

## Lab 3 – JavaScript, AJAX, JSON, using APIs

**Due 9/29 before class**

Weather and <insert other API here> app

This is an **individual** lab. To be hosted on your personal Azure VM at `http://<your-VM-URL>/<your-personal-GitHub-repo>/lab3`

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) API that provides some other kind of data (your choice!). Do the same as with the OpenWeatherMap API.

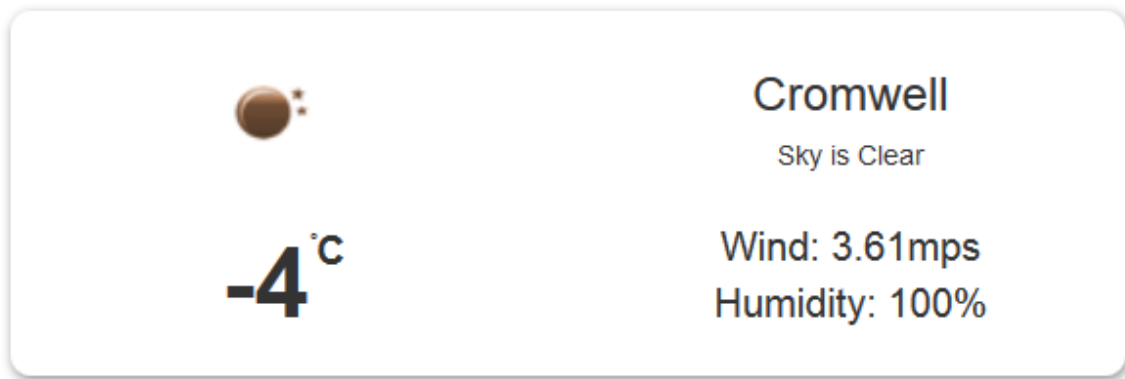
Next, write a web app to show the weather for Troy, NY, and then – think “creativity,” fill out the rest of your app with other information provided to you by both of your APIs.

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).

**YOU MUST CITE ALL YOUR SOURCES IN YOUR README.MD! YOU GET A 0 FOR THE LAB AND A ONE LETTER GRADE DEDUCTION FROM YOUR FINAL GRADE 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:

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

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.

Please fill out this Google form for the TAs, so they can easily find your GitHub repo/VM:

<https://forms.gle/4MMCXzUgKZh9W4Sv9>

**Make sure you submit your response before Lab3 deadline even though you already messaged to TAs before.**