Real Estate Price Predictor for Bengaluru City

My project aims to develop a real estate price predictor based on location parameters for Bengaluru City. By leveraging data analysis and machine learning, we seek to provide accurate insights into property values.

Problem Statement

1 **Lack of Accuracy**

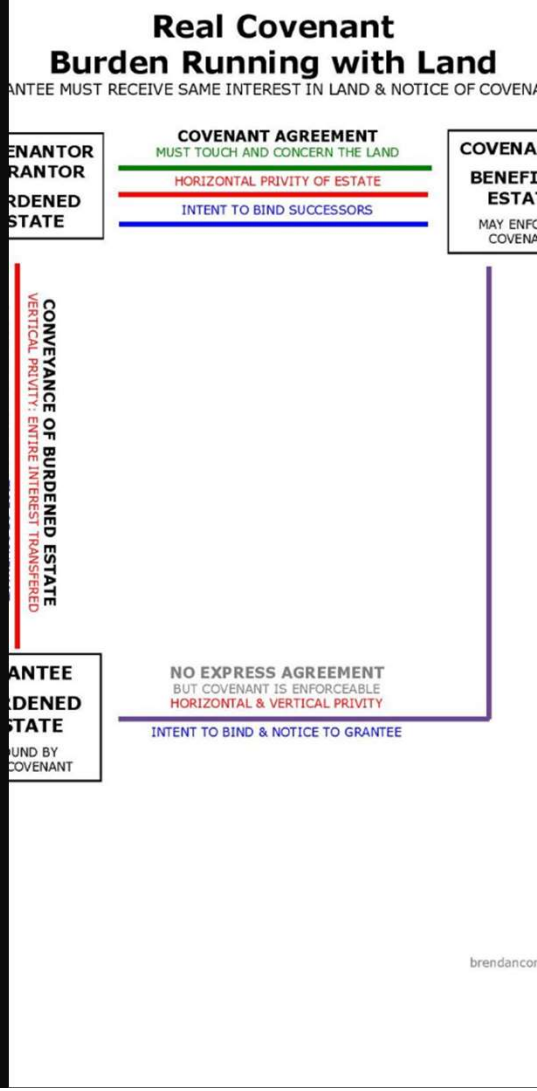
Existing real estate pricing models often often lack accuracy and fail to consider consider specific location parameters parameters for Bengaluru City.

2 **Market Volatility**

The real estate market in Bengaluru experiences significant volatility, making it challenging to predict property prices reliably.

3 **Demand-Supply Mismatch**

There is often a mismatch between demand and supply for real estate in Bengaluru, leading to fluctuating prices.



Objectives of the Project

Data Collection

Gather comprehensive location-specific data to understand the real estate landscape in Bengaluru.

Model Development

Develop a machine learning model capable of predicting property prices accurately based on the input parameters.

Performance Evaluation

Evaluate the model's performance using historical sales data and real-time market information for Bengaluru City.

Methodology

Data Collection

Gather real estate data from multiple sources including property listings, local housing authorities, and government records.

Exploratory Data Analysis

Conduct comprehensive exploratory data analysis to identify patterns, outliers, and correlations among the input parameters.

Model Selection

Select and implement a suitable machine learning model for predicting real estate prices based on location parameters.

Data Collection and Preprocessing

72%

Data Accuracy

Ensuring a data accuracy rate of over 72% through rigorous validation and cleansing processes.

Model Development and Evaluation

Data Preprocessing	Data Cleaning	Data Transformation
Machine Learning	Model Training	Hyperparameter Tuning
Evaluation	Cross-Validation	Performance Metrics

Results and Analysis

1

Data Collection

Gathering and validating location-specific real estate data for Bengaluru City.

2

Model Development

Building and fine-tuning machine learning models for accurate price predictions.

3

Performance Analysis

Evaluating model performance and validating predictions against actual market prices.

Conclusion and Future Work

1

Insights Gain

Gain valuable insights into the real estate market dynamics of Bengaluru City.

2

Model Optimization

Continuously optimize and enhance the prediction model for greater accuracy and reliability.

3

Expansion

Explore the use of the model for predicting real estate prices in other cities and regions.