

A REVIEW PAPER ON FOOD SECTOR BY IMPLEMENTING FOOD APP USING ANDROID TECHNOLOGY

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Abstract : This application is mainly concerned with the local people who run their business at a very small scale. Basic idea behind this application is to bring out the local hotels, dabs and shops to the neighboring people to order their food. By using this application the seller would be able to run his business effectively and will also be able to provide customers with best of their food services. This application uses client-server architecture. Where the application will interact with server and then store or retrieve data from the database located on the server side. This application will interact with database using API(Application Programming Interface). In this application the seller will create an account to get connected with this application and he can post all the information regarding the food, order and delivery. On the other side of the application client will also have to login in order to gain access to the details. This application has several options for the user like searching the location, viewing the list of food, orders through calls etc.

Index Terms - API, Application, server, client.

I. INTRODUCTION

Nowadays there are many types of applications available for ordering food online in order to provide customers with best of their services. In context of customers it saves their time by ordering food online. As in this rapidly growing world no one has time to wait in line or go outside in search of food, instead they will opt for something which is cost efficient, better and time consuming. This application mainly focuses on the local street food sellers and dabs whose locations are not mentioned in Google maps. As this is the very simple and basic application so it will provide users with list of selected locations nearby to each other and the street hotels, dabs etc located in that areas with address provided. This application will provide the users to search for their favorite food and order it through calling. The application is build in such a way that it is beneficial to seller as well as to buyer. This will ultimately lead small scale businesses to increase their productivity. In the seller's application the seller have to login first where he will get separate UI(User interface) and then he will be able to post images, enlist the names of dabs, hotels etc in the app whereas the users will be able to see the list of their favorite food items with details of food, address, and phone number to order the food.

II. PROPOSED ENHANCEMENT

In this application the food vendor/seller will create his account by logging the application and he/she will be able to post list of various hotels, food items, addresses etc within a particular location. Also the users have to create their account in order to use this app by registration after that every time whenever the user need to order the food he/she will be able to order their choice of food by making a call to a vendor of a particular hotel/shop. After this process the call from client side will go to the selected hotel and the food seller will fulfill his customers demand by providing quality food. The delivery of ordered food will be done by the delivery boy on specified time, date and location to meet the user's needs and run their business properly.

The reason to choose this project is the idea behind the project to solve the problem of street food sellers to sell their food in reasonable rate and earn profits. In context of users of this application it will save their time by ordering food through app instead of going outside to buy the food. This system is for making effective communication between consumer and producer of food system which will then leads to ideal and effective system.

III. PROBLEM STATEMENT

In today's world there is no place remained where the use of e-commerce is not in practice. Food is the never ending demand and the growth for online food ordering system is increasing at a high rate. The food applications like Zomato, Foodpanda, Swiggy etc provides with many features, but there are some problems in this existing system. For instance, Most of the time this doesn't consider the rural areas hotels, shops and lacks in providing street food sellers to increase their business from a particular location. Most of the people are switching towards online ordering of food which in turn slows down street food sellers business as people will always accept the things which benefits them in context with Time, Cost, and Quality. Therefore to overcome this challenge I have come up with the idea of making an application for street food sellers. This Food Ordering System sets up food menus list and customer can easily place the order as per they like. The management maintains customer's database and improves food delivery service. This system also provides a feedback system in which a user can rate the application. For more secure ordering separate accounts are maintained for each user by providing them an ID and Password. This will make street food sellers to run their food business and remain in the market.

IV. LITERATURE REVIEW

There is a growing interest in adopting android in embedded real time environments.^[1]This application is developed using android development studio in conjunction with SDK tools.^[2] An automated food ordering system is proposed which will keep track of user orders smartly. Basically they implemented a food ordering system for different types of restaurants in which user will make order or make custom food by one click only.^[3]There was an attempt to design and implementation of digital dining in restaurants using android technology. This system was a basic dynamic database utility system which fetches all information from the centralized database.^[4]The research work aims to automate the food ordering process in restaurants. The android application on users mobile will have all the menu details. The restaurant owner can manage the menu modifications easily.^[5]The study found that the emergence of online food ordering services is high. The student users of this services are well seasoned with the information available on these websites and they feel more comfortable using this service^[6]Red seer a research firm has claimed that the online food ordering and delivering segment grew almost 150% in 2016 as compare to 2015 with an estimated gross volume of \$300 million in 2016.^[7]The food quality, perceived value and service quality all had direct and positive relationship with satisfaction. Some researchers revealed that the price and product quality together with service quality influence customer satisfaction.^[8]This research works on efforts taken by street food vendors to adopt information and communication technologies. This paper highlights the growth of street food vendors by using application which will help them in turn to increase their business.^[9]

V. METHODOLOGY

1. Primary Research: This was done through the online survey form which was filled by common people. The first part of questionnaires included questions about the factors which make consumers order food online. The second part consisted of variety of questions to know the preferences of the consumer on which company’s services they like to use the most and what type of services of particular company they find more convenient. The third part consisted of type of food which consumers like to order online.
2. Secondary Research: This was through literature review about the concept of Mobile food order delivery app.

I. Based on online survey following result was displayed: Some of the frequent questions asked was-

Which is the most common food app you use?
27 responses

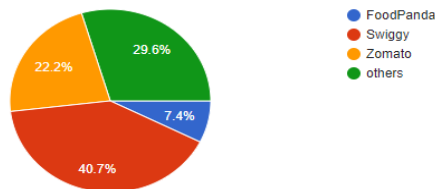


Fig1- Ratio of most common using food app

Ratio of number of people using food Apps
27 responses

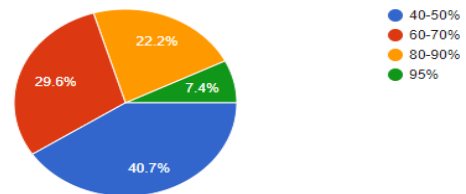


Fig2- Ratio of people using food app

Ordering Online food or going to hotel/restaurant to buy food . Which one would you prefer the most
27 responses

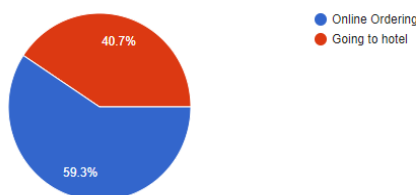


Fig- Ratio of food ordering online/ going to hotel

Among the following Food apps which one you think lack in providing good services to its customers
27 responses

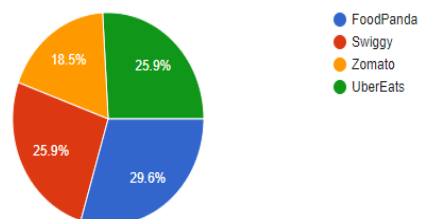


Fig- Ratio of food apps which one lack in providing good Services



Fig- Count of company providing more offers and promotions

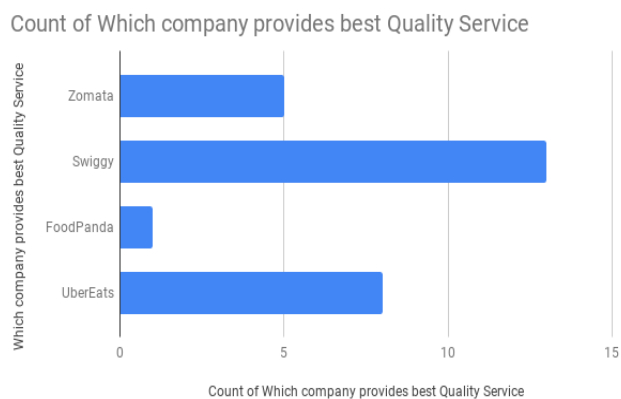


Fig- Count of company providing best quality services

II. Features included in some pre-existing apps and my app

Application Name	Covers Street food vendors	Web-based app	Delivery mode	Payment mode	Areas Coverage
FoodPanda	No	Yes	Delivery boy	Online	Mostly Cities, Known places
Swiggy	No	Yes	Delivery boy	Online	Mostly Cities, Known places
Zomato	No	Yes	Delivery boy	Online	Mostly Cities, Known places
Foodievibes	Yes	No	Call on delivery	Cash on Delivery	Rural areas, Particular region

III. List of Methods and Classes used for application development :

1. Navigation Drawer- In my application Navigation Drawer is used for building a Home Activity.
2. Google Maps- This is used for creating Google maps in order to trace a location. Here I have used this for Location tracing Activity.
3. RecyclerView- Used to Display the list of fragments on the Screen and this is used here to display list of food items and hotels related to it.
4. Card View- Card View is used to create a Material Design, In this application I have used it for developing Home activity.
5. Rating Bar- Used for feedback and Rating Activity. The users can rate this app on the scale of five stars.

IV. Working of Application

1. Create an Account- In order to use this App the user will first have to create an account i.e.- Sign in
2. Login to an Account- After account has been created login to account. This will be beneficial to user as he will not always have to create account to use the application.
3. Home Page(Dashboard)
 - About us- This Activity is giving in short the description of application for instance what the app is about, what service it is providing us.
 - Home- Here lies the main activity of the app. Whenever the user will click on navigation button user will be able to see the list of cuisines. By clicking on any of the menu they will get the detail information regarding hotels, locations, and price.
 - Hotels- This consists of list of hotels belonging to a particular location with the help of Google map.
 - Feedback- Feedback system is introduced here to take feedback from people using this app through rating bar. Users of this app can rate this app on the scale of five stars.

4. More

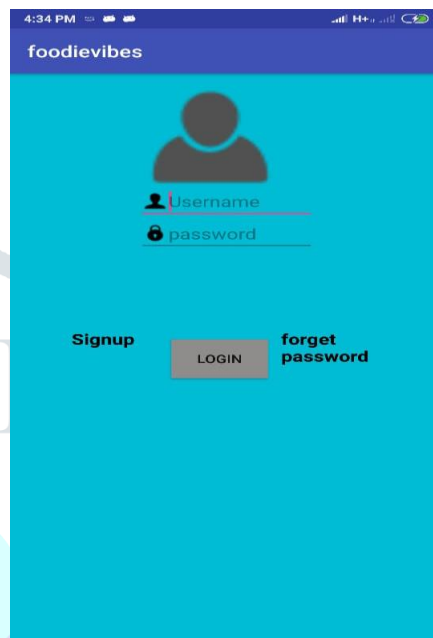
- Order- This is the sub-activity included in More(Activity). In the order activity the user can order their choice of food through clicking on order button through call. The contact number of the particular vendor will be given below the food menu list.
- Logout- After going through each and every step the user can Logout their

V. Screenshots of Application

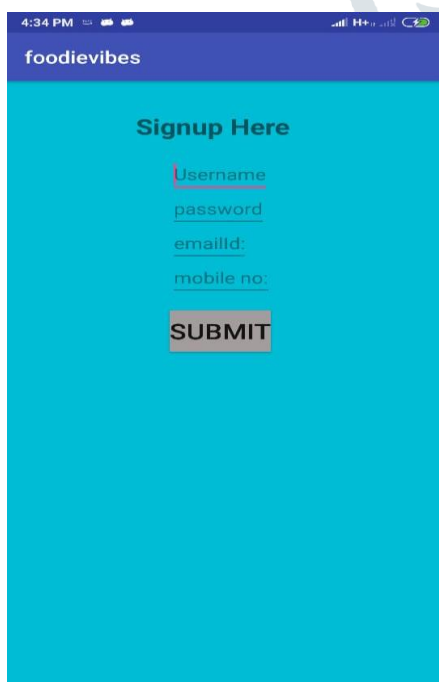
1. Splash Activity



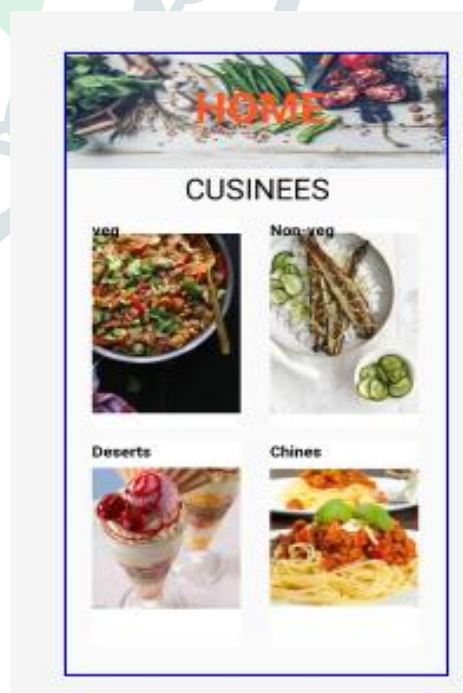
2. Login Activity



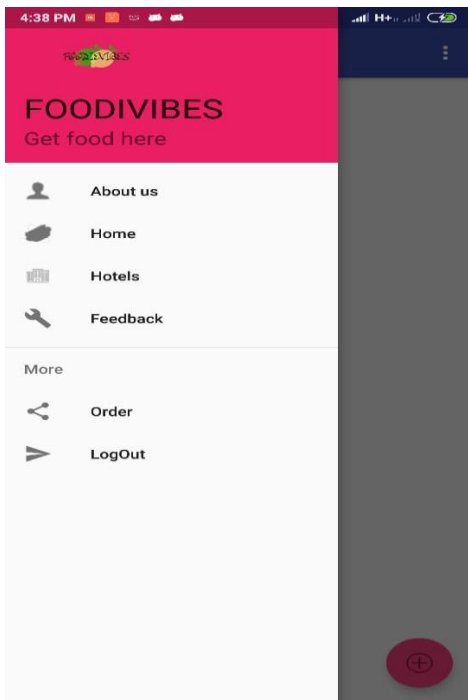
3. SignUp Activity



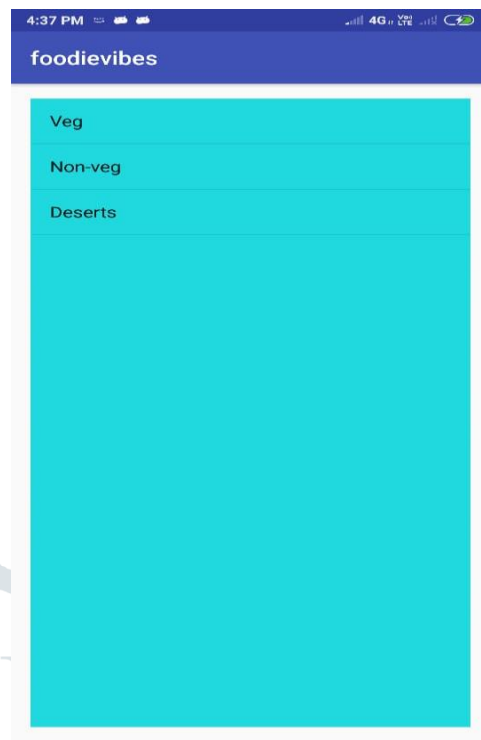
4. Home Activity



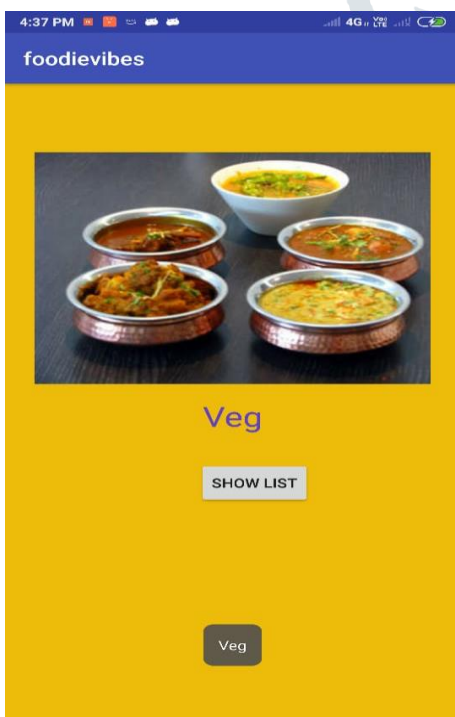
5. Home Activity (Navigation Drawer)



6. List of Menus Activity



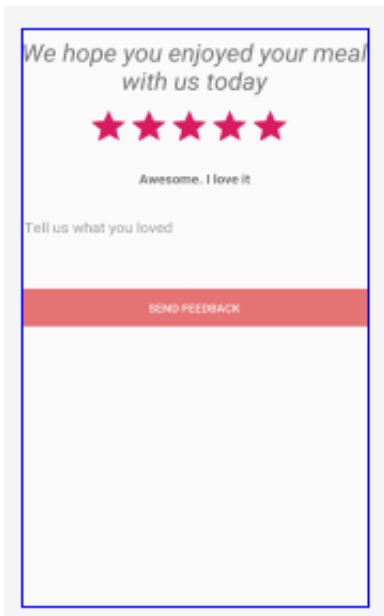
7. Food Item Activity



8. About Us Activity



9. Feedback Activity



VI. CONCLUSION

Conclusion of the proposed system is based on user's need and is user centered. The system is developing in considering all issues of users included in this system. Huge number of people can use this if they know how to operate Android Smartphone. Various issues related to mess/Tiffin for Bachelors can be solved by providing them a full-fledged system. Thus implementation of Food Ordering application is done to help solve this problem.

Based on the result of this research, it can be concluded: it helps customers in making order easily, saves time, efficient and feasible to operate. Helpful to seller as well. It ultimately helps increase their business.

The Food ordering application is made in such way that it satisfies users need and help them to place order in efficient way provided with feedback and rating system in order to increase and maintain their productivity in market.

The food delivery business also caters customers expectations- wide choices of hotels, dabs, ease of ordering, reduced cost, etc.

Scope of proposed system is justifiable because in large number of people is shifting towards food ordering online.

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