**Report**

**Course :-** Artificial Intelligence & Machine

Learning

**Internship Company :-** Ignitech

**Internship Mentor :-** Mr. Rahil Syed

**Branch :-** IF5I

**College :-** Government Polytechnic, Thane

**Project Title :-** Book Recommendation System

**Team Members :-**

1. Gaurav Kshirsagar
2. Vighnesh Tajne

**Aim :-**

To create an intelligent and personalized system that suggests books to users based on their preferences and behaviour.

**Objective :-**

The objective of the Book Recommendation System using machine learning in Python is to design and develop a robust and accurate system that suggests personalized book recommendations to users based on their preferences and behaviour of the similar types of user. The system aims to enhance the user experience by providing relevant book suggestions, thus increasing user engagement and satisfaction on the platform.

**Technique Used :-**

Building a book recommendation system involves various techniques, and the choice of technique depends on the complexity of the system, the available data, and the specific requirements of the recommendation task. Here are some common techniques used for creating book recommendation systems

1. **Popularity Based Filtering:**

A popularity-based book recommendation system suggests books based on their overall popularity, without considering individual user preferences. It ranks books by their popularity scores

1. **Collaborative Based Filtering:**

Collaborative filtering is one of the most popular techniques for recommendation systems. It uses the past behaviour of users and their interactions with items (books in this case) to make predictions about their future preferences.

1. **Hybrid Based System :**

Hybrid recommendation systems combine multiple approaches to improve the quality of recommendations. In this case, Hybrid system combines the collaborative filtering and popularity-based filtering to take advantage of both user behaviour and book characteristics in generating recommendations.

**Summary :-**

Book recommendation system in Python combines popularity-based filtering, suggesting popular books to all users, with collaborative filtering, which provides personalized book recommendations based on user interactions and similarities. Python libraries like pandas, numpy, pickle and etc were used to implement the system.