

# Final Project Report

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## Objective

- This assignment provides an opportunity to demonstrate your ability to work on a project before the final week of the semester. Overall, the course project allows the student an opportunity to demonstrate progress (or mastery) of learning objectives 1, 2, 3, 4, 5, and 6:
  - 1) Obtain data and explain data structures and data elements.
  - 2) Scrub data by applying scripting methods, to include debugging, for data manipulation in Python, R, or other languages.
  - 3) Explore data by analyzing using qualitative techniques including descriptive statistics, summarization, and visualizations.
  - 4) Model relationships between data using the appropriate analytical methodologies matched to the information and the needs of clients and users.
  - 5) Interpret the data, model, analysis, and findings, and communicate the results in a meaningful way.
  - 6) Select an applicable analytical methodology for real problems in areas such as business, science, and engineering.

## Instructions

- Provide a final report using the following format:
  - Title page (4 points) with summary of your findings and your recommendations.
  - Specification (4 points)—Specify the problem, hypotheses, and data for this analysis.
  - Observation (4 points)—What can you conclude from your observation and visualization of the data?
  - Analysis (10 points)—Explain what types of analysis you used. Explain how you arrived at the model(s) you used for your recommendation.
  - Recommendation (8 points)—What should your customer do?
  - References.
  - Appendices.
- The final project is worth 35 points (2 points for the Project Checkpoint 1 submitted during Week 5, and 3 points for Project Checkpoint 2 submitted during Week 7).

## Additional Instructions

- Don't forget what you learned in your previous courses; do your own work, document any assistance, and use comments for clarity.

## Submission Items

- Final project report
- Final project presentation ( < 10 slides)
- Scripts and data (or source)