Assignment Instructions: Final Exam

Purpose

The objectives of this assignment are threefold:

1. To use real-world data
2. To use the appropriate machine learning technique for the business problem, and
3. To present the solution to top-level management.

Directions

1. You may use any source to get your data as long as the data is real-world data. You can either collect data, or download from competitions like Kaggle. Make sure to clearly mention in your report, both the source of data, and how it satisfies the condition for being real-world.
2. Apply whatever machine learning techniques you think are appropriate for the problem. Clearly specify what the central objectives are for this study.
3. Write a paper that describes the objectives, your approach, the results, and your conclusions. It is not necessary to describe the step-by-step account of what you did. Remember that this report is for top-level management. Similarly, also create a presentation of no more than 3 slides (excluding the initial slide) that summarizes the problem, the approach, and the conclusions.

What to Deliver

Your grade on the final will be based on satisfying all three objectives: 1) Using real-world data, 2) Applying the appropriate machine learning technique, and 3) A written report, and a presentation. The written report should summarize the problem, methodology (approach), analysis, and your conclusions. The report will be graded based on the correctness of your approach, and the written quality of your report. As such, you must pay attention to the organization and structure of your report, the proper use of Tables and Figures, and the quality of your writing.

The presentation should contain no more than 3 slides (excluding the Introduction slide). The three slides should focus on:

- The problem
- The approach
- The results as pertaining to your objectives of the problem

Learning Outcomes

The assignment covers all learning outcomes in this class.

Requirements

All due dates are included in the Assignment Schedule.

General Submission Instructions

All work must be your own. Copying other people's work or from the Internet is a form of plagiarism and will be prosecuted as such.

1. Create a new folder called **Final_Exam** in your previously created GitHub repository.
2. If you are using R, then upload the report (pdf/word/google docs), presentation, R Markdown file, the knitted pdf/html file, and any other data file you might have used for the assignment.
3. If you using Python, then share the Jupyter/Google Colab notebook in our Final_Exam folder on GitHub

Provide the link to your git repository in Canvas for the assignment.