**Problem Definition:**

The problem is to predict house prices using machine learning techniques. The objective is to develop a model that accurately predicts the prices of houses based on a set of features such as location, square footage, number of bedrooms and bathrooms, and other relevant factors. This project involves data preprocessing, feature engineering, model selection, training, and evaluation.

**Design Thinking:**

1. Data Source: Choose a dataset containing information about houses, including features like location, square footage, bedrooms, bathrooms, and price.
2. Data Preprocessing: Clean and preprocess the data, handle missing values, and convert categorical features into numerical representations.
3. Feature Selection: Select the most relevant features for predicting house prices.
4. Model Selection: Choose a suitable regression algorithm (e.g., Linear Regression, Random Forest Regressor) for predicting house prices.
5. Model Training: Train the selected model using the preprocessed data.
6. Evaluation: Evaluate the model's performance using metrics like Mean Absolute Error (MAE), Root Mean Squared Error (RMSE), and R-squared.

Building a Model for House price prediction involves several steps, from conceptualization to deployment. Here’s a step-by-step procedure to train a house price predicting model.

**1. Data Preparation**

* Import necessary libraries such as pandas, scikit-learn, numpy, and matplotlib for data manipulation, machine learning, numerical operations, and visualization respectively.
* Load your dataset into a pandas DataFrame.
* Explore the dataset using data.head(), data.info(), data.describe() to understand its structure and characteristics.
* Select the features (independent variables) you want to use for prediction.
* Define your target variable (dependent variable) which is the 'Price' column in this case.

**2. Data Splitting**

* Split the data into training and testing sets to evaluate the model's performance.

**3. Model Training**

* Initialize a regression model (for example, Linear Regression) and train it using the training data.

**4. Model Evaluation**

* Use the trained model to make predictions on the test data.
* Evaluate the model's performance using metrics like Mean Squared Error (MSE) and R-squared (R2).

**5. Model Deployment**

* If the model performs satisfactorily, you can deploy it for predictions in your desired application.

Keep in mind that this is a simple process. You could want to take into account more sophisticated methods, such as feature engineering, feature scaling, or experimenting with various machine learning algorithms, depending on how complicated the dataset is. If your dataset includes categorical variables, make sure to manage them properly.