Data Science Project: House Price Prediction System

Introduction:

House price prediction is a system or tool that evaluates a house's value based on various features like location, size, bedrooms, bathrooms, living spaces, parking, and floors. It also considers the availability of essential services such as water, road access, electricity, and proximity to banks, hospitals, and markets. This aids buyers, sellers, and investors in determining a reasonable price for a house they're interested in.

Problem Statement:

Manual house valuation is challenging and time-consuming.
Inexperienced individuals often struggle to accurately assess property values.

Objective of the project:

- To develop a system to automate house price valuation.
- To provide reliable property valuations to aid decision-making in real estate transactions.

Business Use Case:

- Public Website with Ads
- Real Estate Partner Platform
- Sell the System to Companies
- C2C Real Estate Marketplace

Methodology:

Algorithm

A chosen algorithm (Random Forest Regression) analyzes property details and recent sales data to predict house value.

Data Source:

Web scraping gathers data from real estate websites (e.g., Basobaas, Lalpurga) focusing on sold properties.

Challenges and Limitations:

- **Limited Customer Base:** We target a specific audience, potentially leading to a smaller user base initially.
- **Development Costs:** Website hosting and maintenance may exceed initial ad revenue.
- **Competition:** Existing real estate companies might have resources to build similar systems.
- **Data Collection:** Gathering and processing large datasets can be challenging.

Conclusion:

Why I Choose This Project?

Ideal for beginners to explore data science, offering learning opportunities in web scraping, data processing, model building, and deployment.

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