**CS 171 – Design Sprint**

### Week 2 - Map

This week, you will make a **map** of your project, i.e., you are going to decide the directions of where you want to go with this project.

**As a team**, your discussion should focus on the following questions:

1. Who is your audience in general? Come up with several options and pick one target audience.
2. Describe your target audience in more detail. What do they know? What are their interests? What visualization literacy do they have? etc.
3. What questions can you answer? Come up with a list of interesting questions that your audience may have about your data. The more, the better, but your team should come up with **at least 10 questions**.
4. What data do you have? Download the data that you picked from this website. Take a look at it in Excel or Google spreadsheet and give a brief description of each attribute and its data type (categorical, ordinal, or quantitative) in your process book. It’s OK if you are not sure about the data type for some attributes - you can simply describe them (e.g., geographic location).

You may want to use a virtual whiteboard to facilitate your discussion. We recommend Google jamboard (<https://jamboard.google.com/>).

**Individually** at home, you should then continue to answer these questions:

1. Install Tableau following these instructions. Put a post on Piazza if you are having technical problems.
2. Load your data into Tableau and generate **at least three** initial visualizations **per team member**. Each visualization should use a new worksheet. Use the “Show Me” feature or drag and drop dimensions and measures to create your visualizations.
3. For each worksheet, create a title that corresponds to the question that this visualization answers.
4. Save an image of each worksheet by right-clicking and selecting Copy -> Image…, or take screenshots using your OS. Upload the images into your process book. Make sure that the titles (i.e., the questions) are visible. Put the name of each team member before the screenshots that they uploaded.

Please document your discussion and answers in your process book. Be comprehensive and add sufficient details. At this point, we do not want you to rule out anything - use your inspiration, generate a lot of ideas, and diverge. Please include both text and any screenshots of your virtual whiteboard (if you used one) in your process book.

Finish all of these week 2 tasks and update your process book **before 11:59 pm EDT on Sunday, September 13**. We will continue the design sprint with the “sketch” phase in week 3.

Take a look at the design sprint overview document if you have not done so already. Every week by Sunday, you will need to update your process book with the weekly assigned activities. Your TF mentor will check your updates and leave comments and feedback directly in your process book. You will then review their feedback and comments and revise your process book accordingly if needed.

Possible useful Tableau tips:

* When loading a dataset, Tableau will automatically decide data types in your data. However, sometimes you may want to change the default data type, e.g., airport code (like LAX) might be “string” by default, but in some cases, you may want to change it to “geo” to build visualizations on a map. More details: [Data Types from Tableau Website](https://help.tableau.com/current/pro/desktop/en-us/datafields_typesandroles_datatypes.htm)
* There are also cases where you want to join two data tables to create one “big” table for data visualization. Tableau has “join” as a built-in feature. More details: [Join Your Data from Tableau Website](https://help.tableau.com/current/pro/desktop/en-us/joining_tables.htm)