Unit 8: Being a Data Scientist
Project Criteria and Feedback Rubric

Handout: Being a Data Scientist Final Project (view, copy)

Process for Rubric

- Before beginning the project ask questions and clarify understanding of the criteria.
- After completing the project, comment on areas for growth and strength and provide evidence (such as quote, a link to the handout/visual, etc.). If this is both self and peer feedback, use two different colors.
- Once you or your peers have completed the feedback section, share this rubric with your instructor so they can provide their suggestions in the third column.
- Make revisions to your project based on feedback from your peers and instructor. Add comments in the self/peer assessment column in a *different color* so your instructor can see any changes made.
- When criteria has been met, your instructor will record a “yes” in the final column.
- Be sure to complete the reflection question at the end of the rubric. This will help you make sense of your learnings and will be built upon in later units.

Note: For group projects, fill this out as a group. For individual projects, complete this individually.

High Quality Work

- High quality work contains the following aspects:
    - Clearly communicates and justifies claims
    - Documents evidence of working through the data science process
    - Demonstrates thoughtful revision based on peer/instructor feedback

Feedback Note

- Feedback is one of the most well-proven learning tools because it gives you a new perspective on your work and shows you areas of strength and growth. Your peers and your teacher believe you are capable of high-quality work and considering their feedback can help you achieve that. In turn, you can help your peers with their learning by providing them actionable, kind feedback.

Topical Outline

Unit 8

- Asking questions
- Gathering and organizing data
- Modeling
- Analyzing and synthesizing
- Communicating

Criteria	**Self/Peer Assessment** (Evidence and comments for growth and strength areas)	**Instructor Assessment** (Evidence and comments for growth and strength areas)	**Criteria Met Y/N**
Asking Questions			
Describes why the chosen question is interesting to you Describes how the question captures variability in the world Frames the question in such a way that it is answerable by a statistical investigation. Explains what goals you have for investigating the chosen question Describes who this question is important for and why it might be of importance to those individuals			
Gathering and Organizing Data			
Obtains reliable and sufficient data to answer the project question Ensures the population sampled in the			

data collection process is representative of the population that your claims are about. Describes and justifies data collection and cleaning decisions Includes a link(s) to data			
Modeling			
Uses technology(s) to build a statistical model(s) Chooses a statistical model and justifies why that model is chosen Includes a link(s) to the model(s) Chooses visual(s) that provide meaningful representation of the variability in the data			
Analyzing and Synthesizing			
Shares and justifies the story the data is telling Conducts sensitivity analysis and makes appropriate revisions to the statistical model Makes claims based on evidence from the statistical model			

Compares predictions to the findings in the statistical model Includes and explains relevant visuals			
Communicating			
Slideshow: Justifies approach to statistical modeling and why it is a good fit for the data Explains creation of the statistical model in the context of the dataset and/or question Explains reasoning and justifications for each step of the data science process Describes audience and format of the final project			
Final Product: States question asked and communicates the value of the question, drawing the audience into the story Chooses a deliverable format specific to a target audience Selects thoughtfully the visuals included in the project, using them to tell the story of the data			

Communicates take-aways from the statistical modeling and analysis Includes links to a completed project proposal, project tracker, and slideshow as a part of the appendix			
Ethical Considerations			
Considers and describes possible ethical implications of project (in slideshow or final product) and personal biases			

Reflection:

After doing this project, list what concepts you feel confident in understanding and what still feels tricky or unclear.