

Homework 1

Getting a Clear Visual of Data Visualization – Fall 2024

What to do:

- **Pick at least two (2) exercises to complete from the list below**
 - You may complete any that are interesting or exciting to you. Though you may select those which seem easiest, I hope you'll challenge yourself by picking some which align with your interests and help you build your skills.
- **Submit one (1) pdf containing all of your answers to the exercises you've completed to the assignment on Canvas by the end of day (11:59PM EDT) on Friday, September 27th.**

Exercise Set – Pick two (2) to complete:

- **Attend office hours for one (1) of your classes (not this one).**

They can be held by either the instructor or by a TA. After attending, write the answers to the following questions:

 - What class's office hours did you attend?
 - When did you go?
 - Who did you talk to?
 - What is one (1) thing that you talked about or learned from attending?
 - Note: if you talked about something personal which you would prefer not to share, you can write **"We talked about something personal"** instead.
- **Visit three (3) places that you might want to study or do homework on campus.**

For one (1) of these places:

 - Rate it on a scale from 1 to 5 stars (half stars are allowed)
 - Write a 50 to 100 word Yelp-style review (about the length of this bullet point). Don't worry too much about adhering to a specific style and feel free to bring your personality into the review. Ideally, after reading your review, other students should be able to get a good feeling about whether that study space is right for them (even if it's not right for you).

- **Create a Github account and make your first repository.**

https://github.com/signup?ref_cta=Sign+up&ref_loc=header+logged+out&ref_page=%2F&source=header-home

Then, answer the following questions:

- What is your github username?
- Provide a link to the repository you created.
- Use the git commands (add, commit, and push) in a terminal or a GUI-based git program (like [Github Desktop](#)) to add a file of your choice to the repository. For example, you could add this homework document.

- **Watch a video about a great data visualization from this YouTube playlist:**

https://www.youtube.com/playlist?list=PLbzq0eVw_4Dkqd5kuwY3uMANPvVBQ292V

After watching the video, answer the following questions:

- Which video did you watch?
- What is this video's highlighted visualization about?
- What does Robert Kosara (the person speaking) argue that this visualization does particularly well?
- What is one (1) lesson from this video that you can apply to the process of making a data visualization?

- **Create visualizations using the matplotlib package in python**

Matplotlib Tutorial: https://www.w3schools.com/python/matplotlib_intro.asp

Python Tutorial: https://www.w3schools.com/python/python_getstarted.asp

Then, add screenshots of two (2) visualizations you created (e.g., scatter plot, bar chart, pie chart, histogram, etc.) to your homework pdf.

Your visualizations should **not** be identical to any of the visualizations in the tutorial and should include the following:

- Title
- Axis labels
- Data marks (e.g. line(s), dots, bars, pie slices, etc.)