging | 10/29/21 |
| Prepare for showcase | 10/29/21 |

Issues:

No issues at this time.

Include the schedule for the next meeting:

Meeting Date & Time: 10/22/21 5:00pm

Meeting Location: John Bardo 262