

# “Android Based Mobile Application for Providing Various Services to the Customer”

Keerti Kharayat<sup>1</sup>, Ashitosh Andhale<sup>2</sup>, Vipul Gupta<sup>3</sup>, Prof. Rasika Shintre<sup>4</sup>

<sup>1,2,3</sup>Student, Computer Engineering, SIGCE, Navi Mumbai, Maharashtra, India

<sup>4</sup>Asst. Professor, Computer Engineering, Smt. Indira Gandhi College of Engineering, Navi Mumbai, Maharashtra, India

\*\*\*

**Abstract** - In this era, the most affordable way to reach out the customers are by using web app and mobile app. There are millions of mobile applications being launched every day. A mobile app is any application that uses an android OS for accessing the Application. The application can be as simple as a message board. In this paper we are introducing an application called ‘service provider app’ that connects online users with offline business and help people to find out the services which they need.

**Key Words:** Engineer, Android app, OS, User, Auth, IDE, Firebase.

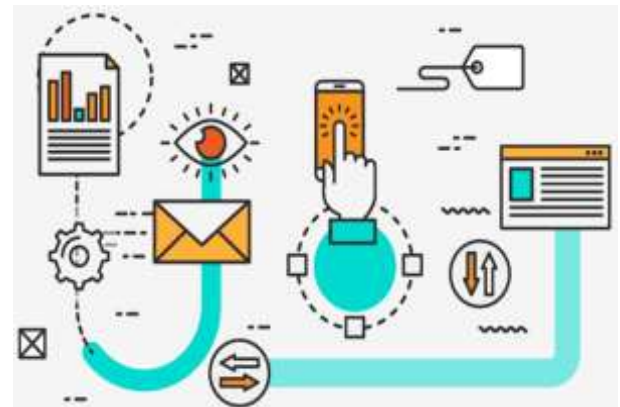


Fig -1: Ecommerce-workflow

## 1. INTRODUCTION

With today’s market going mobile, apps help you keep pace. Mobile and Web Apps are the most affordable and effective way to reach out to customers these days. Using applications is the trend now. So developers always try to provide the best app that makes your life more comfortable. There are millions of mobile applications being launched every day. ‘Service Provider App’ is an android application that provides services to user. We are using Android Studio as a tool for building the app. It’s also the official IDE (Integrated Development Environment) for android. Android platform, compatible for both mobile and computers, is used. The motivation behind initiating this project is to make the people’s life more comfortable and smooth.

The service industry is designed for such professionals that supply services, or intangible goods, to consumers. Unlike the manufacturing sector, which produces physical product that is sold to the public, the service industry gives services to satisfy the need of customer. The individuals who make up this industry are professionally hired to perform tasks. Companies use various modes to provide services; one of them is E Commerce.

E-commerce also called as electronic commerce is a process of buying and selling of goods and services, or the transferring of funds or data, through electronic network, mainly through the internet.

There are Business transactions as well as personal transactions that occur either as business-to-business, business-to-consumer, consumer-to-consumer or consumer-to business. In all these transactions like B2B, B2C or C2C the customer expectation and satisfaction level is very important. As there are many competitors in Service industry so all have to understand the needs and expectations of customers.

### 1.1 Objective

- 1) For standardized, household services which are the larger part of the business.
- 2) For helping old people, to do necessary bank or any other services.
- 3) For mechanical services, like car & bike repairing, modification of vehicles.
- 4) To connect online user with offline business.

### 1.2 Scope

Further we would connect various businesses in touch with user and also we aspire to make hiring a service professional as easy and straightforward as ecommerce companies have made buying products.

### 1.3 Features

- 1) Any services can be booked by the customer.
- 2) Immediate response is given to customer.

- 3) Helpful to old age people for banking and other services.
- 4) Online payment services is also available.

**2. LITERATURE SURVEY**

Service Quality- Service quality, customer satisfaction and customer value is a main concern in all sectors including personal care also. According to Kumar, Kee and Manshor (2011) High level of Customer satisfaction is one of the important consequences of marketing activity, “satisfaction is the consumer accomplishment response. It’s just a judgment that a product or service feature, or the product or service itself, provides a pleasure able level of consumption – related fulfilment”.

In [1], a research study on Customer expectation and satisfaction level of Urban Clap. States that expectation play an important part in service quality. Currently, the most widely adopted view of service quality results from customers’ expectations being met or exceeded. With increasing boom in the E Commerce and fast life style there is a huge demand of online services and home delivery services. Providing home services will always be in demand but along with services the satisfaction level of consumer in this industry is also very important to survive in the market.

Guthrie, M. & Jung J. (2012) in their study women’s perceptions on home services of personal care involves lot of trust and professionalism. As we move towards a time-poor world, where women shoulder as many responsibilities at the workplace as at home, the whole concept of a salon where you have to wait for ages before you can get your turn, is obsolete.

In [2], it introduces an application called ‘We-Cleanse’ that brings life back to your vehicle with services like car wash and mechanical support. The application is made for both user and driver. The facility of getting car services from home is becoming more and more a reality in today’s world.

As per the research done by Jai Vardhan on 8th Sep, 2015, besides food & health, providing services at doorstep are plugged as one of the biggest opportunity. Professional women lead busy lines some tend to prefer availing of such services at home. Likewise Urban clap, one more promising start-ups like Belita (found in 2010) does about 1,300 orders in a month (as per the survey and research done by Jai Vardhan in Sep2015). By these findings we can say that providing quality beauty care services at doorstep is a boon for female working professionals as well as for housewives.

**3. PROBLEM STATEMENT**

Modern world has hand held devices such as smart phone which have become increasingly powerful in recent years.

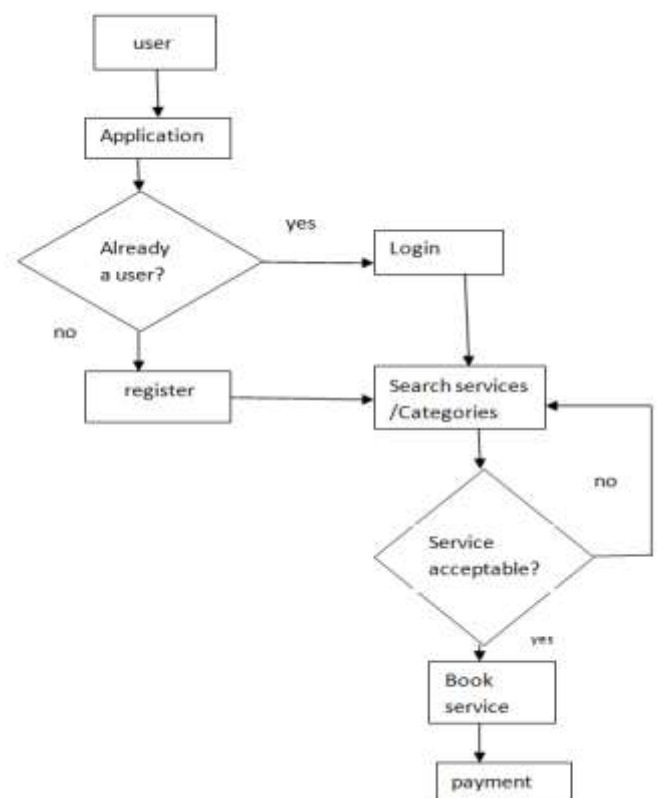
However, there are some applications that allow users to flexibly execute tasks which are done by personal computer, laptop etc. Service Provider application which is developed for Android based platform. The prime objective of this application is to provide all the services we need in our daily life regarding Electronics & Mechanical world in one application at one place.

**4. PROPOSED SYSTEM**

Mobile Apps are the most affordable and effective way to reach out to customers. Service Provider is an android application that provides different services to customer. People are able to get their services at their finger tip. This research uses Android platform. This is much compatible for both mobile and tablet computers. Android Studio is the tool for building the application.

We have build application for the customer as well as the Engineers. The customer can login to system and book services which he wants. And the Engineer can also register himself and find work. The customer once login have categories of some desired services ,then while selecting particular service he can book the service at his current location or he can manually type the location name. Overall system flowchart is as shown in Fig. 2.

**4.1. FLOWCHART**



**Fig -2:** Flowchart

We have build application for the customer as well as the Engineers. The customer can login to system and book services which he wants. And the Engineer can also register himself and find work. The customer once login have categories of some desired services ,then while selecting particular service he can book the service at his current location or he can manually type the location name.

#### A. Customers:

Customer can get service just on a click. This provides authentication phase for both customer and administrator. The customer can login using their registration id and password. Once the customer login, the application at once checks the database to ensure that the user is valid. If the user is valid they can successfully login. If user is not valid, they can create a new account.

Once the user logs, he/she is directed to the selection page where they can select the services. The customer request for their services and based on their location the nearby Engineer is searched and it is marked based on the availability. If the Engineer is available, the customer can do the payment either by e-payment or by-hand.

#### B. Engineer:

Engineer's is also provided with authentication phase. The Engineer will be active with the account all time. The Engineer gets the notification as per the customer request. They also get the location of the customer.

If the Engineer is free he can accept the customer's request. The Engineer, who is currently not free, will not be available to other customers.

## 4.2. ALGORITHMS

### 4.2.1 For adding firebase Database

- Step 1** Create a new project in the firebase by clicking on the Add project.
- Step 2** Now open the android studio and click on Tools in the upper left corner.
- Step 3** Now click on the Firebase option in the drop down menu.
- Step 4** A menu will appear on the right side of screen.
- Step 5** It will show various services that Firebase offers.
- Step 6** Choose the desired service.
- Step 7** Now click on the Connect to Firebase option in the menu of desired service.

### 4.2.2 For login and Authentication

- Step 1** Enabling Firebase Auth.
- Step 2** Next go to your project dashboard.
- Step 3** Find the Auth and click get started.
- Step 4** Go to set up sign in method and choose Email & Password and enable it.
- Step 5** Open app/build.gradle and add firebase auth dependency.
- Step 6** At the very bottom of the file, add apply plug-in: 'com.google.gms.google-services'.
- Step 7** Sign Up with Email & Password.
- Step 8** Log In with Email & Password.

## 5. CONCLUSIONS

In this modern time, most of the people engaged in mobile with internet services. Thus this proposed system giving the opportunity to get the services instantly at their location. This proposed system is an online platform for customers to scout for the best professionals in the service industry. This system helps to the user to reduce their extra efforts for physically going and finding services, while gathering all services at one app. Simply, it connects online users with offline businesses. It will offer the best services on reasonable price. This system provides amazing features and affordable services and delivers project on-time. System vision is to use technology and smart processes to structure the highly unorganized services market in India and emerging markets aspires to make hiring a service professional as easy and straight forward as ecommerce companies have made buying products.

## ACKNOWLEDGEMENT

The success and final outcome of this research required a lot of guidance and assistance and we are extremely privileged to have got this all. All that we have done is only due to such supervision and assistance and we would not forget to thank them.

We respect and thank Prof. Rasika Shintre, for providing us insight and expertise that greatly assisted the research. We are extremely thankful to her for providing such a nice support and guidance.

## REFERENCES

- [1] Prof. Rajni Pathak, a research study on Customer expectation and satisfaction level of Urban Clap in beauty services with special reference to Pune
- [2] 2018 International Conference on Emerging Trends and Innovations In Engineering And Technological Research (ICETIETR), Android Application for Car Wash Services
- [3] <https://www.androidhive.info/2012/01/android-login-and-registration-with-php-mysql-and-sqlite/>
- [4] <https://developers.google.com/web/fundamentals/payments/payment-apps-developer-guide/android-payment-apps>
- [5] <https://www.whizsky.com/2017/09/case-study-urbanclap-funding-founder-business-model-revenue/>
- [6] <https://developers.google.com/maps/documentation/android-sdk/start>
- [7] Implementation of Android Application to Search nearby Places with GPS Navigation Technology. [https://www.ijareeie.com/upload/2015/august/28\\_Implementation.pdf](https://www.ijareeie.com/upload/2015/august/28_Implementation.pdf)
- [8] <https://developers.google.com/maps/documentation/android-sdk/current-place-tutorial>
- [9] <https://www.androidtutorialpoint.com/androidwithphp/login-and-registration-form-in-android/>



Prof. Rasika Shintre, Obtained the Bachelor degree (B.E. Computer) in the year 2011 from Ramrao Adik Institute of Technology (RAIT), Nerul, and Master degree (M.E. Computer) from Bharati Vidyapeeth College of Engineering, Navi Mumbai. She is Asst. Professor in Smt. Indira Gandhi College of Engineering of Mumbai university and having about 8 yrs. of experience. Her area of interest includes Data mining & information retrieval.

## BIOGRAPHIES



Keerti B Kharayat is pursuing Bachelor degree (B.E.) in Computer Engineering from Smt. Indira Gandhi College of Engineering, Navi Mumbai.



Ashitosh Andhale is pursuing Bachelor degree (B.E.) in Computer Engineering from Smt. Indira Gandhi College of Engineering, Navi Mumbai.



Vipul Gupta is pursuing Bachelor degree (B.E.) in Computer Engineering from Smt. Indira Gandhi College of Engineering, Navi Mumbai..