IMDB Movies Gross Prediction

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Introduction

Introduction

Objective:

- IMDB Movies gross prediction
- Using multiple regression models.

Finding the best regression model.

02

Methodology

Methodology

01

Data Extraction

Web scraping using Beautiful Soup.
1000 records and 8 features

02

Exploratory Data Analysis

-Cleaning (nulls, duplicates, spacing)
-Data Analysis

03

Data Preprocessing

04

Regression

Linear
K-fold
Polynomial
Ridge

Tools

Jupyter Notebook

Pandas

Matplotlib

BeautifulSoup

NumPy

Seaborn

Data Preprocessing

Steps:

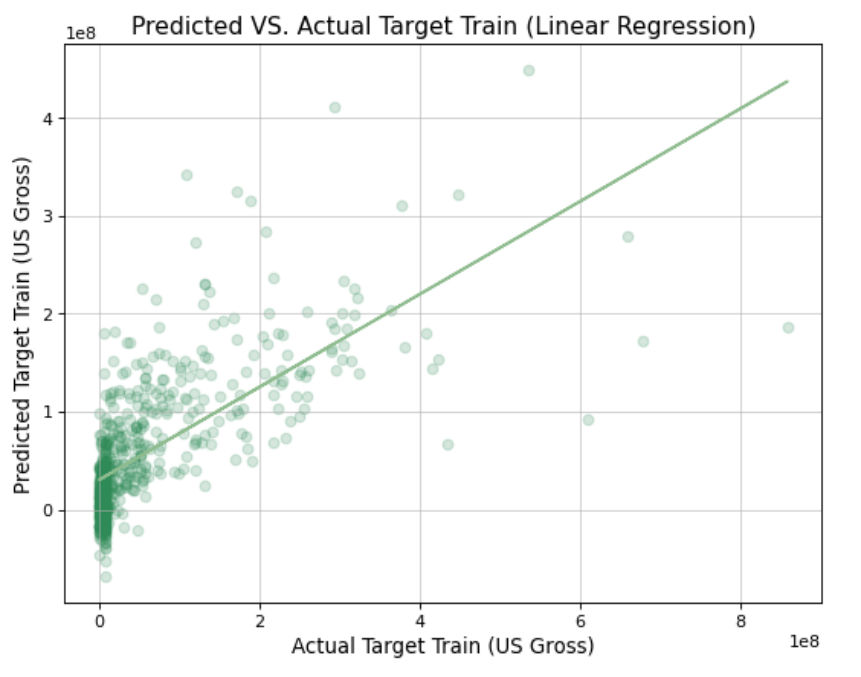
- Feature Selection.
- Data Splitting.
- Regression models (K-fold , Ridge, Linear , Polynomial).

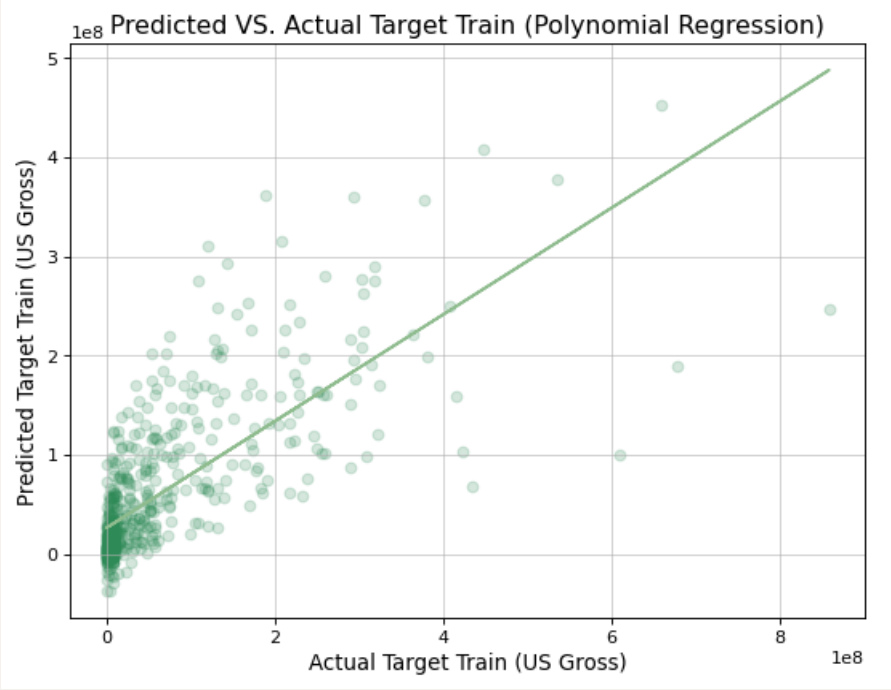
Data Splitting

Regression Models

Regression Models	Training Score	Validation Score
Normal LR	0.474546437	0.338569574
K-fold LR	0.474546438	0.459359399
Polynomial Regression	0.53764559	0.44003267
Ridge Regression	0.47454317	0.33885845
RR Cross-Validation	0.474492806	0.459387872

Analysis





Testing Score:0.58248222

Conclusion

Polynomial Linear Regression

- After testing multiple models.
- Polynomial Regression is the best model for IMDB movies gross prediction

Thanks