iJRASET
International Journal For Research in Applied Science and Engineering Technology



INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 11 **Issue:** V **Month of publication:** May 2023

DOI: https://doi.org/10.22214/ijraset.2023.52021

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538
Volume 11 Issue V May 2023- Available at www.ijraset.com

Implementation of Online Mess Recommender System using Sentiment Analysis

Mr. Nikhil Falke[1], Mr. Abhishek Kiranrao Dabhade[2], Miss. Ashvini Rangraoji Bansod[3], Mr. Nirmal Sureshkumar Bajaj[4], Mr. Chaitanya Harish Tayade[5], Prof. Y. R. Shelokar[6]
[1, 2, 3, 4, 5]*UG Scholar,* [6]*Professor, Computer Science & Engineering Dr. Rajendra Gode Institute of Technology and Research, Amravati, Maharashtra, INDIA*

Abstract: ***In this research paper we proposed mess recommender system using sentiment analysis. We proposed Wordnet based sentiment analysis. Users will submit ratings and reviews for mess as per their experience; our model will analyse the submitted reviews and find out the polarity of the review. Based on these reviews and ratings, user profile like city, area, likings etc. our proposed system will recommend appropriate messes to the user.***
Keywords: Sentiment Analysis, Sentiment Dictionary; Recommendation-System, Text Mining.

I. INTRODUCTION

With the evolution of new web technologies, the recommender systems (RS) are getting significant attention by the business people as well as customers due to its role in better e-commerce, refined business strategy, improved customer's satisfaction, etc. The success of modern e-commerce systems and online booking and reservations systems heavily relies on the customer's satisfaction and trust. The particular interest of this research is related to mess recommended system since this type of business has increased considerably due to the COVID-19 pandemic. For that reason, it is essential to generate methodologies for mess recommendations. The recommendation system helps customers to identify finest mess from an overwhelming group of options by matching customer preferences as much as possible. For mess business person, the recommendation system helps them make free advertising and increase their turnover. Most food-delivery services are applications designed to be used on mobile devices, where the use of recommendation systems is critical since, with small screens, it is essential that what is shown is genuinely relevant for customers to help them in the decision process. However, these systems are generic and process only homogenous data; whereas nature of most of the data on web is heterogeneous that is a major bottleneck in the performance of hotel recommendation systems. The heterogeneity of data affects the performance of the RS directly. In this era of competition, complex information causes overload problems which in turn are time consuming and affects the overall performance. Due to the various forms of data (numeric, textual, etc) in heterogeneous form over the web, the performance of RSs requires more attention towards its improvement.

II. LITERATURE SURVEY

1) In the last 16 years, more than 200 research articles were published about research-paper recommender systems. We reviewed these articles and present some descriptive statistics in this paper, as well as a discussion about the major advancements and shortcomings and an overview of the most common recommendation concepts and approaches. We found that more than half of the recommendation approaches applied content-based filtering (55%). Collaborative filtering was applied by only 18% of the reviewed approaches, and graph-based recommendations by 16%. Other recommendation concepts included stereotyping, item-centric recommendations, and hybrid recommendations. The content-based filtering approaches mainly utilized papers that the users had authored, tagged, browsed, or downloaded. TF-IDF was the most frequently applied weighting scheme. In addition to simple terms, n-grams, topics, and citations were utilized to model users' information needs. Our review revealed some shortcomings of the current research. First, it remains unclear which recommendation concepts and approaches are the most promising. For instance, researchers reported different results on the performance of contentbased and collaborative filtering.
2) Recommendation system is a data filtering technique. They are used to provide suggestions to the users according to their interest and need. It is a very popular technique in recent years and used by many commercial websites and other platforms to recommend news, books, movies, shopping items, novels, music and much more that is why recommendation system has become a hot topic. Recommendation systems are the subset of data filtering systems. The different types of recommendation systems are used in different platforms and have become an important part of various applications.

©IJRASET: All Rights are Reserved

It is a decision making process that will help the users to buy items in which they are interested. Recommendation systems are very useful and effective technique of filtering the data. This paper is a review of recommendation systems that will describe recommendation system, how it works and helps in different platforms, and the different types of it with their merits and limitations.

3) Recommender systems have grown to be a critical research subject after the emergence of the first paper on collaborative filtering in the Nineties. Despite the fact that educational studies on recommender systems, has extended extensively over the last 10 years, there are deficiencies in the complete literature evaluation and classification of that research. Because of this, we reviewed articles on recommender structures, and then classified those based on sentiment analysis. The articles are categorized into three techniques of recommender system, i.e.; collaborative filtering (CF), content based and context based. We have tried to find out the research papers related to sentimental analysis based recommender system. To classify research done by authors in this field, we have shown different approaches of recommender system based on sentimental analysis with the help of tables. Our studies give statistics, approximately trends in recommender structures research, and gives practitioners and researchers with perception and destiny route on the recommender system using sentimental analysis. We hope that this paper enables all and sundry who is interested in recommender systems research with insight for destiny.

4) Recommender systems have become an important research field since the emergence of the first paper on collaborative filtering in the mid-1990s. In general, recommender systems are defined as the supporting systems which help users to find information, products, or services (such as books, movies, music, digital products, web sites, and TV programs) by aggregating and analyzing suggestions from other users, which mean reviews from various authorities, and user attributes. Many of articles were excluded because the articles such as Conference papers, master's and doctoral dissertations, textbook, unpublished working papers, non-English publication papers and news were unfit for our research. We classified articles by year of publication, journals, recommendation fields, and data mining techniques. The recommendation fields and data mining techniques of 187 articles are reviewed and classified into eight recommendation fields (book, document, image, movie, music, shopping, TV program, and others) and eight data mining techniques (association rule, clustering, decision tree, k-nearest neighbor, link analysis, neural network, regression, and other heuristic methods). The results represented in this paper have several significant implications.

III. SYSTEM DIAGRAM

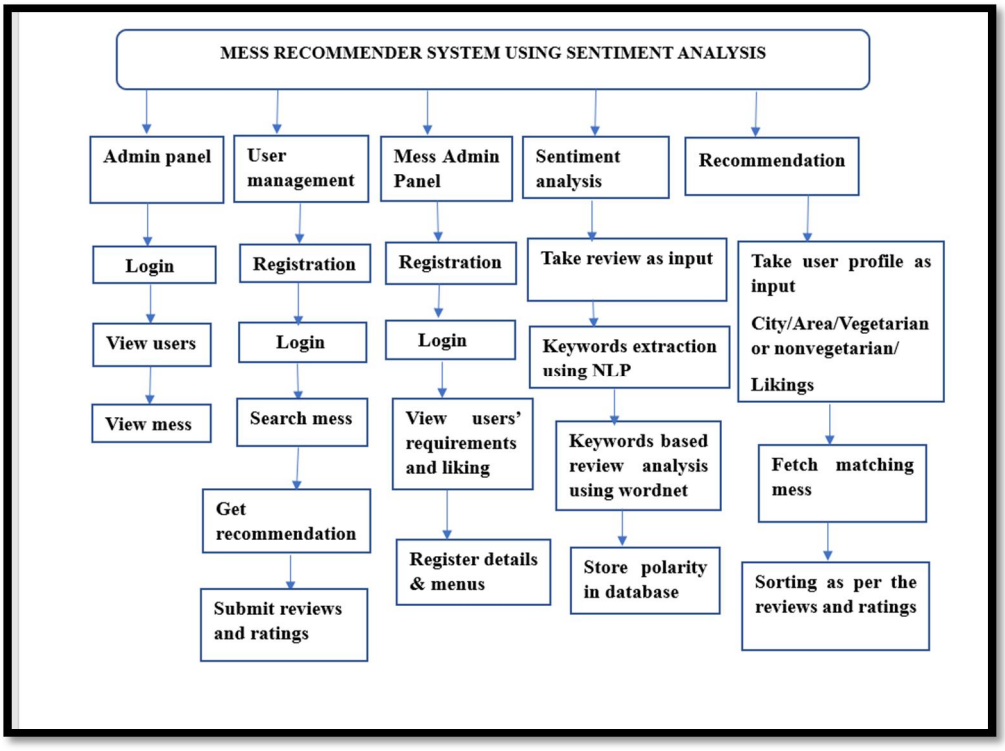


Fig: System Diagram for Mess Recommendation System

IV. TECHNOLOGY USED

1) Deployment Platform : Windows
2) Application Server : Apache Tomcat
3) Technology : Java EE (java17)
4) Development Tools : JSP,Java Beans
5) MVC framework : Spring boot
6) Database technologies : MySQL 8,JDBC
7) Web Development : XML, HTML, DHTML, Javascript,AJAX
8) Development Tool : Eclipse IDE 2022-06

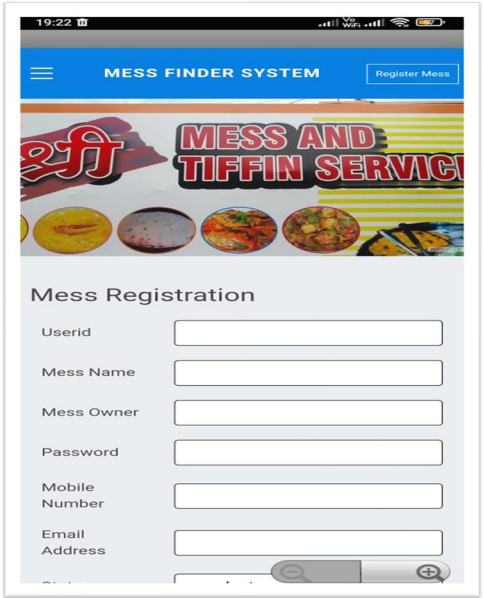
V. SCREEN SHOTS

A. *Home Page*



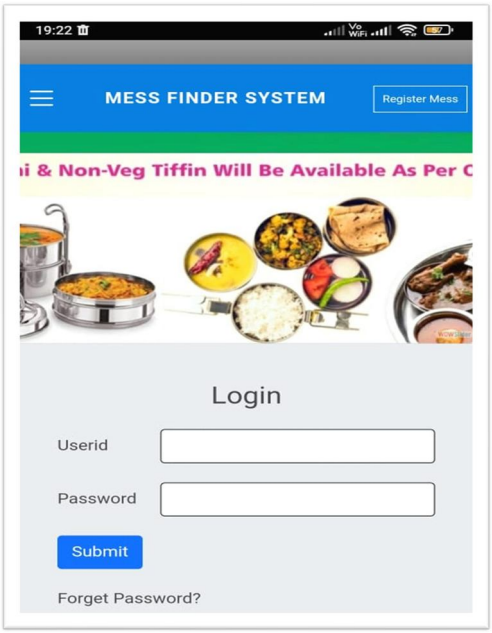
Snapshot 1: Home Page

B. *Registration Page*



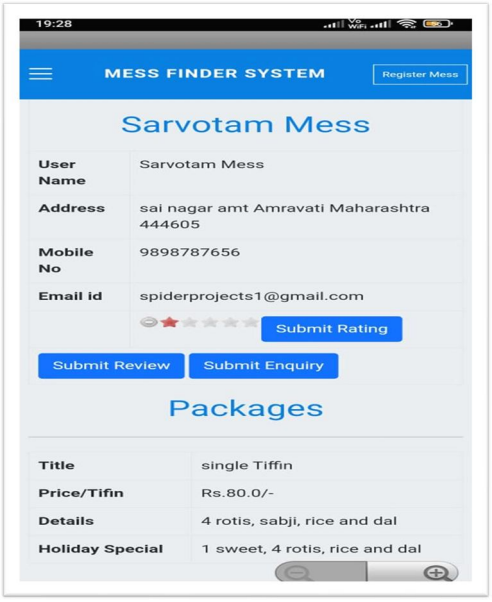
Snapshot 2: Registration Page

C. Login Page



Snapshot 3: Login Page

D. Result Page



Snapshot 4: Result Page

VI. CONCLUSION

This paper proposed a recommendation system for a delivery mess food application based on orders. In this system the user can directly search, rate and provide feedback for the mess packages and the mess owner can use the dashboard with different available functions. The research of new mess recommendation systems is very important. Many consumers tend only to order in restaurants they know because they fear disappointment and do not explore other options. Therefore, this recommendation system is vital for consumers since it can give an excellent suggestion on where to join next mess with high accuracy based only on clients' previous join. The recommendations will satisfy the clients, and mess business can increase their sales. Hybrid systems overcome the limitations of both content based and collaborative filtering systems, improve the result and make the system accurate.

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |

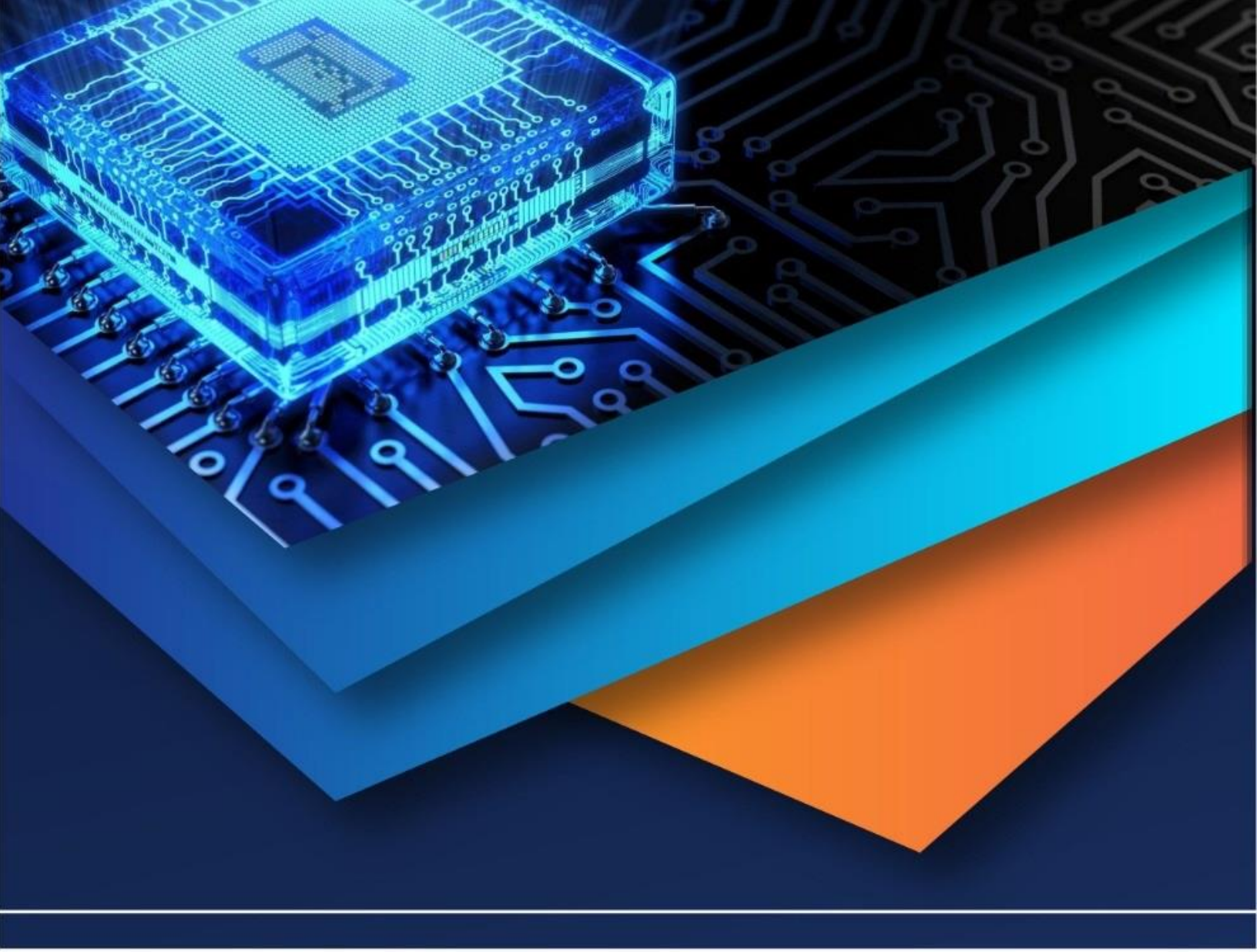
VII. ACKNOWLEDGEMENT

First and foremost, I would like to express my sincere gratitude to my Mr. Yogesh R. Shelokar who has in the literal sense, guided and supervised me. I am indebted with a deep sense of gratitude for the constant inspiration and valuable guidance throughout the work

REFERENCES

[1] Bollacker, K.D., Lawrence, S., Giles, C.L.: CiteSeer: an autonomous web agent for automatic retrieval and identification of interesting publications. In: Proceedings of the 2nd international conference on Autonomous agents, pp. 116–123 (1998)
[2] Recommender Systems: An overview of different approaches to recommendations Kunal Shah, Akshaykumar Salunke, Saurabh Dongare, Kisandas Antala SIT, Lonavala India 2017
[3] P. W. Yau and A. Tomlinson, “Towards Privacy in a Context Aware Social Network Based Recommendation System,” Privacy, Security, Risk and Trust (PASSAT) and 2011 IEEE Third Inernational Conference on Social Computing (SocialCom), 2011 IEEE Third International Conference on, Boston,MA,2011,pp.862-865. Doi:10.1109/PASSAT/SocialCom.2011.87.
[4] Hofmann, Collaborative filtering via Gaussian probabilistic latent semantic analysis. In: SIGIR 03: Proc. Of the 26th Annual Int. ACM SIGIR Conf. On Research and Development in Information Retrieval, pp. 259266. ACM, New York, NY, USA (2003).
[5] Francesco Ricci, LiorRokach, BrachaShapira and Paul B. Kantor - Recommender Systems Handbook; First Edition; Springer-Verlag New York, Inc. New York, NY, USA, 2010.
[6] Basu, C., H. Hirsh and W. Cohen, “Recommendation as Classification : Using Social and Content-based Information in Recommendation”, In Proceedings of the 15th National Conference on Artificial Intelligence, (1998), 714～72
[7] Cai, D., X. He, J. R. Wen, and W. Y. Ma, “Block-level Link Analysis”, Proceedings of the 27th annual international ACM SI-GIR conference on Research and develop-ment in information retrieval, (2004), 440～44
[8] M. M. Mariani, D. Buhalis, C. Longhi, and O. Vitouladiti, "Managing change in tourism destinations: Key issues and current trends," Journal of Destination Marketing & Management, vol. 2, no. 4, pp. 269-272, 2014.
[9] H. Liu, J. He, T. Wang, W. Song, and X. Du, "Combining user preferences and user opinions for accurate recommendation," Electronic Commerce Research and Applications, vol. 12, no. 1, pp. 14-23, 2013..
[10] M.-Y. Hsieh, W.-K. Chou, and K.-C. Li, "Building a mobile movie recommendation service by user rating and APP usage with linked data on Hadoop," Multimedia Tools and Applications, vol. 76, no. 3, pp. 3383-3401, 2017.

©IJRASET: All Rights are Reserved | SJ Impact Factor 7.538 | ISRA Journal Impact Factor 7.894 |



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 (24*7 Support on Whatsapp)