CS-MCP Rubric

DS 4002– Fall 2022- Emily Feng
Due: TBD
Submission format: Link to github repository (collab assignments)

Individual Assignment

General Description: Submit to collab assignments a link to your case study Github repository.

Preparatory Assignments – Class sessions about case study reading.

Why am I doing this? We read and produce solutions to case studies to apply thinking like a data scientist. In this example the focus is on problem solving and presenting graphical results. You are welcomed to use the suggested plan but also are encouraged to design your own. The result you find gives you an expectation of how much you would earn after graduation.

- Course Learning Objective: applied thinking
- Course Learning Objective: presentation of graphical result (plots)

What am I going to do? You will begin by reading the one-page prompt for this case study. In that prompt, you will be given a challenge. Take time to think about that and make notes. If you have ideas, play with them. If you don't, feel free to take a look at hints to determine what you want to do next. Then make a plan to produce the main deliverable. That deliverable has to be self-explainable graphs that show the correlation between two specific variables discussed. All plans, codes and graphs have to be included in your github repo. A one-sentence conclusion and explanations along with each graph should be contained in your README.md file. If you have more time, you are encouraged to try different ways to solve the same problem, add them to the last section of the README.file, and compare the results.

Tips for success:
- Don't constrain yourself. Evaluating in different ways may lead to different results. Trust yourself and stick with your graphs.
- Don't spend too much time on thinking about the algorithms. There are two suggested approaches in the one-page prompt. The goal of this case study is to apply thinking and visualize the result.
- Make attractive graphs. Having colorful and well-labeled graphs help your audience understand your result. Talk to your fellow students and get some feedback about visualization.

How will I know I have Succeeded? You will meet expectations on Case Study MCP when you follow the criteria in the rubric below.

Spec Category	Spec Details
Formatting	- Repository - a github repository - Submit a link to the repo for this assignment containing - README.md - LICENSE - figures folder - src folder
README.md	- Goal: This file is what will be assessed for the assignment - Structure this file in a such a way to be easily readable by others - Include the plan/approach to solve the problem (in English) - Include your figures with one short description for each figure - Include a conclusion that summarizes all of your findings - Include references
Plan	- Goal: Written steps in English that describes how you would find the correlation between mid-career pay of a student graduating from a college/university and the percentage of STEM students of that college/university - Explain why your result would answer the question about correlation
Figures	- Goal: Figures that help people visualize the result - Figures should be clearly labeled - Need to be relevant to your analysis
Conclusion	- Goal: Summarize your findings and provide a final result - Write in English - One paragraph
Figures folder	- Goal: Include all figures you embed in your readme file - This folder will contain images
Src folder	- Goal: include all code you use to make plots - This folder will contain code file of any chosen programming languages