Predating House prices using artificial intelligence

Problem Definition

Predicting house prices is a challenging task, but it can be done with a high degree of accuracy using artificial intelligence (AI). AI models can be trained on large datasets of historical house sales data to learn the relationships between various factors that influence house prices, such as square footage, number of bedrooms and bathrooms, location, and amenities. Once trained, these models can be used to predict the prices of new houses based on their features.

Design Thinking

1. **Data collection and preparation**: This module involves collecting data on historical house sales from various sources, such as real estate websites, government agencies, and multiple listing services. The data is then cleaned and preprocessed to ensure that it is in a format that can be used by the AI model.

2. **Feature engineering**: This module involves creating new features from the existing data that may be more informative for the AI model. For example, a new feature could be created to represent the distance from a house to the nearest school.

3. **Model training**: This module involves training an AI model on the prepared data. The model is trained to predict the price of a house based on its features.

4. **Model evaluation**: This module involves evaluating the performance of the trained model on a held-out test set. This helps to ensure that the model is not overfitting the training data and that it will generalize well to new data.

5. **Model deployment**: Once the model has been evaluated and found to be performing well, it can be deployed to production so that it can be used to predict the prices of new houses.