# Real Estate Exploratory Data Analysis (EDA)

This project focuses on conducting an Exploratory Data Analysis (EDA) on a dataset related to residential real estate. The goal is to gain insights into various factors influencing house prices through thorough analysis and visualization.

Project Overview

In this project, we perform the following tasks:

1. \*\*Loading the Data\*\*: We start by loading the dataset, which contains information about residential properties, into a Pandas DataFrame.

2. \*\*Cleaning the Data\*\*: We handle missing values, remove duplicates, and address any anomalies present in the dataset to ensure data quality.

3. \*\*Univariate Analysis\*\*: We explore individual variables such as house prices to understand their distributions and characteristics.

4. \*\*Multivariate Analysis\*\*: We investigate relationships between multiple variables, especially those impacting house prices, using correlation matrices and heatmaps.

5. \*\*Feature Engineering\*\*: We create new features, such as price per square foot, to enhance our analysis and modeling capabilities.

6. \*\*Feature Engineering and Size Impact\*\*: We further analyze the impact of features and size on house prices, particularly focusing on square footage.

7. \*\*Market Trends and Historical Pricing\*\*: We explore historical pricing trends over time, considering external factors such as economic indicators.

8. \*\*Customer Preferences and Amenities\*\*: We investigate how customer preferences and amenities impact house prices, though this part is currently under development.

## Dependencies on important libraries

- pandas

- numpy

- matplotlib

- seaborn

## References

1. Next hike intership video

2. www.geeksforgeeks.org

3. google.com