Project 2: Improve Your Code from Project 1

Agreement

This Project is meant to be an assessment of your ability to creatively execute several learning objectives at once by visualizing information contained in a data set of your choosing.

You may choose to work alone or work together with one other student. If you work with someone else, you will both receive the same grade for the project.

You may use any resource, either online or physical, to complete the work. This includes:

- Any help forum or website (e.g. StackOverflow) questions that already exist.

- Any notes, code, slides, papers, or previous feedback from the instructor.

- Any books, online or physical.

- Scholarly works such as papers.

It DOES NOT include:

- Help from generative artificial intelligence such as ChatGPT.

- Help from homework websites such as Course Hero or Chegg.

If you use work outside normal course resources (textbooks, lecture notes, slides, code, or instructor feedback), your group is expected to cite the work by providing a URL to the source near the place that the code was used.

Additionally, if you work with another student, you will be required to use Github and version control software (git) to complete the project.

Instructions

Step 1: Decide on how you would like to move forward with your project. Your options are:

- Improve your current project by yourself.

- Join together with another student and move one of your two projects forward.

- Decide to start on a different data set by yourself.

- Decide to start a new data set with a partner.

You should make your decision by **Nov. 3, 2023 at 5 pm** to stay on track! Any new data sets must be approved by your instructor before this deadline.

Step 2: Create a Github repository and an R project for your project 2. Copy over the necessary materials and add them to the repository. If you wish to work with a partner, then you are **required to use git and Github to manage your project.** If you are working on your own, this step is optional. Do this by **Nov. 3, 2023 at 5 pm**.

Step 3: Project 2 will be at least one data visualization (no more than two). The visualization(s) can be the same as project 1 or different. However, the code should be improved. The code producing your visualization should include at least **three elements from at least two categories** the following list:

- a function created by you that is used at least twice;

- a loop; and/or

- a conditional statement.

Add these elements as a working draft by **Nov. 13, 2023 at 5 pm**.

Step 4: Your Project 2 code must conform to the Best Practices document in the Project 2 folder in the course repository. Refactor your project so that it conforms to these standards. Do this by Wednesday **Nov. 15, 2023 by 9 am** to stay on track.

Step 5: Present a short summary of the changes you made to your project 1 to the class. It should be about 2-3 minutes, and list the major changes, including the required elements in Step 3. Be ready to present this summary on Wednesday Nov. 15 during class. Submit a file with just the visualization(s) to Canvas by Wednesday Nov. 15 at the beginning of class time.

Step 6: Turn in your final version by **Friday Nov. 17 by 5 pm**. If you are working alone, you can submit either a zip file containing a folder with all project elements to successfully knit your project or a Github repository link. If you are working with a project, you will need to submit a Github repository link ONLY.