MSBD566 – Predictive Modeling and Analytics

Assignment 3 – Midterm Project

Project description

This project builds on the data you submitted in Assignment 2.

Your task is to apply a **classification or clustering** method that we have learned in class. You may choose **at least one method** and must:
- Process your data using that method.
- Evaluate and interpret your results.
- Include supporting materials such as tables, charts, and relevant visualizations to strengthen your analysis. At least *one type of visualization about the results* must be generated and presented in the presentation and report.

Submissions

1. ***Presentation (40 points)***
   Each student will be allocated 7 minutes. The presentation should cover the details listed in the report section, with a larger portion highlighting the methods and results.

   Presentation day will be during class on **October 22, 2025.**

2. ***Report (40 points)***
   Submit a short report (PDF format) that summarizes your project – you can use the template attached to this assignment. The content should align closely with your presentation and include:
   a. ***Header Information:*** Include your name, course name, date, and assignment title.
   b. ***Project Description:*** Define the problem you are addressing and explain why it is important or relevant.
   c. ***Data Description:*** Describe your dataset (what it represents and how it was collected), include a link to the data source, and provide any relevant notes about this data.
   d. ***Method and Analysis:***
      i. State the method you used
      ii. Explain why you chose this method.
      iii. List the variables or features used.
      iv. Present your results (tables, charts, or visualizations).
      v. Interpret and discuss your findings.
   e. ***Simple evaluation:***
      i. Assess the performance or effectiveness of your method.
      ii. Provide metrics, accuracy, or any relevant evaluation discussion if necessary.

3. ***GitHub or working folder (20 points)***
   Place your code, data, report (and any other files required to run your code, if applicable) in a GitHub repository or a working folder. You have the option to share your public repository link or submit the full zip file of the repo/folder during the submission. Slides submission is optional.

All required files must be submitted by **October 24, 2025, at 11:59 p.m. CT through Blackboard**. Late submissions will be accepted up to 2 days with a penalty of 5 points per day. **No submission will be accepted after October 26, 2025, 11:59 p.m. CT, without prior approval**.

If you encounter any issues with the submission before the deadline, please email me immediately at nazirah.mohdkhairi@mmc.edu.

AI Policy for this project

You may use AI tools to:
- Clarify concepts,
- Understand terminology, or
- Generate examples.

However, AI should not be used to complete your project or generate your report content directly.