Rubric – Case Study Results Reproduction

Preparatory Assignments - none

**Why am I doing this?** This assignment is designed to test a crucial aspect of any data science project— reproducibility. In real-world scenarios, you will often need to understand and reproduce the work of others. You will select and try to reproduce ONE of your classmates’ projects throughout the course. By doing so, you will strengthen your technical skills and learn to provide constructive feedback. This mirrors the challenges you may face in professional settings, where clear documentation and communication are key. Through this assignment, you will not only get familiar with reproducing results but also with gaining insights into different approaches and methodologies. Ultimately, this experience will prepare you for data science by emphasizing the importance of reproducibility, documentation, and collaboration.

* Course Learning Objective: Reproduce results based on documented steps.
* Course Learning Objective: Become aware of research integrity: transparency and replicability.

**What am I going to do?** You will follow the instructions provided in the Github project repository to try to carefully replicate the process and outcomes of the chosen project. If you encounter any challenge along the way, you will document and try to address them. Finally, you will provide valuable feedback, offering insights and evaluations on the reproduced project. This assignment is designed not only to test your ability to understand and recreate your classmates’ work but also to challenge you to think critically and provide constructive feedback. N.B. It is OK if you fail to reproduce the full project. The issue might not be on your end. Take the time to explain the challenges that led to the failed reproducibility of the project and provide valuable feedback, which will enable your classmates to learn for future projects.

**Tips for success:**

* This assignment asks you to follow a series of specific documented steps. Read them carefully and write down the challenges encountered.
* This assignment asks you to be critical. Do so in a constructive way.
* Do not despair if you fail to reproduce the full project. As mentioned before, the issue might not be on your end. In these cases, well-documented notes of the challenges encountered and critical feedback will even be more crucial.

**How will I know I have succeeded?** You will meet expectations on CS1 Case Study Results Reproduction when you follow the criteria in the rubric below.

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| Spec Category Spec Details | |
| Formatting | * 1-2 pages * PDF * Order o Title o Name and Course and Date o Project Overview (1 paragraph) o Reproduction Steps (1 paragraph) o Challenges (1 paragraph) o Feedback (1 paragraph) |
| Project Overview | * Goal: Understand the purpose and context of the original project. * Summarize the main objectives of the project. What problem was it trying to solve or explore? * Provide information on the datasets used. Where did the data come from, and what were the key variables? * Highlight the key findings or results obtained by the original project creator. |
| Reproduction Steps | * Goal: Demonstrate the ability to follow and replicate the workflow outlined in the original project. * Outline each step taken to reproduce the results. |
| Challenges | * Goal: Highlight the challenges encountered during the reproduction process and showcase, if realistic, problem-solving skills. * Document any discrepancies or challenges encountered during reproduction. * If the challenge was addressed, explain how. For example, did you modify the code, seek additional information, make assumptions? etc. |
| Feedback | * Goal: Provide CONSTRUCTIVE feedback. This will be shared with the original project group to foster a collaborative and learning-oriented environment. * Offer positive feedback on well-documented and clear aspects of the original project. * Clearly communicate any areas where additional documentation, clarity, or explanations would have been helpful. * Frame feedback as a means of mutual learning and improvement. |