**Movie Prediction**

**Overview**

This project focuses on predicting movie success based on various features such as budget, genre, cast, director, and other relevant factors. The model aims to estimate the potential revenue or ratings a movie might receive based on historical data and machine learning techniques.

**Features**

* Data preprocessing and cleaning
* Exploratory Data Analysis (EDA)
* Feature engineering
* Machine learning model training and evaluation
* Visualization of results

**Requirements**

Ensure you have the following dependencies installed before running the notebook:

pip install pandas numpy matplotlib seaborn scikit-learn

**Usage**

1. Open the Jupyter Notebook file Movieprediction.ipynb.
2. Run the cells sequentially to process the dataset, train models, and visualize results.
3. Modify the model parameters as needed to experiment with different results.

**Dataset**

The dataset used should contain information on various movie attributes, including:

* Title
* Genre
* Budget
* Revenue
* Ratings
* Cast and Director

**Machine Learning Models Used**

* Linear Regression
* Random Forest
* Gradient Boosting
* Neural Networks (optional)

**Results**

The model evaluation is based on metrics such as:

* Mean Absolute Error (MAE)
* Mean Squared Error (MSE)
* R-squared score

**Future Improvements**

* Incorporate NLP to analyze movie scripts
* Use deep learning models for enhanced predictions
* Integrate real-time data updates