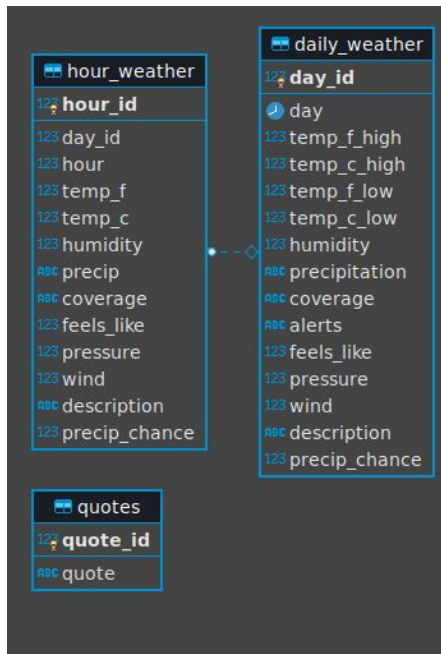


## Project Milestone 3

We spoke with Keval on Friday and we did not have anything fully completed to show him. He told us that we needed to get our database loaded with data and implement an API code. Since then we have loaded our database with Historical weather data for Boulder Colorado. Below are some pictures showing our database setup and implementation.



The screenshot shows a terminal window with two panes. The left pane displays a table of weather data for Boulder, Colorado, with columns for **day\_id**, **day**, **temp\_f\_high**, **temp\_c\_high**, **temp\_f\_low**, **temp\_c\_low**, **humidity**, **precipitation**, **coverage**, **alerts**, **feels\_like**, **pressure**, **wind**, and **precip\_chance**. The right pane shows JavaScript code for an API client that fetches weather data from the OpenWeatherMap API and inserts it into the **daily\_weather** table.

```
var pg = require('pg');
var apiKey = 'd8ef7e5a6e2d4a5c57702a8f93';
var constr = 'postgres://postgres:kier@localhost:5432/weatherdb';

var client = new pg.Client(constr);
client.connect();

var ret = client.query('select * from daily_weather');

var http = require('http');
url = 'http://api.openweathermap.org/data/2.5/weather?q=boulder,colorado&units=imperial&appid=' + apiKey;

var request = http.get(url, function (response) {
  var buffer = '';
  response.on('data', function (chunk) {
    buffer += chunk;
  });
  response.on('end', function (err) {
    console.log(buffer);
    console.log('data');
    data = JSON.parse(buffer);

    var date = new Date();
    var temp_f_high = data.main.temp_max;
    var temp_c_high = (temp_f_high - 32) * (5/9);
    var temp_f_low = data.main.temp_min;
    var temp_c_low = (temp_f_low - 32) * (5/9);

    var humidity = data.main.humidity;
    var precipitation = data.weather[0]['main'];
    var wind = data.wind['speed'];
    var feels_like = data.main.feels_like;
    var pressure = data.main.pressure;
    var description = data.weather[0]['description'];

    debugger;
    console.log(data);

    client.query('INSERT INTO daily_weather(day, temp_f_high, temp_f_low, temp_c_high, temp_c_low, humidity, precipitation, coverage, alerts, feels_like, pressure, wind, description, precip_chance) values ($1, $2, $3, $4, $5, $6, $7, $8, $9, $10, $11, $12, $13, $14)',
      [
        date,
        temp_f_high,
        temp_c_high,
        temp_f_low,
        temp_c_low,
        humidity,
        precipitation,
        null,
        null,
        feels_like,
        pressure,
        wind,
        description,
        null
      ]
    );
  });
});
```

Following that we also implemented some API code to work with our database and load it with data from <https://openweathermap.org/api>. This website allows us to pull current and past weather data so we thought that it was optimal to use.

Shown below is our api code:

```
1  var pg = require('pg');
2  var apiKey = "6adef049dd8abe2d9aac6577b7a20f93";
3  var conStr = "postgres://postgres:Krl3&3R@localhost:5432/weatherdb";
4
5  var client = new pg.Client(conStr);
6  client.connect();
7
8  var ret = client.query("select * from daily_weather");
9
10 var http = require("http");
11 url = "http://api.openweathermap.org/data/2.5/weather?q=boulder,colorado&units=imperial&appid=" + apiKey;
12
13
14 var request = http.get(url, function (response) {
15
16     var buffer = "",
17         data;
18     response.on("data", function (chunk) {
19         buffer += chunk;
20     });
21
22     response.on("end", function (err) {
23
24         console.log(buffer);
25         console.log("\n");
26         data = JSON.parse(buffer);
27
28         var date = new Date();
29         var temp_f_high = data.main.temp_max;
30         var temp_c_high = (temp_f_high - 32) * (9/5);
31         var temp_f_low = data.main.temp_min;
32         var temp_c_low = (temp_c_low - 32) * (9/5);
33
34         var humidity = data.main.humidity;
35         var precipitation = data.weather[0]["main"];
36         var wind = data.wind["speed"];
```

---

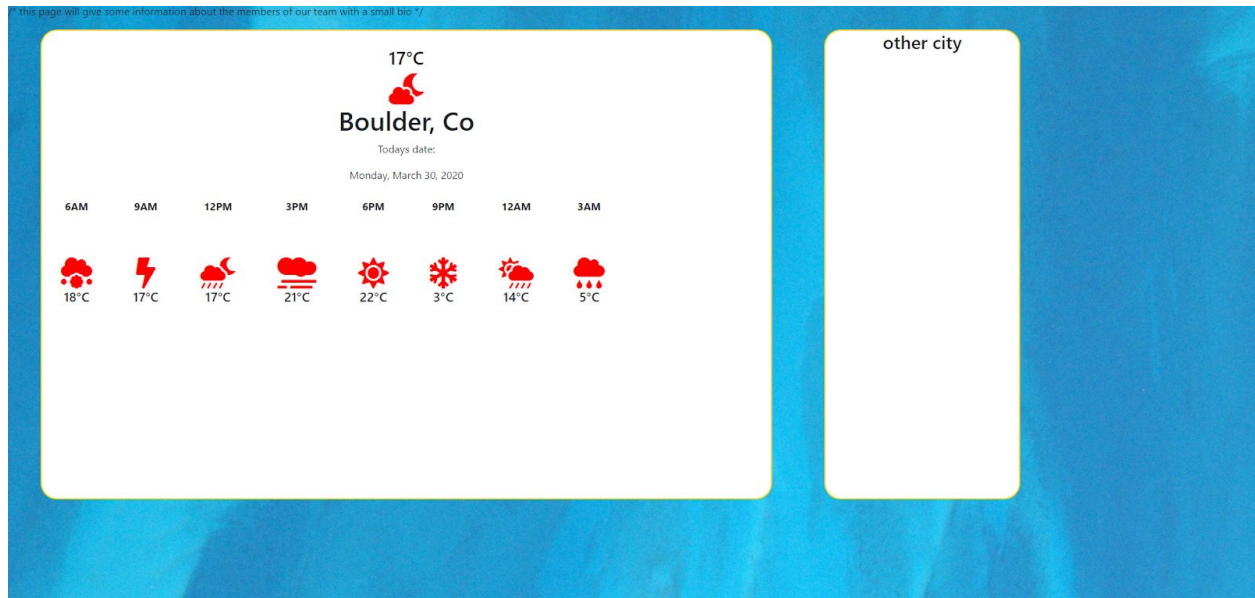
```

26     data = JSON.parse(buffer);
27
28     var date = new Date();
29     var temp_f_high = data.main.temp_max;
30     var temp_c_high = (temp_f_high - 32) * (9/5);
31     var temp_f_low = data.main.temp_min;
32     var temp_c_low = (temp_c_low - 32) * (9/5);
33
34     var humidity = data.main.humidity;
35     var precipitation = data.weather[0]["main"];
36     var wind = data.wind["speed"];
37     var feels_like = data.main.feels_like;
38     var pressure = data.main.pressure;
39     var description = data.weather["description"];
40     debugger
41     console.log(data);
42
43     client.query("INSERT INTO daily_weather(day, temp_f_high, temp_f_low, temp_c_high, temp_c_low, humidity, precipitation, cov
44         [
45             date
46             ,temp_f_high
47             ,temp_c_high
48             ,temp_f_low
49             ,temp_c_low
50             ,humidity
51             ,precipitation
52             ,null
53             ,null
54             ,feels_like
55             ,pressure
56             ,wind
57             ,description
58             ,null
59         ]);
60     });
61 });

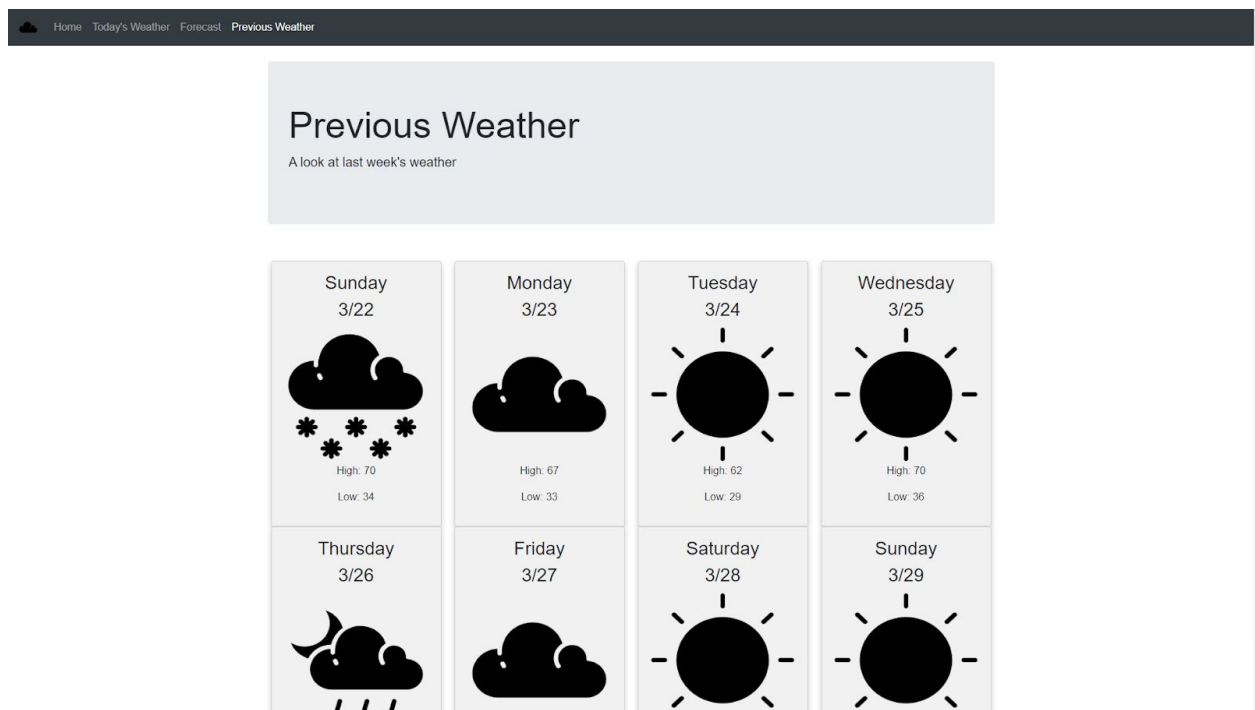
```

We are currently implementing a foundation for our ejs code as well as we will begin building our node server this week to tie all of our projects together. Currently our front page is being worked on simultaneously with our other web pages but i have included where they currently stand below.

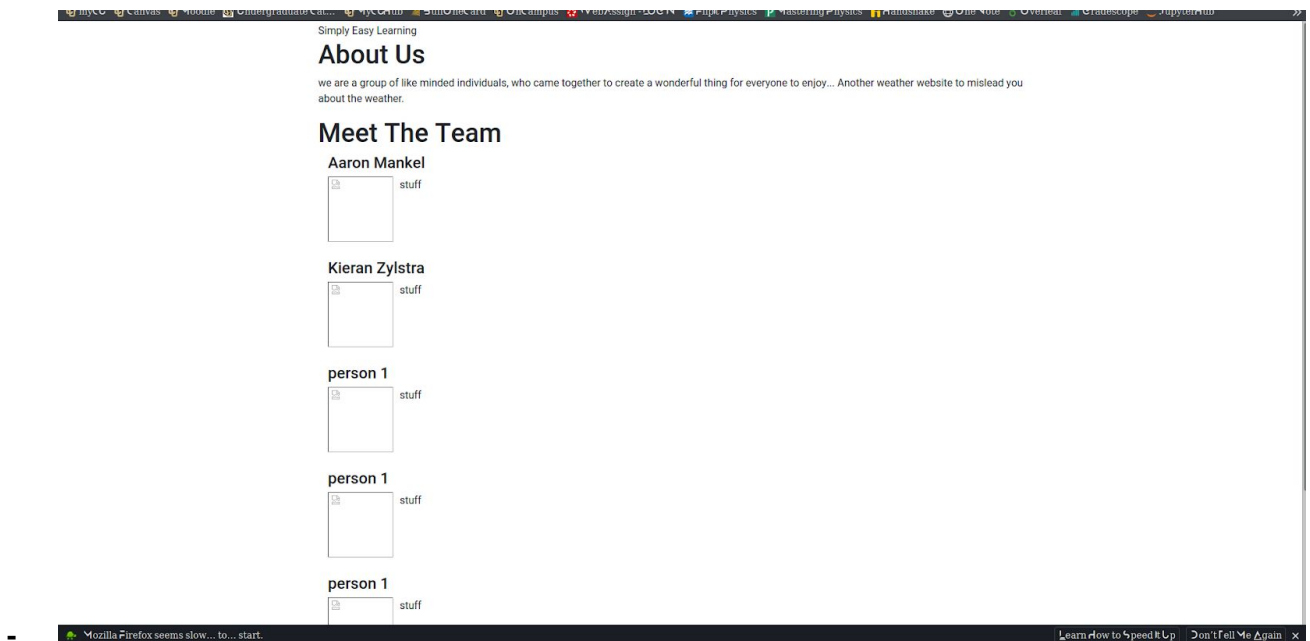
## Front Page:



## Previous Weather Page:



## About Us Page:



As a group, we are struggling with meeting deadlines and cooperating all while completing quality code. To help combat this issue, we have switched up who is working on what features. During the past week we made great progress and hope to see it continue in the future. If we continue to have issues we will set a meeting with Keval to discuss methods to improve productivity and help us meet our deadlines.