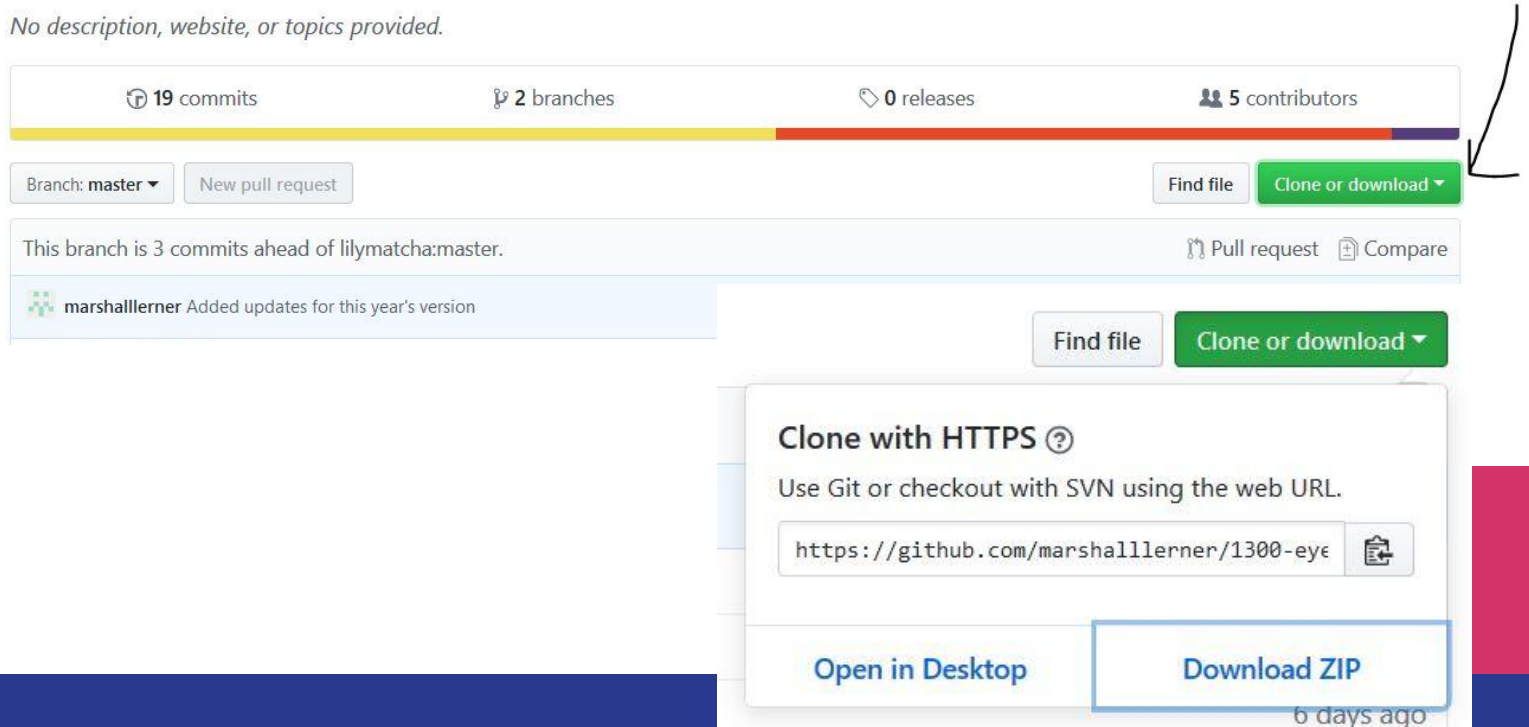
Heatmap and Replay Gear-up

With your host, Marshall

Step 1: Download the files using Github

https://github.com/marshalllerner/1300-eye-tracking



Step 2: Put your screenshots and log files into the extracted Github folder

We will provide you with screenshots on the day of your eyetracking session, so you can use samplescreen.png for the purpose of this gearup.

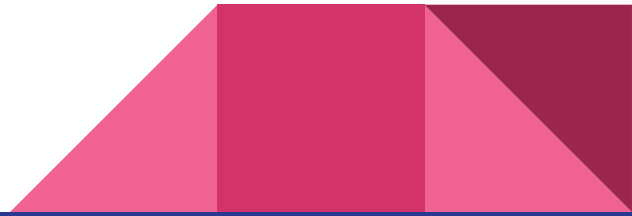
If you don’t have log files yet, you can use the sample one here: www.eternote.com/sample

Step 3: Check out the files with a text editor

If you don’t have a text editor already installed, we recommend Atom or Sublime Text

Heatmap.html: 4 TODOs

Replay.html: 3 TODOs

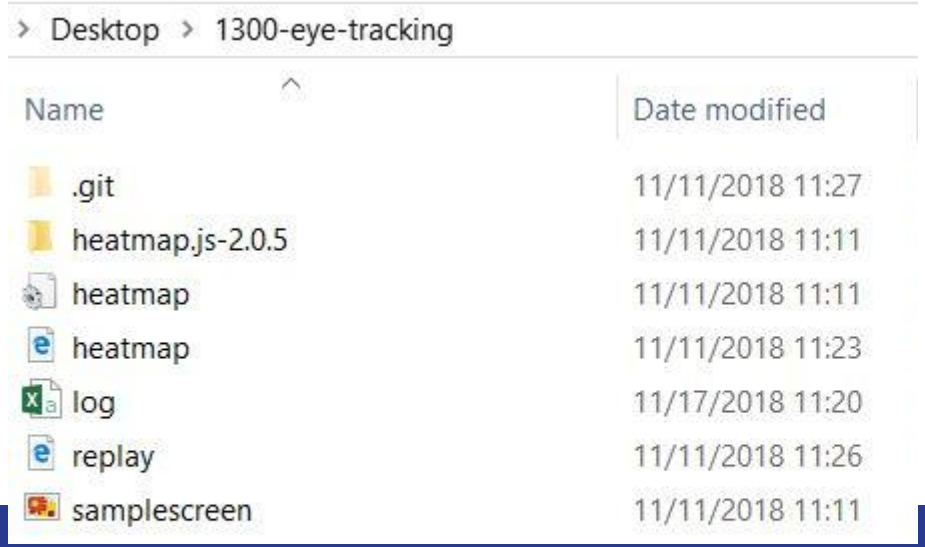


Heatmap.html TODOs

1. Put vour CSV filename in the constant CSV_NAME

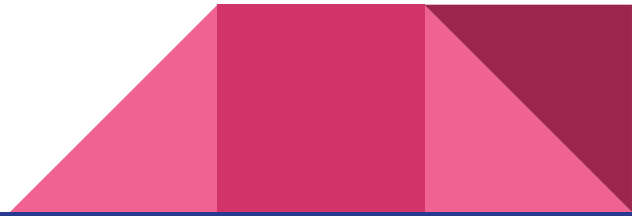
```
const CSV_NAME = 'TODO: put your CSV filename here';
```

This would be the relative path to your CSV file from your heatmap.html. For example, if your folder looks like this, it will be “log.csv”:



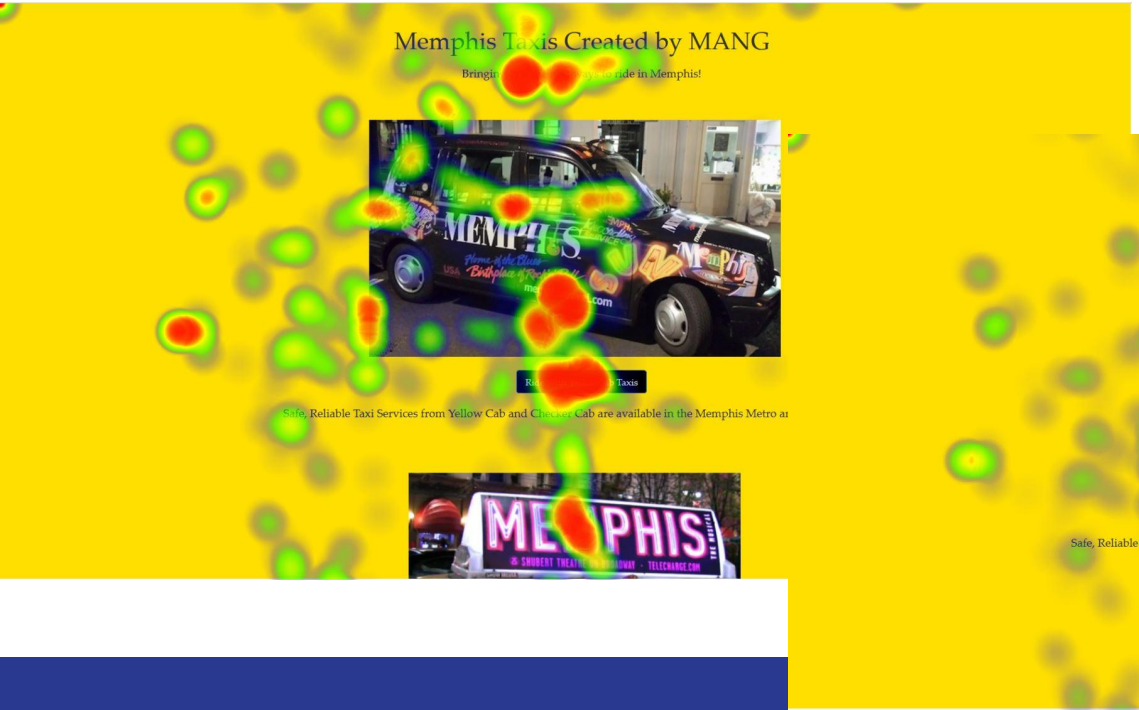
Heatmap.html TODOs cont’d

2. This is the meat of the assignment. This is where you take each line from your CSV and put the data points into the datapoints array. This shouldn’t be more than 20 lines of code



Heatmap.html TODOs cont’d

3. This is the a value to change the threshold for the colors of the heatmap. In the example below, the left image for max is a lower value than the right image. You want a few red areas



Heatmap.html TODOs

4. Put your screen filename in the placeholder just like the CSV file from step 1 (using the relative path). In our previous example, the placeholder would be “samplescreen.png”

```
</script>
<body style="margin:0">
<h2>Heatmap</h2>
<div id="one" class="heatmap" style="position: relative;">
<img id="two" class="heatmap-canvas" id="heatmap-canvas" style="position: absolute; left: 0px; top: 0px" src="TODO: put your screen captu
</div>
</body>
</html>
```

Replay.html TODOs

1. Put your CSV filename in the constant CSV_NAME. This would be the relative path to your CSV file from your heatmap.html. For example, if your folder looks like this, it will be “log.csv”.
2. Put your screenshot relative path filename in the url(“) pointed at by an arrow below.

Replay.html TODOs cont’d

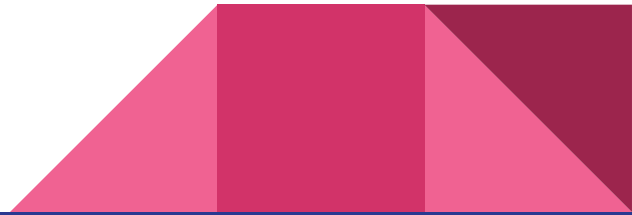
3. This is the meat of the assignment. This is where you take each line from your CSV and put the data points NOT into the datapoints array this time, but use ctx.fillRect(x_value, y_value, width_dot, height_dot). This shouldn’t be more than 20 lines of code

Note: You must set the variable ctx.fillStyle. To set the variable, you say

ctx.fillStyle = ___

where you fill in the ___ with the color of the shapes you are filling, like "rgb(255, 0, 0)" for red (keep the quotes).

You must set this before calling ctx.fillRect()



Viewing the actual heatmap or replay of your data

1. If you do not have Python, **download** and install it for Mac or for Windows.

2. To test your code, open *Terminal*, **navigate to the folder that contains "heatmap.html," and run the following command to launch your Python server:**

   If you have Python2: `python -m SimpleHTTPServer 8000`
   If you have Python3: `python -m http.server 8000`

3. Once your Python server is running, the visualizations will be displayed at this URL: http://localhost:8000/heatmap.html and http://localhost:8000/replay.html