Title of the project: Sunlight Intensity Monitoring System

Group No: 2

Project Group Members:

- Aman Kumar, Sec.Roll.no: 6, Univ.Roll.No: 181500072
- Rishabh Gupta, Sec.Roll.no: 48, Univ.Roll.No: 181500563

Project Supervisor: Mr. Saurabh Singhal, Assistant Professor

The Problem Statement:

There is a person who loves gardening so he spends some time in his garden and feel relax after his full day of tiring and stressful job. He provides water to the plants, check the fertility and moisturization of the soil, but due to high temperature in summer season, he worries about the health of his plants as he is at job during the day and for that he wants to track what amount of sunlight do the plants get in the whole day, so that he can take further measures to ensure the health of his plants. Therefore, we come up with the idea to develop the sunlight intensity monitoring system which will monitor the sunlight and stores the data on the cloud for further analysis. Then he will view this data in form of graph chart by logging into the cloud during his work.

Objective of the project:

The objective of the project is to build the monitoring system which will continuously keep track of the sunlight falling on the plants each day so that an individual can take further steps to ensure the health of the plants in the garden.

About Bolt's cloud platform:

Its control panel provides us the user access management system which enables us to monitor and control the IoT devices. The wifi module is connected to the bolt cloud, which will stores the data received from the sensor and helps us to visualize the data in the form of line graph.

Hardware Required:

1. Light dependent resistor (LDR)
2. Wifi module
3. Resistor
4. Breadboard

Methodology:

This IoT device is placed in the garden to measure the intensity of sunlight by the LDR sensor, then data will be sent to the cloud where we will analyse the data in the form of line graph. Then we will download the data in csv format and we will apply the visualization technique to obtain some insights from the data.

Conclusion:

This project will be used to monitor the sunlight intensity continuously in the garden by fitting the IoT device which will send data to the cloud where graph chart will be displayed then an individual can view data from cloud and take further steps required. In this way, our project would be able to solve some real-life problems.

Signature of Project Supervisor: