**Capstone Project Scoring Rubric**

**1. Problem Framing (20 points)**

**Clearly Defined Objectives (5 Points):** The problem statement defines and aligns with project goals.

**Relevance and Significance (5 Points):** The chosen problem is relevant to real-world applications and significantly impacts the field or industry.

**Complexity and Originality (5 Points):** The problem demonstrates complexity appropriate for a capstone level, with an original approach to its solution.

**Feasibility (5 Points):** The scope of the problem is manageable within the project's constraints and resources available.

**2. Assumption Reporting (15 points)**

**Identification (5 Points):** All critical assumptions made during the project are explicitly stated.

**Justification (5 Points):** Each assumption is justified with logical reasoning or evidence.

**Impact Analysis (5 Points):** Discuss how the assumptions may impact the results and address potential biases.

**3. Code Documentation and Organization (15 points)**

**Clarity and Readability (5 Points):** The code is well-organized and commented on, making it easy to understand.

**Standard Coding Practices (5 Points):** Follows standard coding practices, including variable naming conventions and function decomposition.

**Reproducibility (5 Points):** The code is fully reproducible, meaning another data scientist could run the code and achieve the same results using the provided data.

**4. Visualization and Gestalt Principles (20 points)**

**Appropriateness of Visualizations (5 Points):** Chooses appropriate types of visualizations for the data and analysis needs.

**Application of Gestalt Principles (5 Points):** Effectively applies Gestalt principles to enhance understanding and readability (e.g., similarity, proximity, closure).

**Aesthetic Quality (5 Points):** Visualizations are informative and aesthetically pleasing.

**Clarity and Accuracy (5 Points):** Visualizations represent the underlying data without distorting the information.

**5. Explanation for Non-Technical Audiences (15 points)**

**Simplicity (5 Points):** Explains complex concepts in simple terms that are easy to understand.

**Relevance (5 Points):** Connects explanations to real-world applications or implications relevant to the audience.

**Engagement (5 Points):** The explanation is engaging, with an effort to draw the audience’s interest and encourage further inquiry.

**6. Overall Quality and Cohesion (15 points)**

**Integration (5 Points):** All project parts work cohesively to support the main objectives.

**Innovation (5 Points):** The project introduces novel approaches or insights into the analysis.

**Impact (5 Points):** The project has the potential to have a significant impact, whether academically, economically, or socially.

**Total (100 points)**

**Submission Guidelines**

**Ensure all components (code, report, and presentation) are submitted in the specified formats.**

**The report should clearly articulate the methodology, results, and conclusions, incorporating appropriate visuals.**