**House Price Prediction Report**

**Introduction**

This report explains the implementation of a house price prediction model using machine learning. The model is trained on historical sales data and predicts house prices based on selected features.

**Dataset**

The dataset contains information about various houses, including features like lot size, year built, number of rooms, bathrooms, and fireplaces. The target variable is the house sale price.

**Methodology**

1. **Loading Data**
   * The training dataset (train.csv) is loaded, containing house features and sale prices.
   * The test dataset (test.csv) is loaded for making predictions.
2. **Feature Selection**
   * The model uses selected features like lot area, number of rooms, bathrooms, and fireplaces to predict sale prices.
3. **Model Training**
   * A **Random Forest Regressor** is used to train the model.
   * The model learns patterns from the training data to make accurate predictions.
4. **Making Predictions**
   * The trained model predicts house prices using the test dataset.
5. **Saving Results**
   * The predictions are saved in a file (submission.csv) with house IDs and predicted sale prices.

**Conclusion**

The model successfully predicts house prices based on selected features. Further improvements can be made by adding more features and optimizing model parameters.