

Get Your Book

A recommender system for you to find your preferred book

Rafael Cabral

Overview

Get Your Book has over 3000 books for you.

By choosing a book, you will receive recommendations for other books according to its title, genre, author and description.

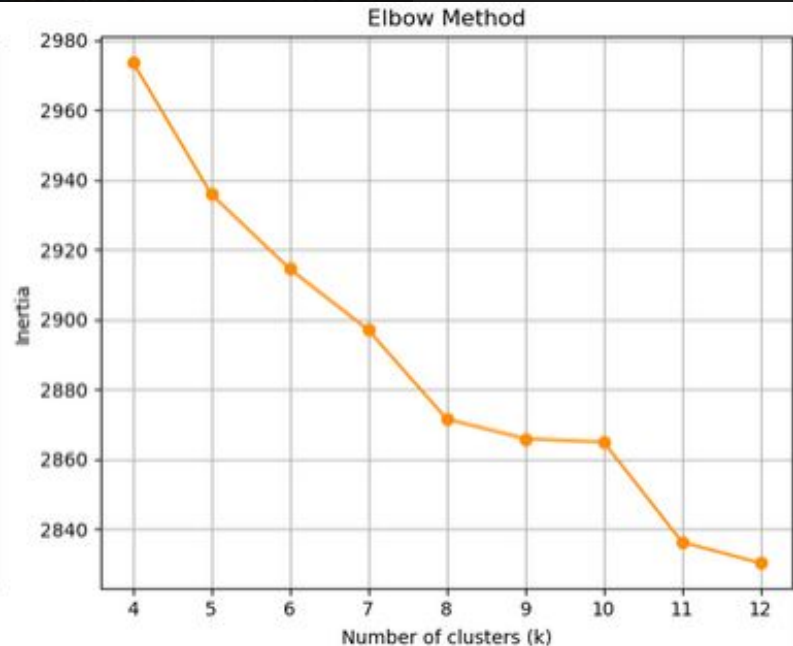
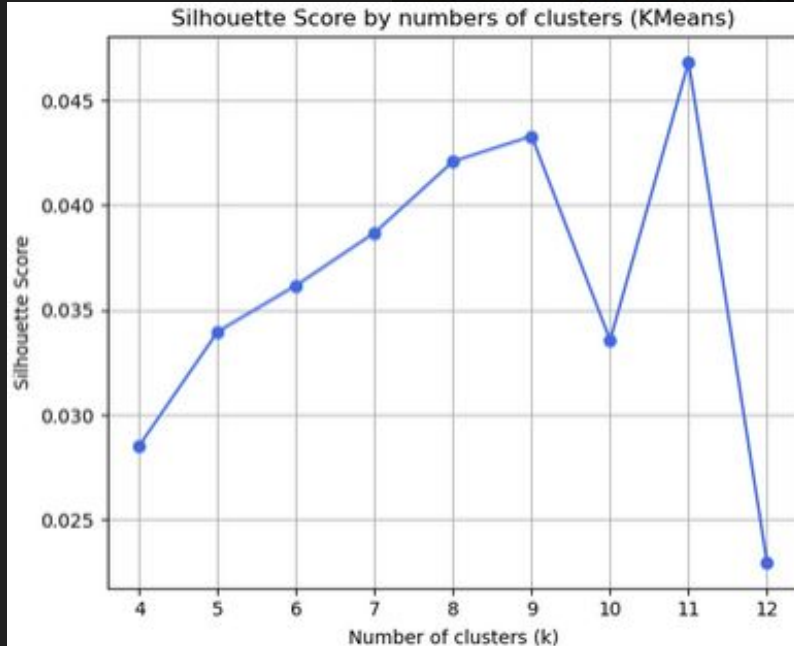
Data overview and cleaning

- Gutenberg.org: 2394 books by scraping;
- Google API: 1010 books;
- Books.csv, from kaggle: to get genre(Gutenberg has none);
- Open Library API: to get the covers by isbn13;
- TF-IDF: to filter out common words like “the”, “is”, “a” to make the clustering using ‘description’ in a better way;

After remove duplicates I got 3347 books.

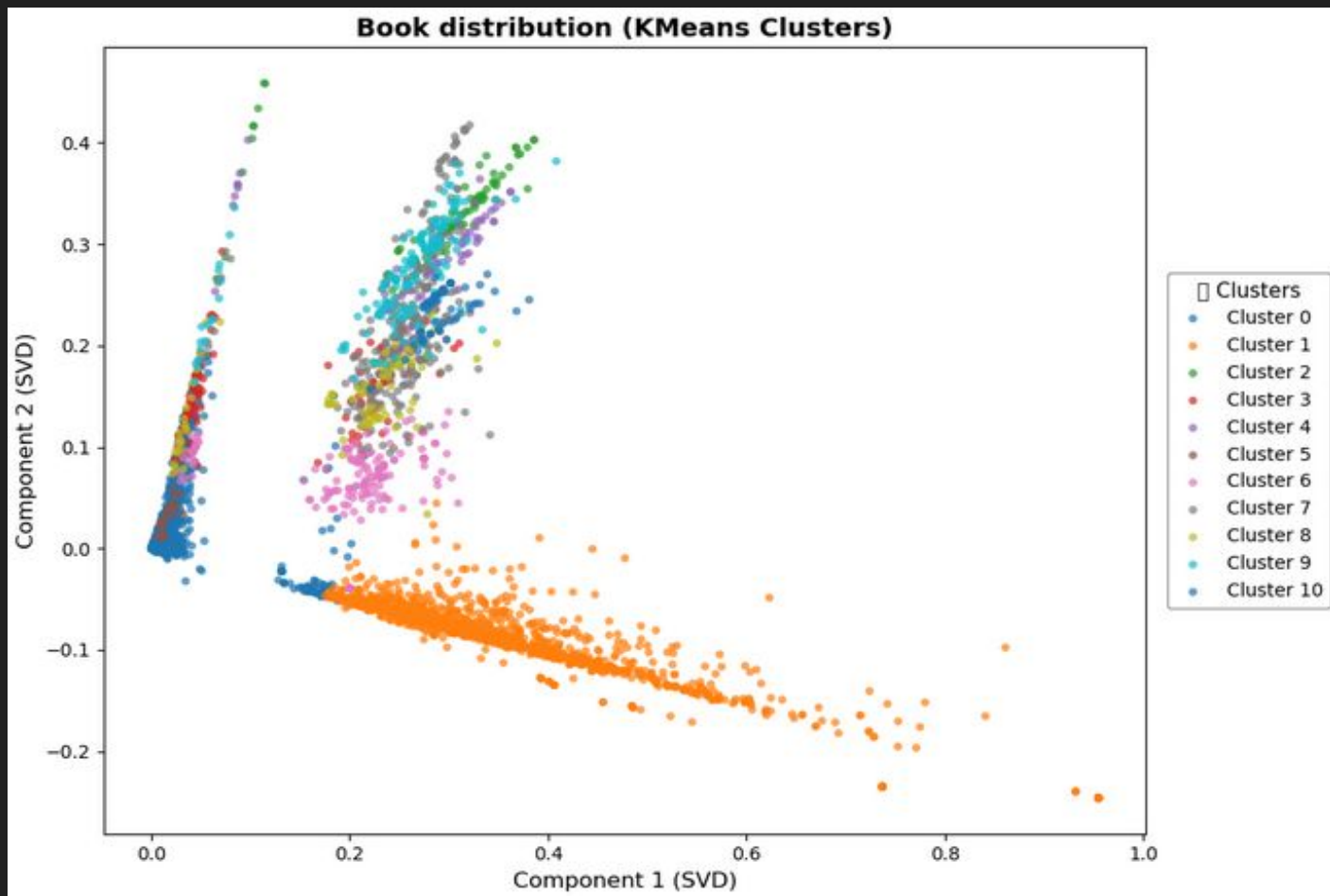
Silhouette Score

```
k=4: silhouette=0.0285, inertia=2,974  
k=5: silhouette=0.0340, inertia=2,936  
k=6: silhouette=0.0362, inertia=2,915  
k=7: silhouette=0.0387, inertia=2,897  
k=8: silhouette=0.0421, inertia=2,872  
k=9: silhouette=0.0433, inertia=2,866  
k=10: silhouette=0.0336, inertia=2,865  
k=11: silhouette=0.0468, inertia=2,836  
k=12: silhouette=0.0229, inertia=2,830
```



Clusters

For greater accuracy and smaller groups, I used $k = 11$ (as Silhouette suggested).



Thank you

<http://localhost:8501/>

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