Gold Price Prediction

This repository contains a Jupyter Notebook for predicting gold prices using machine learning techniques.

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Project Overview

1 Data Collection

The project begins by collecting historical gold price data from reliable sources.(Using Pandas)

2 Data Preprocessing

The collected data is then cleaned, transformed, and prepared for analysis.(Using Matplotlib)

3 Model Selection

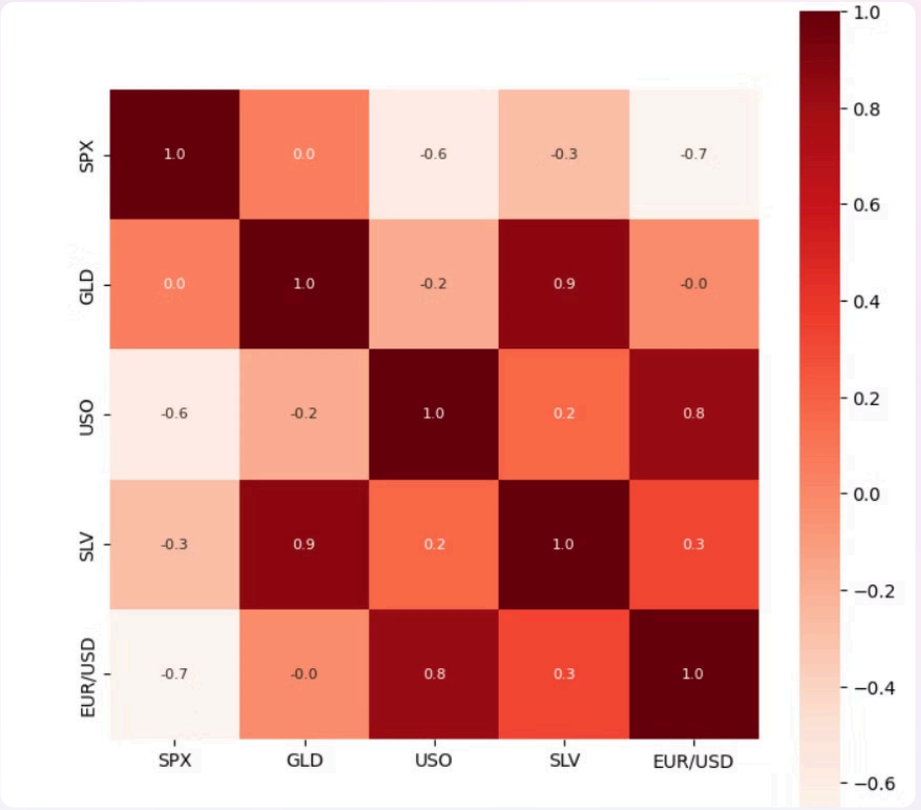
Several machine learning models are explored and evaluated for their ability to predict gold prices.

(Using Random Forest)

4 Model Training

The chosen model is trained on the prepared data to learn patterns and relationships.

Data Correlation



Correlation Analysis

The relationships between different variables are examined to understand their influence on gold prices. Correction is positive if the two variables are directly proportional else negative.

Model Optimization

Distribution of Gold Price

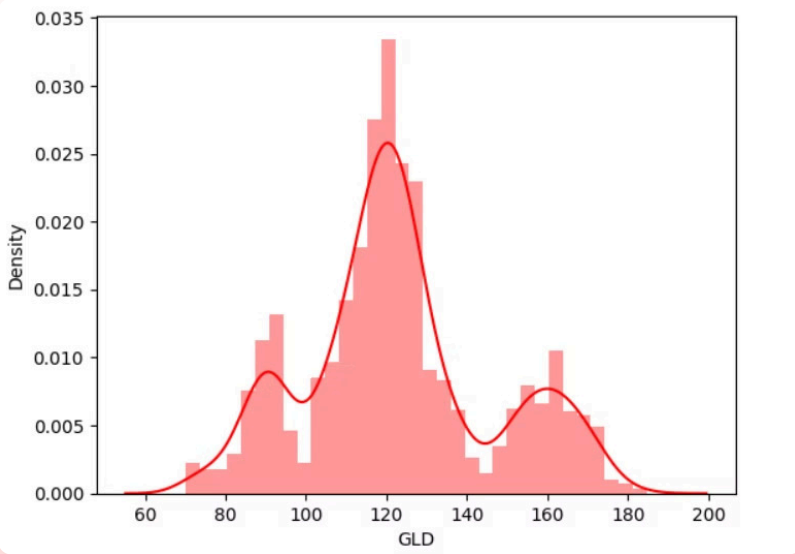
The model's distributions are adjusted to optimize its performance on the training data.

Cross-Validation

The model is evaluated on multiple subsets of the data to ensure its generalization ability.

Feature Selection

The most relevant features are selected to improve the model's efficiency and accuracy.



Gold Price Prediction

1

Data Input

Old data (since 2008) has been taken.

2

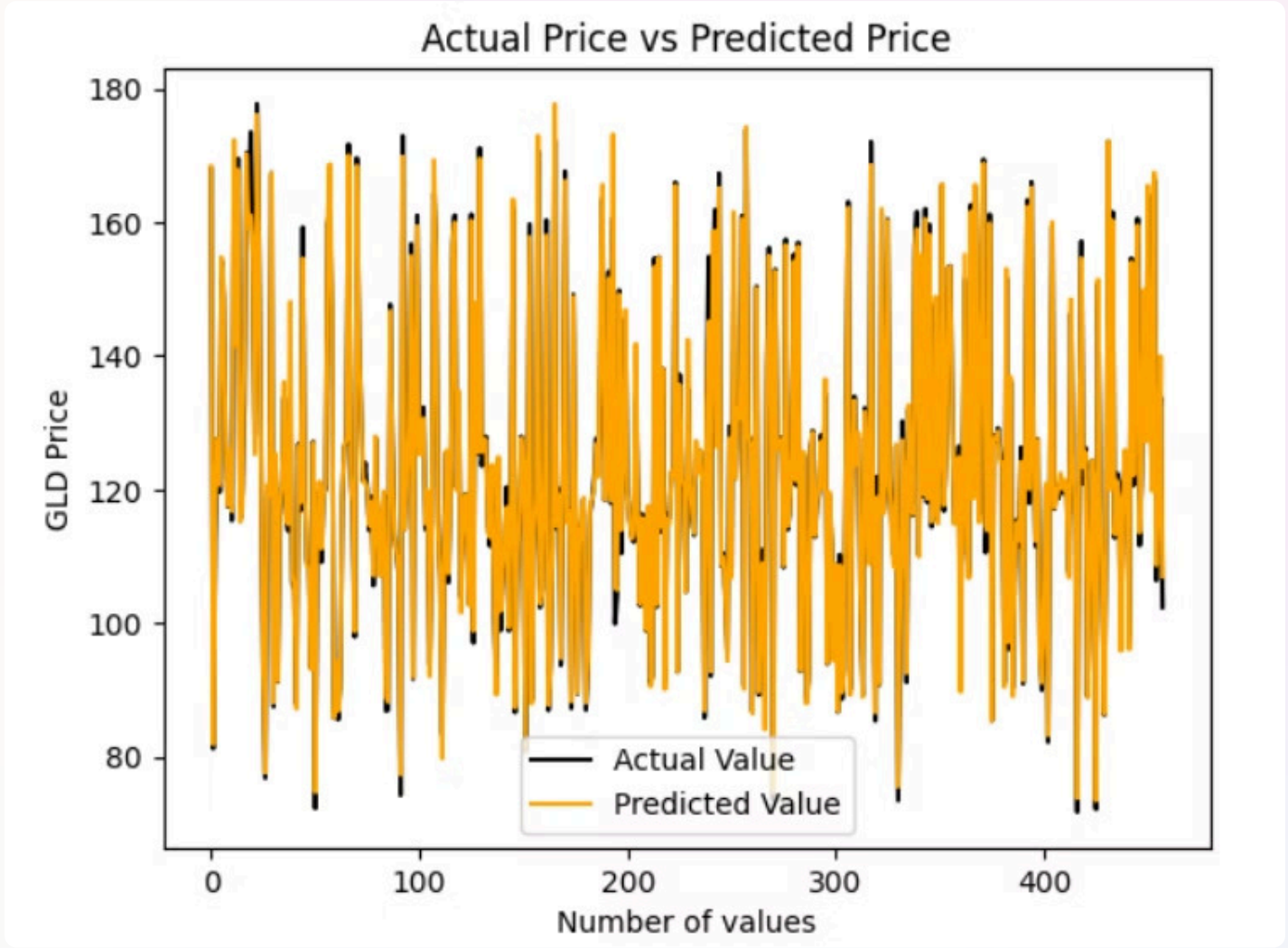
Prediction

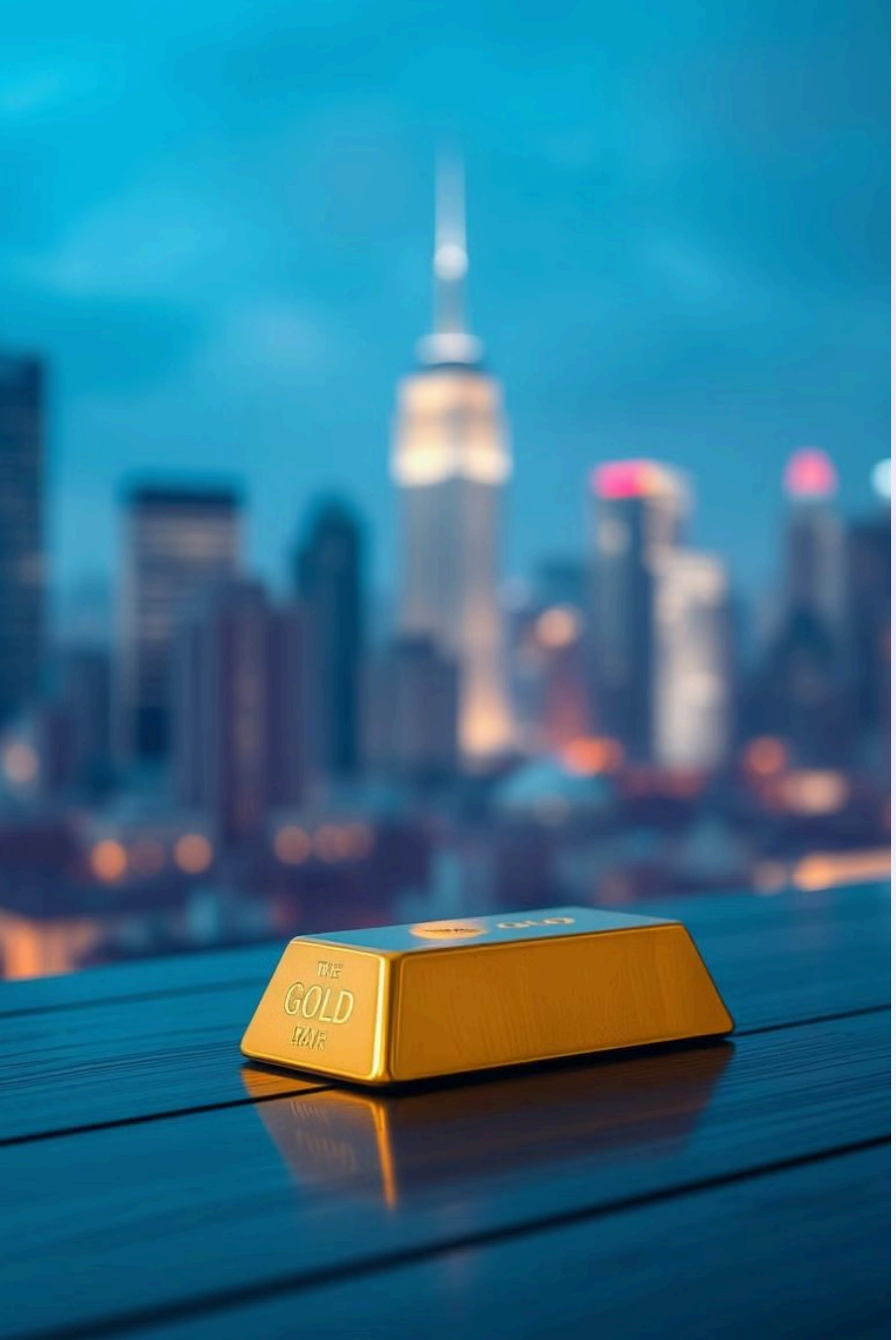
The model uses its learned patterns to predict future gold prices.

3

Output

The predicted gold prices are presented to the user in a clear and understandable format.





Conclusion

This project demonstrates the use of machine learning for predicting gold prices. The model can be used to provide insights into future price movements and assist investors in making informed decisions.