Solar Capstone Project Status Update C

Adrian Caprini

Mon 2018-04-02 12:56 AM

To: Austin Tian <Austin.Tian@humber.ca>;

Cc: Raphael Carlo Najera <rcnajera@outlook.com>; Johnson L <johnny.son@live.ca>;

Hi Austin,
The following email will discuss the status of the Solar Capstone project since status B. In status C, the team has made progress retrieving and displaying data from PV3 into our applications. Additionally, the team has been updating the technical report handed in including all the documentation handed in to this point based on the feedback received from our advisor. The team believes the mobile and web application should be completed by the end of this semester as we are on track.

There weren't any major changes made to the database since the last status update except having a python script to push PV3 values into Firebase. Additionally, the python script now includes code to delete tables after 30 days. This was achieved by using the epoch time we retrieved in status B. Adrian helped Raphael with adding an image to the main screen of the app, creating a splash screen and about page for the mobile application.

There have been a few changes made to the mobile application, but it was already able to retrieve the latest entry and history from the Firebase. Since the last update of the mobile application, Raphael has been able to display the history of the accumulated data up to 24 entries and added the labels for the logs. Raphael also added the link to the web app on the action bar, on the current data it now shows the date and time of last update and updated to display the current data of PV3. Raphael is currently working on displaying the PV3 history and adding icon and image to the app. https://github.com/RaphaelNajera/Solar-Capstone-App

There have been a few changes made to the web application since the last status update, but it was already able to retrieve the latest entry from the Firebase. Since the last update of the web application, Johnson has modified the HTML with CSS to enhance the appearance of the webpage. As a result, minor details such as the background color, font family, and Humber logo were added. Additionally, Johnson was able to push the values of PV3 to Firebase since the last update. Johnson was also able to retrieve and display the latest entries from the Firebase to the HTML frame for PV3. As of current, the web application is almost complete but we have minor implications to enhance its capabilities. https://github.com/j-liang/solarcapstone_web

The problem we had was displaying the data from PV3 to our Firebase, mobile and web application. We were also unclear on what we were going to display until last week when it became clearer to us. The reason we have not shown this project to the collaborator is because we are currently working on the mobile and web app on displaying the data from the 4 solar panel PV's. We are planning on showing the mobile and web app to our collaborator in week 11.

There are no financial updates to this project from status B. The project only required a Raspberry Pi to run the python script. The device must be present on Humber's network otherwise the solar panel's IP addresses are not retrievable. As a result, the project's financial status remains the same. Solar Capstone
Project Github: https://github.com/RaphaelNajera/Sunlight_Sensor

Sincerely,