BEAUTY AT HOME

Submitted by:

ACHAL KUMARI

15113094(305)

DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

MALOUT INSTITUTE OF MANAGEMENT & INFORMATION TECHNOLGY, MALOUT

Jan-Jun 2019

A HARDWARE TRAINING REPORT(BTCS-802) ON

BEAUTY AT HOME

SUBMITTED IN PARTIAL FULFILLMENT FOR AWARD DEGREE OF

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING

SUBMITTED BY

ACHAL KUMARI
15113094(305)

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JAN-JUNE 2019

CERTIFICATE

PROVISIONAL CERTIFICATE

TO WHOM IT TO BE CONCERN

I hereby certify that **Ms. Achal Kumari** of **MIMIT, Malout** is undergoing industrial training since Jan, 2019 at our organization to fulfill the requirements for the award of degree of **B.Tech**. She worked on "**Beauty At Home**" project in **Android** technology during the training under the supervision of **Mr. Munish Kumar**. During her tenure with us we found her sincere & hardworking. We wish her a great success in the future.

Dated: Apr 26th, 2019

Training In-charge:

Diwanshu Tangri

Sr. Business Manager

DECLARATION

I hereby declare that the project work entitled **"Beauty At Home"** is an authentic record of my own reviewed work carried out as requirement of training for the award of degree of B.Tech in **MALOUT INSTITUTE MANAGEMENT OF INFORMATION TECHNOLOGY**, Malout, Under I.K.G.PTU,Jalandhar.

Achal Kumari

15113094(305)

PREFACE

This project has been composed with the aim of covering a part of B. TECH (Computer Engineering) Industrial Training as prescribed Punjab Technical University, Jalandhar. A lot of effort has been made to make this project report interesting and a learning experience for the leader. This report has been explained with the help of diagrams and figures. The running project has presented through a PowerPoint representation. The subject matter has been compiled in a simple, illustrative and lucid manner.

ACKNOWLEDGEMENT

I have taken efforts in this project. However, it would not have been possible without the kind support and help of many individuals and organizations. I would like to extend my sincere thanks to all of them. I am highly indebted to "**Mr. Manish Kumar"** for their guidance and constant supervision as well as for providing necessary information regarding the project & also for their support in completing the project. I would like to express my gratitude towards my parents & member of **"Malout Institute management of Information Technology, Malout"** for their kind co-operation and encouragement which help me in completion of this project. I would like to express my special gratitude and thanks to industry persons for giving me such attention and time. My thanks and appreciations also go to my colleague in developing the project and people who have willingly helped me out with their abilities.

ABSTRACT

Beauty At Home is a mobile-based salon app with appointment scheduling functionality. It connects clients, salons, and stylists in an online community allowing users to browse salons and stylists, and book or cancel appointments. Users can also write and read reviews of salons and stylists. Salons can specify the stylists that work at their salons, as well as the services they offer. Salons can also book appointments for customers and can view and print schedules in convenient formats.

My project will use Android and Firebase to back the interface with strong database functionality. For appointment scheduling, Beauty Hub app will integrate mobile calendar as a backend database for appointments as well as a front-end scheduling interface. This project will target the major play store app as the initial platform for the Beta version.

The final deliverable will be a functioning mobile application that can handle all specified use cases. Some of the major use cases include user account registration, login/logout, appointment scheduling, schedule viewing, adding stylists and services to a salon account, update profile photo, adding schedules to stylist account, accumulating points in a client account, writing and reading reviews for specified salons and/or services, and creating temporal salon promotions that users can browse and filter in our app.

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1.1 FOUNDATION:

STS has been founded by group of senior IT Professional. Right from the inception of this start up, STS has prospered by Leaps and bounds in technology products and critical solutions. Sachtech Solution established back in 29 December 2011 at Mohali, India to serve the varying need of individuals as well as SMEs in today's competitive market across the globe it was incorporated as SACHTECH SOLUTION PRIVATE LIMITED with CIN U72900CH2016PTC041177 on 11th Aug 2016 under the Companies Act, 2013 in India.

As of Year, 2018, Sachtech has a strong team of more than 80 members in Mohali, India lead by passionate young entrepreneurs serving customers from across the globe in following countries: USA, Canada, UK, Brazil, Spain, Malaysia, UAE, Egypt, Australia, Finland and so on. We are continuously increasing our reach with potential customers and determined to expand our services to everyone in the globe. We embrace our responsibility to create a positive impact in the communities in which we work and live. We use proven knowledge to make recommendations and provide expert guidance to our customers. We listen, we care, and we serve. Sachtech Solution innovates and constantly improves. We do what we say we'll do. Sachtech Solution believes in people and their dreams.

Within the span of six years, STS is the strong team of more than 80 members having its presence in India (Mohali) in 7000 sq ft. & in Canada. Our operations are spread in New York, UK, Australia, Saudi Arabia, UAE and Israel.

1.1.1 MISSION & VISION:

Our Mission is to be the world's leading IT Channel in products, services and solutions that empower and alchemize the way consumers and businesses assemble, manage, distribute and communicate information. Our vision is to become a world-class software development and technology provider and to provide clients with innovated technical and business solutions by utilizing industry standards and technology.

1.1.2 ACHIEVEMENTS:

STS believes in Quality and it is evident from various technology breaks through like from fastest development systems to Desktop Retail Applications integrated with highly innovative data center services. STS works along with the client to improve its business outcomes by exploring new business opportunities, deriving cost takeout, and increasing process efficiency without any major change. From innovative ideas to their implementation and thereafter, STS offers all business transformation outsourcing services to clients under one flagship in four different phases of consulting, developing, outsourcing and training.

1.2 SERVICES WE OFFER:

I. **Consulting:** STS has 360-degree approach including each business process through a panel of various domain experts, who work hard along with the client to identify the requirements to achieve client's goal while respecting its value. STS has devised ready to opt industry vertical consulting solutions for various processes like Business Case Analysis, Business process re-engineering and Management product, Development and Management, IT Strategy Formulation, Technology Support Development, Internal Marketing, Product Testing, Performance Management etc.

II. **Development:** STS has the honor of developing innovative technologies and the growth of cloud, mobile computing and social media have put additional burdens on staff looking to quickly provide modern solutions. We also offer bouquet of various enterprise solutions, Android applications, Desktop applications, Web & Device Applications.

III. **Outsourcing:** Besides various readymade STS business process outsourcing solutions for various processes like collocation services, Onsite Database Administration Services,

Online Counter etc., we have specialization in various industrial critical, technical and general processes. Our man resources are trained for client processes and work as client's integral part and are fully accessible by client directly.

IV. **Industrial Training:** From corporate training to end user training and technical Trainings like System Administration, Enterprise Architecture, Enterprise Network etc.

V. STS has client based dedicated training programs to ensure client can take maximum advantage of our system, services and solutions. Apart from in-house trainers, we have ever-growing team of our training partners offering customized professional training modules to enterprising and up comings professionals.

WEBSITE:www.sachtechsolution.com

CHAPTER 2
OBJECTIVES OF PROJECT

2.1 OBJECTIVES

The main objective of Beauty Hub app is saved to time and complexity of work at beauty salon. Beauty Hub app is very much effective mobile application. It is helpful for all the person because the uses of this application are easy. By this you can see all types of services for yourself, parlour work and order according to your need. From this app you can call salon at your home anytime in your location. This app is available for books your order anytime and anywhere and books your appointment for service online and use the mode of payment online or cash payment.

There are more objective of our salon app described as given below:

- To evaluate best solution for booking online appointments and manage the same.
- To develop the outlook type schedule with different views to display the appointments and perform various actions on that.
- To develop secure web-based access to the Users, Powerful search capability of appointments.
- Development of an android applications for salons to manage their daily schedules.
- To manage the accounts of customers, salon owners.
- To integrate payment gateway with features like recurring payments and refunds.
- Use new android feature called android studio 3.3.
- To implement web-based Payments and Reports.
- By getting costumer reviews by reaching site.

2.2 RECOGNITION OF NEED

Generally, Salon hikes a lot in charges of their services. Even their offer is displayed for the limited number of days. Even there is a lot of rush in the salons, which consumes more time.

2.3 SCOPE

The mobile app is highly flexible one and is well efficient to make easy interactions with the client. The key focus is given on data security, as the project is online and will be transferred in network. The speed and accuracy will be maintained in a proper way. Scope is an individual that involve in some module in Beauty A Home app.

The future depends on the beauty business. The change that will happen is that the salon, beauty and the wellness businesses will merge as one feel happy when the salon has all these services offered by qualified people treating your face and skin. Five years down the line the industry will be exponentially growing with many aspirational younger people having more jobs and new ventures and that will give a huge boost to the industry and drive the businesses. There is a huge amount of demand for grooming across all age group and especially with young boys and girls. Young people travel abroad all the time they go for work, vacations and they see the trend there.

3.1 FEASIBILITY STUDY

Before developing this project, we first analyse existed system of study. In existed system all work is performed using papers. As we know, now a day computer is used in every field. We can remove the paper work by using automatic system. We see it first that if it is feasible or not whether technically, economically, operationally. We test that whether it properly works or not. Its technical requirements are feasible or not. We analysed the system properly and then start designing it. After designing, we implement this project that whether this project works properly or not. After implementing the project, we check that whether there is any problem for the user while using this project.

3.2 SYSTEM FEASIBILITY

Prior to stating whether the system we have to develop is feasible or not we believe that we should emphasize on what is implied by the word "Feasibility". Feasibility is the measure of how beneficial practical the development of the system will be to the organization. It is a preliminary survey for the systems investigation.

3.2.1 TYPES

There are various measures of feasibility that helps to decide whether a particular project is feasible or not.

These measures include –

- Operational Feasibility
- Technical Feasibility
- Economic Feasibility

3.2.1. OPERATIONAL FEASIBILITY

A proposed system is beneficial only if it can be turned into an information system that will meet the operational requirements of an organization. A system often fails if it does not fit within

existing operations and if users resist the change. Important issues a systems developer must look into are:

Will the new system be used if implemented in an organization?

Are there any major barriers to implementation or is proposed system accepted without destructive resistance?

The whole purpose of computerizing the Complaint Management is to handle the work much more accurately and efficiently with less time consumption. There will be additional work to be completed, because now the cellular company will have to maintain database of both their employees as well as their Customers. Compared to the semi-computerized system the chances of avoiding errors in a computerized system is much higher because the user need not stress himself unnecessarily resulting in recklessness. Unlike the semi-computerized system there would be backup data for all the information concerning the daily transactions occurred within the organization. Another important fact to be regarded is the security control, which is handled by the system. Since data regarding each Customer and the Organization is confidential, security is a key issue. Information falling into the wrong hands could jeopardize the entire organization. Unlike in semi-computerized systems. The proposed system offers adequate control to protect the organization against fraud and embezzlement and guarantees the accuracy and Security of data and information. This is handled by the system providing individuals with separate login names and passwords.

3.2.2 TECHNICAL FEASIBILITY

Based on the outline design of the system requirements in terms of inputs, output, Procedures, the technical issues raised during technical feasibility include: Does the necessary technology exist to do what is proposed?

Does the proposed equipment have the technical capacity to hold the data required to use in the new system?

Adequate responses provided by the proposed system?

Is the system flexible enough to facilitate expansion?

Is there any technical guarantee of accuracy, reliability, ease of access and data security?

The system developer's task is to view needed capabilities in light of currently available technology. Our site works hand in hand with high technology. A database has to be maintained in order to update and backup data whenever required. To create databases, we use MySQL server. After taking the above

3.3.3 ECONOMIC FEASIBILITY

In making recommendations a study of the economics of the proposed system should be made. Even though finding out the costs of the proposed project is difficult we assume and estimate the costs and benefits as follows. According to the computerized system we propose, the costs can be broken down in two categories.

- Costs associated with the development of the system.
- Costs associated with operating the system

CHAPTER 4
METHODOLOGY

The following are the steps I used in the formation of project. To make the project easy to understand and convenient the steps are as follows: -

4.1 System Analysis: -System analysis is the process of studying the business processes and procedures, generally referred to as business systems, to see how they can operate and whether improvement is needed

4.2 Investigation: - We used the following methods to gather the information
- Document sampling
- Questionnaires

4.3 Analysis of Investigation
- No complex equipment
- Low cost

4.4 Constrains and Limitations: -These limitations and constraints can crop up in almost every system; the most important fact is to find a way to overcome these problems. Software design is the first of three technical activities – design, code generation, and test that are required to build and verify the software. Each activity transforms information in manner that ultimately results in validated computer software.

4.5 Software Requirement Specification: - The introduction to software requirements specification states the goals and objectives of the software, describing it in the context of the computer-based system, software engineering is refined by establishing a complete information description, a detailed functional description, a representation of system behaviour, an indication of performance requirement and design.

5.1 INTRODUCTION

Salon and beauty parlour services at home with free Beauty Hub app. Beauty Hub app and beauty services helps you to discover the best beauty professionals near your home who will come at your doorstep to pamper you. Just download our app, select stylist near your basis reviews, rating, and price to book appointment and relax.

It happens often we are thinking about the hairstyle change or relaxing massage or need makeup help for wedding party or just feel like pampering ourselves with manicure and pedicure. But that salon and beauty parlour near us seem too far away and we don't want to spend time in transit or waiting in the saloon. We also have been there and hence we are looking extra hard to make sure you get everything from spa experience to regular eyebrow threading and waxing without leaving comfort on your home.

Key features of Beauty Hub android app:

- Growing list of beauticians, stylists and beauty professionals.
- Only vetted beauty professionals with 100% verified user reviews.
- Book appointment in just few taps as per your schedule.
- Services offered are facial, clean up, Bleach, Haircut, Hair styling, Hair Colouring, Massage, Manicure, Pedicure, Bridal Makeup, Make Over, Hair Spa.

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5.2 MODULES

5.2.1 SIGN UP: - Sign up module is for the user who visit to our site and enter their details for further sign in. This is the entrance module where the user must reach and must sign in for further knowledge about our salon app and book her appointments for future benefits. User must be registered in salon app when you use to it.

5.2.2 SIGN IN: - Sign in module is also for the user where only the logged in user can reach and firstly must search the nearby location as for the preference for the services she wants and search the type of services they want to have like manicure, pedicure, facial, massage, etc. User can sign in salon app after your registration is done.

5.2.3 PACKAGES: - Our treatments are inspired by nature and are brought to you in a simple, elegant surrounding. From our signature natural treatments to our natural and effective skin care services, everything we do is for your enjoyment.

5.2.4 CHOOSE YOUR SERVICES: - Users can select the services from the list of available in our salon app with their rating and reviews. They can select them based on their need. There are four services available in our salon app having different styles as given below: -

- Hair Services (6 Styles)
- Spa Services (6 Styles)
- Facial Services (12 Styles)
- Nails Services (8 Styles)

Each Services has different styles available in our salon app and choose your style and book the appointment and then pay to it.

5.2.5 BOOKING APPOINTMENT: - The proposed solution offers full featured calendar management functionality. This enables each service provider (saloon owners / businesses) to manage their customer appointments by having multiple types of schedules on daily, weekly and monthly basis. Each service provider can manage the working hours, prices and service durations through this functionality. On the other end, each customer has the option

Manage booking effectively: An App provide a mobile based solution of booking, so you can easily manage salon booking from anywhere, any time of the day or night.

- Easy to handle and use booking wizard

- Manage and control bookings easily
- See who has paid online for their bookings at a glance
- Easily send SMS and Email Booking reminders via your app.

5.2.6 PAYMENT PROCESS: - The proposed solution has a online payment module intended towards automating the retail operations specific to Salons & Spas. This includes integration with credit card achieve transaction. Economy becoming cash less day by day and your users can complete the appointment by online payment with debit and credit card. There are two payment process in our app: -

- Debit Card/Credit Card Payment
- Cash Payment

5.2.7 CHECK HISTORY: - When your order is successful, then your order details show in history in our salon app. User can check the history after the order is confirmed. And user can check the time and date for each service from history.

5.2.8 UPDATE PROFILE: - When your registration is successful then your information details show in Profile tab button. User can check own details in profile tab. And you can upload profile photo from your gallery and any other photo media. This uploaded profile photo shows in your profile tab.

5.2.9 ABOUT APP: - In salon app, there is information about this beauty hub app. And, there is version mentioned in salon app.

6.1 INTRODUCTION

Data flow diagram is graphical representation of flow of data in an information system. It is capable

of depicting incoming data flow, outgoing data flow and stored data. The DFD does not mention

anything about how data flows through the system.

There is a prominent difference between DFD and Flowchart. The flowchart depicts flow of control

in program modules. DFDs depict flow of data in the system at various levels. DFD does not

contain any control or branch elements' can be divided into three levels

- Level 0

- Level 1

- Level 2

6.1.1Level 0 diagram: -
- Highest abstraction level DFD is known as Level 0 DFD, which depicts the entire
  information system as one diagram concealing all the underlying details.

- Level 0 DFD must balance with the context diagram it describes.
- Input going into a process is different from outputs leaving the process.
- Data stores are first shown at this level.
- Level 0 DFDs are also known as context level DFDs.0

Figure 6.1 User open the app

6.2.2 Level 1 diagram

- Level 1 DFD must balance with the Level 0 it describes.
- Input going into a process is different from outputs leaving the process.
- Continue to show data stores.
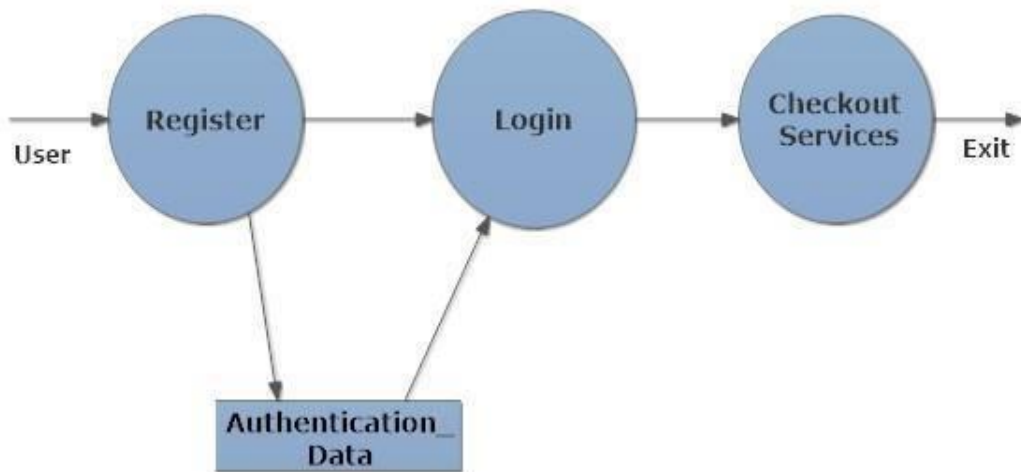
Figure 6.2 Authenticate registration

As if the user is already logged in.

Figure 6.3 Services book

6.2.3 Level 2 diagram

At this level, DFD shows how data flows inside the modules mentioned in Level 1.

Higher level DFDs can be transformed into more specific lower level DFDs with deeper level of understanding unless the desired level of specification is achieved.
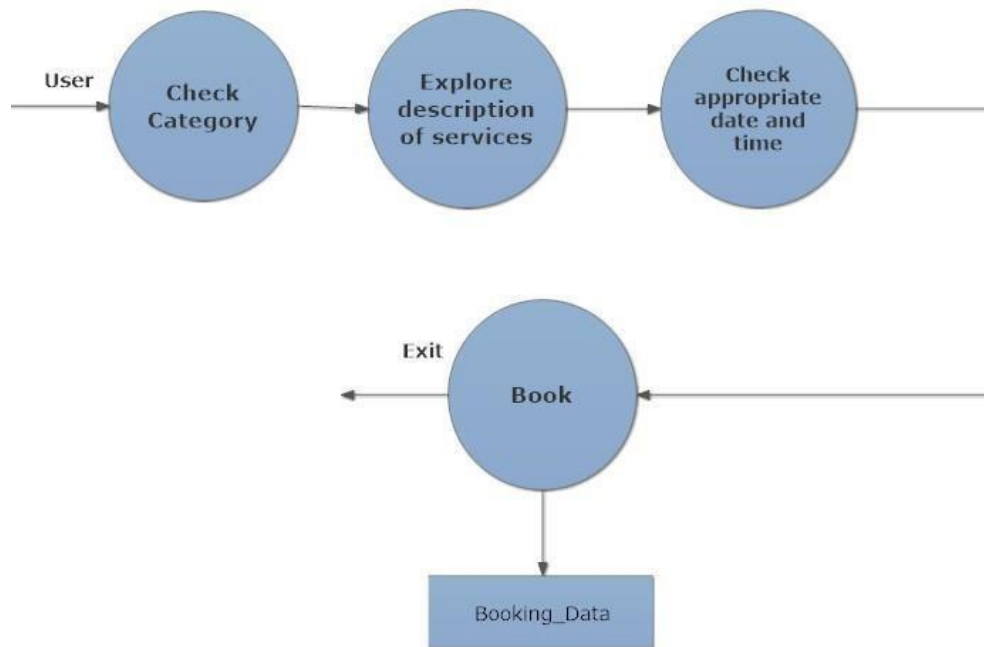
Figure 6.4 Check book appointment
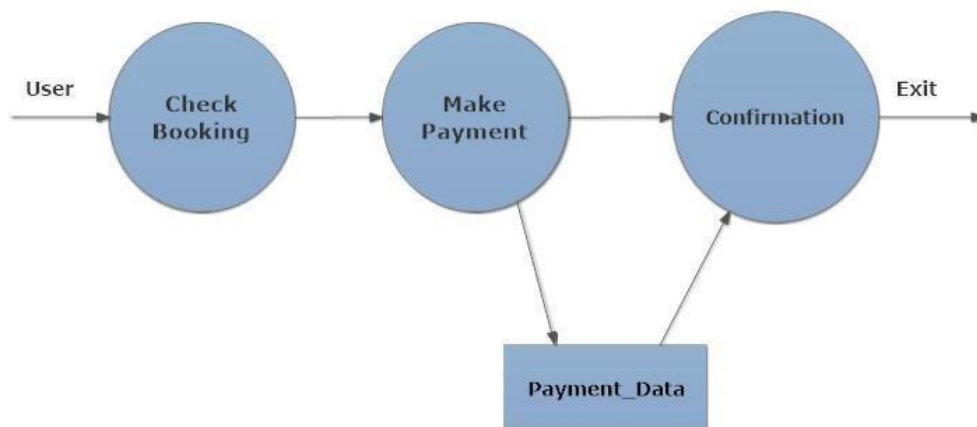
Figure 6.5 Payment Process

7.1 HARDWARE SPECIFICATION

This package is made for single user environment, which is also workable on multi user environment.

Needs following hardware requirements. -

- Intel core i3 generation PC
- GB RAM
- 20 GBHDD.

7.2 SOFTWARE SPECIFICATIONS

- **PLATFORM USED**

  Android Studio is operating system is used in making and running this software.

- **FRONT END USED**

  To make this software XML is used as a front-end tool to design that mobile application for layout.

- **BACK END USED**

  JAVA is used as a back-end tool for maintaining the database of all the information of users.

We used following technologies used on project described as given below:

8.1 ANDRIOD

Android is the name of the mobile operating system owned by American company, Google. It most commonly comes installed on a variety of smartphones and tablets from a host of manufacturers offering users access to Google's own services like Search, YouTube, Maps, Gmail and more. This means you can easily look for information on the web, watch videos, search for directions and write emails on your phone, just as you would on your computer, but there's more to Android than these simple examples.

8.1.1 What can an Android phone do?

Android phones are highly customizable and as such can be altered to suit your tastes and needs; with wallpapers, themes and launchers which completely change the look of your device's interface. You can download applications to do all sorts of things like check your Facebook and Twitter feeds, manage your bank account, order pizza and play games. You can plan events from your phone's calendar and see them on your computer or browse websites on your desktop Mac or PC and pick them up on your phone.

Another neat feature of Android is that it automatically backs up your contacts for you. When you'll need to create a Google Account or sign in with an existing one. Every time you save a number to the address book of your Android phone it will be synced to your Google Account. The benefit of this is that if you lose your phone all of your numbers will be saved. The next time you get an Android phone (or an iPhone or Windows Phone if you prefer) and sign in.

8.1.2 Open Handset Alliance (OHA)

It's a consortium of 84 companies such as google, Samsung, AKM, synaptic, KDDI, Garmin, Teleca, Ebay, Intel etc. It was established on 5th November, 2007, led by Google. It is committed to advance open standards, provide services and deploy handsets using the Android Platform.

8.1.3 Features of Android

After learning what is android, let's see the features of android. The important features of android are given below:

- It is open-source.

- Anyone can customize the Android Platform.

- There are a lot of mobile applications that can be chosen by the consumer.

- It provides many interesting features like weather details, opening screen, live RSS (Really Simple Syndication) feeds etc.

- It provides support for messaging services (SMS and MMS), web browser, storage (SQLite), connectivity (GSM, CDMA, Blue Tooth, Wi-Fi etc.), media, handset layout etc.

8.1.4 Categories of Android applications

There are many android applications in the market. The top categories are:

- Entertainment
- Tools
- Communication
- Productivity
- Personalization
- Music and Audio •Social
- Media and Video
- Travel and Local etc.

8.1.5 History of Android

The history and versions of android are interesting to know. The code names of android ranges from A to J currently, such as,aestro, Blender, Cupcake, Donut, Eclair, Froyo, Gingerbread, Honeycomb, Ice Cream Sandwich, Jelly Bean, KitKat and Lollipop.

Let's understand the android history in a sequence: -

1. Initially, Andy Rubin founded Android Incorporation in Palo Alto, California, United States in October 2003.

2. In 17th August 2005, Google acquired android Incorporation. Since then, it is in the subsidiary of Google Incorporation.

3. The key employees of Android Incorporation are Andy Rubin, Rich Miner, Chris White and Nick Sears.

4. Originally intended for camera but shifted to smart phones later because of low market for camera only.

5. Android is the nick name of Andy Rubin given by coworkers because of his love to robots.

6. In 2007, Google announces the development of android OS.

7. In 2008, HTC launched the first android mobile.

8.1.6 Android Architecture

Android architecture or Android software stack is categorized into five parts:

1. Linux kernel
2. Native libraries (middleware)
3. Android Runtime
4. Application Framework
5. Application

1) Linux kernel

It is the heart of android architecture that exists at the root of android architecture. Linux kernel is responsible for device drivers, power management, memory management, device management and resource access.

2) Native Libraries

On the top of linux kernel, there are **Native libraries** such as WebKit, OpenGL, FreeType, SQLite, Media, C runtime library (libc) etc. The WebKit library is responsible for browser support, SQLite is for database, FreeType for font support, Media for

3) Android Runtime

In android runtime, there are core libraries and DVM (Dalvik Virtual Machine) which is responsible to run android application. DVM is like JVM but it is optimized for mobile devices. It consumes less memory and provides fast performance.

4) Android Framework

On the top of Native libraries and android runtime, there is android framework. Android framework includes **Android API's** such as UI (User Interface), telephony, resources, locations, Content Providers (data) and package managers. It provides a lot of classes and interfaces for android application development.

5) Applications

On the top of android framework, there are applications. All applications such as home, contact, settings, games, browsers are using android framework that uses android runtime and library.

8.1.7 Android Core Building Blocks

An android component is simply a piece of code that has a well-defined life cycle e.g. Activity, Receiver, Service etc.

Fig 8.1 Android blocks

8.1.8 Activity

User interface component, which corresponds to one screen at time. It means that for the simple application like Address Book, the developer should have one activity for displaying contacts, another activity component for displaying more detailed information of chosen name and etc.

8.1.9 Intent Receiver

Wakes up a predefined action through the external event. For example, for the application like Email Inbox, the developer should have intent receiver and register his code through XML to wake up an alarm notification, when the user receives email.

8.10 Service

A task, which is done in the background. It means that the user can start an application from the activity window and keep the service work, while browsing other applications.

8.11 Content Provider

A component, which allows sharing some of the data with other processes and applications. It is the best way to communicate the applications between each other. Android will ship with a set of core applications including an email client, SMS program, calendar, maps, browser, contacts, and others. All applications are written using the Java programming language.

8.12 AndroidManifest.xml

The AndroidManifest.xml file is the control file that tells the system what to do with all the top level components (specifically activities, services, intent receivers, and content providers described below) you've created. For instance, this is the "glue" that actually specifies which Intents your Activities receive.

A developer should predefine and list all components, which he wants to use in the specific AndroidManifest.xml file. It is a required file for all the applications and is located in the root folder. It is possible to specify all global values for the package, all the components and its classes used, intent filters, which describe where and when the certain activity should start, permissions and instrumentation like security control and testing.

Here is an example of AndroidManifest.xml file:

1. .<?xml version="1.0" encoding="utf-8"?>

2. .<manifest xmlns:android=http://schemas.android.com/apk/res/android

3. package="dk.mdev.android.hello">

4. <application android:icon="@drawable/icon">

5. <activity class=".HelloAndroid" android:label="@string/app_name">

6. <intent-filter>

7. <action android:value="android.intent.action.MAIN" />

8. <category android:value="android.intent.category.LAUNCHER"/>

9. </intent-filter>

10. </activity>

11. </application>

12. </manifest>

The line 2 is a namespace declaration, which makes a standard Android attributes available for that application. In the line 4 there is a single <application> element, where the developer specifies all application level components and its properties used by the package. Activity class in the line 5 represents the initial screen the user sees and it may have one or more <intent-filter> elements to describe the actions that activity supports.

8.13 Android Virtual Device (AVD)

It is used to test the android application without the need for mobile or tablet etc. It can be created in different configurations to emulate different types of real devices. Android Emulator is used to run, debug and test the android application. If you don't have the real device, it can be the best way to run, debug and test the application.

8.14 Android Emulator

Android Emulator is used to run, debug and test the android application. If you don't have the real device, it can be the best way to run, debug and test the application.

8.15 APK File

An apk file is created by the framework automatically. If you want to run the android application on the mobile, transfer and install it.

8.16 Resources

It contains resource files including activity_main, strings, styles etc.

8.2 FRONTEND: XML

Extensible Mark-up Language (XML) is a markup language that defines a set of rules for encoding documents in a format that is both human-readable and machine-readable. The W3C's XML 1.0 Specification and several other related specifications all of them free open standards— define XML.

The design goals of XML emphasize simplicity, generality, and usability across the Internet. It is a textual data format with strong support via Unicode for different human languages. Although the design of XML focuses on documents, the language is widely used for the representation of arbitrary data structures]such as those used in web services.

Several schema systems exist to aid in the definition of XML-based languages, while programmers have developed many application programming interfaces(APIs) to aid the processing of XML data.

Main features of XML are: -

✦ XML has come into common use for the interchange of data over the Internet. XML is a markup language much like HTML.
✦ XML was designed to describe data.
✦ XML tags are not predefined in XML. You must define your own tags.
✦ XML is self describing.
✦ XML uses a DTD (Document Type Definition) to formally describe the data.

8.3 BACKEND: JAVA

In 1990, Sun Microsystems Inc. (US) was conceived a project to develop software for customer electronics devices that could be controlled by a remote. This project was called Stealth Project but later its name was changed to Green Project. In 1991, Bill Joy, James Gosling, and several others met in Aspen, Colorado to discuss this project. James Gosling was to identify the proper programming language for the project. Gosling thought C and C++ could be used to develop the project. But the problem they faced with them is that they were system dependent languages and

hence could not be used on various processors, which the electronic devices might use. So started developing a new language, which was completely system independent. This language was initially called Oak. Since this name was registered by some other company, later it was changed to Java.

History of Java

On Jan 23rd 1996, JDK 1.0 version was released. Today more than 4 million developers use Java and more than 1.75 billion devices run Java. Thus Java was pervaded the world. Java is software that enables users to run program on any type of computer system. Java is suitable for internet because of its independency. It eliminates a lot of security problems for data on internet. It is purely object-oriented language. This means Java program use classes and objects. Because of its lot of features we create our project report of Hospital Management System in this language.

8.3.1 Features of Java:

Apart from being a system independent language, there are other reasons too for the immense popularity of this language. Let us have a look at some of its features.

- Simple
- Object- oriented
- Distributed
- Robust and secure
- System Independence
- Scalability
- High performance
- Compiled and Interpreted
- Platform Independent and portable ✦Simple and small

•**Simple:**

Java is a simple programming language. Rather than saying that this is the feature of Java, we can say that is the design aim of Java. When Java is developed, they wanted it to be simple because it has to work on electronic devices, where less memory is available. Now, the question is how Java is made simple? First of all, the difficult concepts of C and C++

have been omitted in Java. Next, Java Soft people maintained the same syntax of C and C++ in Java, so that a programmer who knows C or C++ will find Java already familiar.

8.4 DATABASE: FIREBASE

Firebase can power your app's backend, including data storage, user authentication, static hosting, and more. Focus on creating extraordinary user experiences. We will take care of the rest. Build cross-platform native mobile and web apps with our Android, iOS, and JavaScript SDKs. You can also connect Firebase to your existing backend using our server-side libraries or our REST API.

8.4.1 Authentication

To authenticate a user, we can use the **createUserWithEmailAndPassword (email, password)** method. If you want to use authentication mechanisms with your Firebase application, to enable users to sign up, sign in and sign out, you need to head over to the Authentication option.

8.4.2 Database

If you navigate to the Database option, you will be presented with two database options for Firebase: the newer Cloud Firestore and the Firebase Realtime Database. The Firebase in React tutorial from the beginning shows you how to implement the older Firebase Realtime Database, but also shows you how to migrate over to Cloud Firestore in the end. Choosing one doesn't mean to use it forever. If you would use the Cloud Firestore, your Database could look like the following in your Firebase project's dashboard.

The application is yet to be released and a lot of enhancements are already thought of which proposal are to be implemented in the final version of the mobile application.

The system is highly flexible one and is well efficient to make easy interactions with the client. the key focus is given on data security, as he project is online and will be transferred in network. the speed and accuracy will be maintained in a proper way.

This will be a user-friendly one and can successfully overcome strict and serve validation checks. The system will be a flexible one and changes whenever can be made easy. Using the facility and flexibility in Java and Firebase, the software can be developed in a neat and simple manner there as a front -end and Firebase server as a back-end it can be modified easily and used for a long period.

Conclusion:

Working on the project was good experience. I understand the importance of the planning and designing as apart of software development but it's very difficult to complete the program for a single person. Developing the project has helped us some experience on real-time development procedures.

Figure 9.1 Open the beauty hub
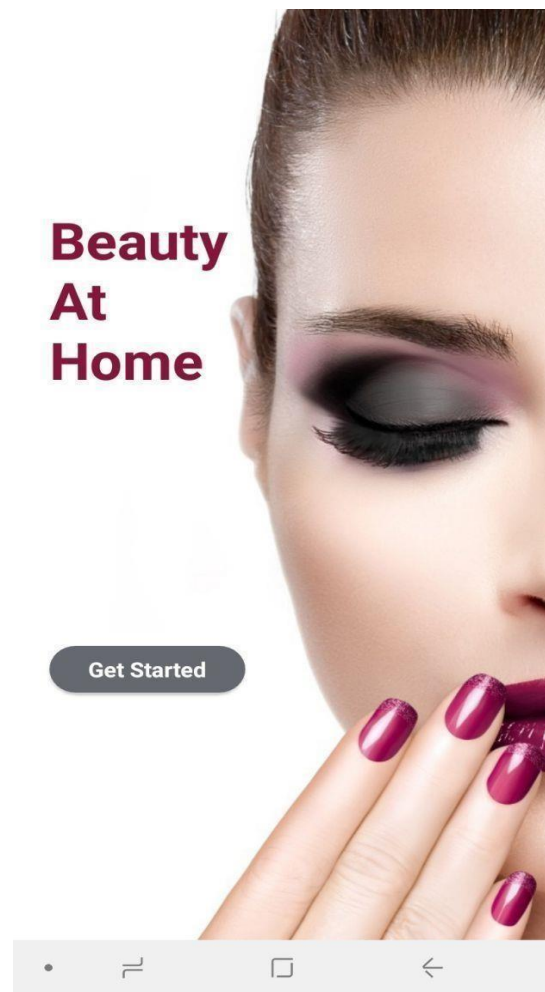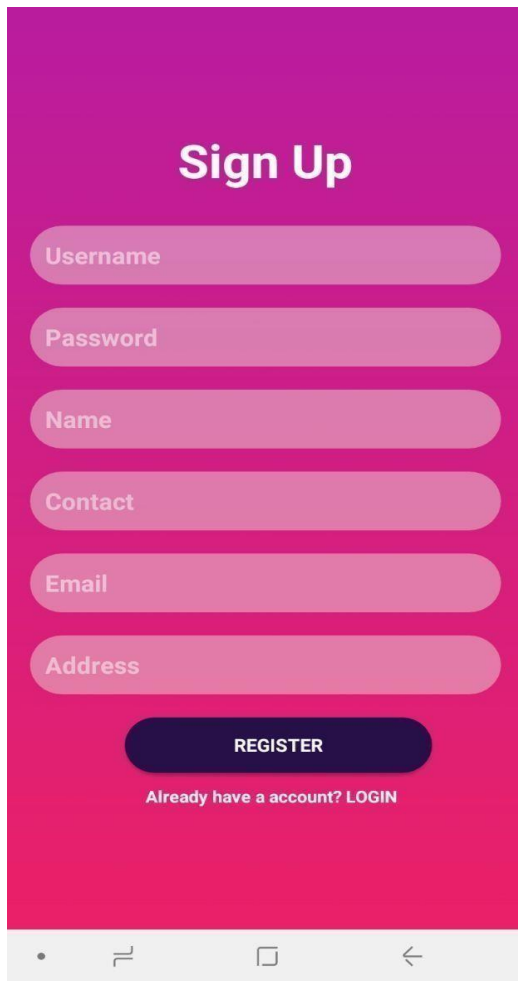
Figure 9.2 Click on Get Started button.

Figure 9.3 Sign Up Page

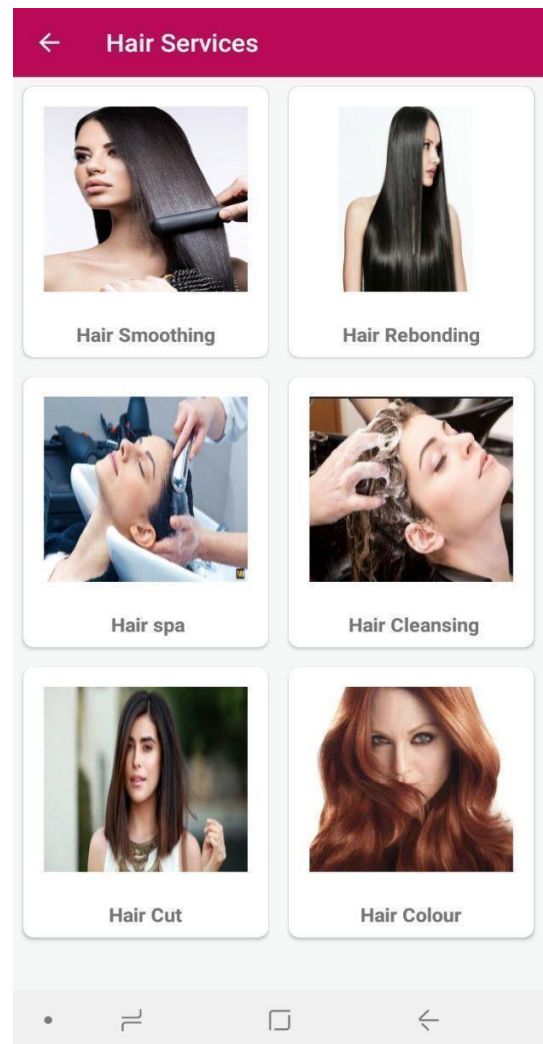Figure 9.4 Sign In Page
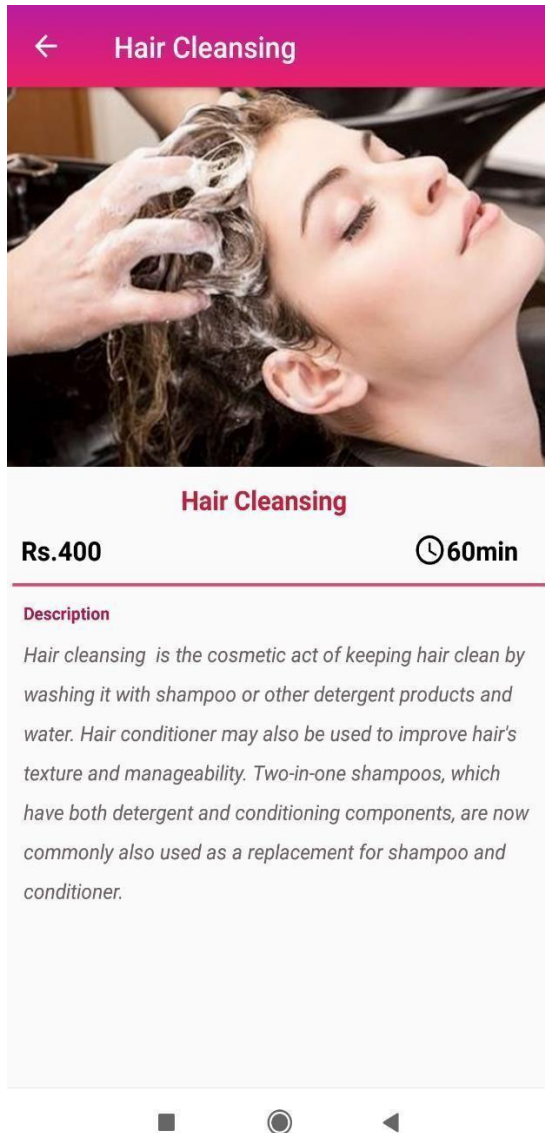
Figure 9.5 Home Page

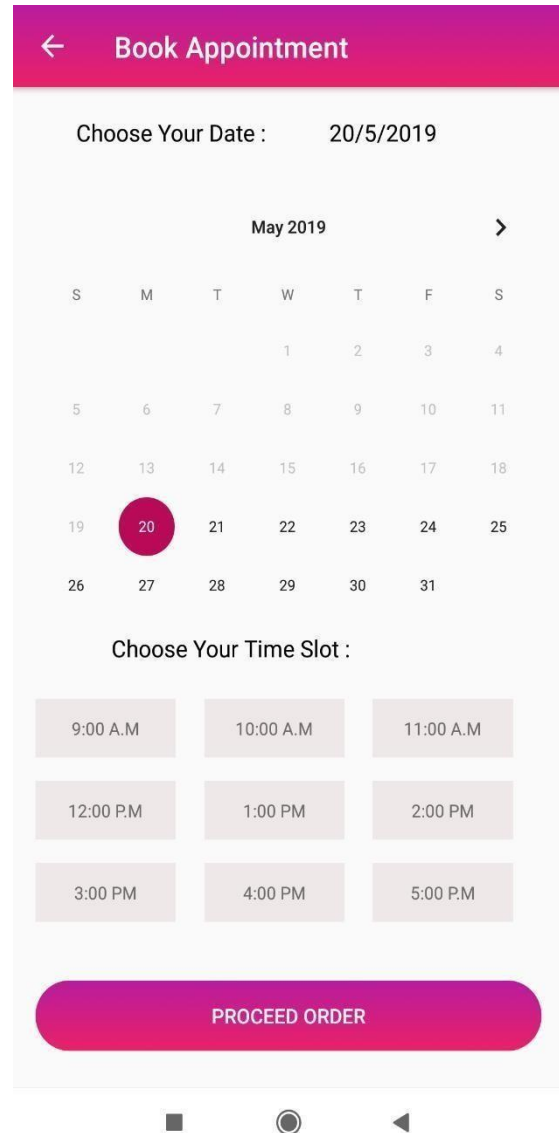Figure 9.6 Hair Services Page

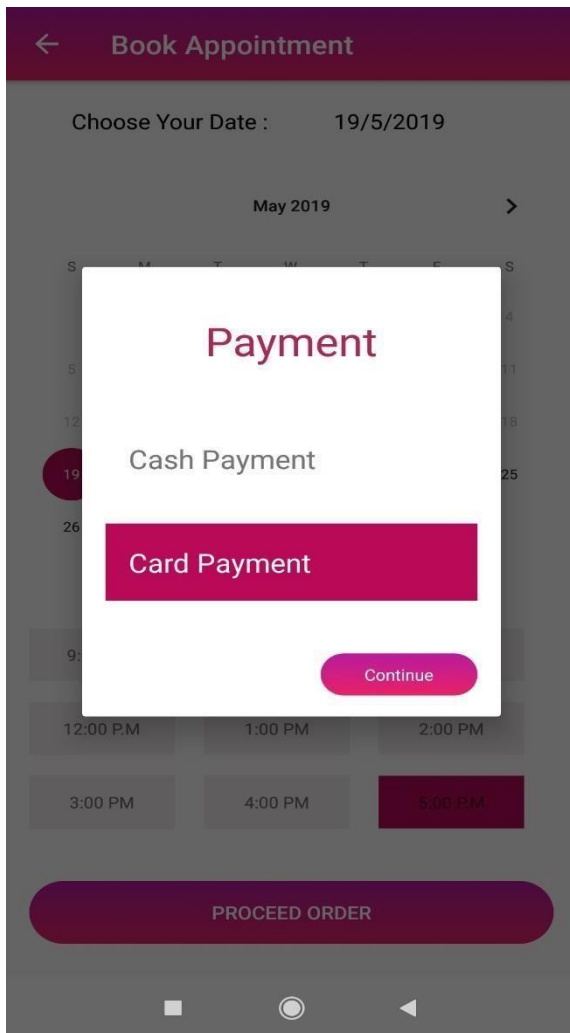Figure 9.7 Book Service Page

Figure 9.8 Book Appointment Page
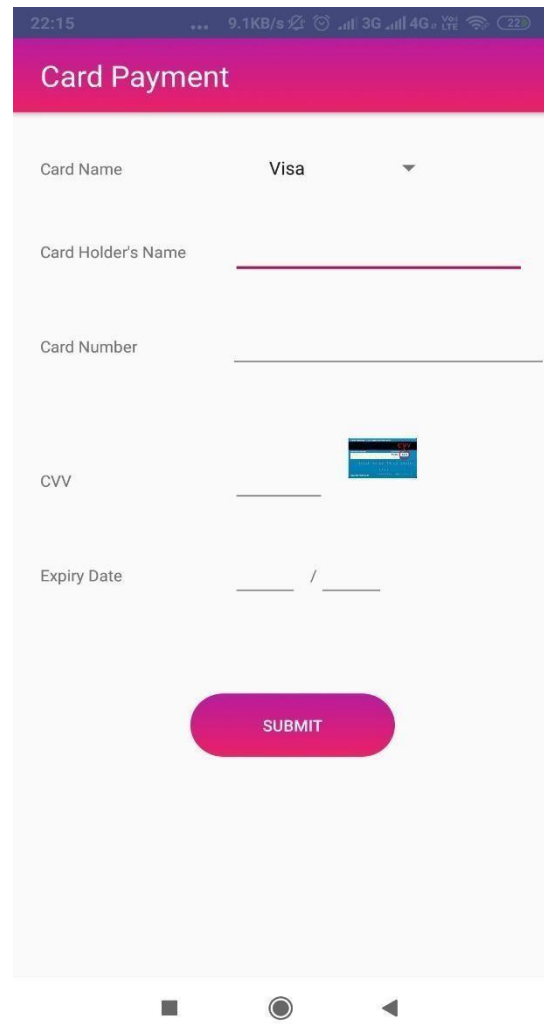
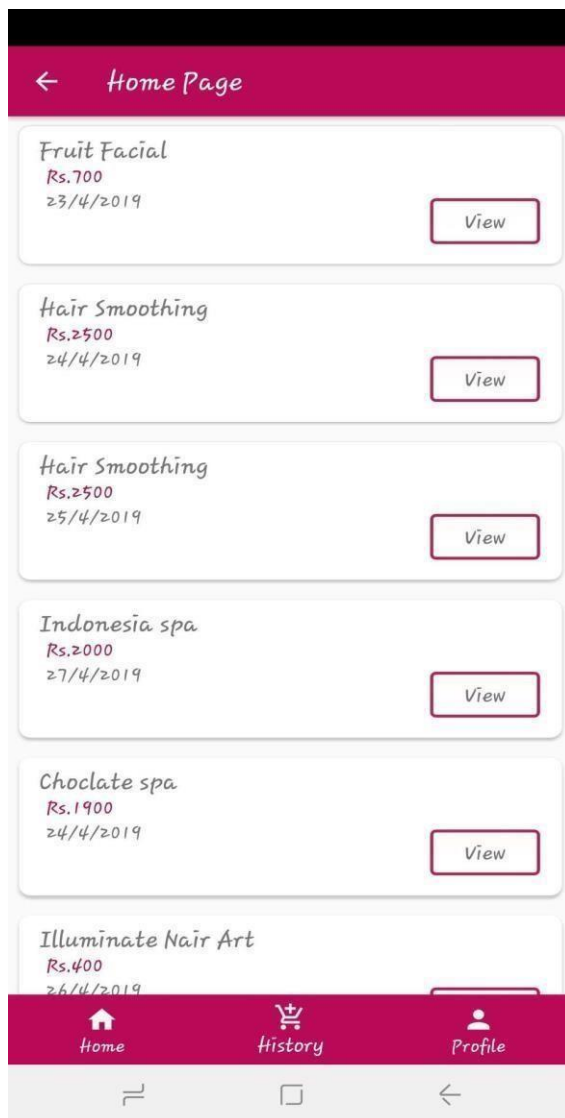Figure 9.9 Payment Process
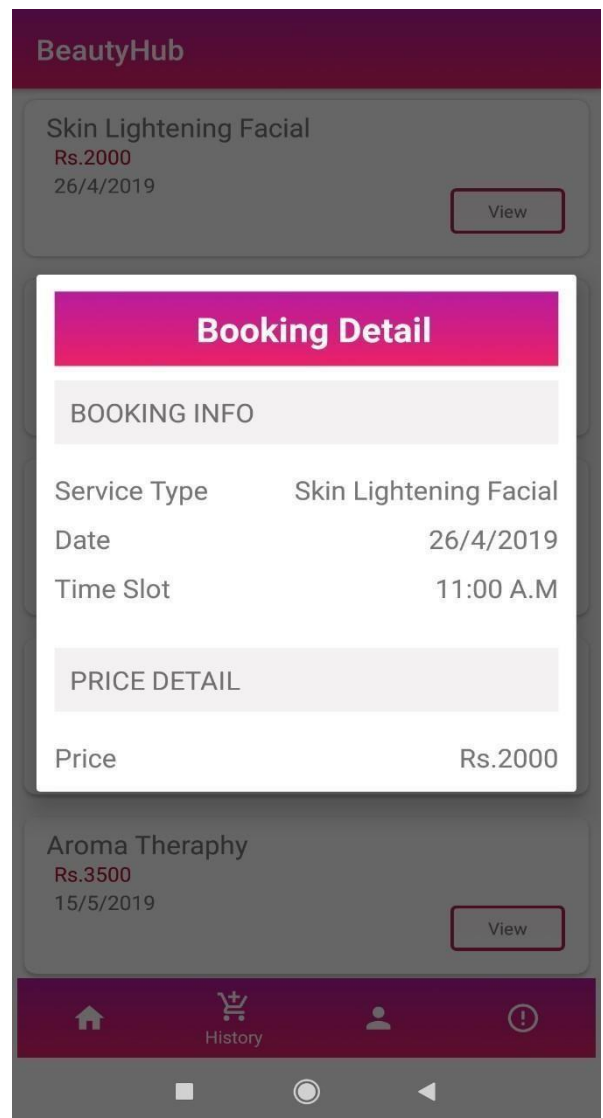

Figure 9.10 Card Payment Page

Figure 9.11 History Page
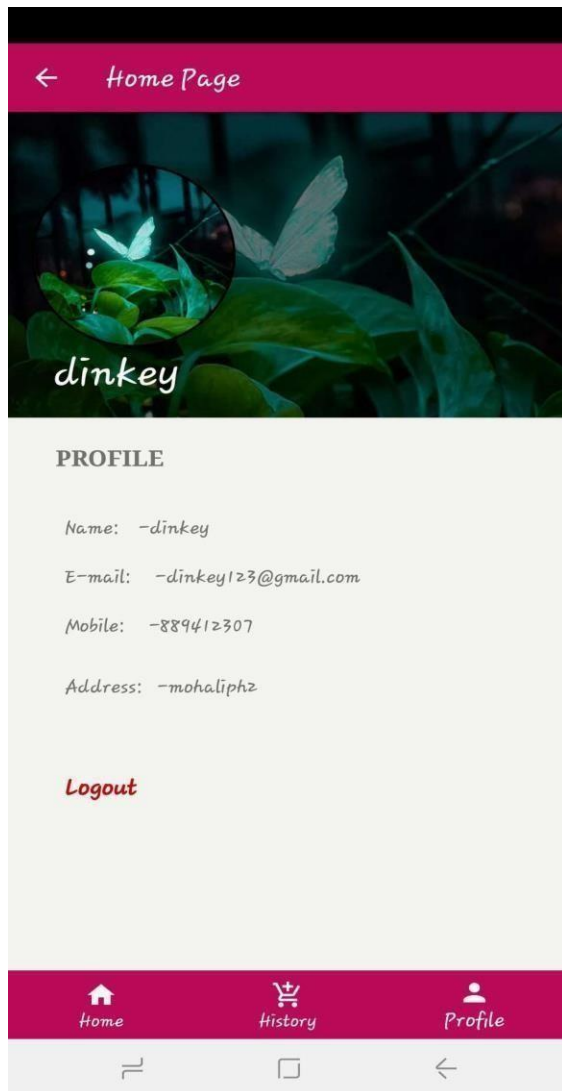

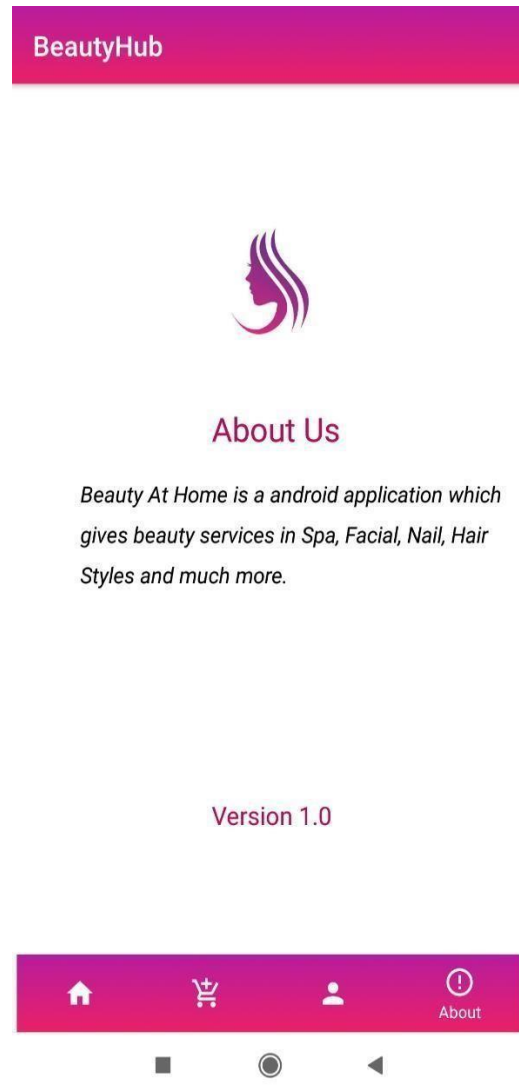Figure 9.12 View Details from History

Figure 9.13 Profile Page

Figure 9.14 About Beauty Hub app

BIBILIOGAPHY

1. "Android Language Breakdown".Open Hub. October 25, 2017.Archivedfrom the original on December 14, 2017. Retrieved December 15, 2017.
2. Morrill, Dan (September 23, 2008)."Announcing the Android 1.0 SDK, release 1". Android Developers Blog.Google.Archivedfrom the original on March 5, 2017. Retrieved March 11, 2017.
3. Head First Java by Kathy Sierra, Bert Bates.
4. The Java Language Specificationby James Gosling, Bill Joy, Guy Steele.
5. Mastering Firebase for Android Development by Ashok Kumar S.
6. Firebase Official Website Link: https://firebase.google.com/.