

**To:** Kristian Medri, Dragos Paraschiv, Sponsors

Humber college institute of Technology Computer Engineering Technology Capstones.

**From:** Ramin Kurkeice, Team leader

MARSINC

**Subject:** Progress Report on the Solar Panel Hardware

## **Summary**

On September 5, 2019, our partnership with you established the creation of MARSINC and a primary focus on creating a Solar Panel interactive display. The team plans on finalizing any hardware plans by December 12, 2019. Since October 3, 2019, we completed four of the eight hardware Tasks.

## **Work Completed**

### **October, 2019**

#### **Task 1 – Parts ordered**

In September, 2019 we created a budget of all the required parts

- Ordered the parts through Amazon, Ebay, and from tech websites.

#### **Task 2 – Proof of Acquisitions / Check in meeting**

- Spoke with Kristian about the hardware progress and shown proof of delivered parts.

#### **Task 3 – Breadboard and PCB design**

- Using the Fritzing Program we design the PCB and breadboard wiring.

#### **Task 4 – Breadboard milestone**

- Wiring the sensor on the breadboard.

## **Work Remaining**

### **November, 2019**

### **Task 5 – PCB soldering**

- Finalize on soldering parts and sockets to the PCB.
- Testing for shorts within the PCB.

### **Task 6 – PCB power up**

- Power up the PCB and run tests.

### **Task 7 – Enclosure**

- Create an enclosure for the PCB/PI and a case for the hardware.

### **Task 8 – presentation**

- Present the completed hardware assignment.

Currently the Hardware is falling behind due to more parts to be ordered before task 5 as we added an analog to digital converter, PCB sockets, and male to female wires the cost of budget has gone up by \$48 also as PCB soldering errors were discovered during task 5 and required a reprinted PCB to be soldered. Although with the set backs we still plan on completing the hardware project on the desired time of December 14, 2019.

For more information please find this link to our GitHub repository with more constant updates of the project.

Solar-Project: <https://github.com/RaminKurkeice/Solar-Project>

Updates: <https://raminkurkeice.github.io/Solar-Project/>