**Memo**

To: Professors Pisano, Osama, and Hirsch

From: Ben Livney, Maxine Loebs, Sergio Pareja, Emanuel Perez, Noah Spahn

Team: 27 - Plants are Neat

Date: 04/30/21

Subject: Customer Installation Report

1. **Details of Meeting**

We met with our client Eugene on Saturday, April 17th at 2:30pm over zoom (all members were present). The installation, which was completely virtual, lasted around 30 minutes. We were able to demo our project successfully despite doing everything online. Eugene was impressed with our work, and offered some suggestions on how to be more successful on ECE day.

**2.0 Requirements**

2.1 Requirements for the project are listed in the table below. With Eugene, we went through them and he was impressed with our ability to meet the requirements. Some requirements were modified from the original project definition, which is noted below as well.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Requirement** | **Original** | **Eliminated/Skipped** | **Final** | **Modified** | **Description** |
| Power | **X** |  | **X** |  | Must be powered for one year. |
| Range |  |  | **X** | **X** | Node-to-node range will be between 500m and 5km (originally 750m to 5km). |
| Self-Healing | **X** |  | **X** |  | Broken nodes should be identified and a new route should be discovered to circumvent broken the node. |
| Precision & Data Upload | **X** |  | **X** |  | Out-of-range data should be ignored, data should be presented on console for interpretation. |
| Weatherproof | **X** |  | **X** | **X** | Must be NEMA4X compliant or better (originally IP43 or better). |

**3.0 Assessment of Installation**

All in all, our client was satisfied with our progress this semester and the final product that we presented to him. At the time of our presentation, we had only been running our network for a short amount of time, so the amount of data shown on the graphs on our webpage was limited. He suggested that for ECE day, we let our system run for quite a while beforehand to be able to view a nice trend in our data. Since we only had one node in our system outfitted with sensors, we also only had one display page on our website. He suggested that we still make pages for at least one other node so a system to toggle between the displayed data of different nodes could be demonstrated. Eugene was understanding of the fact that our budget limited us in how many nodes we could fully outfit with sensors, power management, etc.

**4.0 Customer Acceptance**

