Predetermining House Price Using Machine Learning In Artificial Intelligence

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Introduction:

In this project, we will explore the application of machine learning in predicting house prices. We will analyze a datasets containing various features of houses, such as the number of bedrooms, square footage, location, and other relevant factors. By training and evaluating different machine learning models, we aim to develop a robust and accurate prediction model that can assist in estimating house prices with high confidence.

- 1. *Data Collection:* Gathering a comprehensive datasets that includes information about houses, such as the number of bedrooms, square footage, location, amenities, and historical sales data.
- 2. *Data Prepossessing:* Cleaning and preparing the data for analysis, which may involve handling missing values, encoding categorical variables, and normalizing numerical features.
- 3. *Feature Selection:* Identifying the most relevant features that have a significant impact on house prices. This step helps in reducing dimensional and improving model performance.

- 4. *Model Training:* Selecting an appropriate machine learning algorithm, such as linear regression, decision trees, random forests, or neural networks, and training it on the prepared datasets. The model learns patterns and relationships between the features and target variable (house prices) during this stage.
- 5. *Model Evaluation:* Assessing the performance of the trained model using evaluation metrics like mean squared error (MSE), root mean squared error (RMSE), or R-squared. This step helps in determining how well the model is able to predict house prices.
- 6. *Model Deployment:* Once the model is deemed satisfactory, it can be deployed to make predictions on new, unseen data. This allows real estate professionals, investors, or individuals to estimate house prices based on the provided features.

Conclusion:

In conclusion, the integration of machine learning and artificial intelligence in predicting house prices holds great potential for the real estate industry. By harnessing the power of data and advanced algorithms, we can make more informed decisions, optimize investments, and navigate the complex dynamics of the housing market with greater confidence.