Case Study Rubric

DS 4002 – Spring 2024 - Instructors: Javier Rasero and Harsh Anand
Due: TBD
Submission format:

- **Submit PDF and GitHub repo link to Canvas**

General Description: Submit to canvas a link to your case study and a link to your Github repository that contains your recommendation and all of the material that led to your decision, including data, scripts, figures, and any other sources.

Why am I doing this? This is your opportunity to showcase the experience you have gained during this course and apply it outside of the classroom. The case study combines the quantitative, technical, and conceptual skills of data science and asks you to apply them to a real world situation. Do not be afraid to fail. You may have to go through several models and iterations before coming up with a working solution. Understanding why you are making the analytical decisions you do is something important so you can ultimately present a deliverable in layman's terms. Once you reach a conclusion, it is important to communicate your findings coherently and concisely.

- Course Learning Objective: Time-Series forecasting models.
- Course Learning Objective: Prepare findings for presentation to your supervisor.

What am I going to do? Firstly, read the hook document and familiarize yourself with the context and background information. After that, establish an overall framework that allows you to determine what kind of result you are looking for and how you know when you have succeeded. Do some more research into what options and resources are available to you. Once you pick a direction, try to implement the solution. If it works, determine the best way to communicate your conclusion to a broader audience that may have less technical knowledge than you. If it doesn't, go back to the drawing board and really think about what happened, why it might have happened, and what needs to change in order for the project to be successful.

Tips for success:

- Set a timeline with well defined milestones to keep you on track
- Ask for help when you need it. Your fellow classmates, professors, and the internet are your friend
- Stay engaged. Put yourself in the environmental consultant position and try to think of angles from that perspective

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

Formatting	● Repository – A GitHub repo (and cloud storage folder if necessary) containing all materials o Submit a link to the repo o Everything is contained in the repo or linked to it if appropriate. o Contents ▪ README ▪ SCRIPTS ▪ DATA ▪ FIGURES ▪ RECOMMENDATION ▪ LICENSE o Use pdf format when possible o For code and data products use the appropriate format for whatever it is
README	● Goal: provide a high-level background and context for the case study ● Use headings and subheadings ● Include instructions for reproducing your findings ● Include final recommendation and supporting figure ● Include all references in IEEE format
SCRIPTS	● Goal: Include all code used in your model
DATA	● Goal: Include all data used in your model ● Have a data dictionary detailing column, data type, and definition
RECOMMENDATION	● Goal: Communicate findings effectively ● Can be a powerpoint slide or one page of writing detailing recommendation along with any supporting figures/graphics ● One page PDF format
FIGURES	● Goal: include all relevant figures and images ● Figure names should provide description for each image
LICENSE	● Goal: explain to readers the terms under which they may use and share your work ● The MIT license is the default recommendation

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