Team Name: Smart Park (EE)

Date of Submission: 04/10/22

Meeting Date & Time: 04/10/22 5:00pm

Meeting Location: John Bardo Center

Meeting Duration: 30 mins

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

Progress:

We are still moving along fine. Damian was able to get the gateway to work, but is trying a different approach so we can add more features. Martin is still on the sensor package and checking if we can further optimize what we have. Alex and Max spoke about the power system and made a choice to move forward with Alex’s method.

Damian Avery:

I was able to get the RAK gateway working, but since it was running on a Chirpstack Specific Operating System we are trying a different method (installing Ubuntu and installing Chirpstack and ThingsBoard on that).

Martin Kariuki:

I am continuing to collect data form the sensors. We initially spoke about obtaining alternate sensors to test, but I feel like this is not needed based on the idea of Senior Design.

Alexander Chiem:

I have brought a power solution to the table and moving forward with that. It will be a 6000 mAh battery with a 1.2W solar panel that will be connected to a solar manager and then will connect to the Arduino. There is a thermistor to make sure the battery is within operating temperatures as well. While waiting for that to come in, I will look into the casing for the units and the Raspberry Pi Gateway.

Max Burrell:

I have spoken with Alex about the power solution and I am okay with Alex’s solution.

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

|  |  |  |  |
| --- | --- | --- | --- |
| Team Member | Assignment | Due Date | % Complete |
| Alex Chiem | Compiling power system choices | 03/12/2022 | 100% |
| Damian Avery | Getting the gateway to operate | 04/02/2022 | 90% |
| Martin Kairuki | Sensor Data Collection | 04/02/2022 | 90% |
| Max Burrell | Compiling power system choices | 04/02/2022 | 100% |

Plan (future work):

|  |  |
| --- | --- |
| Assignment | Due Date |
| Full operation of Gateway | 04/23/22 |
| Create housings for the Gateway and Package | 04/23/22 |
| Continuation of Data Collection | 04/23/22 |

Issues:

We currently have no issues.

Include the schedule for the next meeting:

Meeting Date & Time: 04/17/2022 5:00pm

Meeting Location: John Bardo Main Lobby