

Airbnb Bookings Analysis

Instructions:

- i) Please fill in all the required information.
- ii) Avoid grammatical errors.

Team Member's Name, Email and Contribution:

Name: - Vikas Panchal

Email id:- panchalvicky501@gmail.com

1. Find a project topic.
2. Matches dataset.
3. Research on Models.
4. Create Popularity based Recommendation.
5. Create collaborative Filtering.
6. Analyze the rating dataset and books dataset.
7. Create ratings implicit and explicit.
8. Create a ppt with my team member.

Name: - Naveen Kumar Batta

Email id: - naveenbatta4587@gmail.com

1. Find project resources.
2. Analyze users dataset.
3. Work in template editing.
4. Create html template.
5. Dataset observation.
6. Create a ppt with my team member.
7. Find a problem statement.

Please paste the GitHub Repo link.

GitHub Link:- <https://github.com/Naveenkumarbatta/Book-Recommendation-system-.git>

Please write a short summary of your Capstone project and its components. Describe the problem statement, your approaches and your conclusions. (200-400 words)

Problem statement:

During the last few decades, with the rise of YouTube, Amazon, Netflix, and many other such web services, recommender systems have taken more and more place in our lives. From e-commerce (suggest to buyers' articles that could interest them) to online advertisement (suggest to users the right contents, matching their preferences), recommender systems are today unavoidable in our daily online journeys.

In a very general way, recommender systems are algorithms aimed at suggesting relevant items to users (items being movies to watch, text to read, products to buy, or anything else depending on industries).

Recommendation systems are really critical in some industries as they can generate a huge amount of income when they are efficient or also be a way to stand out significantly from competitors. The main objective is to create a book recommendation system for users.

Approaches:

Recommendation systems are widely used today to recommend products to users based on their interests. A recommendation system is one of the strongest systems for increasing profits by retaining more users in a very big competition. In this article, I'll walk you through how to build a book recommendation system with Machine Learning using the Python programming language.

Conclusion:

- In EDA, the Top-10 most rated books were essentially **novels**. Books like **The Lovely Bone** and **The Secret Life of Bees** were very well perceived.
- Majority of the readers were of the **age bracket 20–35** and most of them came from North American and European countries namely **USA, Canada, UK, Germany and Spain**.
- If we look at the ratings distribution, **most of the books have high ratings** with maximum books being rated 8. Ratings below 5 are few in number.
- Author with the most books was **Agatha Christie, William Shakespeare and Stephen King**.
- For modelling, it was observed that for **model based** collaborative filtering SVD technique worked way better than NMF with lower Mean Absolute Error (MAE) .