Case Study Rubric

Due: TBD
Submission format: PDF and Github link to Canvas

Individual Assignment

Why am I doing this? This study is meant for a 2nd year student. It will allow you to use your creativity and show your skills in data science to try and solve a real-world problem. It will be an opportunity for you to use the analysis skills you have learned in previous classes and use them in a more life-like scenario.

What am I going to do? In this assignment, you will use the Github repository provided, along with the data, background information, and scripts, to complete an analysis of your own. You will conduct your own background research to answer technical questions, gain background information on the topic, and then use your analysis skills to solve the task at hand. You will provide a deliverable including a link to your Github repository as well as a PDF containing your results and ultimate recommendation. **Deliverables include:**

- PDF submission of top results, conclusion, and overall recommendation.
- GitHub repository link containing code, results, and data.

Tips for success:

- Conduct background research on natural gas to understand pricing norms and seasonal shifts.
- Be creative - do not hesitate to spend more time exploring the data before you conduct more in-depth analysis.
- Try your best - without previous knowledge of the energy industry, do not overthink your ultimate recommendation.

How will I know I have Succeeded? You will meet expectations on this case study and follow the provided rubric closely.

Category	**Details**
Formatting	● GitHub Repository ○ Submit a link to your personal github repository containing code, data, and a ReadMe ● PDF Submission ○ Submit the written portion of the assignment as a2 page PDF document ○ Include references

Repository	● Goal: This is a GitHub repository containing all digital materials for the case study. ● Complete a README explaining what the case study is meant to do. Include a link to the original case study GitHub page. ● Create a "Data" folder containing the data that was used in the project ○ Label the files succinctly ● Create a "Scripts" folder containing the code used to complete the analysis ○ You should have one "Exploratory Data Analysis" script that contains code from your initial exploration of the data ○ You should have one "In-Depth Analysis" script that contains code that led you to your final conclusion ● Create a "Results" folder containing jpegs of the most important tables or graphs that led you to your conclusion. ○ Name the individual files succinctly, and so that someone who stumbles upon your repo would be able to understand
PDF Submission	● Goal: This PDF should give an overview of the most important results and final conclusion of the problem statement given in the Hook document. ● 2 page maximum ● Restate the problem statement that was given in the original hook document ● Include 3-5 tables, results, or graphs that led you to your final conclusion. ○ Give a short description of each figure, result, or table included and why it was important to your study. ● Write a 2 paragraph conclusion statement that summarizes results and gives a final recommendation to utility companies on seasonal differences. ● Include references in any style format, as long as it is uniform.