

Book Recommendation System

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Abstract - This study of book recommendation system tries to suggest us the items that we want to buy or to view. In this system user gets directed to those items which he/she wants to view directly based on previous ratings and interest. Online platform is now growing rapidly due to this pandemic situation. Online book purchasing has spread within many countries along with other e-commerce business. In this system collaborative based machine learning methods are used. Thus the result state that based on the users recommendations they can view the books they want easily. This system will help the user to easily get to the book that he/she wants

Key Words: Book recommendation, Machine learning, pandemic situation, online, e-commerce

1. INTRODUCTION

“Online” platform is an online service that that is provided by the system to the users. There are many platforms of online services. We see that most of the organization have their own recommendation system to sell their related products online. But here all the system is not developed by the users or buyers interest. But built with multiple options to buyers or users by recommendation. The personalized recommendation system helps user to select their product from multiple amount of items. As internet is growing online options are also growing in an e-commerce sites. With the help of personalized recommendation system helps users find books, things, etc. easily.

This era has come up with the advance learning computing languages such as IoT (Internet of Things), AI (Artificial Intelligence), ML (Machine Learning, DS (Data Science) etc. My system is based on Machine learning language

Recommendation is giving or showing suggestions to the costumers. Earlier the recommendation system was working on the basis of taking suggestions from friends and relatives. But nowadays internet can handle the newly users through the basis of Google's, youtube's history. They recommends the product which are now trending.

1.1 Types of Recommendation System

- 1) Content Based Filtering: In this filtering we try to find items that looks alike.

- 2) Collaborative based filtering: In this filtering recommendation system is based on the past interactivity of users.
- 3) Hybrid Filtering: This filtering is based on both of the above filters combination.

1.2 Book Recommendation System

In this system it's a type of recommending books to the reader or users past interest. Mostly the book recommendation system is already used by the websites like eBooks, open library, etc. Here we will use collaborative filtering methods to build a book recommendation system.

Here is the architecture of our system on three basis:

- 1) Data Acquisition: Here we will take user rating dataset and book dataset and merge this both datasets.
- 2) Data Processing: Here we will count the ratings of the books by the user and then distinguish them into two categories either low rating or high rating. If low rating then we will remove those books from user's recommendation.
- 3) Clustering Techniques: Here the recommended books will be displayed using Machine learning algorithms.

2. SURVEYS

Survey to get information about Book recommendation System:

Here I conducted the survey to ask some readers the questions based on the books interest. The questions were sent to multiple peoples by social media forms. Some questions that I have asked are given below along with the graphical representation using pie chart diagram:

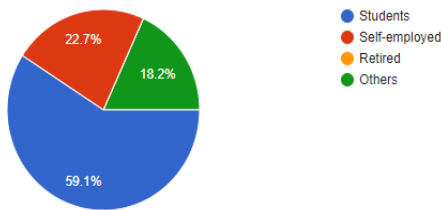
- 1) What is your age group?
- 2) Do you love reading books?
- 3) What are your favorite book covers?
- 4) What was your favorite book when you were a child?
- 5) Did someone read to you any book when you were a child?
- 6) Where do you usually discover new books?
- 7) Where do you like to read the books?
- 8) What was the last book you read?

- 9) Has the book ever made you laugh out loud or cry
- 10) What book or series do you hope and pray will be turned into a movie or TV shows one day?

I have received 22 responses from the peoples. And tried to seek their point of view below are their responses using pie chart

What is your age group?

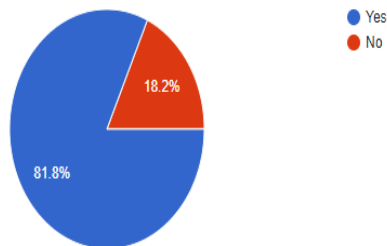
22 responses



Here we see that all types of aged people read books

Do you love reading books?

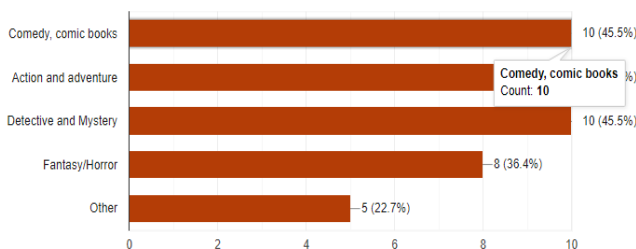
22 responses



Here maximum number of people love reading books

What are your favorite book covers?

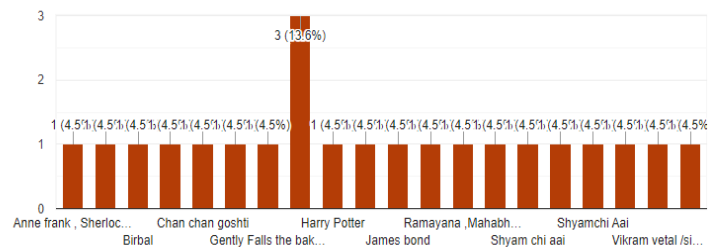
22 responses



Here we see people's favorite types of recommended books. Most of the people love comedy, detective types of books.

What was your favorite book when you were a child?

22 responses



This are the people's favorite books list among various book covers.

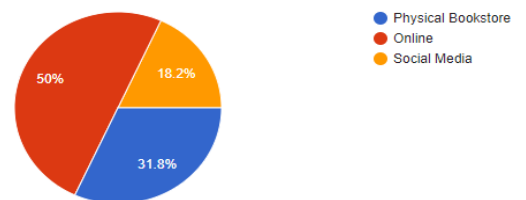
Did someone read to you any book when you were a child?

22 responses



Where do you usually discover new books?

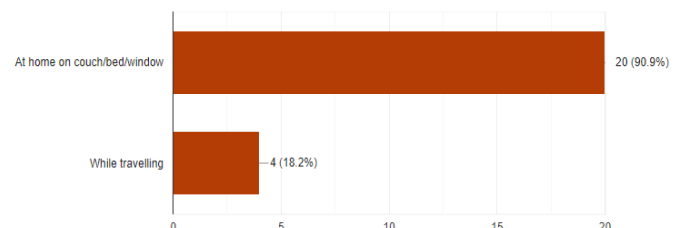
22 responses



Here we can see that most of the peoples buy the books online.

Where do you like to read the books?

22 responses

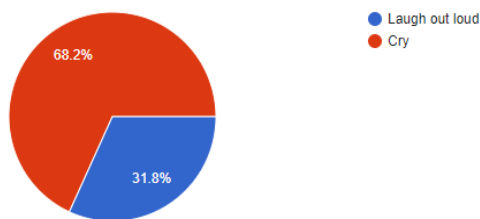


Here people mostly read their books at home rather than traveling.

What was the last book you read?
22 responses

The Magic of Thinking Big
The mystery
Marvel
Melhua
Something I never told you
Champak
Rich dad poor dad
The power of subconscious mind
Rich Dad Poor Dad

Has the book ever made you laugh out loud or cry
22 responses



Here the rating tells us that the reader are happy reading books.

What book or series do you hope and pray will be turned into a movie or TV shows one day?
22 responses

Gently Falls the Bakula
Don't know
Marvel comics all season
Its already happened Halfgirlfrnd
Something I never told you
Champak
-
Never thought
History of Maratha

3. CONCLUSION

From this survey we can conclude that, most of the people love reading books, Due to current pandemic situation they buy the books online rather than purchasing it from shops offline. With this survey we can also conclude that we can recommend books based on their survey answer or ratings. This recommendation system of books will surely help people for purchasing their interesting books easily. Thus we should use more recommendation systems of multiple categories.

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