

Final Exam: Advanced Exploratory Data Analysis with Power BI Course: Introduction to Power BI Institution: Miami Dade College

Objective Building upon the knowledge acquired and insights derived from the mid-term project, students are expected to conduct a deeper exploration of their chosen dataset. This exam aims to challenge students to uncover three additional insights, emphasizing their ability to delve deeper into data, draw meaningful conclusions, and effectively communicate their findings through a concise presentation.

Instructions

1. **Dataset Revisitation:**
 - Revisit the dataset you selected for your mid-term project.
 - Familiarize yourself with the insights you previously derived and consider areas or aspects of the dataset that could potentially yield new insights.
2. **Advanced Data Exploration:**
 - Dive deeper into your dataset to find more intricate patterns or relationships.
 - Consider performing multivariate analyses, correlation studies, or time-series analyses if relevant to your dataset.
3. **Insight Generation:**
 - Based on your advanced exploration, identify and document at least three new insights from the dataset.
 - For each new insight, elaborate on its significance and how it adds value or a new perspective compared to your mid-term insights.
4. **Visualization with Power BI:**
 - Design at least three new visualizations in Power BI corresponding to each of your new insights.
 - The visualizations should be distinct from those presented in the mid-term and effectively convey the newly discovered insights.
5. **Presentation Preparation:**

- Prepare a 7-minute presentation focusing on your new insights and corresponding visualizations.
 - Structure your presentation to briefly recap your mid-term findings and then transition to the new insights. Ensure that the focus remains on the new findings.
 - Practice your presentation to ensure clarity, conciseness, and that it fits within the time constraint.
6. **Submission:**
- Update your Power BI report to include the new EDA, insights, and visualizations.
 - Export the updated report as a PDF.
 - Submit the PDF report, and be ready to present your findings to the class.

Grading Criteria

- **Advanced Exploration (20%):** Demonstrates a deeper understanding and application of data exploration techniques.
- **New Insight Generation (25%):** The new insights should be distinct, well-thought-out, and offer a fresh perspective on the dataset.
- **Visualization Quality (25%):** New visualizations should be clear, relevant, and distinct from the mid-term, effectively conveying the insights.
- **Presentation Skills (20%):** The presentation is well-organized, engaging, stays within the time limit, and effectively communicates the insights.
- **Overall Cohesiveness (10%):** How well the new insights integrate with the previous ones and how effectively the entire story is told, from mid-term to final.

Best of luck, and remember that the journey of data exploration is as crucial as the insights derived. Your ability to delve deep, ask the right questions, and communicate your findings is what will set you apart!