Solar Capstone Project

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Declaration of Joint Authorship

Approved Proposal

Executive Summary

Background

Methodology

Concluding remarks

Abstract

Table of Contents

Illustration Lists

1. Introduction

2. Project Description

2.1 Problem

2.2 Rationale Behind Project

2.3 Project Scope

2.4 Software Requirement Specifications

2.4.1 Database

The project will include four databases, each database contains data from each of the four solar panels. The databases will be used to store the information from the PV's of the four solar panels. For solar panel PV3, it will be storing the data on Google's Firebase. Also, the information stored on the databases will be retrieved so that it can be read on our mobile and web application, so that users can access this information from their cell phones or publicly at Humber College. The data being stored in each database will include how much solar energy is collected from each solar panel and the total amount of energy collected every month and year. (Developed by Adrian Caprini)

2.4.2 Mobile Application

This project will include a mobile application which is currently available for Android platforms. The mobile application will be called Solar Light. This app will take the data from the solar panel PVs, which is stored on the database and display them on the app. The user will be able to see how much solar energy has been collected from each of the solar panel PVs each day. It will also show the total energy collected each month and each year. It will display this data in a graph and list view. The application will update from the database each time its run, or when the user clicks on the update button to request an update from the database. (Developed by Raphael Najera)

2.4.3 Web Application

The web application will function similarly to the mobile application where both will display data retrieved from the solar panel stored in the database. The difference between the two is one will be accessed from the phone while the other is globally advertised. The web application will be displayed on a monitor in the L building, where the Humber community can observe the school's solar resources. As a result, the community will be able to observe the amount of solar energy collected from the sun, how much energy has been expended, and how much CO2 has been avoided. This graphical user interface is intended to be built using NetBeans. (Developed by Johnson Liang)

2.5 Project Overview

2.6 Problems Encountered

2.7 Approaches

2.8 Walkthrough of System

3. Progress Reports

4. Conclusions

5. Recommendations

6. Technical References

7. Appendices