FOOD ON RAILS

Bavanikumar A[1], Naveen N A[1], Lokesh K[1], Dhilipkumar M[1], Gengatharan S[1]
[1]School of Computer Science and Engineering
Vellore Institute of Technology, Chennai
bavanikumar.a2018@vitstudent.ac.in, naveenn.a2018@vitstudent.ac.in, lokesh.k2018@vitstudent.ac.in,
dhilipkumar.m2018@vitstudent.ac.in gengatharan.s2018@vitstudent.ac.in

Abstract—*Getting quality food in trains was nearly impossible all these years.so that's where the idea of this project arised. Pantry foods and the foods from IRCTC is subpar. So in our project, we want to address this issue. There are several application which deliver foods in train but they give the users much choice and they have been preparing food from a single place and delivering it via application. So we plan on doing a Swiggy, Zomato-esque application where we link with multiple restaurants and deliver food on train. There is already dominos, a famous pizza joint delivering across railway stations all over India. In our project, we are building an application where the user location is found via gps and the upcoming stations which is atleast 1 hr from the current location of the user are displayed and the exact station where the user needs his food is selected by the user and the restaurants in and around that particular regions who are registered with us are displayed. The user can select a restaurant and order his food from the menu of that restaurant. So this is the core-idea and we want to make this idea into an working application.*

I. INTRODUCTION

This is an android application which is designed to order the food online while travelling by train. While travelling a long distance by train the main problem we face is food. To overcome such a problem we want to develop a mobile application through which we are ordering the food online. If the person wants to order food he/her can directly order the food so that the food is delivered directly to your seat and the cash-on-delivery process takes place between the customer and the person who delivers the food to us from the particular restaurant which we order.

1.1 **Objective and goal of the project**

- Ordering the food online while travelling by train.
- Provide more comfort for the users in ordering the food.
- To avoid the unhygienic railway catering system.
- The passengers can overcome the problems faced regarding their food need Complaints
- Reviews can also be given about the food service

1.2 Problem Statement

We are stepping into the 21st century but still, now we don't get proper quality food while traveling by train because of that many people have got sick by eating the unhygienic food to change this condition and to increase the sales of the hotel industry also we have created the idea like while you traveling by train you can order the food which you can get it from next station by the time you reach the station they will deliver the food which you have ordered and you can pay online and that could be more suitable for our current covid situation.

1.3 Motivation

The motivation for this project is simple that how common people suffer for getting good food while traveling in trains. Since the food that delivered by IRCTC is not good.
So we came with the idea of designing the app that connects with the hotels located nearby stations. Passengers can easily download the app and order the food they like. Healthy, fresh food and tasty food for the passengers that's our motivation.

II. Literature Survey

According to IBEF (Indian Brand Equity Foundation), food ordering is a fast growing business. It is also a sought after business by investors and investments in food ordering startups has seen an increase of 93% in 2015. The flip side is that competition is tough and it is difficult to survive in this competitive sphere. Businesses that are unable to sustain close down and others who are in the business struggle to beat competitions, keep their costs low, and reduce their burn rate in order to break even and make profits.

In an application of integration of hotel managementsystems by web services technology is presented. Ordering System Kitchen Order Ticket (KOT), Billing System, Customer Relationship Management system (CRM) are held together by the Digital Hotel Management. Add or expand of hotel software system in any size of hotel chains environment was possible with this solution.

Karan Kashyap has opined that using online food ordering services is gaining popularity in Tier 1 cities. The customers prefer eating in, as compared to going out to a restaurant when there are issues of traffic congestions. This segment has therefore seen a growth of almost 100% in the last couple of years.

In along with customer feedback for a restaurant a design and execution of wireless food ordering system was carried out. It enables restaurant owners to setup the system in

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wireless environment and update menu presentations easily. Smart phone has been integrated in the customizable wireless food ordering system with real-time customer wireless environment and update menu presentations easily. Smart phone has been integrated in the customizable wireless food ordering system with real-time customer

Anshoo Sharma from Light speed Ventures opines that the potential market for food ordering business attracts investors. This is also a business has a repeat ordering behavior as also high margins. It is expected that the huge funding in this space will consolidate similar to the ecommerce space.

III. Requirements Specification

3.1 Hardware Requirements

- System: Pentium IV 2.4 GHz
- Hard Disk: 80 GB
- Monitor: 15 VGA Color
- RAM: 2 GB

3.2 Software Requirements

- Operating system: Windows
- Coding language: Android SDK
- Toolkit: Android 5.0
- IDE: Eclipse

IV .System Design

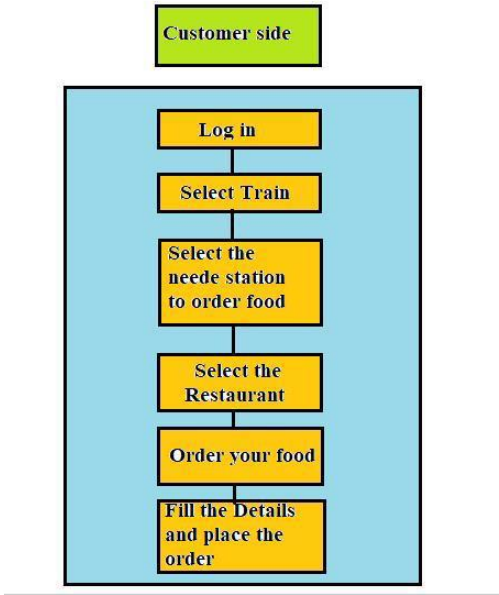

Fig 1: Customer Side

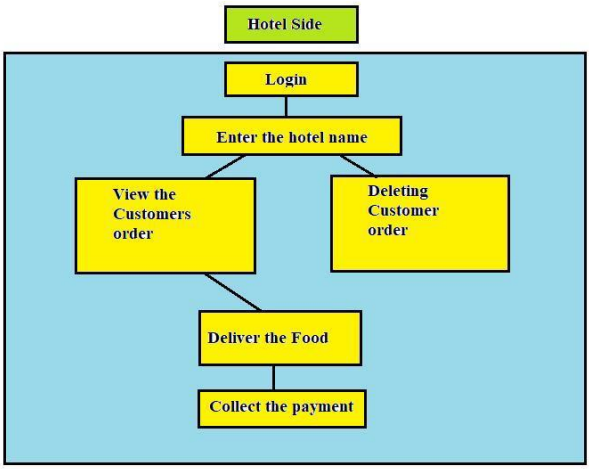

Fig 2: Hotel side

V. Implementation of System

The main function and the flow of the application is equite evident from the previous paragraphs we wrote. Now the concept of finding the location of the user and showing the places and restaurants which are atleast 1 hour from our current location is the main subject we have concentrated.

5.1 GPS section

On the select train screen, just when the train is selected the gps starts its work. It basically gets the location of us i.e. the district in which our train is passing by it shows the places which are atleast 1 hour away from our current district i.e. if you are ordering from madurai, they train shows you the stops which are atleast 1 hour from Madurai. i.e. Dindigul, Trichy, etc…
An hour time limit is due to the food preparation time demanded by the restaurants.

5.2 Geocoder

Geocoding is the process of transforming a street address or other description of a location into a (latitude, longitude) coordinate. Reverse geocoding is the process of transforming a (latitude, longitude) coordinate into a (partial) address. At first we are getting the latitute or location from getfromlocation method. We are later using geocorder to transfer the latitute and longitude values to get the address of the user and with the address derived we are just using the district name in our code . After getting our location we are using if else function to get the available location which are 1 hour(condition) from our current direct district location.

VI. Results and Discussion

If the user forgets his/her password, the google firebase has an options here it can send the password reset link through which we can change the password. So, this is just an basic application. So, we can add various features in future. So, we can add more trains to make this application and idea big. We are using Json files to add extra restaurants and their menus. So one of the main problems while developing this application into the next level would be getting permissions front railway department to allow delivery executives to enter the railway premises without any charges but this is not impossible since Dominos have already started doing this by getting permission from Indian railways. So this issue isn't as big as we think.

6.1 Applications

- The user can select the place where he/she wants to order food from.
- The user can select the restaurants and the food from that particular joint.
- The user can explore the variety of restaurants and the food option our applications gives them.
- The user can overcome the problems faced regarding their food need Complaints
- The user can order the items as per the requirement.
- The user can make use of PNR number can directly communicate with the Restaurant Manager.

The user can cancel his order within 5 mins of ordering.

Fig 1: Select Train

Fig 2: Available station to order food

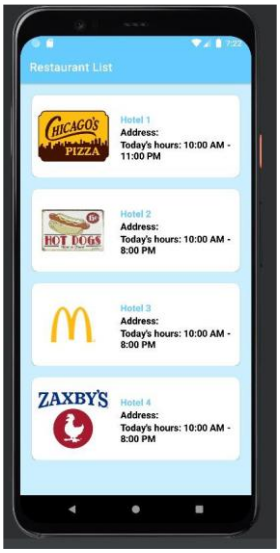

Fig 3: Restaurant List

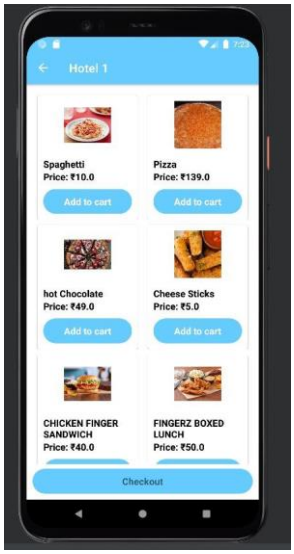

Fig 4:Hotel list

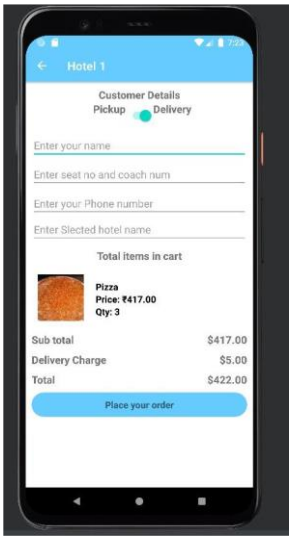

Fig 5 :Customer Detail

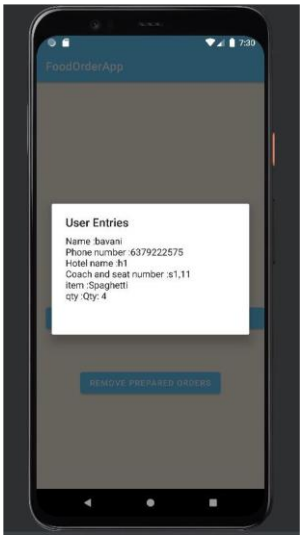

Fig 6:User Entries

VII. Conclusion and Future Work

We studied the efficient use of developing a Food Express Android application and making great use of it.We focused on the problems faced by the passengers who are traveling by train and developed this android application to overcome the causes affecting the people. We used these results to determine the usage of this application is very easy and everyone can make use of it by ordering their desired food at any place at any time. Finally, based on our research, we proposed an approach to find the possibilities of reaching the passengers with their ordered food, which accounts for the expected data transfer time over the available duration for the order to be placed.

Main Moto to develop this app is to help the passengers to have a healthy food

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