

CPS630
LAB 2
Due: Feb 12th @ 23:00hr.

Create a **beautiful, fully functional responsive Weather app** using AJAX with JSON OR XML and current data from the **openweathermap.org** server.
Students need to apply for a free unique key to access information from:
<http://openweathermap.org/api>

Criteria: implementation must be pure/vanilla css & JavaScript else Zero.

1. Esthetic and Design: Student are encouraged to be creative but weather information concisely present using **graphic and text**. Application must be responsive to various computers and mobiles. Create your own custom interface that satisfies all criterions.

These links provide good layout and interface for weather app:

- <http://www.hongkiat.com/blog/weather-widgets-for-android-home-screens/>
- <http://www.imore.com/best-weather-apps-iphone>
- <http://android.appstorm.net/roundups/lifestyle-roundups/10-beautiful-weather-apps/>

2. User interaction: User selects Fahrenheit or Celsius temperature. User must be able to search for city around the world.
3. Weather Information:
 - Current temp, and weather conditions (cloudy, snow, rain.. etc.), wind and humidity.
 - Forecast of minimum 5days
 - hourly(per 3hr) weather information (freedom implement data display ie: graph or traditional information display.
4. Use only JavaScript AJAX (NO external frameworks such as jquery and others) call to server to get and manipulate information. Update information must be done asynchronously: location change or temperature F to C or C to F

4.1 Implement a toggle switch to C/F using pure css.

5. 20% of this lab mark is toward esthetic and logical layout.

No External framework for CSS.

Submission is via Brightspace dropbox: zip- a self-contained folder of your weather app.

A good layout example (google weather):



Resources:

Unique app id is free:

<http://openweathermap.org/price>

<http://openweathermap.org/appid>

Search for **Free weather icons or weather font**:

Or use from the following

<http://naldzgraphics.net/freebies/free-weather-icons/>

<https://erikflowers.github.io/weather-icons/>