

MAP WRANGLING LAB

In this lab you will change the dataset that is being depicted in a D3 choropleth visualization. Take a minute to look through the files that you've been given.

We will be using actual TSV files, so you will need to be running a local server in order to load a TSV file into your `openMe.html`.

****(If you do not understand why this is, try simply opening `openMe.html` in your browser and read the error you get. If you don't understand what that error means, Google it. If you're still not sure, come and ask me.)****

One way of running a local server is with Python's SimpleHTTPServer (or `http.server` if you use Python version 3). To spin up a server, open your command prompt, navigate to your unzipped lab folder, and run the command. This will look something like:

```
$ cd Desktop/MapLab
$ ls
    js openMe.html tsv
$ python -m SimpleHTTPServer
    Serving HTTP on 0.0.0.0 port 8000 ...
```

(or with Python version 3)

```
$ python3 -m http.server 8000
    Serving HTTP on 0.0.0.0 port 8000 (http://0.0.0.0:8000/) ...
```

Now, open your browser and enter `localhost:8000/openMe.html` as the url. You should see a choropleth depicting unemployment rates. In your `openMe.html`, you'll see that the map is pulling from `unemployment.tsv`. Your task is to use the same map to depict data from `drought.tsv`.

YOU ARE NOT ALLOWED TO MAKE ANY CHANGES TO DROUGHT.TSV

So help me god, if you change that file I will lose it! You should only be adding code to `openMe.html`. Here are some other things that you should be doing:

- Look at both `unemployment.tsv` and `drought.tsv` and see how they're structured (hint: there is a field that appears in both files).
- Go to the US Drought Monitor site to figure out what the columns in `drought.tsv` mean: <http://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?TX>
- Think about how much you love this class!

- Think about whether blue is an appropriate color scheme for depicting drought information (hint: it's not).
- You have multiple columns in `drought.tsv` as opposed to just one in `unemployment.tsv`. Think about how you can combine columns, add mappings, utilize tooltips and interaction.
- Remember that having a map that is interpretable is far more important than cramming every piece of data in at once.
- • Come up with a new title (maybe a subtitle too!) that helps users understand what they're looking at.

Depicting a single column of data from `drought.tsv` in your choropleth requires minimal code changes. Start there, then move on to incorporating other columns, changing the color scheme, etc. If you have extra time, take a closer look at how D3 is actually generating that map.

Submission:

Due: Thursday, April 12 at noon

Please zip all files necessary to run your demo and submit it via the provide.

```
$ provide comp177 maplab {your_cs_id}.zip
```