

BOOK RECOMMENDATION SYSTEM

Based on Intel OneApi

Types of Recommendation System

Popularity
Based



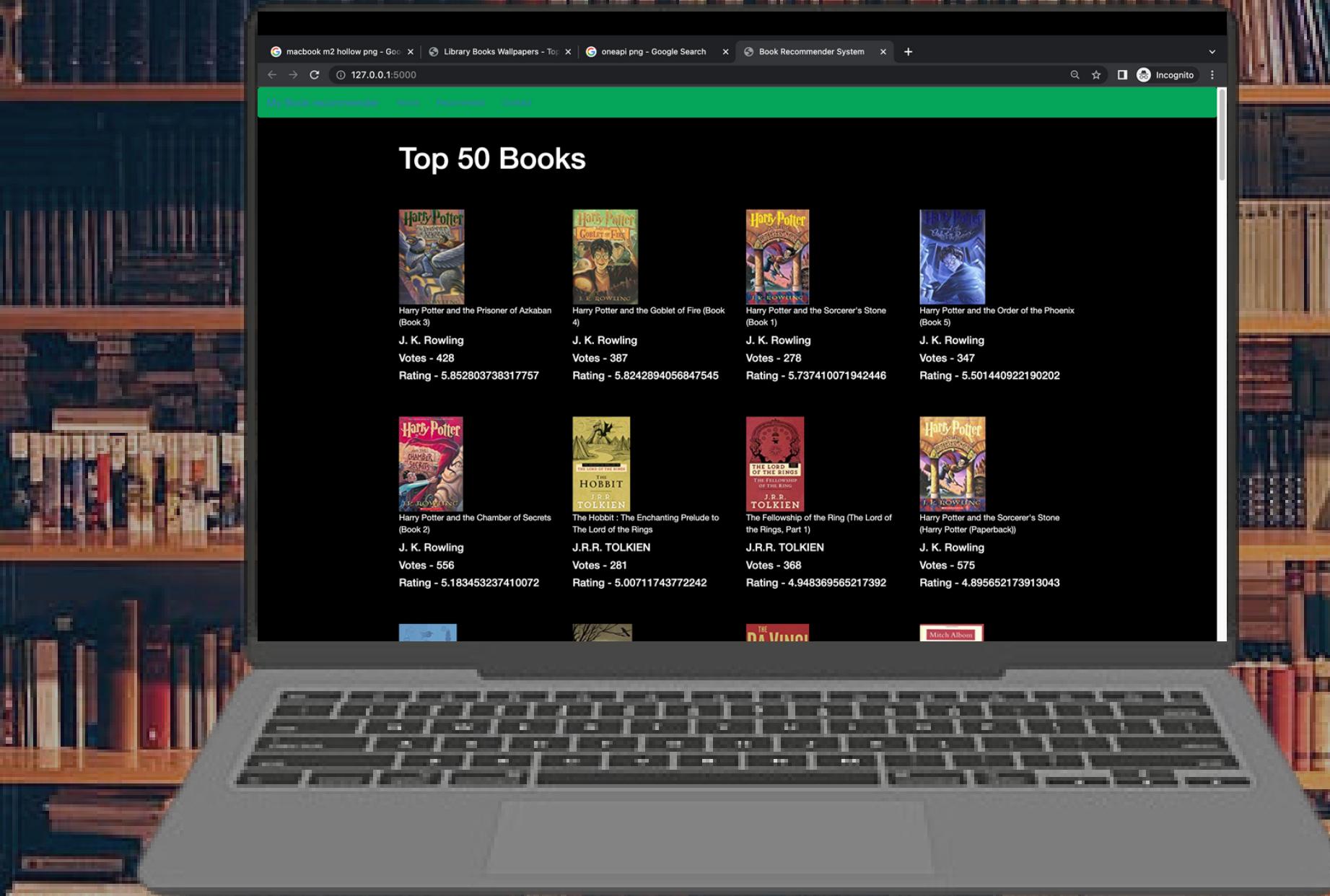
Content
Based

Collaborativ
e
Based



Hybrid

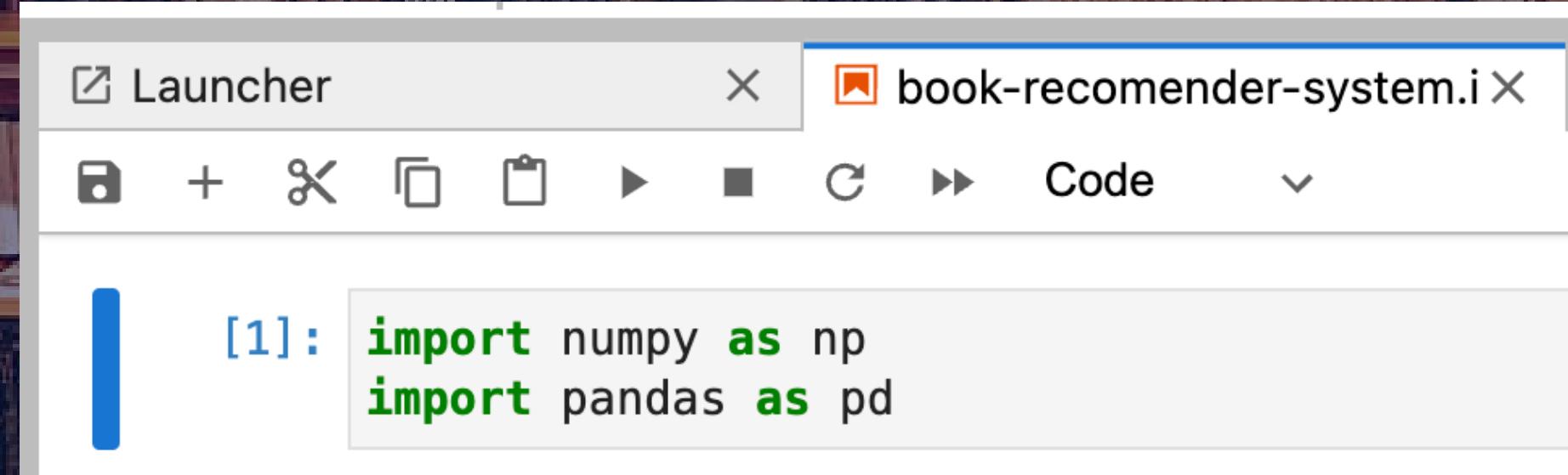
Types of Recommendation System



Get Personalized
Recommendations
at the
Click of a Button!

Libraries used

- Numpy
- Pandas



The image shows a screenshot of a Jupyter Notebook interface. The title bar says "Launcher" and "book-recomender-system.i". The toolbar includes icons for file operations, a new cell, copy, paste, run, cell type, and code. Below the toolbar, a code cell is visible with the following content:

```
[1]: import numpy as np  
import pandas as pd
```

Datasets used

All required datasets have been obtained from Keggle

BOOKS DATASET

- books.csv
- ratings.csv
- users.csv

The screenshot shows a web browser window with multiple tabs open. The active tab is titled "Books Dataset | Kaggle". The page displays a sidebar with navigation links: Home, Competitions, Datasets (which is selected), Models, Code, Discussions, Learn, and More. The main content area shows the "Books Dataset" card, which includes a "Data Card", "Code (4)", and "Discussion (0)". Below the card, there are category buttons for Business, Literature, E-Commerce Services, Recommender Systems, and Marketing. A "Download (26 MB)" button is visible. On the right side, there's a "Data Explorer" section showing the contents of "books_data" (Version 1, 120.75 MB), which contains three files: books.csv, ratings.csv, and users.csv. At the bottom, there's a "Summary" section indicating 3 files and 14 columns.

Data Filtering

Data has been deliberately filtered to make sure the output is reliable to the user



```
y = filtered_rating.groupby('Book-Title').count()['Book-Rating']>=50
famous_books = y[y].index

[12]: final_ratings=filtered_rating[filtered_rating['Book-Title'].isin(famous_books)]

[13]: pt = final_ratings.pivot_table(index='Book-Title', columns='User-ID',values='Book-Rating')

[14]: pt.fillna(0,inplace=True)

[15]: from sklearn.metrics.pairwise import cosine_similarity

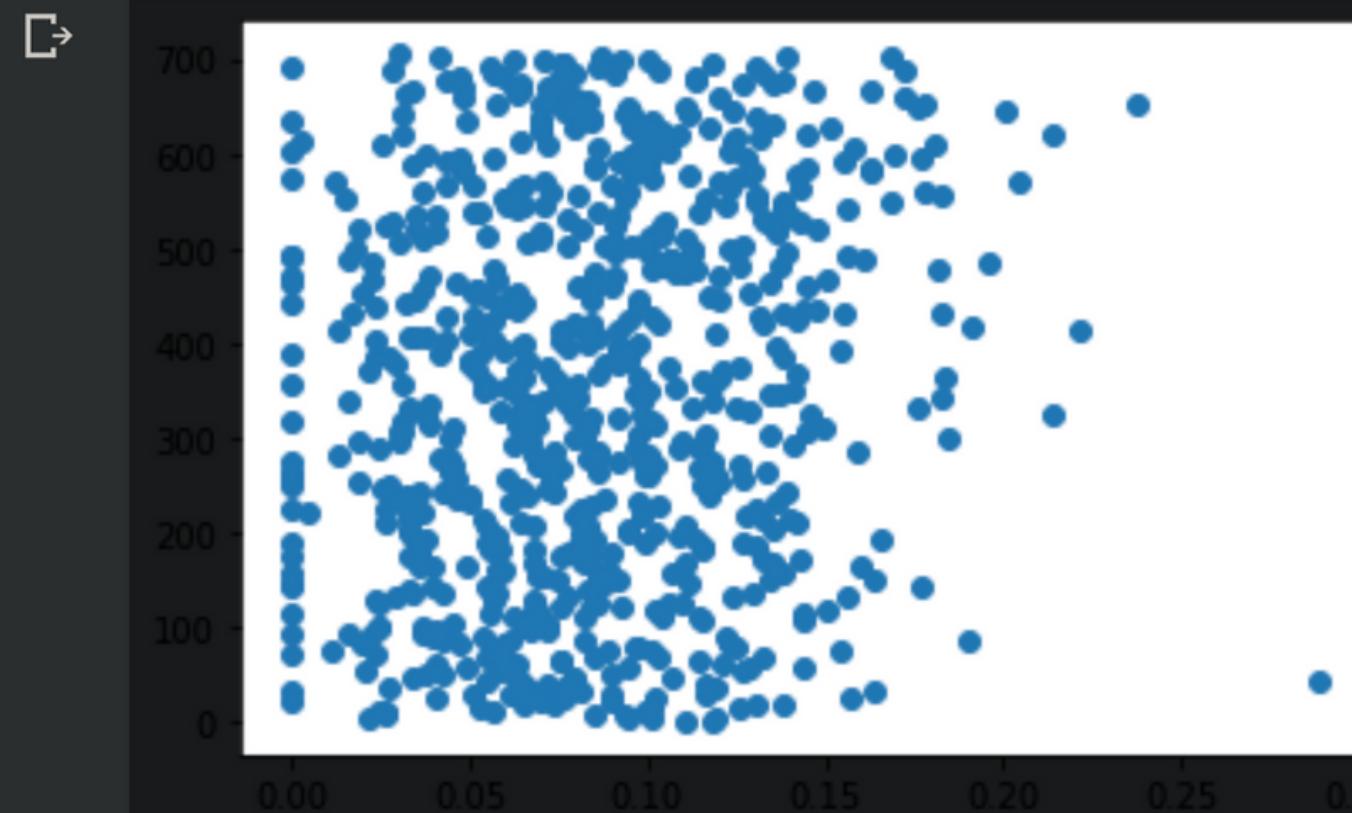
[16]: similarity_scores = cosine_similarity(pt)

[17]: similarity_scores.shape
```

Visualizing Data

Scrutinizing the data only to pick the best

```
7s   x, y = plotting('The Da Vinci Code')
      plt.scatter(y, x)
      plt.show()
```



```
    x, y = plotting('1984')
    fig, ax = plt.subplots()

    ax.step(x, y, linewidth=2.5)

    ax.set(xlim=(0, 8), xticks=np.arange(1, 8),
           ylim=(0, 8), yticks=np.arange(1, 8))

    plt.show()
```

Uses

Get hold of the current hits among the Bibliophiles



Harry Potter and the Prisoner of Azkaban
(Book 3)

J. K. Rowling

Votes - 428

Rating - 5.852803738317757

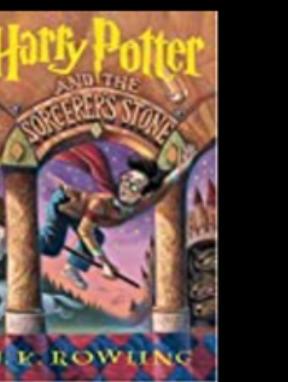


Harry Potter and the Goblet of Fire (Book 4)

J. K. Rowling

Votes - 387

Rating - 5.8242894056847545



Harry Potter and the Sorcerer's Stone
(Book 1)

J. K. Rowling

Votes - 278

Rating - 5.737410071942446

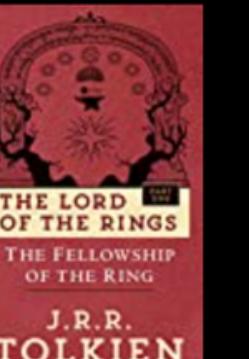
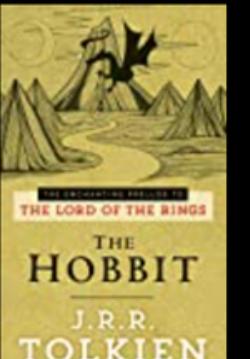
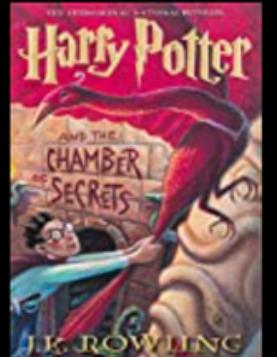


Harry Potter and the Order of the Phoenix
(Book 5)

J. K. Rowling

Votes - 347

Rating - 5.501440922190202

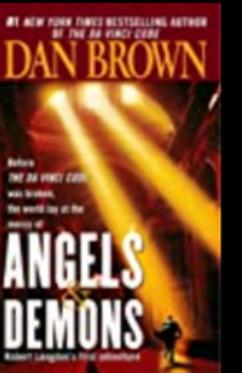


Uses

Get Recommendation on books similar to your current Fav

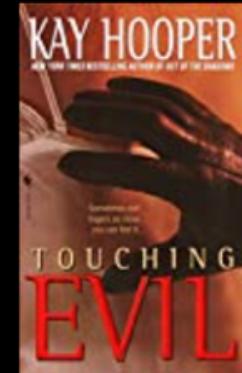
Recommend Books

Submit



Angels & Demons

Dan Brown



Touching Evil

Kay Hooper



Saving Faith

David Baldacci



The Sweet Potato Queens' Book of Love

JILL CONNER BROWNE

