

# React Weather App Design Plan

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DGM 6308 Intermediate Programming for Digital Media

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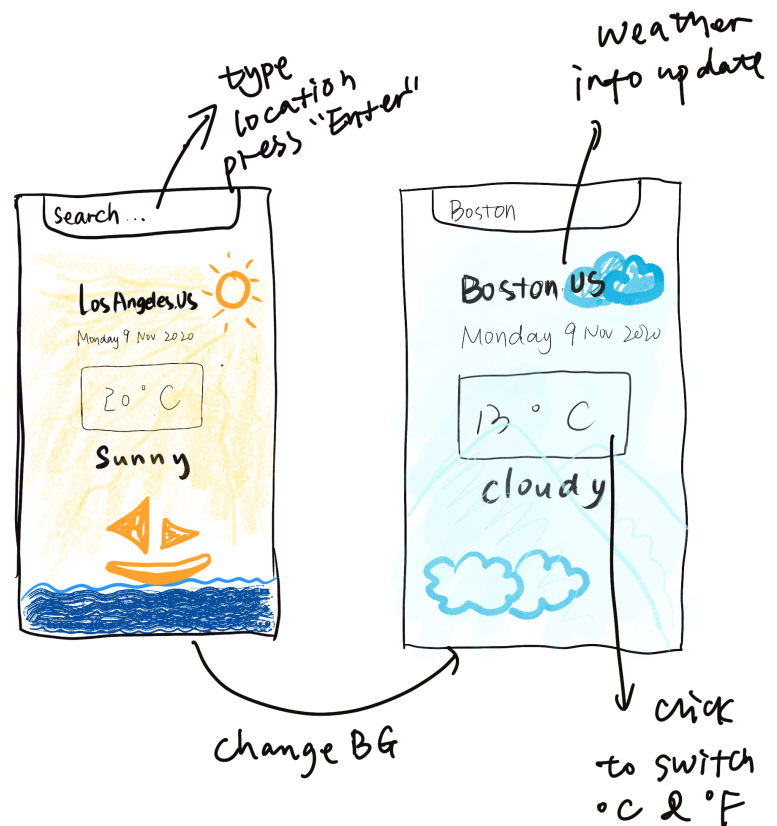
Nov, 10, 2020

## 1. Description:

I'm going to make a Weather app mainly in React JS, also will use some JQuery functions. I will use the Open Weather Map API to make calls to a restful api to return the current weather data. This uses the Modern Javascript Fetch AP along with React hooks and conditionals.

The main functions include(Please check the sketches):

- Type the location in search bar and press the "enter" key, then the weather information (temperature, date, day, month, year and the weather type– sunny or cloudy, etc. ) will show up on the screen.
- Checking of the type of the weather, if it's above 16 degrees C, the background wallpaper will turns to a warmer one, otherwise it's a cold background.



- Also, I will use JQuery to add a click function so that the end users can switch the degrees between Celsius and Fahrenheit.

## 2. Research:

There are couple of things that I wanna research.

- Import the Open Weather API to my app.
- Combine JQuery elements to React.js
- In React.js, how to create a function to access the weather information.
- How to set a condition to change background.
- How to add JQuery click function to switch degree between Celsius and Fahrenheit.

## 3. Break Down The Problem:

*1. Get the weather info by type location in the search bar(outside the return function):*

In the app function:

query and set query as constant

weather and set weather as constant which will equal to an empty object.

create a constant search as a event, and then:

if the (press the enter key) event equals to "Enter"

(whatever we've typed in my query or set my query to what I was

searching for, it will fetch, access the api) request the api

then, (the result gonna return rest of json), get to the json from response and pass to another promise:

then, the result will return to the setweather result

Inside the return function:

use onchange function, so that I can get the value of the input that I typed in

and I need to bind this value equals to the query,

And then use onkeypress function equals to search

All this done, going back to the search outside the return function, add the setquery to an empty string so that the user can type in the different places.

*II. Set the warm or cold background(inside the return function):*

if typeof weather is not undefined//checking for the type of the weather, if this equals to undefined then return to default cold background.

(then get another weather temperature):

if it's above 16 degree Celsius, add the class of warm background.

else return the app(which is the default cold background),

else return the app(which is the default cold background)

*III. to change degrees from Celsius to Fahrenheit*

*I'm still researching on adding JQuery function to react.js. Roughly, for example we call function(a){*

*// to show the current condition*

*var cel = Math.round(a.main.temp - 273);*

*//to change degrees from Celsius to Fahrenheit*

```
$('# '). click(function() {  
    $('#'). removeClass(' ');  
    $(this).addClass(' ');  
    $('#temp').html(Math.round(cel*1.8+32));  
})  
$('# '). click(function() {  
    $('#'). removeClass(' ');  
    $(this).addClass(' ');  
    $('#temp').html(cel);
```

```
});
```

```
}
```

#### 4. Schedule of Milestones:

Initial Proposal **Nov 3**

Rough Draft Design Document **Nov 10**

Proof of Concept, pseudo code **Nov 17**

Feedback to your peer **Nov 24**

Practice Presenting your project **Dec 2nd**

Final Project, design document, video due in your blog – **Dec 9**, 6AM (last day of class)