## **Exploratory Data Analysis (EDA) Project Rubric**

### **Interim Submission (40 Marks):**

#### Code Quality (20 Marks):

* Loading and Cleaning (10 Marks):
  + 10 Marks: Accurate and efficient loading of the dataset into a Pandas DataFrame. Effective handling of missing values, removal of duplicates, and addressing anomalies.
* Univariate Analysis (10 Marks):
  + 5 Marks: Code for initial univariate analysis exploring the distribution of key variables (e.g., house prices).
  + 5 Marks: Clear visualizations and accurate interpretation of univariate analysis.

#### GitHub Interim Submission (10 Marks):

* Repository Organization (5 Marks):
  + 5 Marks: A well-organized GitHub repository with a clear directory structure for data, code, and resources.
* Interim Notebook Commit (5 Marks):
  + 5 Marks: Interim Jupyter Notebook committed and pushed to the repository. The link to the GitHub repository is shared.

#### Interim Submission Report (10 Marks):

* Findings Summary (5 Marks):
  + 5 Marks: Concise summary of key findings, challenges encountered, and any adjustments made to the original plan.
* Insights from Univariate Analysis (5 Marks):
  + 5 Marks: Clear insights derived from the initial univariate analysis and preliminary observations.

### **Final Submission (60 Marks):**

#### Updated Jupyter Notebook (30 Marks):

* Code Completeness (15 Marks):
  + 10 Marks: Comprehensive code for all tasks, including feature engineering, multivariate analysis, and geospatial analysis.
  + 5 Marks: Accurate and efficient code implementation, free of errors.
* Documentation and Comments (10 Marks):
  + 5 Marks: Clear and detailed explanations in markdown cells and comments within the code.
  + 5 Marks: Well-documented steps for each task, making it easy to follow.
* Visualizations (5 Marks):
  + 5 Marks: Appropriate use of visualizations for multivariate analysis, feature engineering, and geospatial analysis.

#### GitHub Final Submission (15 Marks):

* Updated Repository (10 Marks):
  + 5 Marks: GitHub repository updated with the final Jupyter Notebook and any additional code files.
  + 5 Marks: README.md file includes an overview of the project, instructions for running the notebook, and any dependencies.
* Access and Permissions (5 Marks):
  + 5 Marks: The GitHub repository is public or access has been provided to the reviewing team.

#### Final Submission Report (15 Marks):

* Comprehensive Analysis (10 Marks):
  + 10 Marks: In-depth summary of the entire exploratory analysis, emphasizing key insights, trends, and relationships identified.
* Discussion of Challenges and Strategies (5 Marks):
  + 5 Marks: Clear discussion of challenges faced during the project and effective strategies employed to address them.

#### Overall Presentation (10 Marks):

* Recommendations (5 Marks):
  + 5 Marks: Well-thought-out recommendations based on the analysis, especially insights that could inform decision-making in a real estate context.
* Clarity and Organization (5 Marks):
  + 5 Marks: Clear progression in the analysis, building upon the tasks completed in each phase.

Total Marks: 100