INTERNATIONAL JOURNAL
FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

International Journal for Research in Applied Science & Engineering Technology (IJRASET)

M-Ticket

Shilpa Kadam[1], Saloni Kargutkar[2], Harshala Bombe[3], Juilee Mathkar[4], Mayank Mangal[5]

[1,2,3,4,5]*UG Student, IT Engineering Department of Information Technology, 5 Professor*

Abstract: To avoid standing in the queue, Android mobiles are used to take a railway ticket by using local railway ticketing system. This avoids the paper tickets which can be misplaced and also reduces the use of paper. This also reduces the time of the user to stand in the queue for the ticket. This local Railway Ticketing system is very unique and very strong technique for railway ticket on the user's own android phones in very short span of time. Internet connection will be used for this android application. This project mainly aims at device application that makes possible for users to book ticket from source and destination station. On the Android application of each user's mobile device, there will be a source and destination option. When the user enters the details he will be shown the amount of his journey and the fare price will be deducted from the account of user. Beforehand, an account will be created. In the database this account will be present individually with the every user with a unique credentials i.e. unique ID and password.

I.   INTRODUCTION

Wi-Fi is used for booking tickets. It will be made available through application on web on the mobile devices. This project aims at website developing and application on mobile that enables users to book tickets from source and destination. This will have a source and destination options on the application of Android on each user's android mobile phones. Once the user login with his credentials and after when he enters the detail of his fare, he will be shown the fare amount and the amount will be reduced from the user account. Before that, the user should have an account created. This account details will be present in the database individually for every user with the different credentials i.e. unique ID and password. Each user can check, add, modify and access the transaction with the help of this account.

Internet connection will be used for the working of this Android application. This Internet connection will be provided with the help of Wi-Fi Hotspot on each railway station available. The load on each station will decide how much the number of hotspot should be made available. More hotspot will be needed if there are more users in the station .Wi-Fi will be used for booking the railway tickets. This will be available on the web application of the mobile device. It is aimed on the development of website and application on mobile that makes possible for a user to book his ticket from source and destination station. This Android application will have source and destination on each user's mobile phone. When the users enter the details he is shown the journey fare amount and this fare amount will be subtracted from the user's account. Before this, account will be created for users. This account created will be present in the database for each user with the different credentials. The user can modify his data can add, delete and access the transaction. Internet connection will be needed for these android applications. This application will work only with the help of the connection of the internet. This internet connection will be provided through the Wi-Fi hotspots which will be made available on each railway station. The load on the station will decide the number of hotspots on the station. More hotspots will be needed, if the number of the users is more on the station.

This proposed system mainly aims to change the current season booking ticket process for the local travelling. This will help the travellers using this application to book tickets on their device using internet connection. The user can handle its account by viewing its balance in his account so that he or she can refill it to avail the uninterrupted service. The user can also keep track about the recent tickets he bought. This makes possible to have a queue less ticketing system and make passenger to use their time on other work which they waste on waiting in the queue for booking tickets.

II.   EXISTING SYSTEM

Window Ticket: This is the most oldest and this system is widely used until today itself too. The passenger waits for the long queue and waits for his turn and ticket vendor issues the printed paper ticket. Coupon System: A passenger firstly has to purchase a coupon booklet from the ticket vendor. Then passenger punches the coupon in the coupon machine which prints the source and destination and the time and date of punching the ticket. Recently, Indian Railway have possible ways to provide the ticket to users through the portal of web and device but no application has been provided for the local passengers. R-wallet Ticketing System: The development of this application is done in-house by centre of the Railway Information System (CRIS). The passenger book the ticket in his mobile device and then the passenger prints the ticket from the installed machine at the journey of originating or source

International Journal for Research in Applied Science & Engineering Technology (IJRASET)

station. Railway Wallet (R- wallet) has to be maintained by the passenger to use the facility or service.

III. PROPOSED SYSTEM

This application will make the user to visit the source station and then he or she will have to use our application on Android. If the user is using this application for the first time he or she will be needed to open an account after which they will be provided unique ID and its password. The railway will be creating a master database with the credentials and amount of that passenger on other side. This application will be do the calculation of the ticket fare after checking the amount balance available of that passenger and will verify the passenger account. When everything is acceptable, then the user passenger will receive the text which is in the form of ticket.

For recharging the user's account he can recharge the account directly going to the ticket vendor or to avoid this we can develop one website with the user's help to recharge the user account. New user registration facility will be online provided. It will reduce the cost of the printing the tickets and the maintenance of the traditional vending machines of coupon and the smart card machine. It will also reduce the labour needed with the printing tickets which are needed at each counter of the ticket to provide the ticket to the local passenger.

It makes easy for passenger to buy the ticket that otherwise wait in the long queue. It does not need any paper uses usage for printing. It can be used to purchase any local ticket of any class through the application on Android device using the Wi-Fi. User passenger can handle their account by checking their balance in the account in their registered account so that he can refill it to avail the uninterrupted facilities. It also keep the track of the recent ticket bought by making request of the last transaction from server.
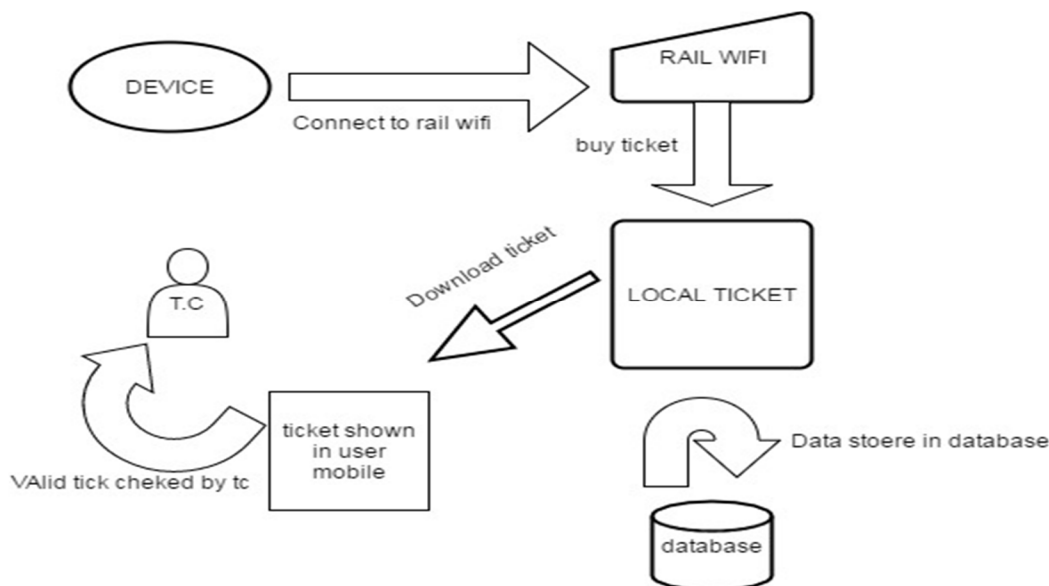
A. System Architecture

Fig1. Architecture

IV. WORKING

A. Registration Details

It first needs the personal information for the installation of application. Customer information such as name, mobile number, email, password and his entire information will be gathered to store into database.

B. Login Page

It is required to enter the mobile number which is used as a username and password during the login into this system.

C. Buying Tickets

During the purchasing tickets process, the source station is automatically detected and the user passenger is only required to enter the details of destination class, number of adult tickets, number of the child ticket, the ticket type i.e. return or single. User can

International Journal for Research in Applied Science & Engineering Technology (IJRASET)

check the fare after entering the information.

D. Ticket Generation

When the ticket is purchased, generation of the ticket is done. Information about the journey, time stamp, user ID, transaction ID is generated in the ticket.
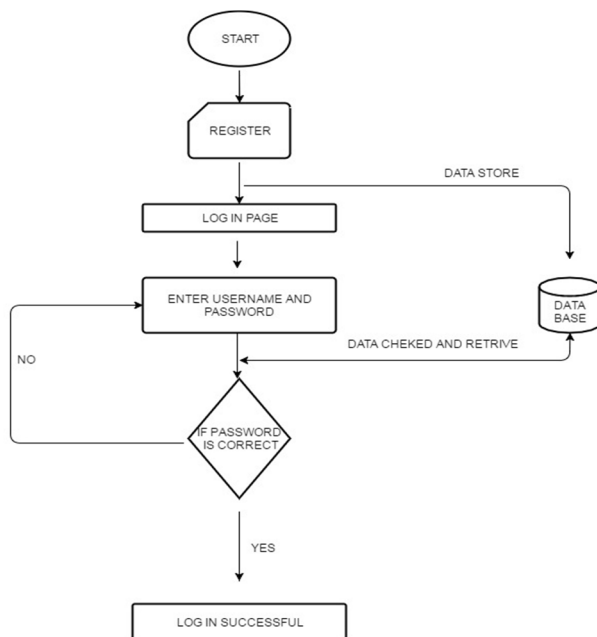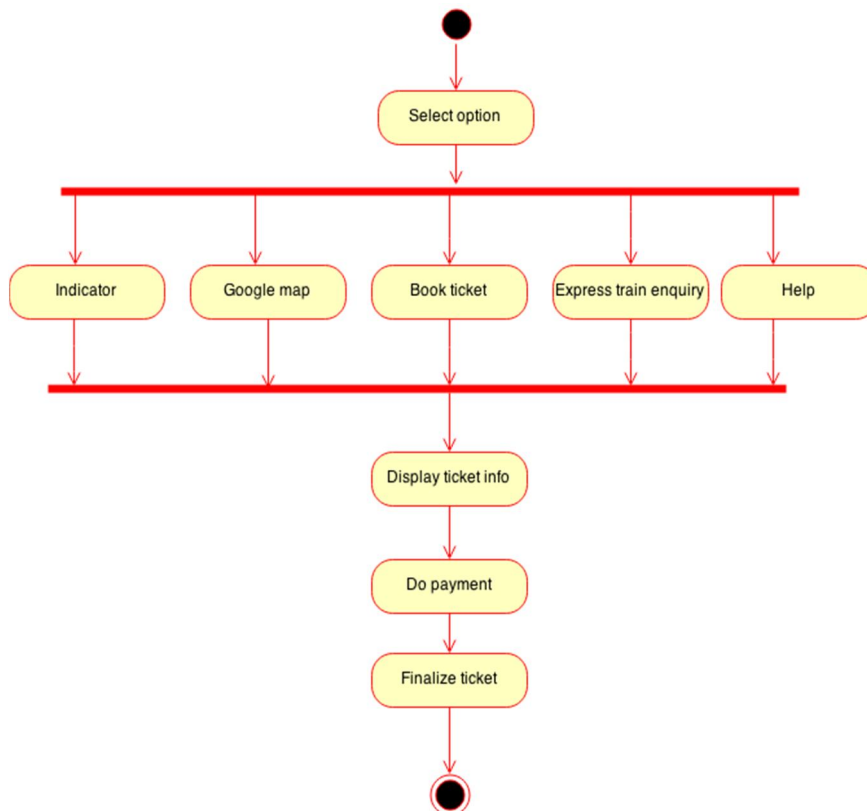

Fig 2. Use case diagram for login page

Fig 3. Activity Diagram

International Journal for Research in Applied Science & Engineering Technology (IJRASET)

V.   FUNCTIONAL REQUIREMENTS

A. Basic Functional Specifications
1) All the tickets classes are issued for all types of trains
2) Various types of tickets are issued

B. The Following are Some of the Complex Requirements of Railway Ticketing that Need to be Addressed
1) Dusty environmental
2) Callous work
3) No data loss – highly secured
4) All functions of tickets are provided
5) 5 to 15 seconds transaction time per use passenger
6) Audit operations flexibility
7) Changes in business logic and fare frequently
8) Ease maintenance, implementation
9) User-friendly

C. Hardware Requirements

D. Server Side
1) *Operating system :* Windows XP, 8,7
2) *RAM:* 512 MB

E. Client Side
Android Mobile Device / Tablet

F. Software Requirements

G. Server Side
1) *Operating System:* Windows 98, Vista or 7, ME, NT, 2000, XP
2) *Language:* SQLite, Android.

H. Client Side
1) *Operating System:* Android 4.0 (Ice-cream Sandwich)
2) *RAM:* 1GB

VI.   CONCLUSION

This new ticket booking application of the project is designed to enhance the take up of Wi-Fi mobile ticketing by drastically reducing setup of installation cost while concurrently creating ease to deploy infrastructure, highly scalable. Integration is the key to success: integration of their customer is must by the mobile ticketing system, preferred communication channels into an enhanced customer experience. Further integrating channels of the existing system and processes supporting the ticket process.

REFERENCES

[1] BROADCOM CORPORATION, "WI-FI for mobile and video generation", IEE 802.11ac, January 2012.
[2] William Enck, Damien Octeau, Patrick McDaniel, and Swarat Chaudhuri, "Study of android application security-research paper".
[3] Rich Watson ,"Understanding the 802.11ac WI-FI standard", white paper ,September 2012.
[4] Android Compare (Why Android?) http://androidcompare.com.
[5] JSP – Java Server Pages Technology http://www.oracle.com/technetwork/java/javaee/jsp/ind ex.html
[6] Android Developer http://developer.android.com/index.html
[7] Indian Railway Portalhttp://www.indianrail.gov.in/

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 ◯ (24*7 Support on Whatsapp)