Healthcare App

Mehul Sharma[1], Manav Yadav[2], Ashwani Kumar[3]

UG Student, Dronacharya College of Engineering, Gurgaon, India[1]

UG Student, Dronacharya College of Engineering, Gurgaon, India[2]

Assistant Professor, Department of Computer Science and IT[3]

Dronacharya College of Engineering, Gurgaon, India

Abstract: *The Healthcare app is a user-friendly platform that allows people to search for medical care and book appointments with doctors, dentists, pathlabs, and medical stores. Upon login or signup, users can receive notifications about medical services available in their area. The app uses the user's location to show relevant medical facilities nearby. Users can easily book appointments with healthcare professionals and pay through debit cards. Additionally, the app allows users to modify their appointment schedules by cancelling or postponing appointments as per their convenience. With its comprehensive features and ease of use, the Healthcare app aims to provide a convenient and hassle-free experience for users seeking medical care..*

Keywords: Programming, Flutter, Medical Sector, Mobile Application, App Development, Cross Platform Development
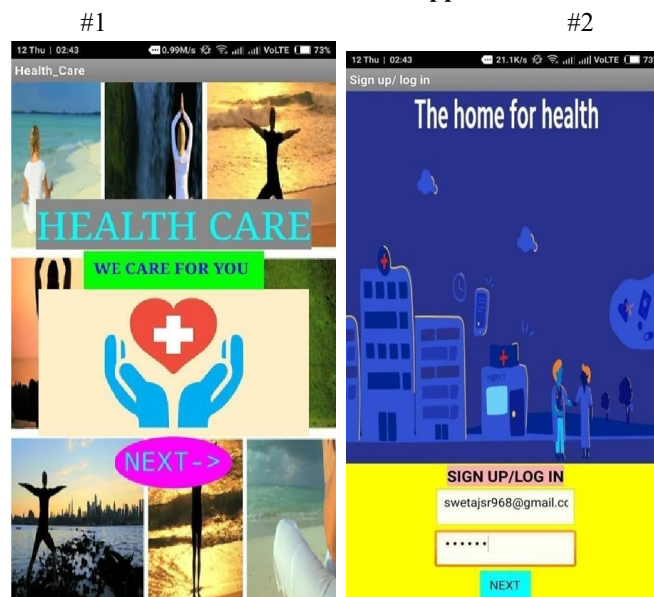
I. INTRODUCTION

Healthcare is an app which will provide a platform where people can search for medical care . It also provides facilities for booking appointments of doctors . It targets the users who need to visit medical facilities in their location.

- • This app first asks the user to login or signup which will help them to get notifications about medical services present in their location.
- Based on their location , the users can access physicians, dentists , pathlabs and medical stores.
- The user can also book appointment doing payment through a debit card.
- They can also make changes in appointment schedule i.e. cancel or postpone the appointment according to their preferences.

II. IMPLEMENTATION
2.1 User Interface of our Application.

#1   #2

Whenever user opens the application, the following #1 page is loaded. After this when user clicks "NEXT" it takes the user to #2 page i.e., the Signup and Login Page. The user then chooses to Sign Up or Log In into the application using email and password.
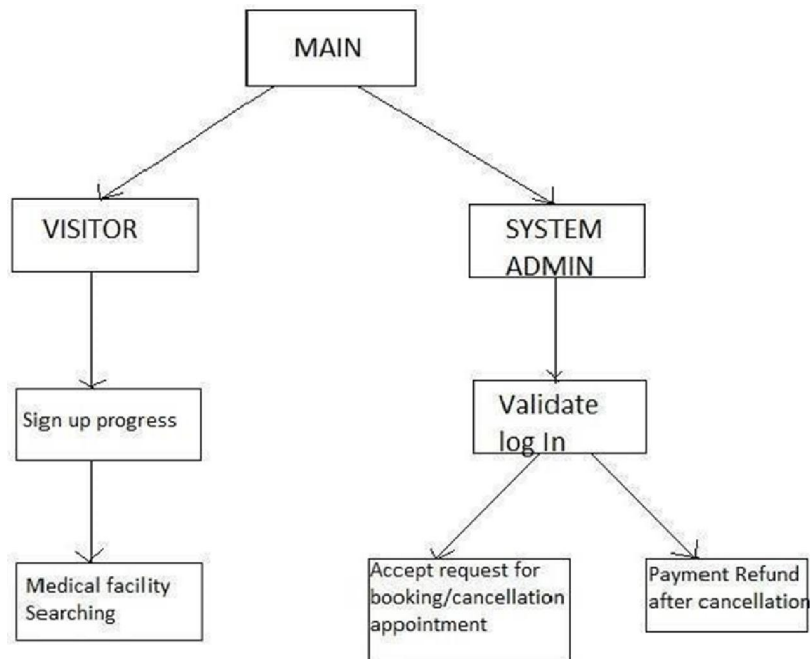
Data Dictionary:-

Login_Details = email + password

CHECKING PASSWORD VALIDATION

1. Ifstream fin("VISITOR_FILE",ios::binary);

2. String id,password;

3. Flag=0;

4. gets(id);

5. gets(password)

6.   while (fin. read((char*)&e,sizeof(e))

7. {

8. If(id==e.id && password==e.password)

9. {

10.   Flag=1;

11.   Given access to system continue;

12.}

13.}

14. If(flag==0)

15. cout<<"access denied";

16.fin.close();

17.return;

This is basically how the architecture of this application is designed. This diagram shows the flow at both Visitor and System Admin end.

After Logging in the application, this is how the next page is showed to the users where they have to fill their basic details like Name, Age etc.
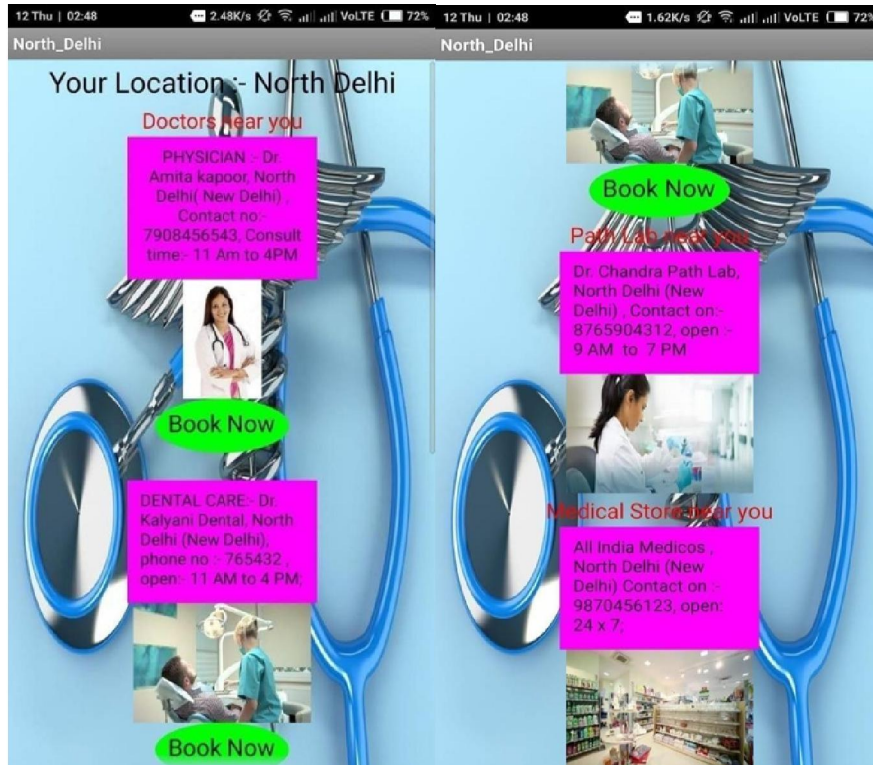
Data Dictionary:-
Login_Details = email + password
Visitor_Details= Name + Age+ Phone_no + Email ID

After filling up of visitor details, the application takes the user to the next page i.e., the location page. In this the user has to choose their nearby location where they can visit the doctors.

As soon as the application gets the location from the user, it fetches the information from the database and provide the suitable list of doctors, clinics, path labs etc according to the demand of the user.

User has the facility to book an appointment online using our application, if the user books the appointment through our application then they have to click Book Now and the application goes to

Copyright to IJARSCT
www.ijarsct.co.in

DOI: 10.48175/IJARSCT-10005

ISSN
2581-9429
IJARSCT

44

another page where the user has to fill the payment details and choose the payment way, and through a secure way the application does the transaction.

III. TECHNOLOGY USED

Flutter

Flutter is an open-source mobile app development framework created by Google. It allows developers to build high-performance, visually appealing, and cross-platform applications for iOS, Android, web, and desktop platforms using a single codebase. Flutter uses the Dart programming language, which is also developed by Google.

Flutter offers a wide range of features and benefits, including:

1. Hot reload: Allows developers to see changes made to the app immediately, without having to restart the app.
2. Widgets: Flutter comes with a rich set of customizable widgets that allow developers to build beautiful and responsive user interfaces.
3. Cross-platform development: Flutter allows developers to create apps for multiple platforms using a single codebase, saving time and effort.
4. Fast development: Flutter's widgets are highly customizable and offer various built-in options that can be easily integrated into the app.

C++

C++ is an object-oriented programming language which gives a clear structure to programs and allows code to be reused, lowering development costs. C++ is portable and can be used to develop applications that can be adapted to multiple platforms. C++ is fun and easy to learn! C++ is one of the world's most popular programming languages. C++ can be found in today's operating systems, Graphical User Interfaces, and embedded systems.

IV. TOOLS USED

A. GITHUB

GitHub is a code hosting platform for version control and collaboration. It lets you and others work together on projects from anywhere. .Version control helps developers track and manage changes to a software project's code. As a software project grows, version control becomes essential. Github is just like any other platforms that uses Git services. Git is a specific open-source version control system created by Linus Torvalds in 2005.Specifically, Git is a distributed version control system, which means that the entire codebase and history is available on every developer's computer, which allows for easy branching and merging.

B. Visual Studio Code

Visual Studio Code (famously known as **VS Code**) is a free open source text editor by Microsoft. VS Code is available for Windows, Linux, and macOS. Although the editor is relatively lightweight, it includes some powerful features that have made VS Code one of the most popular development environment tools in recent times.VS Code supports a wide array of programming languages from Java, C++, and Python to CSS, Go, and Dockerfile. Moreover, VS Code allows you to add on and even creating new extensions including code linters, debuggers, and cloud and web development support.

V. CONCLUSION AND FUTURE SCOPE

Mobile app development is the act or process by which a mobile app is developed for one or more mobile devices, which can include personal digital assistants (PDA), enterprise digital assistants (EDA), or mobile phones. Such software applications are specifically designed to run on mobile devices, taking numerous hardware constraints into consideration. In this project we have used Flutter. Flutter is an open-source mobile app development framework created by Google. It allows developers to build high-performance, visually appealing, and cross-platform applications for iOS, Android, web, and desktop platforms using a single codebase. Flutter uses the Dart programming language, which is also developed by Google.Flutter apps are faster than not only apps built using React Native but also native apps built for specific platforms.Since modern day

customers prioritize speed and usability over anything else, Flutter is likely to be the choice of development for mobile app developers in the future.

REFERENCES

[1]. https://flutter.dev/

[2]. https://github.com/

[3]. https://en.wikipedia.org/wiki/C%2B%2B

[4]. https://code.visualstudio.com/docs

[5]. https://www.integratepayments.com/payment-gateway/direct-post-payment-gateway-api

BIOGRAPHY

Hello Readers, This is Mehul Sharma and Manav Yadav. An, undergraduate students of Computer Science and Information Technology Background having deep interest in the App Development