

WEB APPLICATION FOR FOOD MESS SEARCH AND DISCOVERY OF SPECIFIC REGION USING ADVANCE ANALYSIS AND VISUALIZATION

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Abstract – In recent times, students and officials moving to another city are preferring online food delivery portals which are partnered with the best of the hotels in the particular city. People are using these portals almost every day for their meals. For hotels partnership with food delivery portals gives out exposure to larger customer base in order to expand their business and reach but people working in niche market hardly get any exposure to their potential customer base.

It is observed that students goes to many mess without knowing about the mess and it's service and quality of food they serve. Owner can handle their business online and customers can get in touch with the messes. We are developing a portal which will focus on the niche market like students and mess owners in order to benefit both of them. We will be using analytics and sentimental analysis in review system in our portal in order to help owners to make certain changes in their respective field.

Keywords – *Machine Learning; Mess Recommendation; Sentiment analysis; Web Application.*

I. INTRODUCTION

Many students shift to another city for higher education and the main problem is being the food and accommodation. Students usually don't prefer the college mess system and opt out for mess providing food externally. Students spend lot of money on food, trying out new alternatives which will suit their needs.

We are living in the era where everything is shifting to online world. We are so dependent on internet that almost 50% of our work is undone in the absence of internet. Students have access to this powerful phenomenon they try to get as much information they can get about going for the food or ordering it online. Mess owners are less known about the marketing potential and huge buff to their customer base they could earn by getting on platform just meant for the mess owners.

II. PROBLEM DEFINITION

As there is little less to no centralised system for students and mess owners, we provide a single platform where students will get all information about mess, their food menu and quality based on all reviews by users. Mess owners will get all data about students choices and market competition.

Using sentimental analysis on review system on our mess management portal in order to promote the mess and provide centralised information system to customers and mess owners with other services on subscription based model.

III. PROPOSED SYSTEM

The proposed system consists of information system about mess which will help mess owners to promote their services at first place and further we will add sentimental analysis to get into the

customer perspective and help owners to take decisions based on the analysis did on reviews.

IV. PROJECT DELIVERABLES:

- Web application deployment with GUI.
- Documentation for owners to access the analytics.
- A large Dataset of food consumption of a particular region.
- Currently our focus is only on websites not on mobile applications.

**V. FIGURES AND TABLES
 DATA FLOW DIAGRAMS**

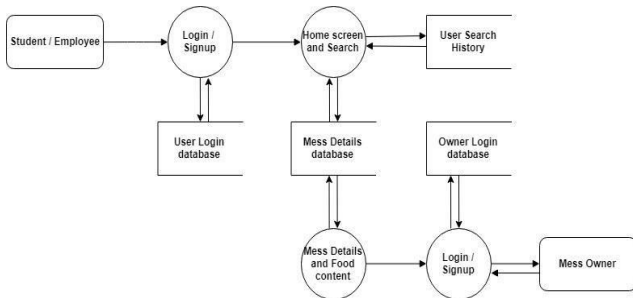


Fig 1. Data Flow Diagram

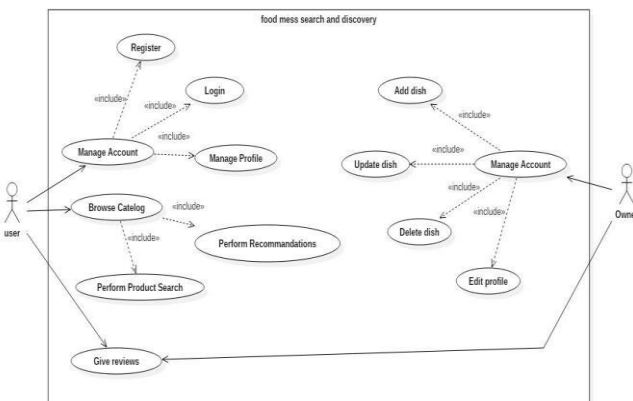


Fig.2 Use case Diagram

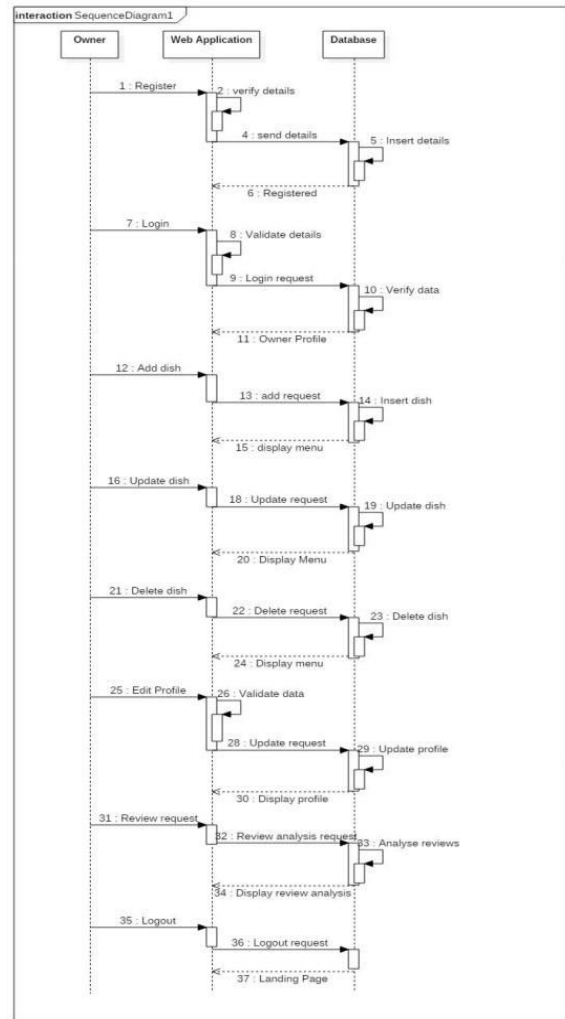


Fig.3 Sequence Diagram

VI. APPLICATIONS

- User Perspective:
 - Centralised system for user
 - Single platform where user will get all information about mess and their menu.
 - User can see review of particular mess and dishes.
 - User can filter out mess and dishes.
 - User can maintain its history for analysis.
- Mess owner Perspective:
 - Mess owners will get all data about students choices and market competition.
 - Mess owner can analyze what is in trend.
 - Mess owner can also see reviews and try to improve for growth.
 - Mess owner can get feedback from its users.

VII. ALGORITHM

Review sentiment analysis ML model

Input : Corpus of Normalised reviews { }

output : Trained machine learning model to predict sentiment from reviews (positive, negative)

1. Build the Bag Of Words(BOW) form corpus list.
2. Divide BOW in training set and Testing set.
3. Training a machine learning classifier model
4. Calculate Confusion Matrix (CM)
5. End

VIII. CONCLUSION

Final product will be an web app which will be able to gain more centralised approach. Students and employees will get all mess information at one place. Owners will get huge customer reviews and suggestions.

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REFERENCES

[1] ZOMATO – A CASE STUDY Research Paper by Dr. Gomathy Thyagarajan Faculty- General Management, N.L. Dalmia Institute of Management Studies and Research, Mumbai.

[2] Reviews Sentiment analysis for collaborative recommender system by i)Alia Karim Abdul Hassan Computer science Dept. University Of Technology Baghdad, Iraq ii) Ahmed Bahaa aldeen abdulwahhab Informatics Dept. Middle Technical University Baghdad, Iraq.

[3] Collaborative Approach based Restaurant Recommender System using Naive Bayes by Prof N G Bhojne 1 , Sagar Deore 2 , Rushikesh Jagtap 3, Gaurav Jain 4 , Chirag Kalal 5 Assistant Professor, Department of Computer Engineering, Sinhgad College of Engineering, Pune, India 1 Student, Department of Computer Engineering, Sinhgad College of Engineering, Pune, India 2,3,4.

[4] <https://dsim.in/blog/2015/04/14/zomato-an-indian-startup-acquiring-the-world/>