## Lab 2 – JavaScript, AJAX, JSON, using APIs

## Due 9/27 before class

Weather and <insert other API here> app

This is an **individual** lab. To be hosted on your personal Azure VM at https://<your-VM-URL>/<your-personal-GitHub-repo>/lab2

You will need to have SSL certs (aka, HTTPS) on your VM or else you won't be able to connect to your APIs from your VM!

Use OpenWeatherMap for this lab! Connect to its API and see what information you get back from it. Don't forget to check out the HTTP response headers: do they include extra metadata not found in the JSON that you might find useful?

Find another **free** (you are not allowed to pay for anything; if you have to put a credit card in, you cannot use it) API that provides some other kind of data (your choice!). Do the same as with the OpenWeatherMap API.

Next, write a web app to show the weather for Troy, NY, and then – think "creativity," fill out the rest of your app with other information provided to you by both of your APIs.

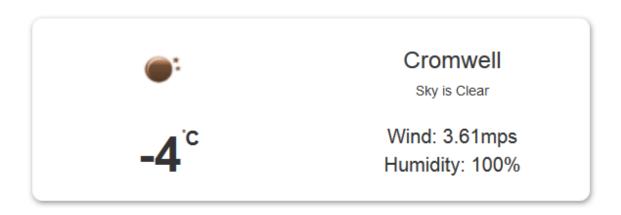
It is important to check out the API documentation for both of your APIs to see what data you can get... you might be surprised how much you can get!

Use CSS/JavaScript/Bootstrap/jQuery/whatever (as long as it's not a web framework) to make your web app interesting! Make sure you have valid HTML and CSS (warnings OK, but no errors of your own making... -5 if there are HTML errors; -5 if there are CSS errors).

5 items of content from each API at a minimum!

YOU MUST CITE ALL YOUR SOURCES IN YOUR README.MD! YOU GET A 0 FOR THE LAB IF YOU DON'T DO THIS! (It's plagiarism!)

Example weather-only implementation using Bootstrap. Yours needs to be better than this! (And use both of your APIs):



## **Grading:**

Total	50 pts
README.md	10 pts
Creativity	10 pts
Quality HTML/CSS/JS	10 pts
Manipulating data received from APIs (JSON)	10 pts
Getting data from APIs (AJAX)	10 pts

For an additional 5 points, see if you can figure out how to use the HTML5 Geolocation API to get the weather for the user based on their location rather than hard coding Troy, NY.