Final Report

Online Book Recommendation

Artificial Intelligence

By

Sr. No.	Registration No	Name of Students	Roll No	Marks Obtained	Signature
1	11809092	Jay Jagani	33		
2	11810588	KM Sakshi Kumari Soni	34		
3	11905933	Shivani Singh Raghuwanshi	35		
4	11905934	Paras Agarwal	36		

Submitted To Nikita Kaushik, Assistant Professor

Lovely Professional University
Jalandhar, Punjab, India.

Introduction

The project is about recommending the books for the user from a book which he/she has already read. The recommendation is based on collaborative recommendation system and it recommends the books to the user according to the ratings of the user. A recommender system, or a recommendation system (sometimes replacing 'system' with a synonym such as platform or engine), is a subclass of information filtering system that seeks to predict the "rating" or "preference" a user would give to an item.

Literature Review

- Programming Collective Intelligence
- Recommender Systems: The Textbook
- Building Recommendation Engines

Proposed Methodology

First of all I have downloaded the database of books and their ratings from: http://www2.informatik.uni-freiburg.de/~cziegler/BX/. Then I started visualising the following database one by one and abstracted the only data which was needed for the project and then compiled it. Then I applied the formula and algorithms for the recommendation and finally I fine-tuned whole project.

Algorithm:

I have used the K-nearest neighbour algorithm to build this recommendation system. It is a simple algorithm that stores all possible cases and classifies new cases based on their similarity. It is mainly used in classification and regression problems.

Result and Discussion

The result of the project came as I was able to learn a lot of new things which I was not familiar earlier. It predicts the best possible books as per the ratings and the likings of the user based on the database which is available containing lakhs of records of books and its ratings.

Conclusion

I would like to conclude that after this project I learnt the working of recommendation systems which I have experienced before while using Netflix, YouTube and many other platforms. I came across lots of new books and websites to learn about machine learning and Artificial Intelligence.

References

- Programming Collective Intelligence
- Recommender Systems: The Textbook
- Building Recommendation Engines
- For database: http://www2.informatik.uni-freiburg.de/~cziegler/BX/
- YouTube videos
- Wikipedia

Work Distribution

1. Jay Jagani: whole project compilation and execution and report making.
2. Sakshi Soni: Data collection and finding resources.
3. Shivani Singh Raghuwanshi: Data collection and Extraction
4. Paras Agarwal: Data mining