**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)**

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| David Quintanilla | dquint54 | dquint54@gmail.com |
| Ryan Aboueljoud | raboueljoud\_csus | raboueljoud@csus.edu |
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**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.