

Project Proposal

Group2

Caroline Bordin, Erjola Lluka, Jihye Yoon, Sughra Shadab, Supreet Ahuja

Project overview

The project aims to develop machine learning models do

- **Price Prediction:** predict property prices based on features such as location, size, amenities, and market trends. (Supreet Ahuja, Sughra Shadab, Erjola Lluka)
- **Demand Forecasting:** analyze historical data and predict future demand for properties in specific areas. (Supreet Ahuja, Sughra Shadab, Erjola Lluka)
- **Recommendation Systems:** suggest properties to potential buyers or renters based on their preferences, search history, and behavior. (Caroline Bordin, Jihye Yoon)
- **Market Analysis:** identify trends, hotspots, and investment opportunities. (Caroline Bordin, Jihye Yoon)

Based on key features such as location, number of bedrooms and bathrooms. Leveraging a dataset sourced from Kaggle, we intend to create robust predictive models that **can assist home buyers, sellers and real estate professionals in making informed decisions.**

Methodology

Data collection : utilize the real estate dataset from Kaggle, which includes information on property location, number of bedrooms, bathrooms, and corresponding prices. **Data**

Preprocessing - Supreet Ahuja : Handle missing values and outliers, perform conversion units.

Technologies and libraries we plan to use

- Python Pandas
- Python Matplotlib
- HTML/CSS/Bootstrap
- JavaScript Plotly
- JavaScript Leaflet
- SQL Database
- MongoDB Database
- Google Cloud SQL
- Amazon AWS
- Tableau

- 
- Scikit-learn

Bonus

- **Property Valuation:** for automated property valuation.