Case Study Rubric
Due: TBD
Submission Format: Provide a link to your GitHub repository on Canvas

General Description: Submit to Canvas a link to your GitHub repository

Why am I doing this? This case study provides an opportunity to demonstrate your technical and analytical capabilities by exploring trends in healthcare consumption. You will integrate statistical methods, programming skills, and visualization techniques to analyze spending trends. This hands-on project simulates real-world scenarios encountered in academia or industry.

Tips for success:

- Organize your repository thoughtfully.
- Plan your analysis steps.
- Leverage visualizations.
- Write clear and concise code.
- Test your models thoroughly.
- Highlight key insights in the report.
- Manage your time effectively.

GitHub Repository Requirements:

The GitHub repository, titled "CS3_Healthcare", must contain the following:

- README.md: A brief summary introducing your case study project.
- LICENSE.md: Specify the licensing for your project.
- Source Code File: A well-documented Python script implementing the trend analysis.
- Data Folder: Include all datasets utilized in the analysis.
- REFERENCES.md: Documentation of sources and their contributions.

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

Spec Category	**Spec Details**
Formatting	Each component listed below must be included and formatted as follows: ● Title: *CS3_Healthcare* ● Folder Structure: ○ README.md: A concise project overview. ○ LICENSE.md: Licensing information for the project. ○ Source Code File: Google Colab notebook or Python script. ○ Data Folder: Include all data used in the analysis,

	with clear file naming. ○ REFERENCES.md: A markdown file citing all references in IEEE style with annotations.
README.md	The README file should: ● Introduce the project's purpose and structure. ● Summarize methods and key findings. ● Provide basic instructions for running the code and replicating results.
Source Code File	Well documented Python Script in Google Colab that contains the code used to execute your trend analyses. In the source you must include: ● Overall healthcare consumption trends over time ● Total spending for each healthcare service ● Analyzation of outliers of healthcare service spending ● Visualize trends in healthcare spending over time using moving averages ● Comments throughout, and especially in the Python Script when interpreting the results of the moving averages
REFERENCES.md	Include a markdown file (REFERENCES.md) with: ● All cited resources formatted in IEEE style. ● Brief annotations explaining how each source informed your analysis.

Evaluation Criteria:

- Completeness: Inclusion of all components (repository, code, analysis, report)
- Clarity: Clear documentation and visualizations.
- Insight: Depth and relevance of analysis
- Accuracy: Proper application of statistical models