Scientific Journal of Impact Factor (SJIF): 4.72
e-ISSN (O): 2348-4470
p-ISSN (P): 2348-6406

International Journal of Advance Engineering and Research Development

"Emerging Technologies in the Computer World", January -2017

Recommendation System for Engineering Admission

S.N.Zaware[1],Kiran Jadhao[2],Snehal Khot[3],Krutika Pachundkar[4],Shraddha Shinde[5]

[1]ComputerEngineering,AISSMS IOIT
[2]Computer Engineering,AISSMS IOIT
[3]Computer Engineering,AISSMS IOIT
[4]Computer Engineering,AISSMS IOIT
[5]Computer Engineering,AISSMS IOIT

Abstract *--The challenges to existing system is the lack of knowledge about the engineering rounds, regarding the seat allocation.Nowadays engineering admissions have increased. Huge number of students opt for Engineering colleges other than IIT's.They fill the admission form with list of colleges according to their popularity. Thisresults in getting admitted to any college without priority. This recommendationsystem will list out the appropriate colleges for the student based on their merit list, other criteria's as well as it will give information of the institute e.g. placements,infrastructure etc. The system will have all the colleges affiliated to Savitribai PhulePune University. The design of Recommendation system is based on priority and rating of colleges. It recommends items based on a comparison between the content of the rating and a user profile.*

Keyword *-- Data mining,accuracy,time complexity*

I. INTRODUCTION

Recommender systems are a subclass of information filtering system that seek to predict the "rating" or "preference" that a user would give to an item.Traditionally recommender systems typically produce a list of recommendations in one of two ways – through collaborative and content-based filtering or the personality-based approach .The proposed system recommends items based on a comparison between the content of the items and a user profile. The content of each item is represented as a set of descriptors or terms, typically the words that occur in a document. The user profile is represented with the same terms and built up by analyzing the content of items which have been seen by the user.

II. LITERATURE SURVEY

Kavinkumar.V, Rachamalla Rahul Reddy[1]
A recommendation system using user based and item based collaborative filtering, this paper propose a framework which includes a feedback analysis to improve the recommendation system. The enhanced model aids the customers in decision making.For hybrid approach, we need huge datasets of feedback to improve results.Using this approach of collaborative filtering and the feedback component, we can design a model which can help the users to take decision according to the feedback that is given by the other users like students, faculties, etc.

Jing Wang, Chuntao Man, [2]
In this paper,,they proposed a method to recommend answer for particular questions on medical cQA system. This paper uses both question similarity and answers quality are combined together to represent the final score of the question-answer pair.The proposed algorithm is tested on the dataset and the results show a good performance in answer recommendation.
When the lexical gap problem exists, it's difficult for these traditional information retrieval models to find the sematic similar history cases according to users' descriptions.Using this approach recommendation can be provided based upon answer quality and question-answer pair.

Wu wenjuan, Lu zhubing [3]
In this paper, a novel personalized recommendation strategy is proposed based on collaborative filtering technology Meanwhile, a mechanism used for trust relationship feedback has been introduced. Users can submit some feedbacks for their trust relationship after every transaction.Experiments show that recommendation based on trust relationship in virtual community can effectively improve the recommendation accuracy and enhance customer satisfaction.This mechanism provide a good approach to solve change of preference. Experiments show that the algorithm can effectively improve the accuracy of recommendation, and enhance customer satisfaction.

Renata L. Rosa, Demóstenes Z. Rodríguez [4]
This paper presents a music recommendation system based on a sentiment intensity metric, named enhanced Sentiment Metric(eSM) that is the association of a lexicon-based sentiment metric with a correction factor based on the user's profile.
The solution does not include complex programming languages; consumes low resources from current electronic devices.
Machine learning requires a large amount of data,because an unusual sentence may cause noise in the calculation of the sentiment.Using this recommendation can be provided based upon on users emotions and his profile on social site.

Bal Ram Lath, Haiming Liu [5]
This paper propose a tool called FSOS(Find Suitable Operating Systems), which analyses well-known operating systems used at domestic, commercial and industrial level and suggest suitable operating systems to the users as per their requirements.Helping users to learn about the different operating systems and provide recommendations to assist users select an operating system best suited.This tool only review lower rang of operating systems.This tool is used for recommendation of different operating system on the basis of users requirements and feedback given by previous users.

SuhasiniParvatikar, Dr. Bharti Joshi [6]
The proposed system uses combination of collaborative filtering and association mining. It provides consumer with information to help them decide which items to purchase .The demands of Online Information have lead to invent new techniques for prioritizing and presenting items of Users Interests.The results of similarity calculation give good performance at accuracy.

Jun Zeng, Feng Li [7].
In this paper, they propose a restaurant recommender system in mobile environment.It adopts a user preference model by using the features of user's visited restaurants, and also the location information of user and restaurants to dynamically generate the recommendation results.This preference model do not need the extra effort and can effectively obtain user's preference.In the mobile environment, only considering the user preference may not get suitable recommendation results. This recommendation system is used for recommendation of different restaurant on the basis of user performance and mobile environment.

Bruno Coelho, Fernando Costa[8]
This paper is a Hybrid Job Recommendation System that considers the user model (content-based filtering) and social interactions (collaborative filtering) to improve the quality of its recommendations. HYRED is a system that is able to make suggestions, in an accurate and precise manner, between users and opportunities.It is also expected to improve the accuracy and recall of the recommendations by inferring more knowledge about users and opportunitiesThis proposed solution is also able to generate adequate teams for a given job opportunity, based not only on the needed competences but also on the social compatibility between their members.

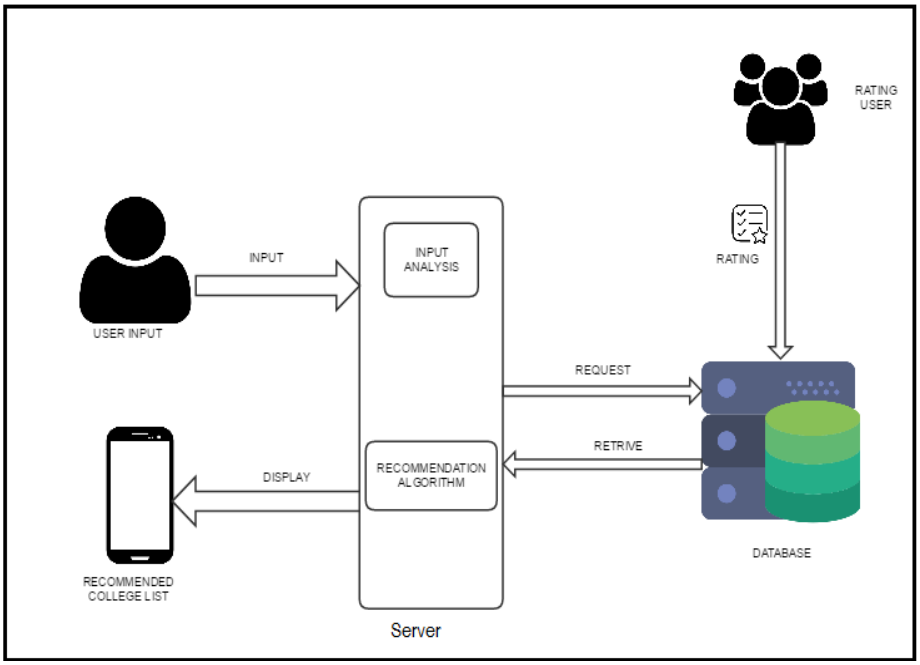
BudsabawanJueajan, Kanitthanaleg [9]
Development of Location-Aware Place Recommendation System on Android Smart PhonesThis project aims to develop a location-aware place recommender system on Android smart phones. A user-based collaborative filtering scheme is applied to predict the nearest places for the android user based on his/her GPS position from a mobile device. The system recommends the nearest places for the android users by incorporating the geographic positions and real-world foursquare check-in spots. Network should be available for location of the user.The experimental results demonstrate that the system achieves both satisfying precision and recall of recommended places on the dataset.

Naoki SHINO, Ryosuke YAMANISHI[10]
Recommendation System for Alternative-ingredients Based on Co-occurrence Relation on Recipe Database and the Ingredient Category. This paper proposes a recommendation system for alternative ingredients. The recommendation ingredients based on co-occurrence frequency of ingredients on recipe database and ingredient category stored in a cooking ontology. he result of the subjective evaluation experiments showed 88% appropriateness for alternative-ingredients recommendation.The method for determining proper quantity should be structured. This paper proposed a recommendation system for alternative-ingredients using co-occurrence frequency of ingredients and cooking ontology.

III. PROPOSED SYSTEM

There is no existing system which recommends students based on their marks. User profile is the only input for the recommendation system. Depending on the many scenarios and additional filters according to the user requirement,

algorithm will work and the output will be provided as recommendation. The recommendation will be provided based on student gender, category, marks, branch, etc.



End User : New user will first register in the system. Then he/she can login into the system and then fill the user profile information. Based on the information ,this system will give recommendations. The system proposed will have an user end i.e. android application. The user will enter the marksand the application will list out minimum of 10 colleges suitable for the user, later the system will also have filters such as infrastructure, fees , placement etc.

Recommendation system : The system will recommend colleges based upon various ratings and marks entered by the user.

Server : It will contain the database of all the colleges. The details of thecollege will be number of courses available for that particular college,total number of seats in particular branch, average of previous 3 year's cutoff marks, shifts in that particular college, intake capacity, etc.

IV. APPLICATIONS

This system is useful to students who wish to pursue engineering in Pune University.
This system can be used by the different institutes to improve their overall performance.
Overall analysis of institute can be done by using this system.

V. CONCLUSION

This system proves to be useful for students who have no knowledge aboutadmission process. This system can be scaled for other admissions. We did exhausted literature survey on recommendation system and come to a conclusionthat there is not a full-fledged recommendation system. We evaluated how touse different recommendation strategies to generate recommendations.

VI. FUTURE SCOPE

This system can be scaled for admission in various states,universities.The system can be implemented using HADOOP for better services ie for implementaion of big data.It can be used in ecommerce to offer a more visceral , immersive and well rounded experience for every step of a usersjourney**.**

VII. REFERENCES

[1] Kavinkumar.V, Rachamalla Rahul Reddy, "A Hybrid Approach for Recommendation System with Added Feedback Component", International Conference on Advances in Computing, Communications and Informatics (ICACCI),978-1-4799-8792-4/2015/$31.00_c 2015 IEEE

[2] Jing Wang, Chuntao Man, "An Answer Recommendation Algorithm for Medical Community Question Answering
Systems",,978-1-5090-2927-3/16/$31.00 ©2016 IEEE

[3] Wu wenjuan, Lu zhubing, "A Personalized Recommendation Strategy Based on Trusted Social Community", The 10th International Conference on Computer Science & Education (ICCSE 2015) July 22-24, 2015. Fitzwilliam College, Cambridge University, UK

[4] Renata L. Rosa, Demóstenes Z. Rodríguez, "Music Recommendation System Based on User's Sentiments Extracted from Social Networks", IEEE Transactions on Consumer Electronics, Vol. 61, No. 3, August 2015 00983063/15/$20.00 © 2015 IEEE

[5] Bal Ram Lath, Haiming Liu, "FSOS: A Tool for Recommending Suitable Operating Systems to Computer Users", SAI Computing Conference 2016July 13-15, 2016 | London, UK, 978-1-4673-8460-5/16/$31.00 ©2016 IEEE

[6] SuhasiniParvatikar, Dr. Bharti Joshi, "Online Book Recommendation System by using Collaborative filtering and Association Mining", 2015 IEEE International Conference on Computational Intelligence and Computing Research,978-1-4799-7849-6/15/$31.00 ©2015 IEEE

[7] Jun Zeng, Feng Li, "A Restaurant Recommender System Based on User Preference and Location in Mobile Environment", 2016 5th IIAI International Congress on Advanced Applied Informatics, 978-1-4673-8985-3/16 $31.00 © 2016 IEEE DOI 10.1109/IIAI-AAI.2016.126

[8] Bruno Coelho, Fernando Costa, "HyredHYbrid Job REcommenDation System", project WorkInTeam, Portuguese National Strategic Reference Programme (QREN 2007-2013),pp2013/38566.

[9] BudsabawanJueajan, Kanitthanaleg, "Development of Location-Aware Place Recommendation System on Android Smart Phones", 2016 Fifth ICT International Student Project Conference (ICT-ISPC), 978-1-5090-1125-4/16/$31.00 ©2016 IEEE

[10] Naoki SHINO, Ryosuke YAMANISHI, "Recommendation System for Alternative-ingredients Based on Co-occurrence Relation on Recipe Database and the Ingredient Category", 2016 5th IIAI International Congress on Advanced Applied Informatics, 978-1-4673-8985-3/16 $31.00 © 2016 IEEE DOI 10.1109/IIAI-AAI.2016.187

