Sports Viewership Trends Post-COVID Case Study Rubric

How will I know I have succeeded?

You will meet expectations for this case study when you fulfill the criteria outlined below. This project involves cleaning data, modeling trends, and analyzing the recovery of sports viewership after COVID-19.

Files and Submission

- **GitHub Repository** (link submitted via Canvas)
 - o **README.md**: Project overview, file structure, and instructions.
 - o LICENSE.md: MIT license file.
 - o **DATA Folder**: Includes raw and cleaned datasets.
 - SCRIPTS Folder: Contains scripts for data preprocessing, modeling, and analysis.
 - o **OUTPUT Folder**: Stores plots, images, and final report (PDF).
- Final Report (PDF): 5-page report submitted through Canvas.

README.md

- **Header**: Title of the project.
- Overview: Summary of project goals, data source, and analysis methods.
- **Data Explanation**: Description of the columns in the dataset.
- **Directory Structure**: Tree diagram of file structure with file descriptions.

SCRIPTS Folder

- Required Scripts:
 - o **preprocess.ipynb**: Cleans and processes the raw viewership dataset.

o **modeling.ipynb**: Applies double exponential smoothing for trend analysis.

DATA Folder

• Raw viewership data for NFL, NBA, MLB, and NHL (1990-2024).

OUTPUT Folder

- Plots & Visuals: Pre- vs. post-COVID trends and forecast vs. actual data.
- **forecast_results.csv**: Comparison of forecasted and actual viewership for 2021-2024, with % difference.
- **final report.pdf**: The 5-page case study report.

Report PDF (5 Pages)

- **Introduction**: Research question, purpose, and relevance of the study.
- **Data Cleaning**: Description of cleaning methods and key adjustments.
- **Modeling Approach**: Double exponential smoothing process, parameter choices, and rationale.
- Results & Analysis: Comparison of forecasted and actual viewership for each league.
- **Reflection & Insights**: Takeaways and lessons learned from the analysis.

Submission Instructions

- 1. **GitHub Submission**: Submit a link to the GitHub repository on Canvas.
- 2. **Final Report**: Submit a 5-page PDF report through Canvas.
- 3. Required Files:
- **README.md** (project overview, structure, and file descriptions)
- LICENSE.md (MIT license)
- SCRIPTS Folder (all scripts used for data cleaning, modeling, and analysis)
- DATA Folder (raw and processed datasets)
- **OUTPUT Folder** (plots, results, and final report PDF)