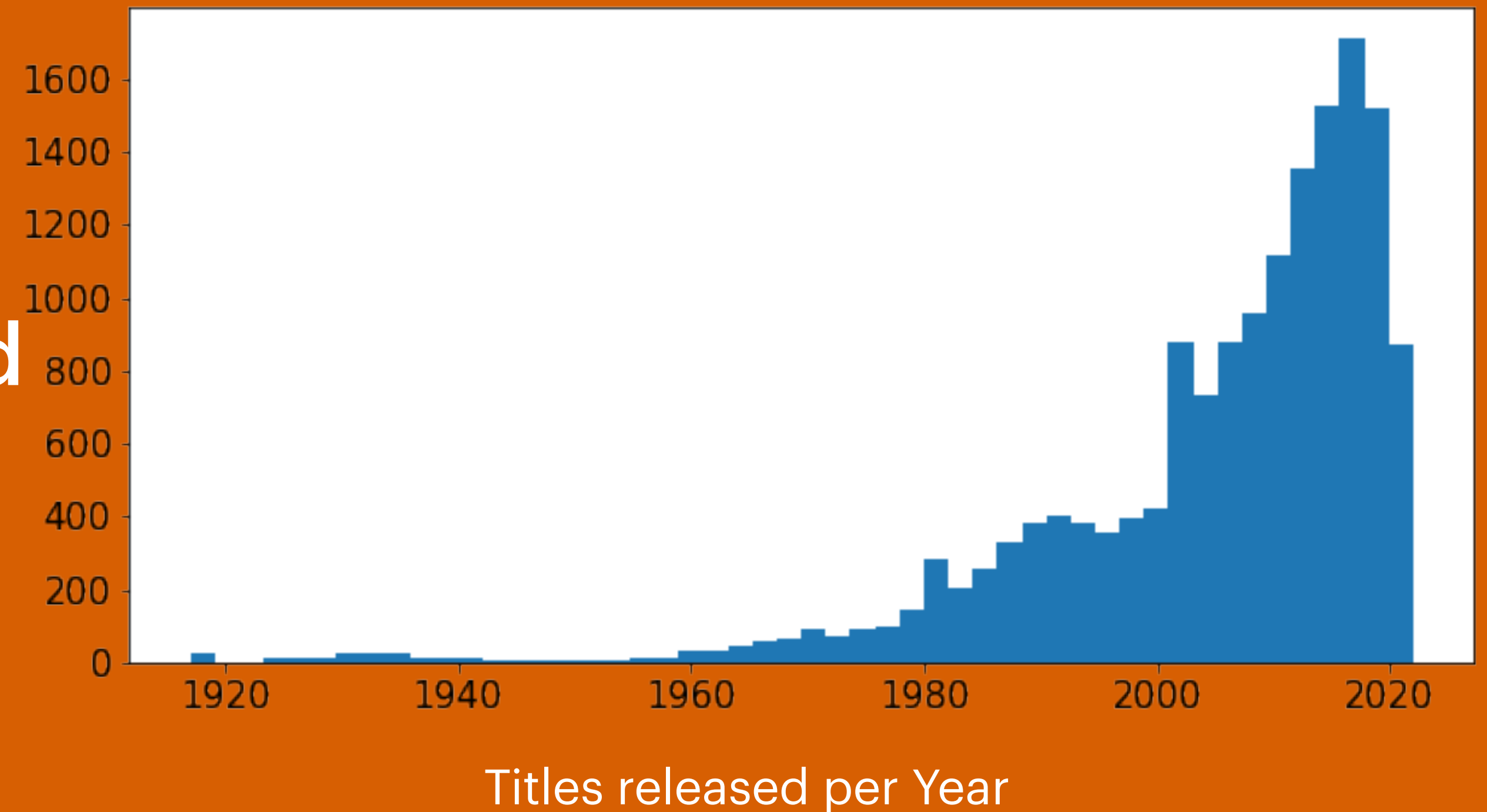# Anime Recommendation

Capstone

Edgar Gonzalez

Anime in the Mainstream

Popularity has steadily increased over time

Increasing number of titles released Per Year

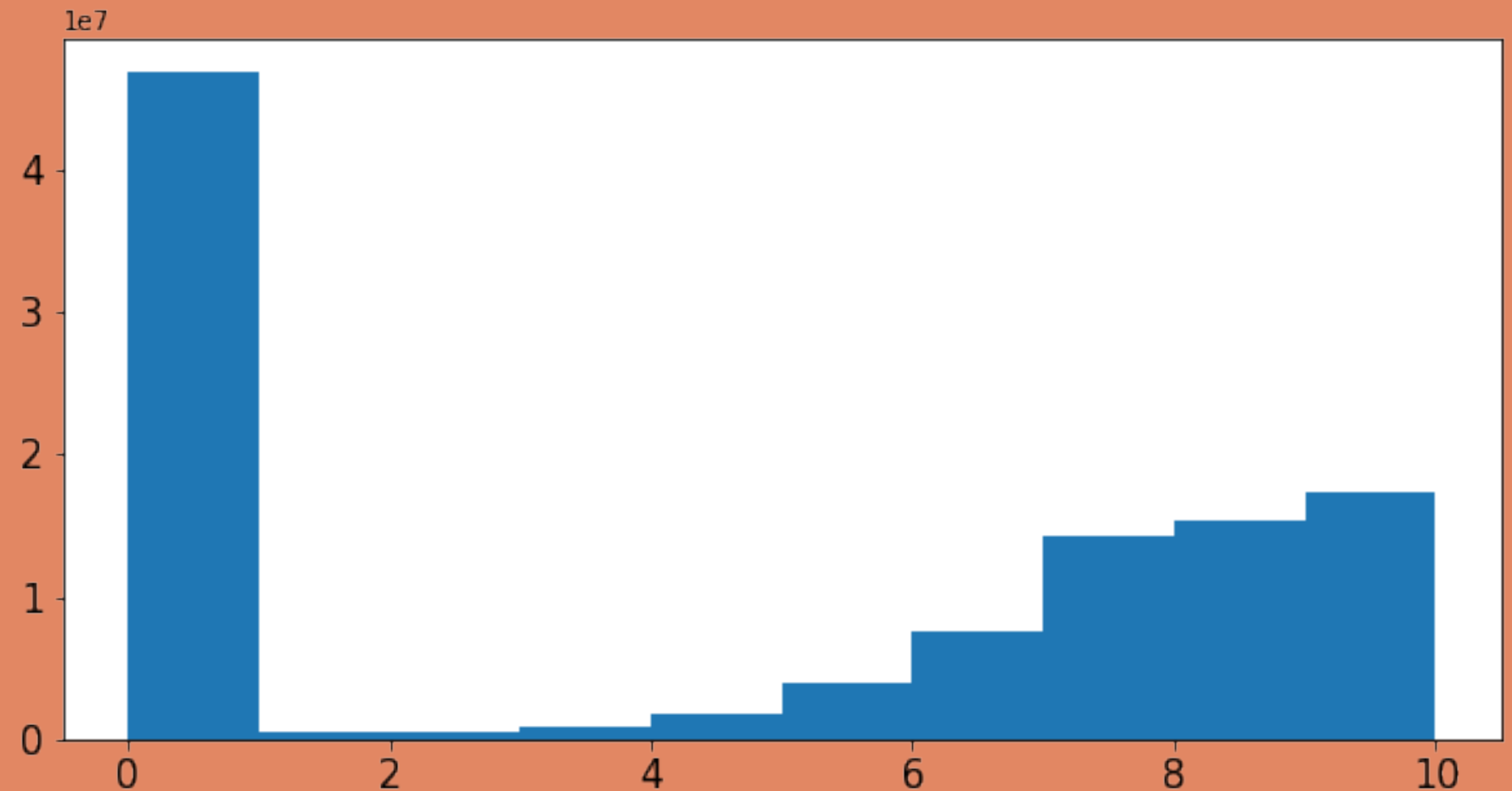## A growing number of companies Are starting to stream or create Anime

Crunchyroll, Funimation, Netflix, Amazon, Etc.
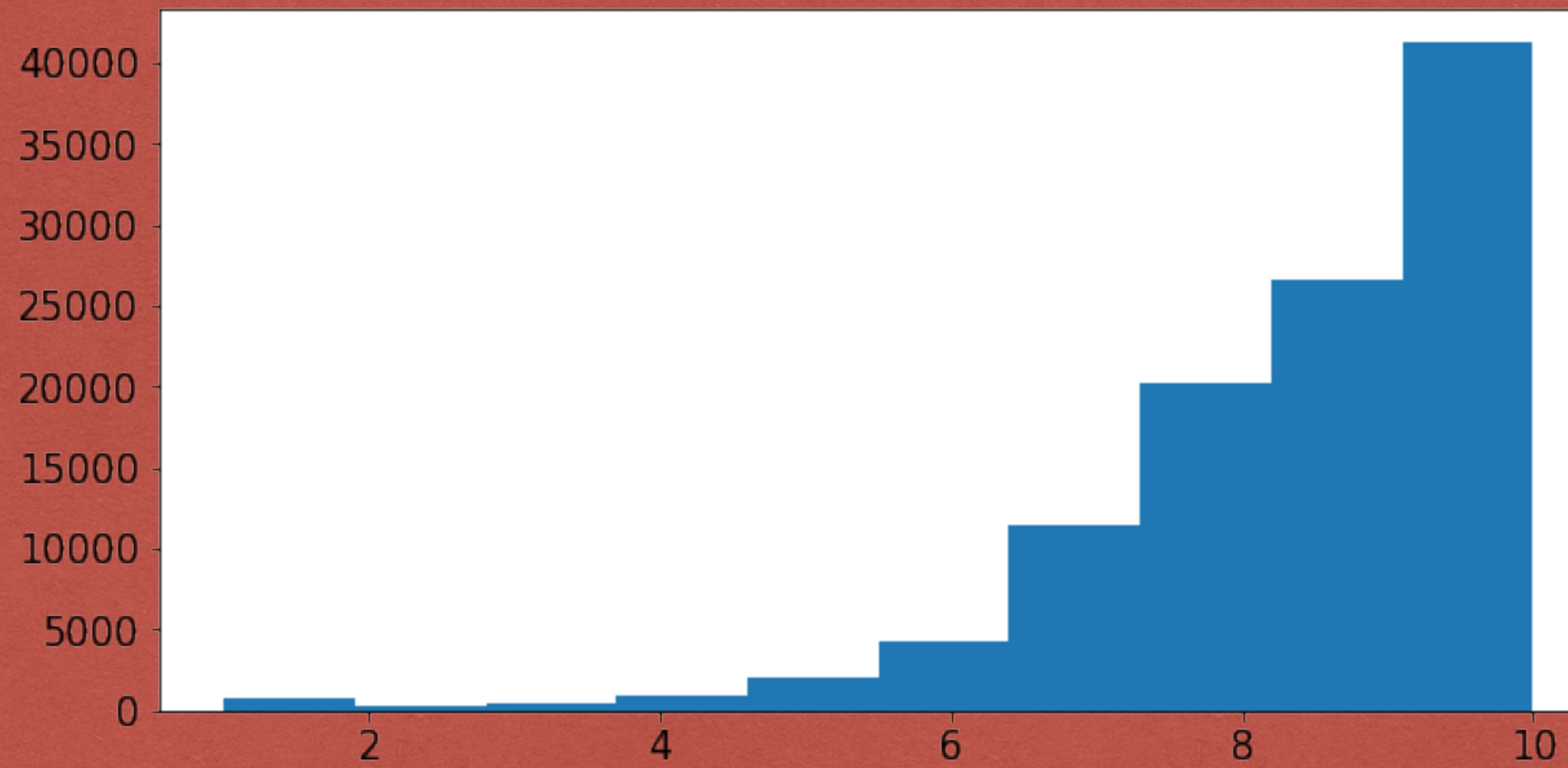

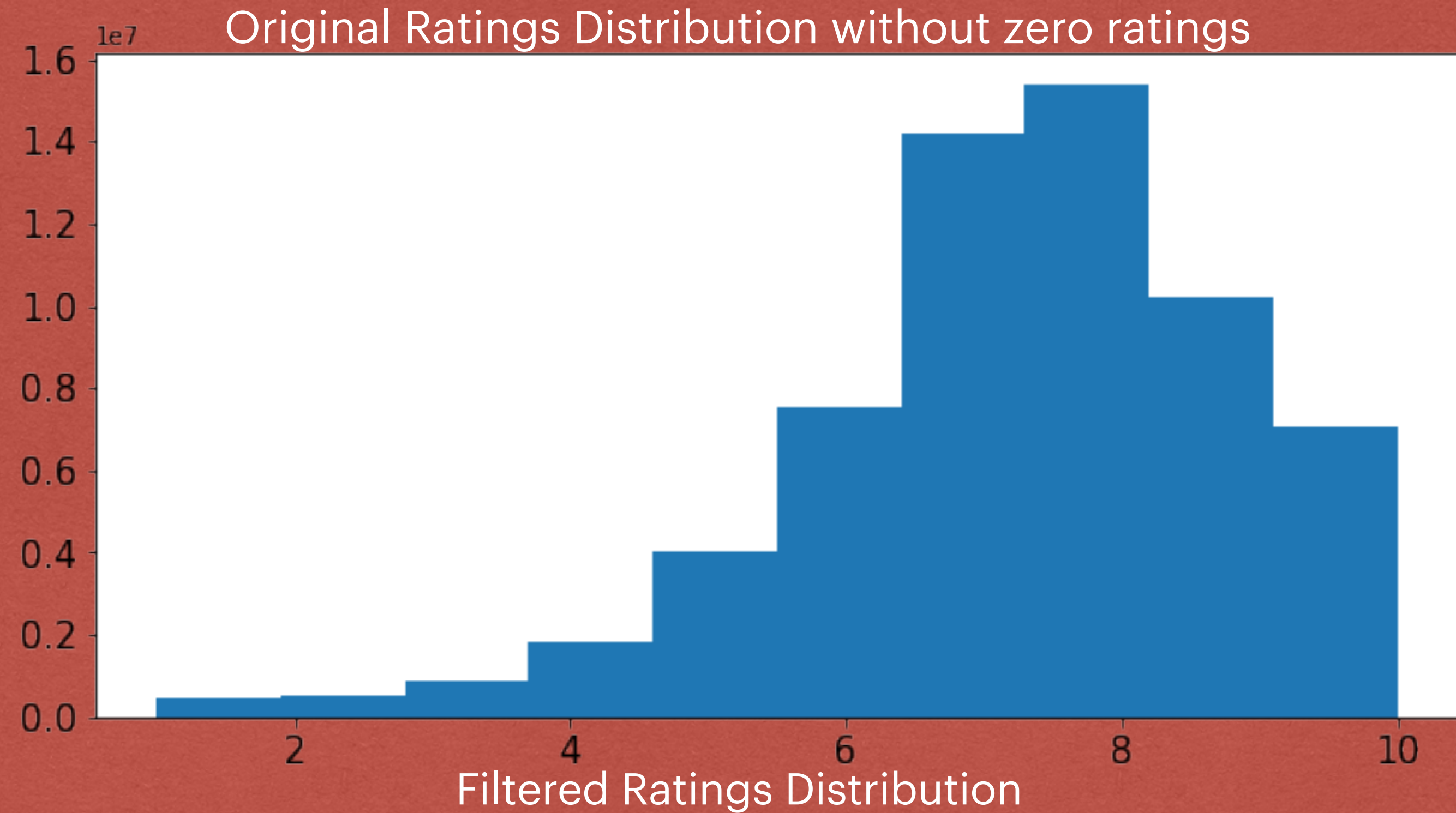Titles released per Year

Data
From Kaggle

- 326,000 Unique Users

- 106 million ratings

- 17,000 Anime titles

- Rating Scale of 1 - 10

- Over 30 genre types

Data Cleaning and EDA

- **Filling in names for titles with 'Unknown' values**

- **Removal of Pornographic titles**

- **Removal of 0's in user ratings (40% of user ratings were 0 values)**

- **Removal of users that had rated shows they hadn't watched yet**

Original Ratings Distribution without zero ratings

Filtered Ratings Distribution

Modeling

- Only used a subsection of total data so far

- 1000 titles, 14000 Unique users, 100000 total ratings

- Surprise library in Python

- Using RMSE to measure accuracy of the model

- SVD (Lowest RMSE: 1.42)

- KNN Basic (Lowest RMSE: 1.60)

- KNN Baseline (Lowest RMSE: 1.51)

- KNN with Mean (Lowest RMSE: 1.52)

Future Steps
Moving forward

- Add content filtering by age of show

- Add content filtering based on outside fields of interests

- Live website