Ayurvedic Solution For Disease Application

A

MAJOR PROJECT-2 REPORT

Submitted in partial fulfilment of the requirements

for the degree of

BACHELOR OF TECHNOLOGY

in

COMPUTER SCIENCE & ENGINEERING

By

GROUP NO. 35

Abhishek Singh Rana	**0187CS181004**
Faisal Siddique	**0187CS181052**
Aditi Upadhyay	**0187CS181005**
Ankita Sinha	**0187CS181027**

Under the guidance of

Puneet Himthani

(Assistant Professor)

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Department of COMPUTER SCIENCE & ENGINEERING

Sagar Institute of Science & Technology (SISTec)

Bhopal (M.P.)

Approved by AICTE, New Delhi & Govt. of M.P.

Affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal (M.P.) ***Sagar Institute of Science & Technology (SISTec), Bhopal***
Department of COMPUTER SCIENCE & ENGINEERING Bhopal (M.P.)

***May*-2022**

CERTIFICATE

We hereby certify that the work which is being presented in the B.Tech. Major Project-2 Report entitled **Ayurvedic Solution App,** in partial fulfilment of the requirements for the award of the degree of ***Bachelor of Technology*** in ***Computer Science & Engineering*** and submitted to the Department of Computer Science & Engineering, *Sagar Institute of Science & Technology (SISTec),* Bhopal (M.P.) is an authentic record of our own work carried out during the period from dec-2021 to May-2022 under the supervision of **Puneet Himthani (Assistant Professor).**

The content presented in this project has not been submitted by me for the award of any other degree elsewhere. This is to certify that the above statement made by the candidate is correct to the best of our knowledge.

Abhishek Singh Rana	**0187CS181004**
Faisal Siddique	**0187CS181052**
Aditi Upadhyay	**0187CS181005**
Ankita Sinha	**0187CS181027**

19-04-2022

PROJECT GUIDE	***HOD***	***PRINCIPAL***
Prof. Puneet Himthani	***Prof. Bhavana Gupta***	***Dr. Keshvendra Choudhary***

ABSTRACT

Ayurveda is a science of life with a holistic approach to health and personalized medicine. It is one of the oldest medical systems, which comprises thousands of medical concepts and hypothesis. Interestingly, Ayurveda has ability to treat many chronic diseases such as cancer, diabetes, arthritis, and asthma, which are untreatable in modern medicine. Unfortunately, due to lack of scientific validation in various concepts, this precious gift from our ancestors is trailing. Hence, evidence-based research is highly needed for global recognition and acceptance of Ayurveda, which needs further advancements in the research methodology. The present review highlights various fields of research including literary, fundamental, drug, pharmaceutical, and clinical research in Ayurveda. The review further focuses to improve the research methodology for Ayurveda with main emphasis on the fundamental research. This attempt will certainly encourage young researchers to work on various areas of research for the development and promotion of Ayurveda.

ACKNOWLEDGEMENT

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LIST OF ABBREVIATIONS

ACRONYM	FULL FORM
ADT	Android Development Tool
AVD	Android Virtual Device
GUI	Graphical User Interface
IDE	Integrated Development Tool
XML	Extensible Markup Language

CHAPTER-1
INTRODUCTION

CHAPTER-1

INTRODUCTION

1.1 INTRODUCTION:

It might have happened so many times that you or someone yours need doctors help immediately, but they are not available due to some reason. This system provides medical suggestions for patients on any time either by go Ayurveda treatment or by consultation through online. So we hereby make a web application for patients and from that they can easily undergo treatment. The user who needs for help at their home can consult online easily. It also saves the time of the user. From this the medical suggestions get more customers from online and they earn a lot.

1.2 PURPOSE:

It is impossible for many persons to visit doctor at any time. In that case the web application we developed may help peoples to seek doctor's help at required time, getting appointment from doctor and paying the bill online. It is not necessary for all the patients to take Ayurveda medicines; they can also get the Ayurveda treatment from the developing Web Application.

PROPOSED SYSTEM:

This system helps the patient to get solutions whenever required.

Patient does not have to wait in queue to visit the doctor.

This system saves time of both doctor and patient.

The information that you provide below will help us understand the specifics of your physical, mental and emotional state and condition, so that we can provide you with a personalized healthcare solution best suited to your health needs.

1.3 PROJECT OBJECTIVES:

Ayurveda is a science of life with a holistic approach to health and personalized medicine. It is one of the oldest medical systems, which comprises thousands of medical concepts and hypothesis. Interestingly, Ayurveda has ability to treat many chronic diseases such as cancer, diabetes, arthritis, and asthma, which are untreatable in modern medicine. Unfortunately, due to lack of scientific validation in various concepts, this precious gift from our ancestors is trailing. Hence, evidence-based research is highly needed for global recognition and acceptance of Ayurveda, which needs further advancements in the research methodology. The present review highlights various fields of research including literary, fundamental, drug, pharmaceutical, and clinical research in Ayurveda.

The review further focuses to improve the research methodology for Ayurveda with main emphasis on the fundamental research.

1.4 INTERFACE:

This application interacts with the users through G.U.I. The interface is simple, easy to handle and self-explanatory. The user will easily come into the flow with the application and easily uses all interfaces properly.

1.5 ADVANTAGES OF APPLICATION:

1) One of the Biggest Advantages is we can listen music Offline.
2) In the next update we can listen music offline as well as online which help us to choose your favourite songs.

1.6 DISADVANTAGE OF APPLICATION:

1) currently this app will not play songs in online mode.

CHAPTER-2

SOFTWARE REQUIREMENT AND SPECIFICATION

CHAPTER-2
SOFTWARE REQUIREMENTS SPECIFICATION

Software and Hardware Requirement for the project of Music Player Application are as follows:

2.1 SYSTEM REQUIREMENT SPECIFICATION:

2.1.1 Software Requirements

NAME OF COMPONENT	SPECIFICATION
LANGUAGE	JAVA
TECHNOLOGY	ANDROID
SOFTWARE	ANDROID STUDIO AND ITS COMPONENTS

2.1 Software Requirements

2.1.2 Hardware Requirements

NAME	SPECIFICATION
PHONE	ANDROID

2.2 Hardware Requirement

2.3 Functional Requirements:

The functional requirements that takes some input and perform some task then produced the output thus these types of requirements are known as functional requirements. The functional requirements are classified in two categories namely admin and user requirements.

Admin Requirements:

- Admin authentication (username, password)
- Add / Update information regarding Ayurvedic medicines (Tablet name,Syrup name)
- Add / Update information regarding dozes of medicine (Specific Medicine for specific disease)
- See details of medicine (Medicine name)
- See details of users (user ID OR username)
- Delete any user account (user ID OR username)

User Requirements:

- User authentication (username, password)
- Check Medicine status (Medicine name)
- Calculate fare (Total cost of medicines)
- Change password (register mobile number OR register email ID, OTP Authorization)

Registration:

- Admin registration
    - Personal information
    - Professional information
- User registration
    - Personal information
    - Professional information

The input, output and description of all these functional requirements are describes below. Which describe the all the information related to that particular function and describe that how the function will work what will be input takes than according to their function which type of output will be generate.

Registration:

1. Admin Registration

Input – Personal information, professional information, confidential conformation code.

Output – Either Registration successful or Registration failed.

Description – This function is used to register the admin and gives privilege of all the admin Rights. This function will take personal information such as name, mobile number, email id, permanent residential address etc. Along with some professional details which are system generated according to confidential conformation code such as which privilege are provided to admin.

2. User Registration

Input – Personal details.

Output - Either Registration successful or Registration failed.

Description – Through this feature the user will be able to register and take advantages of all the feature of software. This function will ask user to provide their personal details such as name, mobile number, email id, permanent residential address, age etc.

Admin Requirement:

1. Admin Authentication

Input – Username, Password

Output – Admin either login successfully or failed.

Description – This function is used to authorize the admin by asking him/her their username and password. This function will check the username and password provided by admin if the username and password will be matched as they are provided at the time of registration then the admin will login successfully otherwise it displayed login failed.

- **Add/Update information regarding medicine**

Input – Medicine number

Output – The output of function shows details are add / update successfully.

Description – This function is basically used for add / update the information of medicine. Whenever any new medicine is there then their details must be added here.

- **See details of medicine**

Input – Medicine name

Output – Display the details of that medicine if medicine name matched otherwise show medicine not found.

Description – This function is implemented to see the whole details of any medicine through its medicine name. This function is available for admin as well as for user. But some confidential details of medicines are limited only to the admin.

- **See details of user**

Input – Username, user ID

Output – Display the details of user.

Description – Through this function the admin has right see all the details related to a user which is register with their system.

- **Delete any user account**

Input – Username or user ID, Conformation

Output – Delete registered user account.

Description – This function deletes the registered user account after getting conformation.

User Requirements:

1. User Authentication

Input – Username, password

Output – Login successful or login failed.

Description – This function will authenticate the user by checking his username and password provided by user for login from database that is saved at the time of registration. If the username and password are matched, then the user will login successfully otherwise it will display wrong username and password.

2. Calculate Fare

Input - Medicine name

Output – Calculate and display fare.

Description – This function will calculate the fare on basis of inputs provided by user.

3. Booking Status

Input – Medicine name

Output – Display the information related to medicine conformation.

Description – Through this function the user will be able to check the status booking that the medicines are conformed or not.

4. Cancel Booking

Input -Medicine name

Output – Cancel medicine booking.

Description – This function is implemented to provide medicine cancellation facility to user. Through this feature the user will be able to cancel their medicine booking anytime and according to time of cancellation the eligible refunded amount will be initiated to user registered bank account.

- **Change Password**

Input – Register mobile number OR register email ID, OTP authorization, new password.

Output – Change the login password.

Description – This function is used to change the user login password. Take input such as register

mobile number or email ID, after that an OTP will be generate and send to user registered mobile number or email ID. After the OTP authorization the system ask new password from user and renter the password and a conformation after that the user login password will be changed.

2.4 Non-Functional Requirements:

In systems engineering and requirements engineering, a non-functional requirement is a requirement that specifies criteria that can be used to judge the operation of a system, rather than specific behaviours. They are contrasted with functional requirements that define specific behaviour or functions.

The non-functional requirements of Railway Reservation system are as:

- Security
- Reliability
- Availability
- Maintainability
- Supportability

Each non functional requirement is described below:

1. Security

The system uses SSL (secured socket layer) in all transactions that include any confidential customer information. The system must automatically log out all customers after a period of inactivity.

The system should not leave any cookies on the customer's computer containing the user's password.

The system's back-end servers shall only be accessible to authenticated management.

2. Reliability

The reliability of the overall project depends on the reliability of the separate components. The main pillar of reliability of the system is the backup of the database which is continuously maintained and updated to reflect the most recent changes. Also, the system will be functioning inside a container. Thus, the overall stability of the system depends on the stability of container and its underlying operating system.

3. Availability

The system should be available at all times, meaning the user can access it using a web browser, only restricted by the down time of the server on which the system runs. A customer friendly system which is in access of people around the world should work 24 hours. In case of a of a hardware failure or database corruption, a replacement page will be shown. Also, in case of a hardware failure or database corruption, backups of the database should be retrieved from the server and saved by the Organizer. Then the service will be restarted. It means 24 x 7 availability.

4. Maintainability

A commercial database is used for maintaining the database and the application server takes care of the site. In case of a failure, a re-initialization of the project will be done. Also the software design is being done with modularity in mind so that maintainability can be done efficiently.

5. Supportability

The code and supporting modules of the system will be well documented and easy to understand. Online User Documentation and Help System Requirements.

CHAPTER-3
PROBLEM DESCRIPTION

CHAPTER-3

PROBLEM DESCRIPTION

3.1 OVERVER VIEW:

PROBLEM STATEMENT:

It is impossible for many persons to visit doctor at any time. In that case the web application we developed may help peoples to seek doctor's help at required time, getting appointment from doctor and paying the bill online. It is not necessary for all the patients to take Ayurveda medicines; they can also get the Ayurveda treatment from the developing Web Application.

SOLUTION STATEMENT:

- This system helps the patient to get solutions whenever required.
- Patient does not have to wait in queue to visit the doctor.
- This system saves time of both doctor and patient.
- The information that you provide below will help us understand the specifics of your physical, mental and emotional state and condition, so that we can provide you with a personalized healthcare solution best suited to your health needs.

CHAPTER-4
LITERATURE SURVEY

CHAPTER-4
LITERATURE SURVEY

This system is an end user support and online consultation project. Here we propose a system that allows users to get instant guidance on their health issues through an intelligent health care system online. The system is fed with various symptoms and the disease/illness associated with those systems. The system allows user to share their symptoms and issues.

Then it will ask for user opinion whether they wants to follow natural treatments or by consulting a doctor. If the user chooses natural treatment helps the users in curing its disease by giving the list of fruits and herbs that the user should consume in order to get rid of its disease. Here we use some intelligent data mining techniques to guess the most accurate illness that could be associated with patient's symptoms. The admin can add fruits and herbs to the system and its information. This system also allows the user to view the selected fruit or the herb's description which describes how the fruit or the herb will help to improve the user's health.

And if the user chooses for consulting a doctor, the system will send the notification message for related doctors based on the above symptoms. Then the available doctors will reply for it. Then it will list all the available doctors and then the user chooses a doctor among them and proceed their treatment and pay the fees through online.

So that the doctors get more customers through online.

Moreover, the doctors who are all frequently accessed by more patients will be short listed and they will get a credit amount once in a month by the organization. It's major benefit for the doctors.

Efficient doctor patient portal is a managing system that helps doctors as well as the patients by providing options of booking appointments as per the convenience of both doctor and patients with the motive of medical progress. Through this system, doctors can easily manage the appointment slots online. System will make all the empty slots visibly available to the patients, which are booked by the name of any particular patient. The system makes it easy to manage various doctors and their availability on various dates and timings. Doctors maintain the medical history of

the patient into their database so that every time any particular patient logs into the system, he/she can easily access their complete medical history whenever needed. In addition, it helps the doctor to refer their patient's medical history for any further prescriptions. This allows for an automated patient doctor handling system through an online interface. The system also contains an organ donor module. This module has an option for the registration of organ donation along with an organ search option. The module design helps to fulfill the urgent organ requirements through easy/instant searches.

CHAPTER-5
SOFTWARE DESIGN

CHAPTER-5
SOFTWARE SPECIFICATION

5.1 USE CASE DIAGRAM

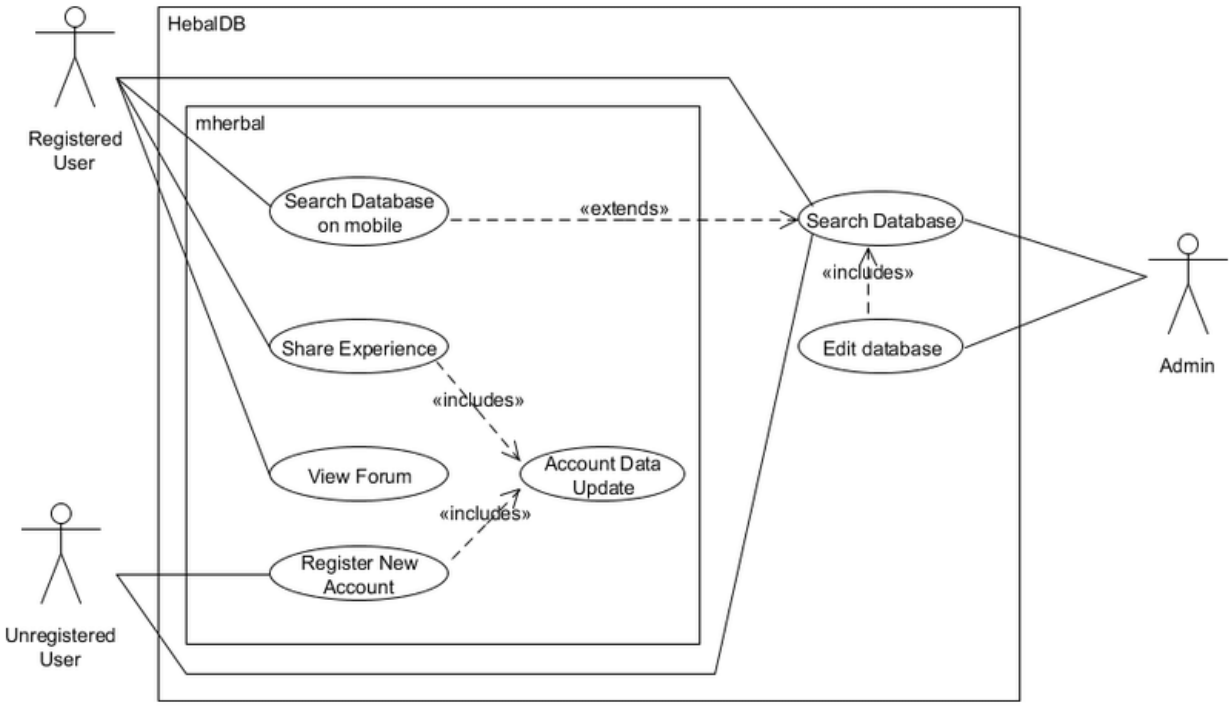

Fig 5.1- Use Case Diagram

CHAPTER-6
OUTPUT SCREEN

CHAPTER-6
OUTPUT SCREEN

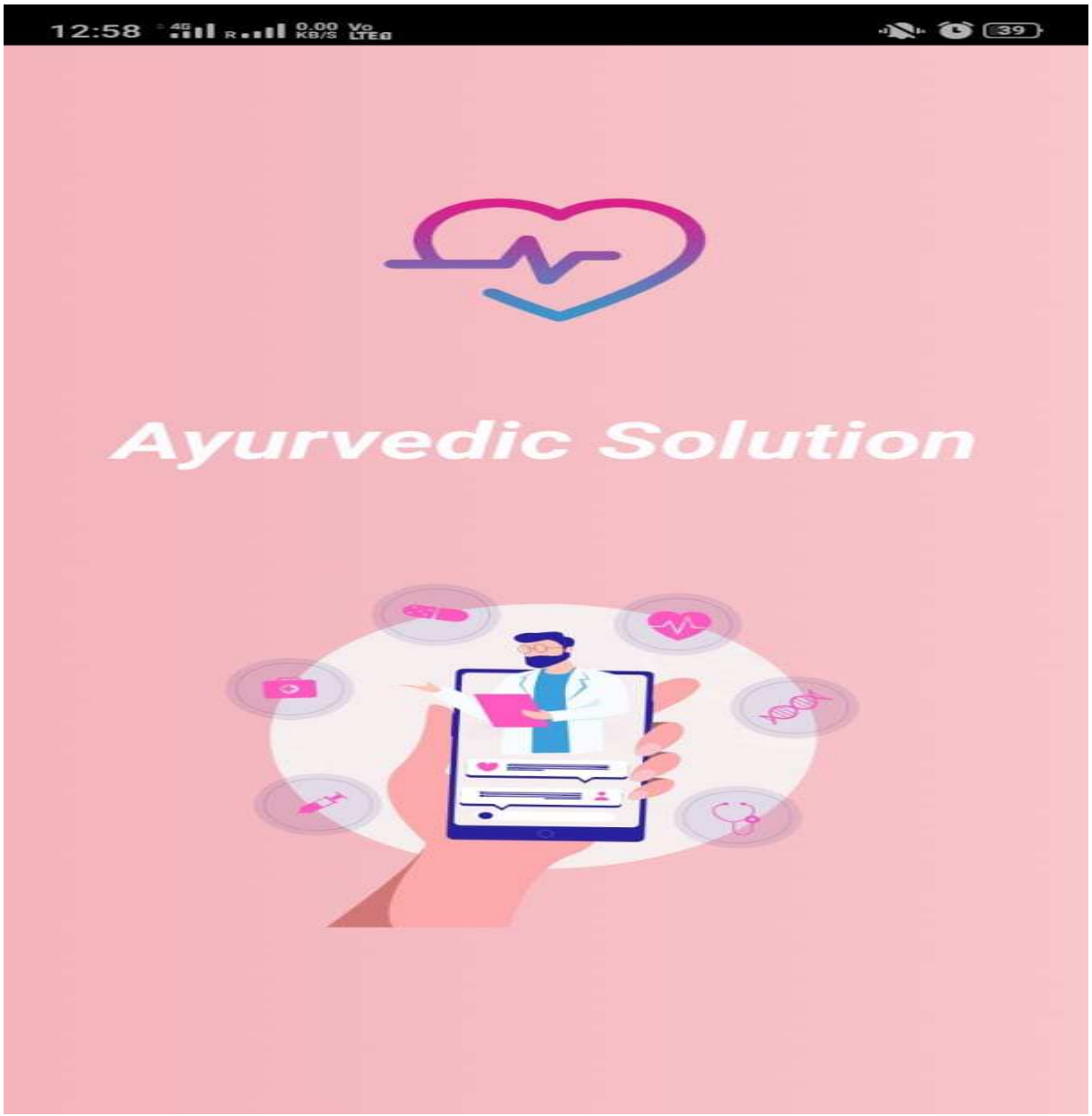

Figure 6.0 – Splash Screen

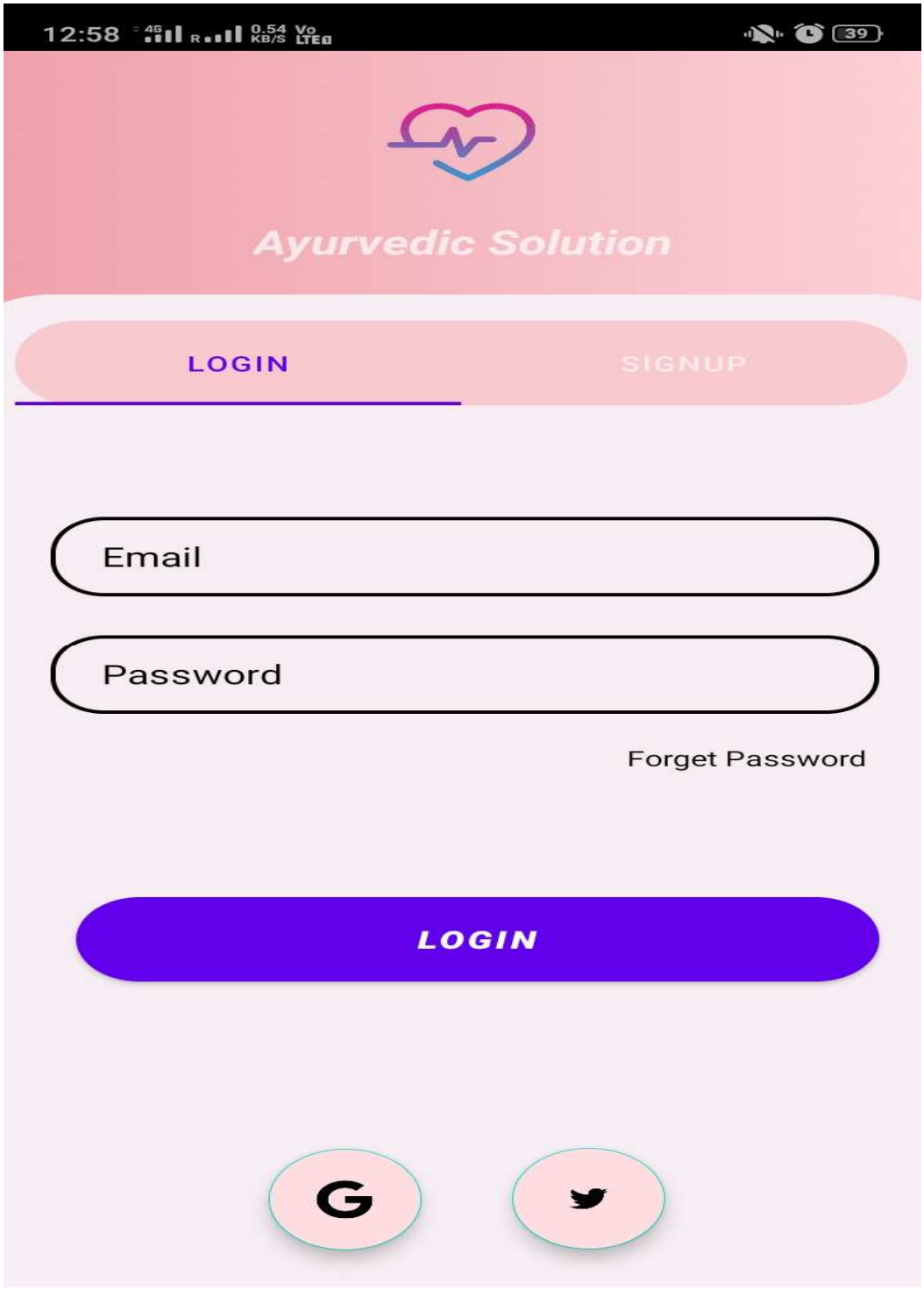

Figure 6.1 – Login page

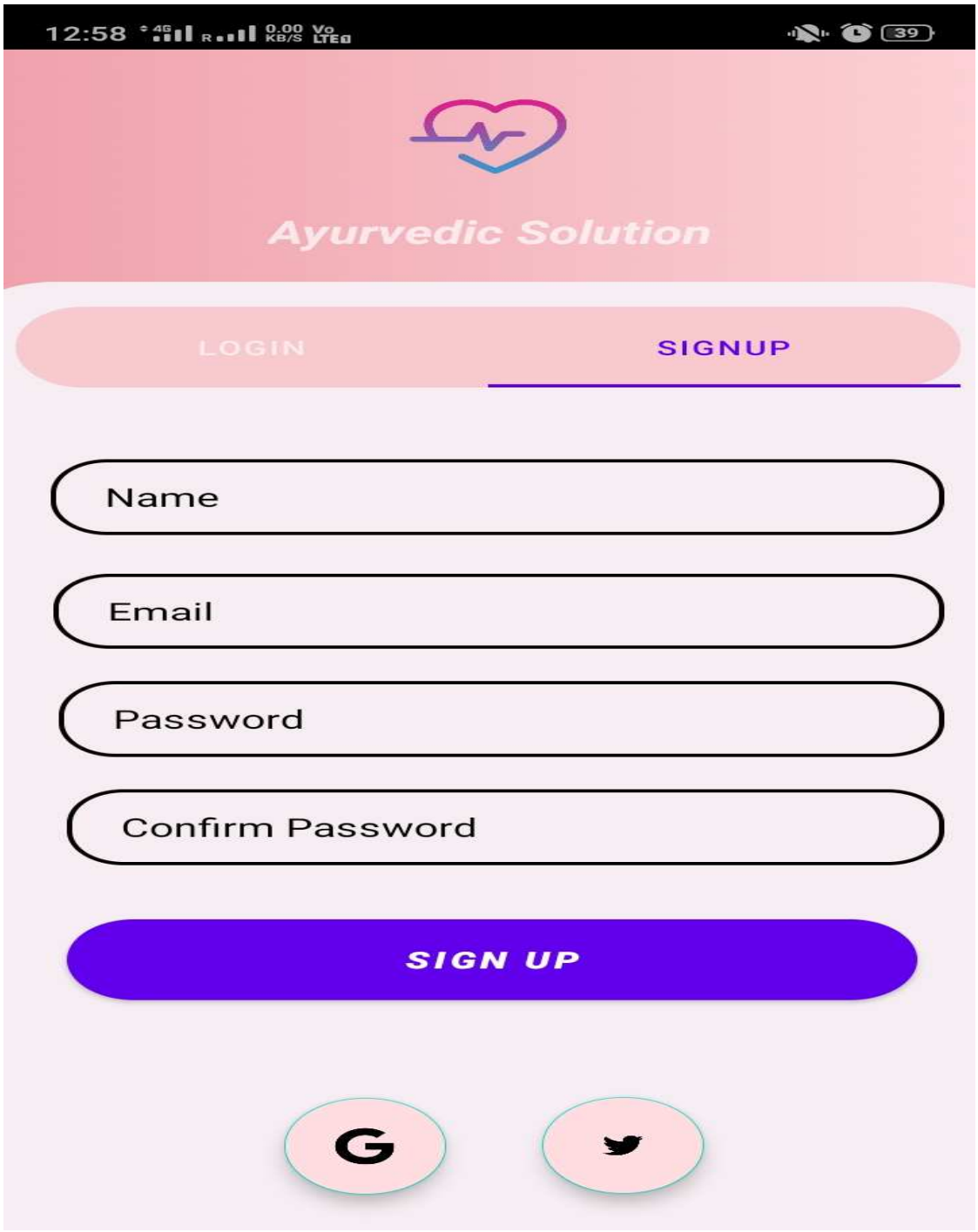

Figure 6.1 – Signup page

Figure 6.2 – Change Password page

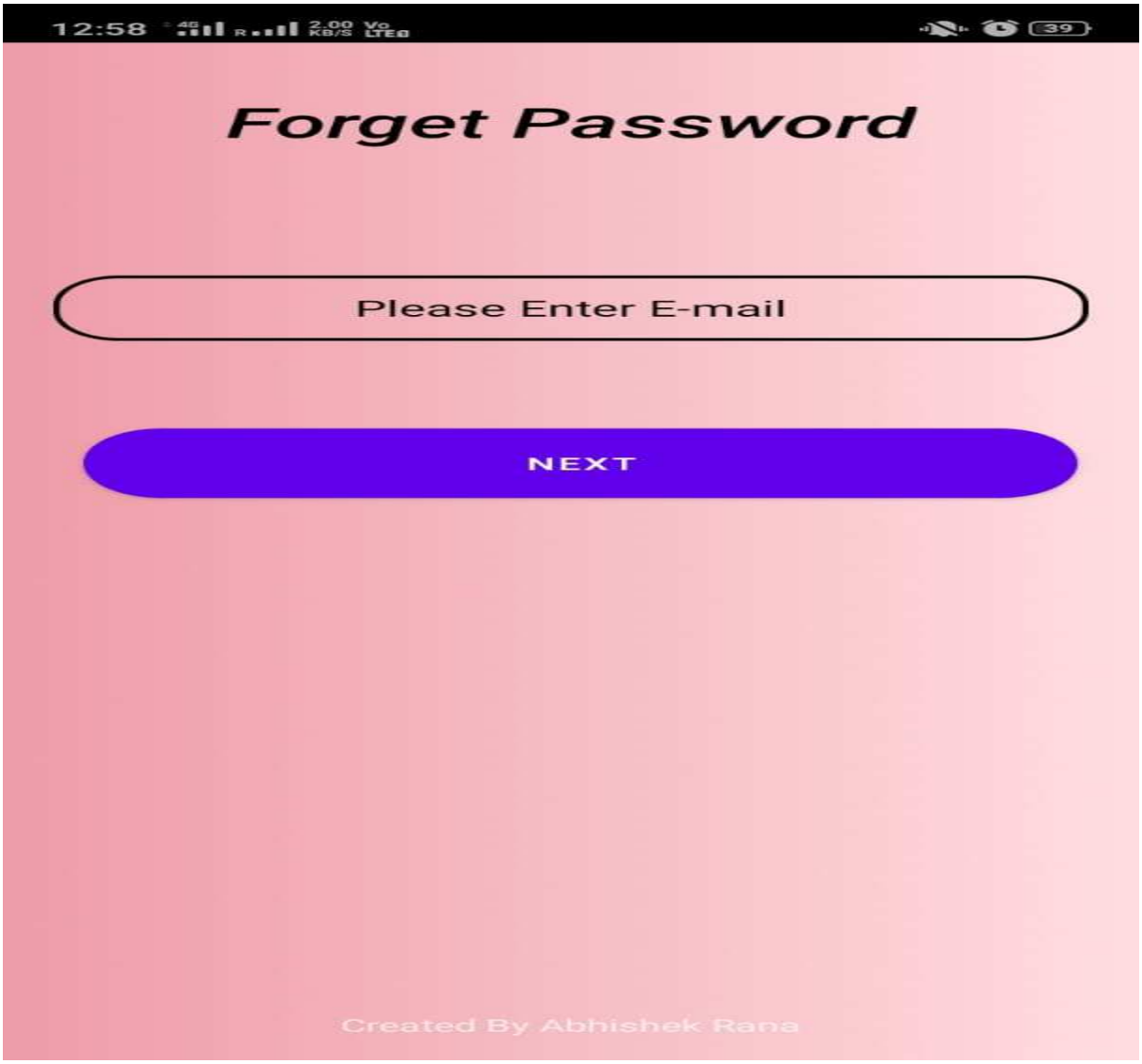

Figure 6.3– Forgot Password page

CHAPTER 7
DEPLOYMENT

CHAPTER-7

DEPLOYMENT

It might have happened so many times that you or someone yours need doctors help immediately, but they are not available due to some reason. This system provides medical suggestions for patients on any time either by go Ayurveda treatment or by consultation through online. So we hereby make a web application for patients and from that they can easily undergo treatment. The user who needs for help at their home can consult online easily. It also saves the time of the user. From this the medical suggestions get more customers from online and they earn a lot.

System Modules:

- ADMIN
- USER

ADMIN

- Login
- Post Suggestion Details
- Post Treatment Details
- View Complete History of Disease

USER

- Register
- Login
- Post Personal Details
- Post Health Details
- Post Complete History of disease
- Post Mental condition
- Post Old Treatment History
- Get Solutions

Module Description

Login Module

The main activities in the application are the user login page for user. The other modules are followed by this login page. This module records only user and password of the user.

Registration Module
Another main function of our proposed system is registration, in order to register with the

unique application details such as name; password, email, place and time are required.

ADMIN

- **Post suggestion Details**
  Admin can post solutions for patient disease.

- **Post Treatment Details**
  Admin can only post treatment details. Like

- Ayurveda Treatment

- **View complete history of disease Details**
  Admin can only view history of disease details. Like

- Patient mental condition

- Symptoms of disease

- Digestive system

USER

- **Post Personal Details**
  User can post personal details like Name, Gender, and Age and so on.

- **Post Old Treatment Details**
  User can Post treatment details. Like

- What type of medicines

- **Post Health Details**
  User can post Health details. Like

-
  - Name your disease
  - Symptoms of health

GLOSSARY OF TERMS

(In alphabetical order)

A

Android is an operating system that is based on the Linux kernel. It runs on touch screen panel-based smartphones. It is an open-source system wherein the users are allowed to create their own applications.

Application, An application, or application program, is a software program that runs on your device. Web browsers, email programs, word processors, games, and utilities are all applications. The word "application" is used because each program has a specific application for the user.

G

GUI The graphical user interface is a type of user interface that allows users to interact with electronic devices through graphical icons and visual indicators such as secondary notation, instead of text-based user interfaces, typed command labels or text navigation.

GUIs were introduced in reaction to the perceived steep learning curve of command line interfaces (CLIs), which require commands to be typed on a computer keyboard.

P

PDF The Portable Document Format (commonly referred to as PDF) is a file format used to present documents in a manner independent of application software, hardware, and systems. Each PDF file encapsulates a complete description of a fixed-layout flat document, including the text, fonts, graphics, and other information needed to display it.

U

Use case diagrams consist of actors, use cases and their relationships. The diagram is used model the system/subsystem of an application. A single use case diagram captures a particular functionality of a system.

PROJECT SUMMARY

PROJECT SUMMARY

About Project

Title of the project	**Ayurvedic Solution For Disease Application**
Semester	8th
Members	4
Team Leader	Abhishek Singh Rana
Describe role of every member in the project	Name - Abhishek Singh Rana Role - Development of the Application Name - Faisal Siddique Role - Design of the Application and documentation work Name - Aditi Upadhyay Role - User Interface designing UI and Data work Name - Ankita Sinha Role - Design of database system and documentation work
What is the motivation for selecting this project?	It is impossible for many persons to visit doctor at any time. In that case the web application we developed may help peoples to seek doctor's help at required time, getting appointment from doctor and paying the bill online. It is not necessary for all the patients to take Ayurveda medicines; they can also get the Ayurveda treatment from the developing Web Application.
Project Type **(Desktop Application, Web Application, Mobile App, Web)**	Mobile Application

Tools & Technologies

Programming language used	JAVA
Compiler used (With version)	JDK
IDE used (With version)	Android Studio
Front End Technologies (With version, wherever Applicable)	JAVA and XML
Back End Technologies (With version, wherever applicable)	JAVA
Database used (With version)	None

Software Design & Coding

SDLC model followed **(Waterfall, Agile, Spiral etc.)**	Waterfall Model
Is the prototype of the software developed?	No
Why is the above SDLC model followed?	The WATERFALL SDLC model focuses on better outcome.
Justify that the SDLC model mentioned above is followed in the project.	Firstly, start with planning and analyses requirements then design and develop the project after that test the project before deployment.
Software Design approach followed **(Functional or Object Oriented)**	Function Oriented

Name the diagrams developed (According to the Design approach followed)	Use Case Diagram
In case Object Oriented approach is followed, which of the OOPS principles are covered in design?	--
No. of Tiers (Example 3-tier)	1-Tier
Total no. of front-end pages	3
Total no. of tables in database	0
Database is in which Normal Form?	Internal Storage
Front end validations applied (Yes / No)	Yes
Session management done (in case of web applications)	--
Is application browser compatible (in case of web applications)	--
Exception handling done (Yes / No)	Yes
Commenting done in code (Yes / No)	Yes
Naming convention followed (Yes / No)	Yes
What difficulties faced during deployment of the project?	None
Total no. of Use-cases	1
Give titles of Use cases	Use Case Diagram

Project Requirements

MVC architecture followed (Yes / No)	No
If yes, write the name of MVC architecture followed (MVC-1, MVC-2)	--
Design Pattern used (Yes / No)	--
If yes, write the name of Design Pattern used	--
Interface type (CLI / GUI)	GUI
No. of Actors	01
Name of Actors	User
Total no. of Functional Requirements	--
List few important non- Functional Requirements	--

Testing

Which testing is performed? (Manual or Automation)	Manual
Is Beta testing done for this project?	No

Write project narrative covering above mentioned points

Today, the cost of health care is constantly rising, and affecting people's ability to afford health coverage. Drug-based medicines are being unaffordable for economically poor countries like India and problematic in the Western countries due to numerous side effects. The drug should be the last rather than first mean of treatment, beginning with the natural healing method like Ayurveda. One of the Ayurvedic treatment modalities such as *Panchkarma* can remove disease before its manifestation. Having all the above beauties, Ayurveda is still lagging behind because of the lack of scientific evidence in many cases and poor research methodology.

- The Project focuses on the implementation phase of the Aayu Project. Firstly, the prototype of the technology stack which has been selected has been presented. Thereafter a detailed discussion of the implementation of the data science, backend and frontend components are carried out.
- Finally, the deployment and the CI/CD pipeline are examined.

Student Signature	Student Signature	Guide Signature
Abhishek Singh Rana	**0187CS181004**	**Puneet Himthani**
Faisal Sidhqui	**0187CS181052**	
Aditi Upadhyay	**0187CS181005**	
Ankita Sinha	**0187CS181027**	