

# FOODZEST: A SOCIAL MEDIA PLATFORM FOR FOOD ENTHUSIASTS FOR SHARING AND EXPLORING RECIPES

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#### **Abstract**

Foodzest is a web application that serves its users by providing a platform that is specifically designed for foodies. This platform can be used by cooks who are interested in posting videos of the recipes, vloggers who visits restaurants/cafeterias/hotels and record videos on food items that are notable and also restaurants/cafeterias/hotels. If the users want to try a recipe, they can search recipes based oningredients and try based on the availability of ingredients. If the users want to visit any eateries, they can use this application and find solution by viewing vlogs which also gives the location information. If they wish to gain popularity through famous vloggers, then they can invite the top zests listed basedon the number of likes to record vlogs on the special food items. Foodzest therefore, serves its users as an advisor when it comes food related subject.

Keywords: Food, Recipes, Vlogs, Ingredients, Likes, Comments, Posts

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### 1. Introduction

Foodzest is a web application designed specifically for food loving community. Here people can share their recipes and vlogs on food related content that can be viewed and searched by users and gain popularity. People can watch the recipes uploaded by others and like, comment on them. If the user has already uploaded videos on Youtube, he can simply specify the link of the video which makes the job easier. The cooks can mention the ingredients while uploading the videos which facilitates users with ingredient-based searching in which users specify the ingredients they own and find the desired results. Viewers can like and comment on the videos uploaded by the users who are being followed. Vloggers can update the location information of the restaurant/cafeteria/hotels they visit, using which the users, if interested can give it a try. The information of number of likes and comments are displayedon the posts. The top zests are listed on the home page based on the number of likes received in the last seven days toencourage them so that they can be invited by zests to make videos. The recipes with highest number of like in the last seven days is also listed as top recipes in the home page. With the development of Foodzest, the successful creation of a vibrant and engaging platform for food enthusiasts has been achieved. The app has fostered a thriving food-loving community where users can freely share their recipes andfoodrelated vlogs. Through this platform, individuals have been able to showcase their culinary skills and creativity to a wide audience. The ingredientbased searching featurehas greatly enhanced user experience, allowing individuals to find recipes based on the ingredients they have on hand. This has empowered users to discover new and exciting dishes tailored to their available ingredients. Furthermore, the integration with YouTube has streamlined the process for content creators, enabling them to easily share their existing videos by simply specifying the link. Overall, Foodzest has achieved the goal of bringing food enthusiasts together, promoting culinary creativity, and providing a platform for sharing and discovering exciting recipes and food-related content.

# Literature Survey

The food processing sector of India is the largest inthe world and the output it is producing is expected to be reaching US \$ 535 billion by 2025-26. The Food service of Indian market is also anticipated to register a CAGR of 10.51% during the 2022 – 2027. The distribution of balanced food items is one of the major factors for the economic growth of the nation. Different Food outlets can be seen inour day-to-day life in almost all places of the society. From a small food canteen to a huge restaurant food

management has to be done in order to run the business efficiently. Many people today find their passion in food, can style everyday food and make them beautiful. They can be a chef,a professional cook proficient in preparation of a particular cuisine, intending to share their recipes, which can be their own creation or enhancement with the existing recipes. Orthe owner of the restaurant who makes then difference in the ambience of the place, presentation and the menu or a vlogger who presents the same to his followers and keeping them up with his explorations. The recipe sharing app has become a necessity in today's fast-paced society where people are constantly looking fornew and exciting ways to prepare meals at home. The apps should provide a convenient platform for users to find and share their favorite recipes, as well as discover new ones. With the increasing popularity of cooking and food-related content on social media, a food recipe sharing app can also serve as a community for food enthusiasts to connect andengage with one another. To find a right additional ingredients and sample recipes is an important but also a challenging task in the culinary world due to the abundant possible ways that are available and possible. This article proposes a unified framework for food recommendation, and identifies main issues recommendation affecting food including context and incorporating various domain knowledge, building the personal model, and analyzing unique food characteristics [1]. The web has become a popular platform for recording and sharing cooking recipes, a tradition that goes back many centuries. Online recipe collections provide valuable insights into cooking techniques and user preferences due to their vast variety and scale. By examining individual ingredients, we can determine their importance, flexibility, and adjustability in recipes. Additionally, we can create two types of networks to understand ingredient relationships. The complement network identifies commonly paired ingredients, while the substitute network reveals alternative ingredients preferred by users for healthier options. Through experiments, we find that recipe ratings can be accurately predicted using features based on ingredient networks and nutrition information. [2] The cooking recommender for Ingredients and Recipes Using Set transformer led to the striking feature of foodzest, ingredient based searching aligns with the goal of enabling users to find desired results by specifying the ingredients they have available. That aligns with the motive of allowing usersto search for a desired results by specifying the ingredientsthat are available. [3] The analysis on Zomato and Swiggy Online food ordering data influences foodzest's user interaction, recipe sharing and how content popularity can help in gaining profits. It helps to incorporate best features and practices which will enhance user engagement and make the platform highly appealing toits users. [4] In these works, the aim is to develop an application that can include these features and provide the best and efficient use of these systems in foodzest. The systems that takes orders and delivers food delivering that deals with the deliveryoriented management system [5],[6].

It is feature that enables users to navigate through the recipe collection more efficiently and find the new recipethat can match their preference. The Sentimental analysis is integrated to analyse the users comments and reviews on recipes and vlogs. It enables people to provide feedback and actively interact with other Users' content and thereby developing valuable insights for improvisation of recipes and vlogs and understanding user preference. [8],[11] Users search for recipes for their meals from the recipe sites. However, when they search for a recipe using an ingredient name, numerous similar pages which are coincidentally similar or which have been plagiarized are found for them. Moreover, a user who searches for a recipe usually does not select a high-ranking recipe from the search results, reacting better than one might with usual web searches. The Clusteringfor Similar Recipes in User-Generated Recipe Sites Basedon Main Ingredients and Main Seasoning can be embedded to oraganise and categorize the recipes based on important ingredients.[9] Extracting user's food preference based on their interaction with the application, the category of videos that they are viewing, liking and commenting will be analysed andrecommendations to be generated on these interactions will add more weight to the application and improves theinteractiveness of the system.[10] Along with the content the creators are also to berecognised. Finding out the creator of the posts that are being viewed, liked and shared by the user and recommending to follow the creator and various other techniques to recommend the similar posts and

friend is going to add overall user experience to the system.[12] Additionally, with the rise of meal delivery services, having a food recipe sharing app can help individuals find recipesthat can be cooked with the ingredients they have on hand. Moreover, food recipe sharing app can also help users plan their meals. The app makes it easy for users to organize and access their recipe collection, and can save time and effort in meal planning. Overall, the food recipe sharing app is a valuable tool for both novice and experienced cooks, and can play an important role in supporting a healthy and enjoyable meal- time experience. This application enables all the food zeststo make their job easier, providing the platform to share the recipes and create vlogs and gain popularity.

## 2. Methodology

The user can register himself with foodzest by filling the basic details and then login to the sytem which takes them to the home page. The home page displays the posts which is requested by the users to be posted and approved by admin. It also contains the top recipes and vloggers who has earned highest number of likes in the last 7 days. The user can then navigate through the bar and select the feed and view the videos uploaded by the zests and like and comment on them. The users can upload the recipes by specifying the ingredients which can help the users to search based on ingredients. The users can search a particular recipe by specifying the ingredients, author or title. The notification feature helps them to stay updated with all the action that takes place. The users can also follow and unfollow eachother and view profiles. They can also report any kind of problem if found. The admin manages the entire system. Solving the problem that is raised, approving the poster for the home page, deleting inappropriate videos or images comes under admin's responsibility.

## SYSTEM ARCHITECTURE

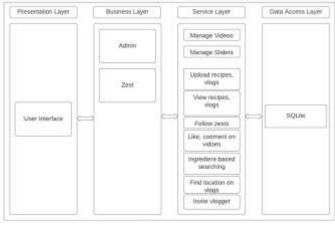


Fig. 1. Architecture Diagram

The Architecture Diagram incorporates four layers of the system which are known as Presentation Layer, Service Layer, Business Layer and Data Access Layer. Presentation Layer is the representation for the User Interface which deals with how the zests interact with the various featuresthat are available. Business Layer consists of the users of the application. They are Admin who manages the entire system and the zests who share and view recipes and vlogs. Service Layer contains the functionalities of the system i.e. to manage videos and slider which is performed by admin and upload, view, follow, like comment on videos etc. by users. Data Access Layer consists of the database that stores the all relevant data about users and the recipes they upload.

#### 3. Result

Foodzest is designed to be web application which will result in creating a community for food enthusiasts. This helps them to share the expertise on the recipes they know by posting the recipes on foodzest and others can take benefit from it. The vlogs can allow people to know the diversified food styles in different places. These vlogs also benefit the owners of the restaurants by being posted on the food community which is viewed by numerous people. The users of foodzest can easily find a perfect recipe without having to scroll over multiple platforms by searching for it based on names or titles or ingredients. The resulted food community can be a guide for any kind of food related subject.



Fig. 2. User Registration

In figure 2 The users can fill the application with the basic details and then register themselves with foodzest. They should follow the guidelines and

conventions and then use the same username and password to login.



Fig. 3. home Page

In the home page the sliders that are requested to be hostedby the zests can be viewed. It also lists the top recipes and vloggers that gained the highest number of likes in last 7 days.



Fig. 4. Ingredient search

The ingredient based seaching being the striking feature of theapplication enables the users to choose the ingredients they andthe results comprizes of the recipes that includes the specified ingredient



Fig. 5. Notification

Foodzest enables its users updated with the notification panel which pops when the post is liked, commented and whenfollowed or a post is uploaded by other zests the users can report the irrelevant

posts, suggestions and feedback that can contribute to the betterment of the system. The admins will respond to the problem and takes action to rectify the same.



Fig. 6. Report a problem

## 4. Conclusion

Foodzest is a web application designed specifically for the food-loving community. Foodzest provides a platform where users can share their recipes and food-related vlogs, while also enabling others to view, search, and engage with the content. Throughout the development of Foodzest, the primary goal has been to create a vibrant and engaging platform that fosters a strong sense of community among food enthusiasts. Furthermore, this work has identified potential areas forfuture including the enhancement recommendation systems, the integration of social networking features, the implementation of advanced analytics and insights, thedevelopment of a companion mobile application, and the exploration of monetization and business strategies. These future directions present exciting opportunities for further research and development, enabling Foodzest to evolve and meet the ever-changing needs of the food-loving community. In conclusion, Foodzest has successfully achieved its objec-tives of creating an interactive platform for food enthusiasts to share, explore, and engage with culinary content. The incorporation of various features, inspired by relevant research papers, has contributed to the functionality and user experience

of the platform. By continuing to innovate, refine, and expand upon the foundation of Foodzest, we can foster a thriving food-loving community, empower users to unleash their culinary creativity, and provide a valuable resource for sharing and discovering exciting recipes and food-related content. Foodzest has achieved its goal of developing an interactive commu-nity that is dedicated for food enthusiasts to share, explore, and involve themselves with culinary content. The inclusion of various features inspired by relevant researches has its contribution to the functionality and user experience of the platform. By continuing to innovate, refine, and expand upon the foundation of Foodzest, it is possible to foster a food-loving community, empower users to unleash their culinary creativity.

# Future Work

Foodzest as a web application which is designed specificallyfor food enthusiasts. Therefore it makes it easy to scale the application by adding new features. The application is designed to accommodate new updates and makes it convenient and comfortable to the user in using the application. The integration with enhanced recommendation systems for users and recipe will give a tailerd and diverse recommendation. Including payment feature

to invite vloggerswhich will allow to interact with experts and hosting posters on the home page and there by helping users to earn through their skills. Providing advanced analytics to the users and enabling them to grasp the data driven information.

#### 5. References

- 1. W. Min, S. Jiang and R. Jain, "Food recommendation: Framework existing solutions and challenges", IEEE Trans. Multimedia, vol. 22, no. 10, pp. 2659-2671, Oct. 2020.
- 2. C.-Y. Teng, Y.-R. Lin and L. A. Adamic, "Recipe recommendation using ingredient networks", Proc. 3rd Annu. Web Sci. Conf., pp. 298-307, 2012.
- 3. Mogan Gim, Donghyeon Park, Michael Spranger, Kana Maruyama, Jaewoo Kang: "RecipeBowl: A Cooking Recommender for Ingredients and Recipes Using Set Transformer" in IEEE Access Vol: 9 2021.
- Anupriya Saxena: "An Analysis of Online Food Ordering Applications in India: Zomato and Swiggy", in 4th International Conference On Recent Trends in Humanities, Technology, Management Social Development (RTHTMS 2K19), 2019.
- 5. Doaa Hassan, Sherif El- Kassas, Ibrahim Ziedan: "A Software System for Food Ordering and Delivery" in IEEE 16th International Symposium on Intelligent Systems and Informatics (SISY), 2016.
- 6. T.Deepa, "Online Food Ordering System" in Journal of Emerging Technologies and Innovative Research (JETIR)

- 7. Prof Upendra More, Prof Ria Patnaik, Prof Reema Shah, "A Study on Online Food delivery services during the COVID -19 in Mumbai", in Palarch 's Journal Of Archaeology Of Egypt/Egyptology 18(7). ISSN 1567-214x
- 8. Pakawan Pugsee, Monsinee Niyomvanich: "Comment analysis for food recipe preferences" in 12th International Conference on Electrical Engineering/Electronics, Computer, Telecommunications Information and Technology (ECTI-CON), 2015.
- 9. Akiyo Nadamoto, Shunsuke Hanai, Hidetsugu Nanba: "Clustering for Similar Recipes in User-Generated Recipe Sites Based on Main Ingredients and Main Seasoning", in 19th International Conference on Network-Based Information Systems (NBiS), 2016.
- Elham Asani; Hamed Vahdatnejad; Saeed Hosseinabadi; "Javad Sadri To Extracting User's Food Preferences", in 8th Iranian Joint Congress on Fuzzy and intelligent Systems (CFIS), 2020.
- 11. Sneha Choudhary; Charu Chhabra, "Sentiment Analysis of Amazon Food Review Data", in Fourth International Conference on Computational Intelligence and Communication Technologies (CCICT), 2021.
- 12. Pooja Tasgave, Ajay Dani, Friend-space: "Cluster-based users similar post friend recommendation technique in social networks", in International Conference on Information Processing (ICIP), 2015