



## **TURNING GOODREADS DATA INTO PERSONALIZED RECOMMENDATIONS**

Harnessing Machine Learning to Tailor Your Next Read



# INTRODUCTION



## DATA SOURCES



- **Web Scrapping:** Top 100 best books published in 2023 from Goodreads.
- **Open Dataset on Kaggle:** over 100.000 books from Goodreads.



# 73.719 Books

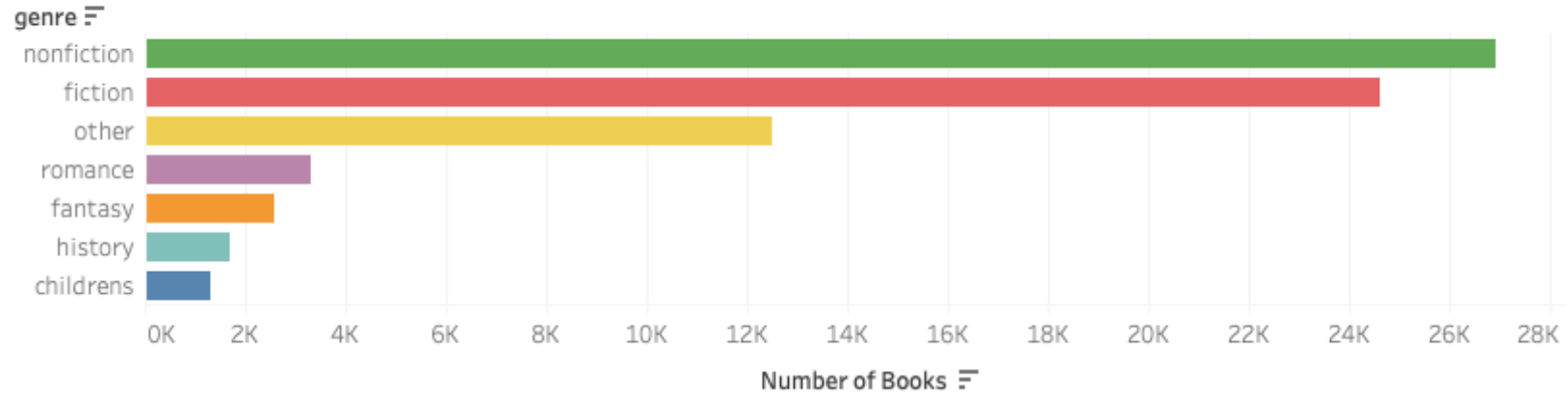
# STRUCTURE

1. Data Links and Explanations
2. Data Import and Inspection
3. Data Cleaning
4. Exploratory Data Analysis (EDA)
5. Feature Engineering and Model Preparation
6. Book Recommender

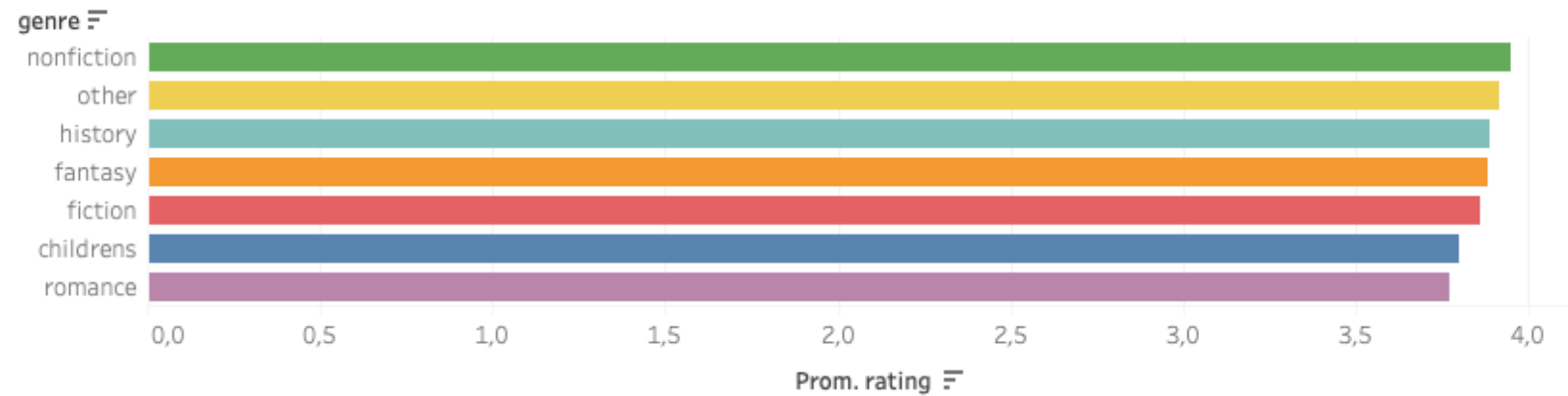
# EDA AND FEATURE ENGINEERING

- Genre Popularity
- Rating Distributions
- Sentiment Analysis results

## Genre Popularity

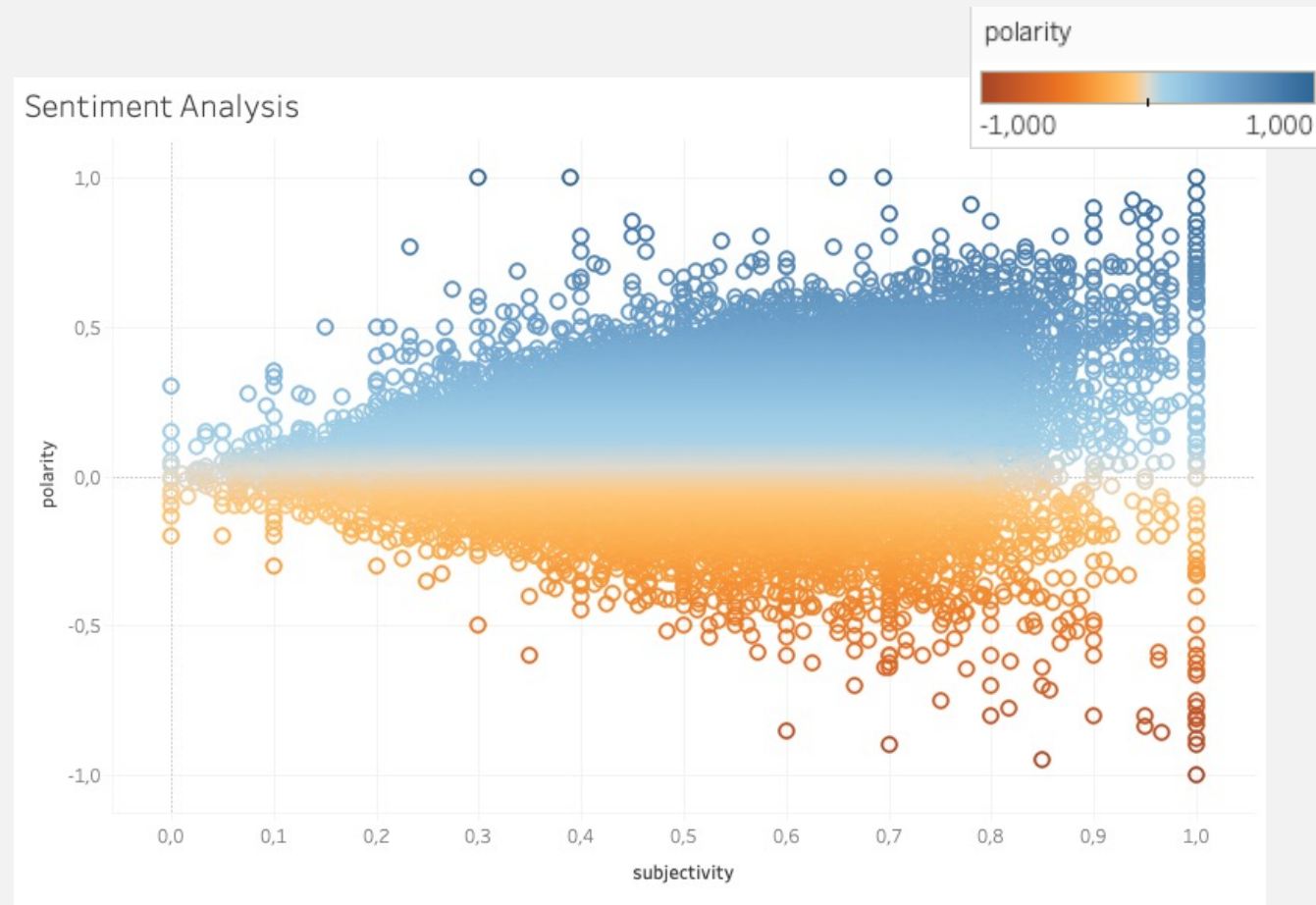


## Average Ratings across Genres



**Polarity (-1 to +1):** emotion expressed in the text, ranging from negative to positive.

**Subjectivity (0 to 1):** objective (facts) to very subjective (opinion).

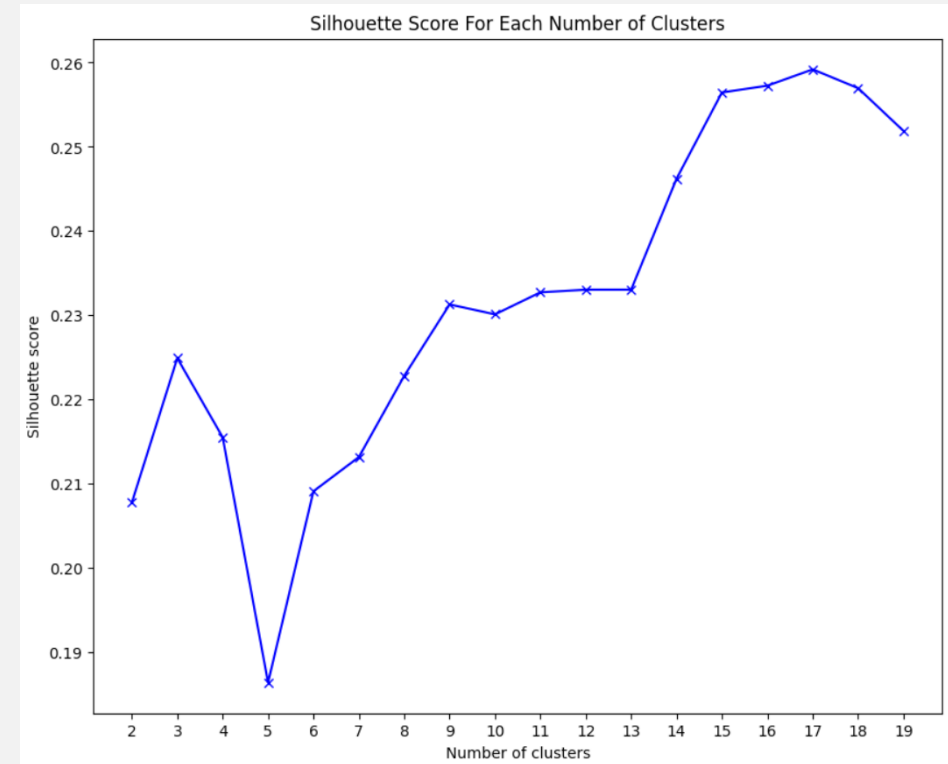
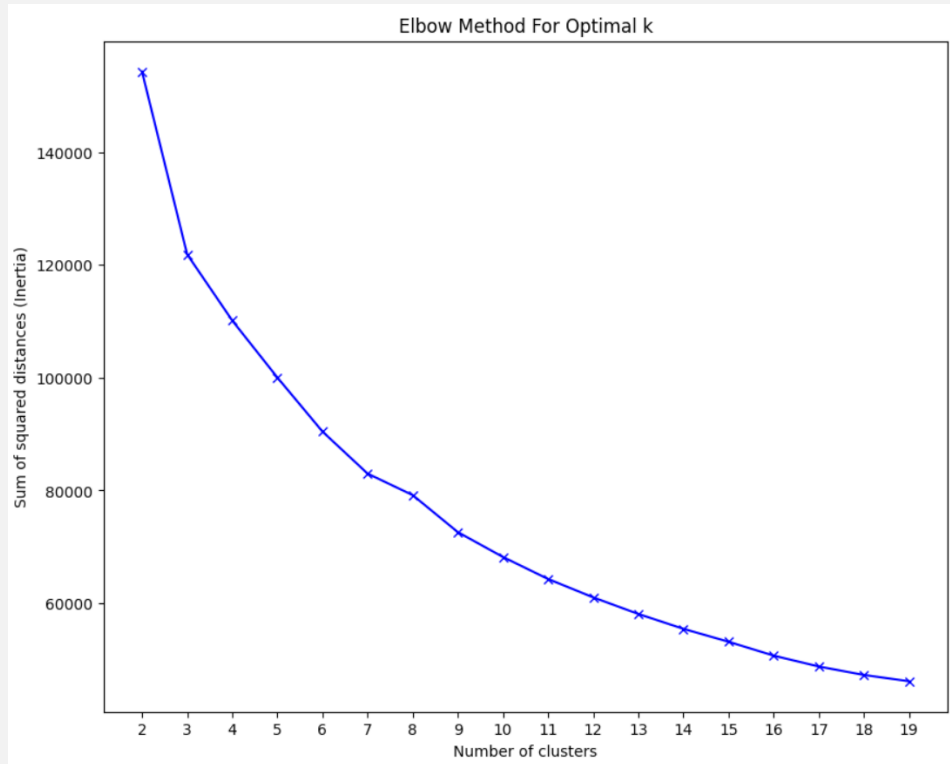


# FEATURES

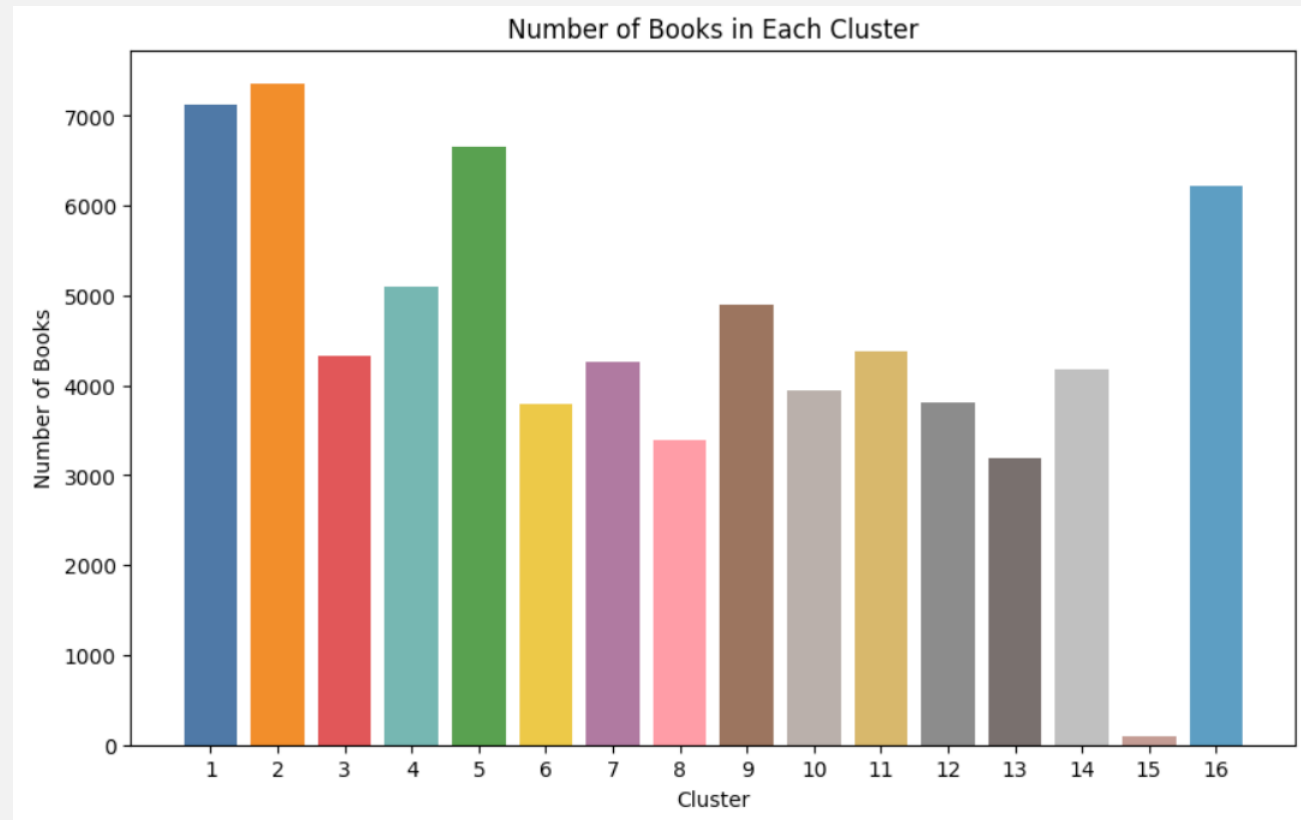
- Description (after sentiment analysis)
- Genre
- Pages
- Rating



# CLUSTERING AND MODEL PREPARATION



# CLUSTERS



## DEMONSTRATION AND LIMITATIONS

Enter the book title:

Enter the book title: happy place

Enter the author's name:

Enter the book title: happy place

Enter the author's name: Emily Henry

The book is already in our list. Here's a recommendation from our collection:

Title: All the Dangerous Things

Author: Stacy Willingham



Enter the book title: hunger games

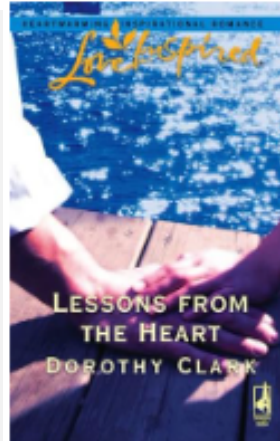
Enter the author's name: Suzanne Collins

Book not found in our list. Searching online...

We recommend this book for you:

Title: Lessons from the Heart

Author: Dorothy Clark



URL: [https://goodreads.com/book/show/1421293.Lessons\\_from\\_the\\_Heart](https://goodreads.com/book/show/1421293.Lessons_from_the_Heart)

# **LIMITATIONS**

- Dataset Limitations
- Cluster's Quality
- Features

## **FUTURE WORK**

- Explore which features are relevant to provide a more accurate recommendation.
- Include the latest bestsellers.
- User's feedback

**THANKS FOR LISTENING!**