

GOODREADS BOOK RECOMMENDATION ENGINE

Setara Nusratty Stats 418



PROJECT OVERVIEW

DATA

2000 rows From: **Best Books Ever** List Goodreads

Key fields:

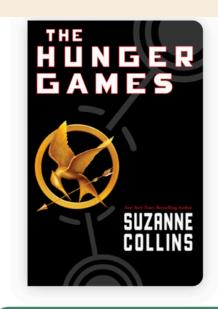
Title, Author, Genres, Rating, Pages, Year, Url PRODUCTION

Recommending **Books:**

via K-NN

Producing:

Python Shiny + Cloud Run



The Hunger Games #1

The Hunger Games

Suzanne Collins



★ ★ ★ ★ ★ 4.34 9,483,651 ratings · 245,893 reviews

Winning means fame and fortune. Losing means certain death. The Hunger Games have begun. .

In the ruins of a place once known as North America lies the nation of Panem, a shining Capitol surrounded by twelve outlying districts. The Capitol is harsh and cruel and keeps the districts in line by forcing them all to send one boy and one girl between the ages of twelve and eighteen to participate in the annual Hunger Games, a fight to the death on live TV.

Sixteen-year-old Katniss Everdeen regards it as a death sentence when she steps forward to take her sister's place in the Games. But Katniss has been close to dead before-and survival, for her, is second nature. Without really meaning to, she becomes a contender. But if she is to win, she will have to start making choices that weigh survival against humanity and life against love.

Young Adult Dystopia Fiction Fantasy Science Fiction Romance Adventure

374 pages, Hardcover

First published September 14, 2008

DATA COLLECTION

Webscraped:

Using Selenium

Want to Read

Shop this series [7]



Rate this book







DATA SUMMARY

Unfiltered:

2000 X 8

Cleaned:

1898 X 11

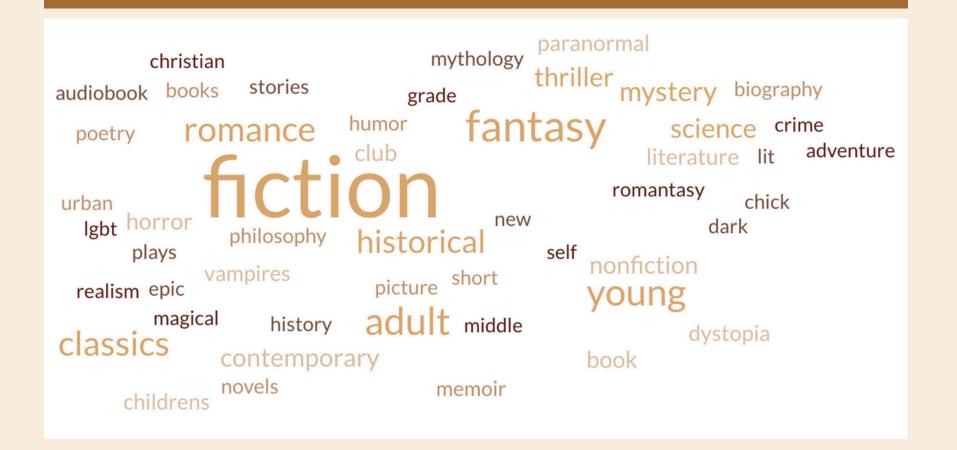
Log Transformed:

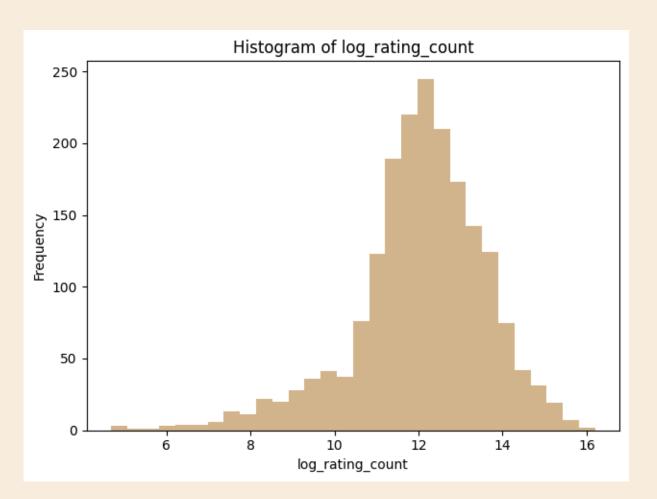
Rating Count, Pages,

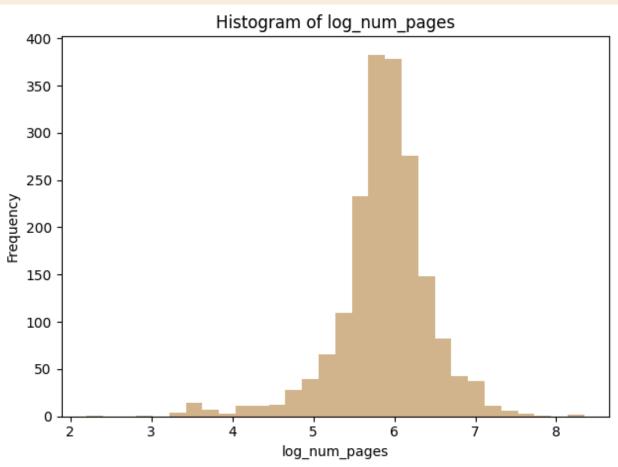
Transformed:

Calculated/Log Tranformed Age

GENRES WORD CLOUD







RECOMMENDER

CONTENT BASED K-NN MODEL

INPUT

THE HUNGER GAMES New York Time: Besselling Author SUZANNE COLLINS

COLUMN TRANSFORMER

Feature Vectorization:

- Genres → TF-IDF
- Author → TF-IDF

Numerical Features:

- log rating_count
- log num_pages
- log pub_age
- avg_rating

K-NN

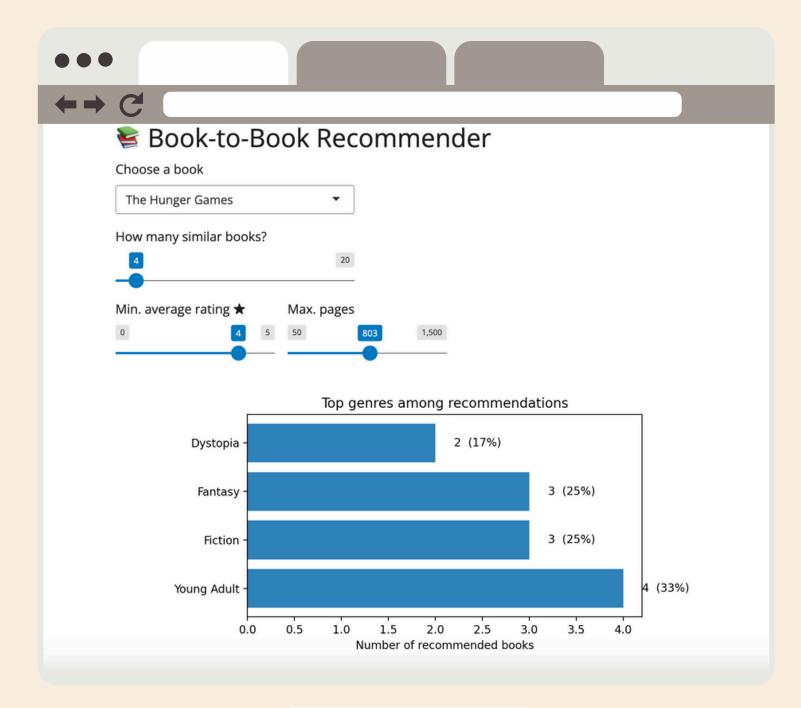
COSINE K-NN (k=10):

Find k nearest books OUTPUT

Title	Author	Avg Rating
Harry Potter and the Chamber of Secrets	J.K. Rowling	4.43
Harry Potter and the Prisoner of Azkaban	J.K. Rowling	4.58
Harry Potter and the Half- Blood Prince	J.K. Rowling	4.57

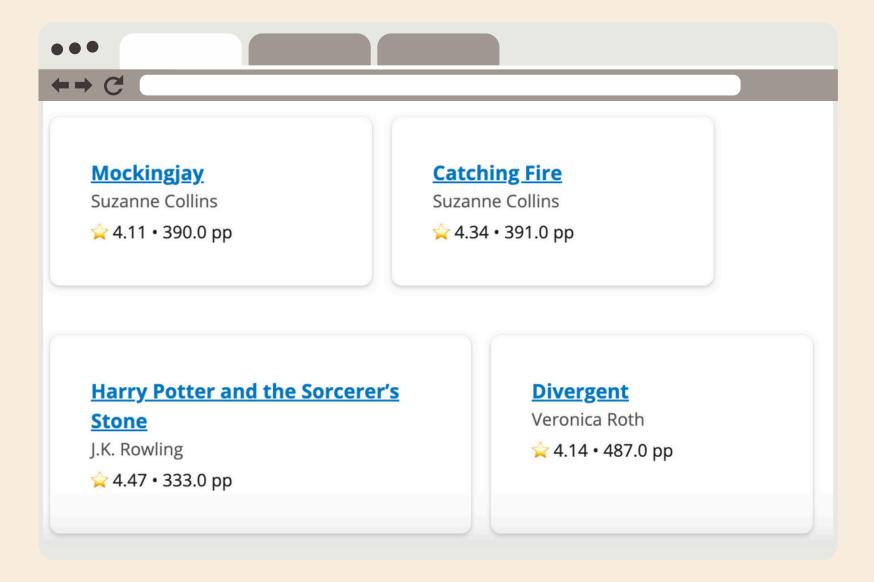
^{*}Pipeline built with scikit-learn

LIVE SHINY APP



Scan To Try!





Feature and Deployment Call-Outs:

- Title Search & Auto Complete
- ✓ Filters ★ rating / max pages
- **ii** Genre bar chart
- * Clickable rec cards (link to Goodreads)

Hosted on Google Cloud Run

Docker container (linux/amd64 build)