

Project Title: Final Project Raspberry Pi Weather Tracker

Lab Course: CpE 185 Section 2

Lab Instructor Name: Sean Kennedy

Lab Day: Tuesday 6:30 pm

Team Members:

Ryan Aboueljoud,

David Quintanilla,

Xavier Howell (Thursday Lab)

Name	Bitbucket Username	Bitbucket Email
David Quintanilla	dquint54	dquint54@gmail.com
Ryan Aboueljoud	raboueljoud_csus	raboueljoud@csus.edu
Xavier Howell	xhowell	xavierhowell@csus.edu

Project Description:

We will be using a raspberry pi to host a flask server which will aggregate weather data around Sac State from the free public weather.gov API. Using the allotted data, we will graph and analyse the deviation on a webpage. Depending on the severity of the weather temperature a series of LED's connected to a PI , will sequentially light up, representing the current state of the weather (comfortable, uncomfortable, extreme).

Team Members Responsibilities:

Functionality of appropriate lights changing as states change (Ryan Aboueljoud): Build website and manage weather.gov API calls.

Determining Direction of movement (David Quintanilla): Interpret and graph JSON data provided by weather.gov. The graph will display the temperature against time.

Ensuring backup strobe works will only backward movement (Xavier Howell): Will focus on triggering the correct LED's based on weather data.