

FLUTTER BASED APPLICATION MED EASY

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This Report Presented in Partial Fulfillment of the Requirements for the
Degree of Bachelor of Science in Computer Science and Engineering

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DAFFODIL INTERNATIONAL UNIVERSITY

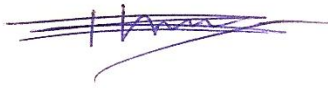
DHAKA, BANGLADESH

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APPROVAL

This Project titled "**Flutter Based Application Med Easy**", submitted by ***Md. Abu Bakar Siddique*** and ***Shammi Sultana*** to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on **2nd of June, 2021**.


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We hereby declare that, this project has been done by us under the supervision of **Md. Jueal Mia, Lecturer (Senior Scale), Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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ABSTRACT

The project's primary focus is to develop multi-cross platform app that will be capable to demonstrate the location of pharmacy near user. So that user can find the nearest location of pharmacy. Users just need to accept the location permission to use. Users also can call to pharmacy from the pharmacy information page. Users also can search about different types of medicine, details information about medicines like usage, side effects, who can use this medicine etc. Users also can set reminder for medicine taking time. Users can set time and date for reminder of medicine. This will notify users by vibrating phone and also showing notification in notification panel on user's phone. Users also can see the latest news of Covid-19 Bangladesh. From this user can see the Government info about Covid-19. Users have to Sign Up for using this service. So that the developers can count the users which can help developer to count how much users are using this service. This app is cross platform so we can use it in Android, IOS, Windows(beta), Linux(beta), Website.

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CHAPTER 1

Introduction

1.1 Introduction

Flutter Based Application Med Easy project satisfies the needs of users who wants to find pharmacy near him/her. In this project there are also some other features. From pharmacy location user can find the nearest location of pharmacy and also many shops, hospitals, banks, college etc. [2]. Because this feature is built with Google Map API [3]. So, user can find many other stuffs too. From the pharmacy information page Users can call to the pharmacy for ordering medicine. Users also can search medicines. In this medicine section user can find many useful stuffs like usage, side effects of medicine etc. The other feature is Covid-19 news of Bangladesh. The other feature is medicine reminder [9]. In this feature user can set time for taking medicine. From this user will notify with phones vibration and also from notification panel on their phone. All these features can be used if user will sign up in the service.

1.2 Motivation

Sometimes we go somewhere and fall sick and we need medicine for recovery and we don't know the location of pharmacy [1]. We know there are lots of people in a country who is already sick and they need medicine in time. But we don't know the pharmacy phone number that's why we can't make a call. Sometimes we want to know the current situation of Covid-19 of Bangladesh [18]. Sometimes we need to search for medicines detail information. We can find all these things through online search but not in one place like app or website. We have tried these all things in one app and website. All these solutions will be available in this app and website.

- In this system user can find the nearest location of pharmacy near him/her. User needs to accept location permission on their phones. Can call to the pharmacy.
- User can check the current situation of Covid-19 in Bangladesh.
- User can set reminder for medicine taking time.

1.3 Objectives

The objective of Flutter Based Application Med Easy is the development a system that will tell user to find pharmacy location near him/her. The main aim of this project is the solution to find the nearest location of pharmacy near user. User can order medicines by calling to the pharmacy and get it through cash on delivery. User will be able to know about current Covid-19 situation. User can find details information about Covid-19 situation of Bangladesh. Users also can set medicine reminder. This reminder can take both time and date and also medicine name. User will be notified through vibration and also in notification panel with medicine name in their phones. Users also can search for medicine. From this user will be able to view details information about medicine like usage of medicine, side effects of medicine etc. information.

1.4 Expected Outcomes

Though we live in a global village, we have all things in our hand right now. If we need any software or any technology, we first make it then testing it and then release it for global users. Finding a pharmacy is not a difficult task. We can find through Google map. We have to search for it. If we need any medicine information, we search it online. If we need to know the current situation of Covid-19 in Bangladesh we search it online. Sometimes we forget to take important medicines in time. There are many individual apps for this work. But there is no app or website that will give users all of these things in one system. So, using this system user can find the nearest pharmacy location thorough Google API [7]. User need to accept location permission in their systems or platform. User can call to the pharmacy for medicine if necessary. User can set reminder for medicine taking time. So, no medicine will be missed from user. User also can search medicine information in details thorough this app. User also can find many useful news of Covid-19.

1.5 Report Layout

It is specified a method for preparing, visualizing, evaluating, and delivering a system. Normally, we are making a "Flutter Based Application Med Easy" project. We were able to complete our project due to project time differentiation under the supervision of our reputable project supervisor.

We appear to address Motivation, Objectives, and Expected Outcome in Chapter One, "Introduction." We appear to address the linked project of "Flutter Based Application Med Easy" and comparative studies regarding this project in Chapter Two titled "Background." There are seven chapters and references in this report. Chapter One is titled 'Introduction' which describes introduction of this paper includes five sections. Chapter Two is titled 'Background' which describes backgrounds of this paper includes five sections. Chapter Three is titled 'Requirements Specifications' which describes different types of models and description includes five sections. Chapter Four is titled 'Design Specifications' which describes different types of designs like front-end, back-end designs includes four sections. Chapter Five is titled 'Implementation & Testing' which describes different types of implementations, testing and test results includes four sections. Chapter Six is titled 'Impact on Society, Environment & Sustainability' which describes consequences on society, environment, ethical aspects and resilience plans includes four sections. Chapter Seven is titled 'Conclusion & Future Scope' which describes the conclusion and future developments of this project includes two sections.

CHAPTER 2

Background

2.1 Introduction

Flutter Based Application Med Easy project's main purpose is the needs of user who wants to find pharmacy near him/her. In this project there are also some other features. From pharmacy location user can find the nearest location of pharmacy and also many shops, hospitals, banks, college etc. Because this feature is built with Google Map API [3]. So, user can find many other stuffs too. Users can call to the pharmacy. Users also can search medicines. In this medicine section user can find many useful stuffs like usage, side effects of medicine etc. The other feature is Covid-19 news of Bangladesh. The other feature is medicine reminder. In this feature user can set time for taking medicine. From this user will notify with phones vibration and also from notification panel on their phone. All these features can be used if user will sign up in the service.

2.2 Related Works

Google Maps is a web mapping service developed by Google. It offers satellite imagery, aerial photography, street maps, 360° interactive panoramic views of streets, real-time traffic conditions, and route planning for traveling by foot, car, bicycle and air, or public transportation [5]. Google Maps uses machine learning in combination with various data sources including aggregate location data, historical traffic patterns, local government data, and real-time feedback from users, to predict traffic.

- We are using this map API in our app [7].
- We are also using Covid-19 Bangladesh website for WebView in our app.
- Also using Medicine reminder with Notifications.

2.3 Comparative Studies

Flutter Based Application Med Easy is an online service. It will be available in cross platform like Android, IOS, Windows(beta), Website, Linux(beta). User have to sign up to use this service. With the improvement of Information technology sectors, now users can save many times searching these stuffs online in different portal for different things. This app can provide users with bug free information in real time or web portal [26].

2.4 Scope of the Problem

Flutter Based Application Med Easy provides the accurate information of pharmacy location which is provided by Google API [5][6]. Devices have to know the required permission like location which is need to enable. If not enabled then location will be not working. So, it is mandatory to accept location permission in devices. The Covid-19 current news is depending on the Government website. If there had problems then the news section will face problems showing details news and information.

2.5 Challenges

The first challenge is location services. This service is totally depending on Google location API. If the API works correctly then this service will work fine. If the location service is down somehow then our service will not work. If the google location API has the ability to show the details information of a pharmacy like phone number, then it will be easy to make call and give order for medicines. If the location API has no ability to do such works, then the service will to give orders of medicine. Though this is a free service that's why these limitations have occurred. Also, if I want all the location of pharmacy of Bangladesh then I have to collect all the location like longitude and latitude and put it manually. Then I have to create an API to use the perfect service. There is another thing is this is not a final version of app or website because of online data storage problems. We are using free version of Google Firebase, that's why there are limitations of storage.

CHAPTER 3

Requirement Specification

3.1 Business Process Modeling

Flutter Based Application Med Easy, the emphasis of this application is on the standard of business process software development. Modeling (Business Process) is a discipline that combines modeling, automation execution, control, measurement and business activity optimization flows for the benefit of company objectives, customers and partners across company lines [19]. Data Flow Chart shows the corporate event sequence. A company needs to focus on software benefits. BPM's objective has been to develop the solution and precision of the specific role and to distribute to consumers an explicit and clear definition of the interface.

3.2 Requirement Collection and Analysis

For project managers and internal partners, gathering project specifications is the most crucial factor of the Software Development Life Cycle (SDLC).

In this part project team works for users need. What is needed for end users and from that view team works for collecting specific requirements and analysis these requirements for production. So, this is one of the important parts. In our app, we need only users email and password for registration. Our database holds only the emails and passwords from users [26].

3.3 Use Case Modeling and Description

This diagram illustrates how people interact with apps. This software has Login and Sign-Up options. As a new client, they must first Sign-Up before they can login and use the system. The system's use case demonstrates only the system's primary features. This diagram has many usability like:

- Registration and Login.
- Can view the maps.
- Can view the Medicine information
- Can view the information of Covid-19 current situation

Use Case Diagram:

3.3.1 Section User:

In figure 3.3.1, this is for user. A user can access this application by Registering with username, email, account type and password. Then user have to login to go to Homepage. Homepage contains five sections. Each section has different types. These types are:

- Pharmacy Location
- Medicine Information
- Medicine Reminders
- Covid-19 Bangladesh situation
- About US

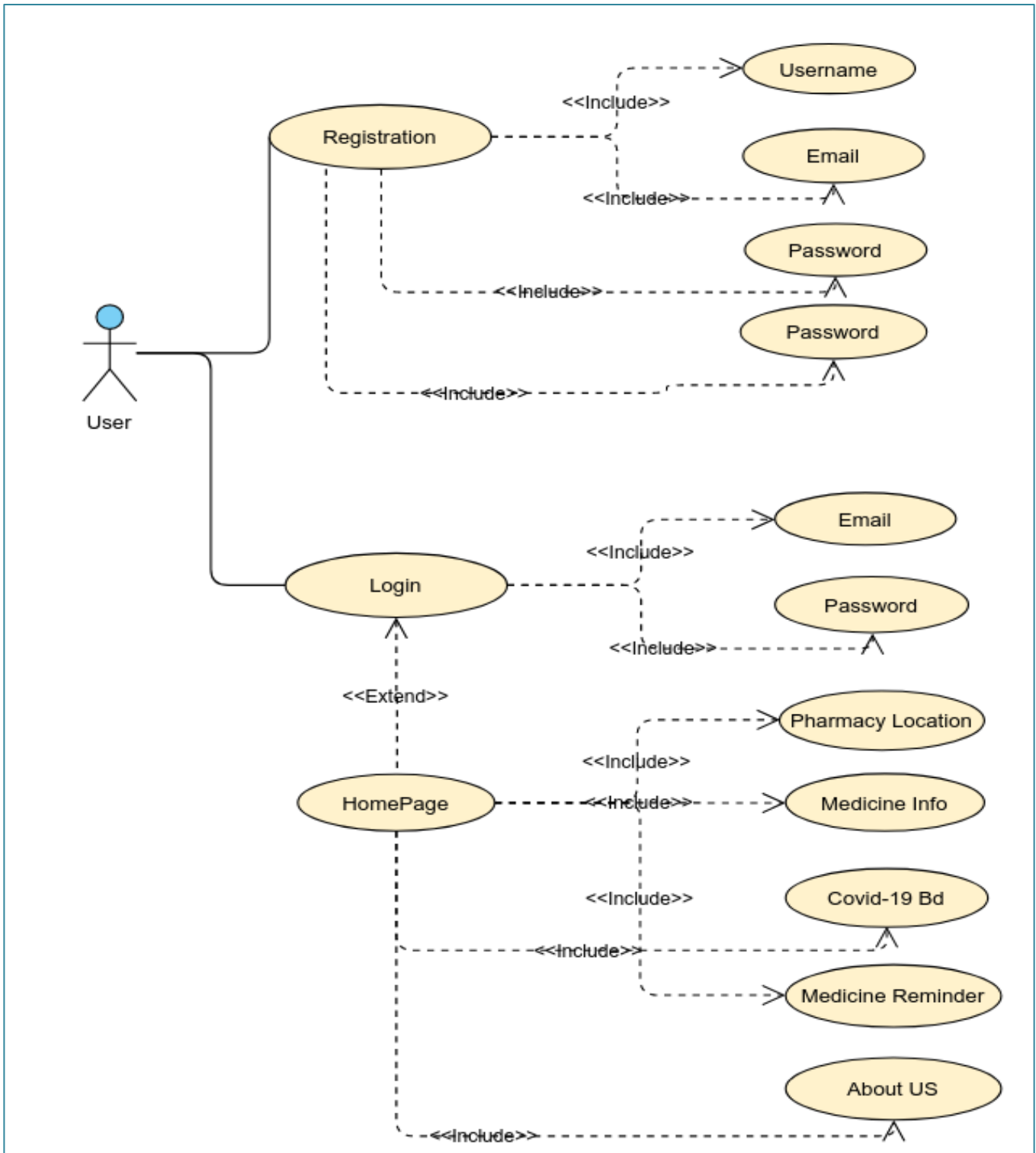


Figure 3.3.1: Use Case Diagram for User in mobile app.

3.3.2 Section User Website:

In figure 3.3.2, this is for website user. A user can access this website by going to domain name or URL. Then user will go to Homepage direct. Homepage contains five sections. Each section has different types. These types are:

- Pharmacy Location
- Medicine Information
- Covid-19 Bangladesh situation
- About US
- Contact US

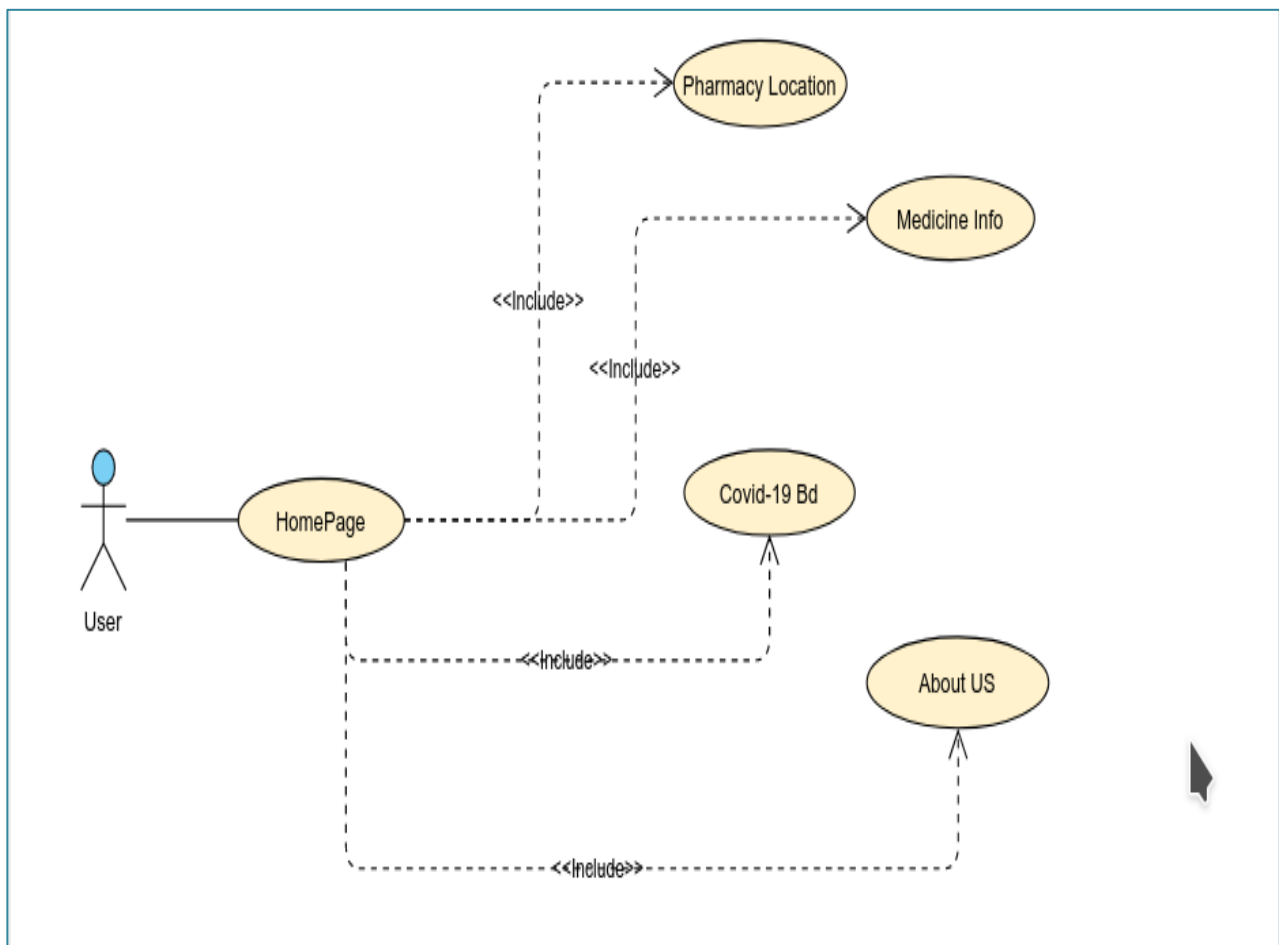


Figure 3.3.2: Use Case Diagram for User in Website.

3.3.3 Section Admin Website:

In figure 3.3.3, this is for website admin. An admin can access this admin panel by login. Then admin can access this whole panel where there are many sections. Admin panel contains many sections. Each section has different types. These types are:

- Add Sections
- Add Post
- Edit Post
- Add Header or Footer

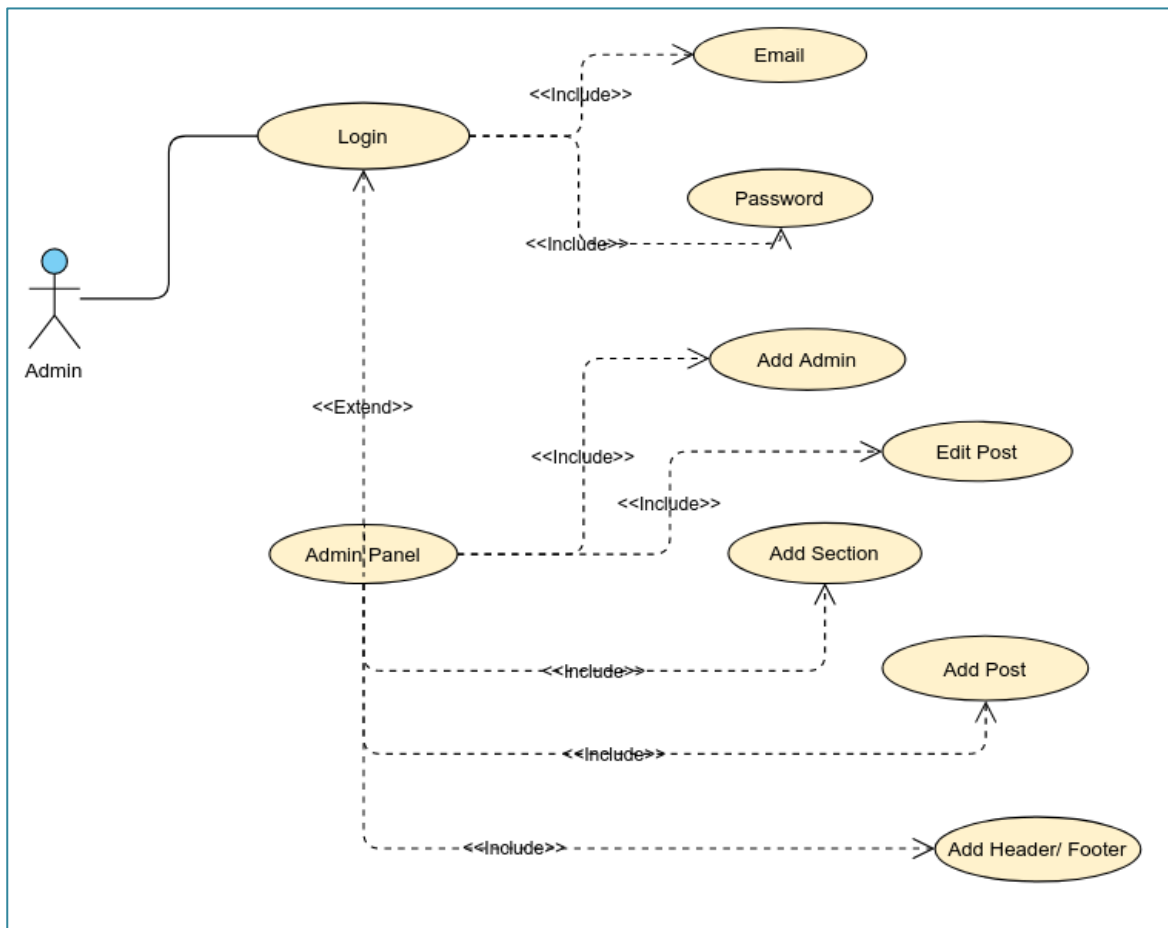


Figure 3.3.3: Use Case Diagram for Admin in Website

3.4 Logical Data Model

The properties of database items and their connection to a database dictionary are discussed in this section and confusion-free tables. These data objects are factored. Two major domain classes are used in this application system. Firstly, storing User Email, Name, Password information, and secondly storing admin data. A method objectively depicts data contained in a database in the logical data model.

3.5 Design Requirements

Design is the phase after demand and development specification. Just three engineering exercises – planning, scripting, execution, and checking – have been carried out while analyzing and specifying software design specifications for the software to be developed and checked. The design practices in this stage are of prime importance because decisions influence the success and ease of maintenance of program deployment. These decisions ultimately have to do with system stability and maintenance. Design is the only means of translating the specifications of the client into completed product or device precisely. Design is the location where the production of quality is promoted. Software architecture is a method by which software representation translates specifications. Two steps are taken to develop software. Initial design concerns the conversion of data specifications.

- Use case Diagram
- Sequence Diagram
- The ER Diagram
- The State Diagram

3.5.1 The ER Diagram

This diagram defines objects that interrelate with a particular domain. It consists of entities and defines relationships between certain entities' instances. The E-R diagram for User in Application

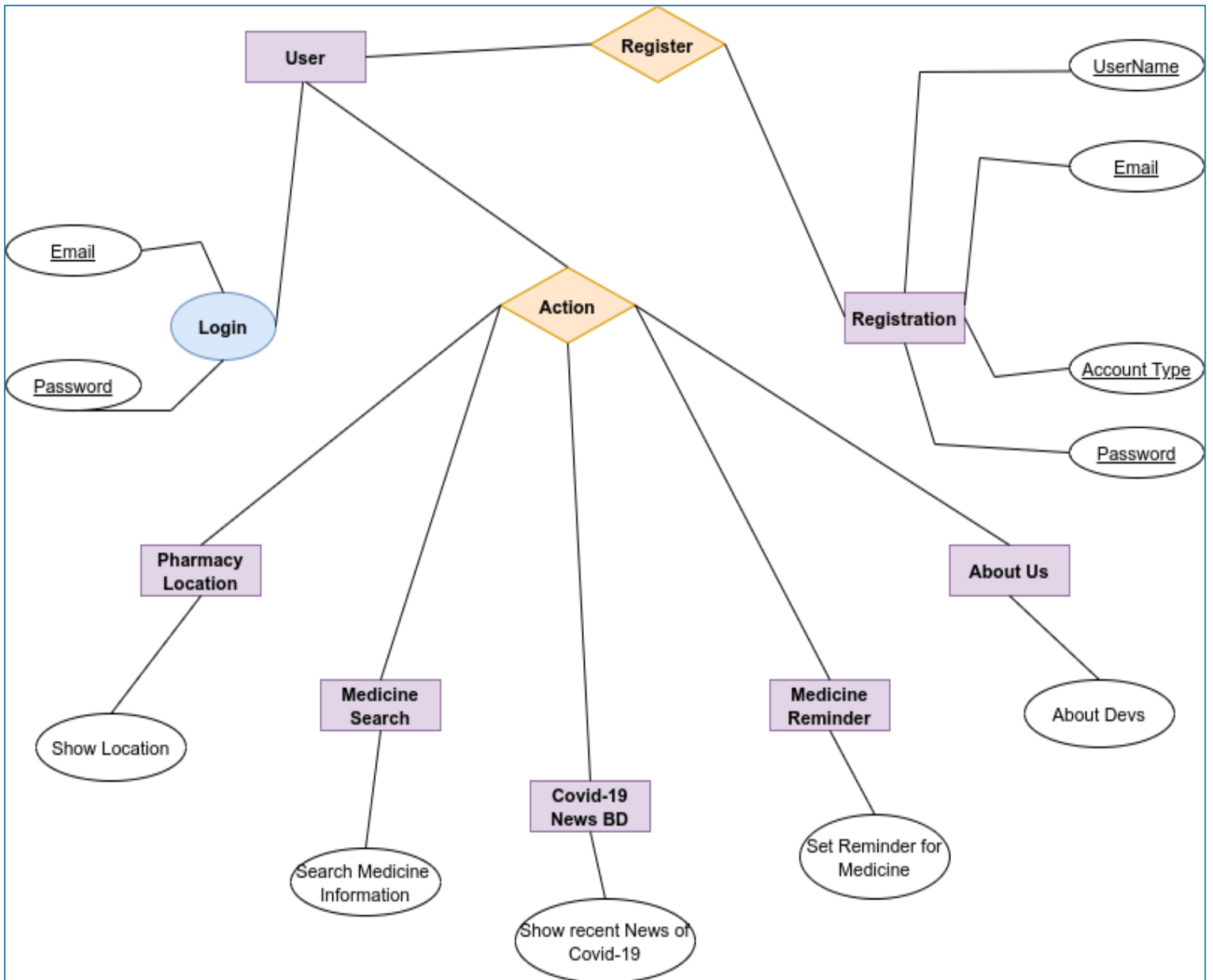


Figure 3.5.1.1: ER Diagram for User in Application

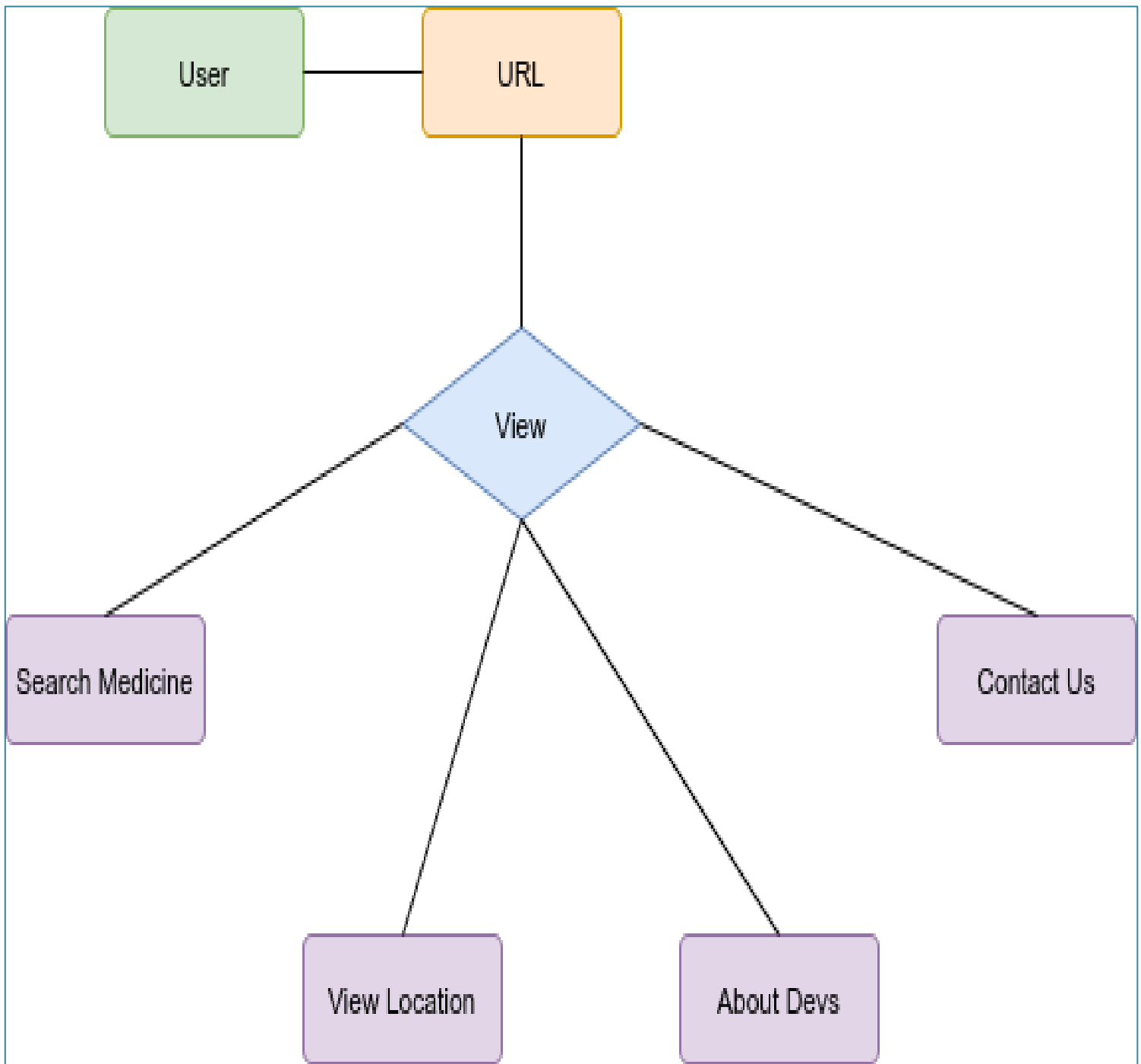


Figure 3.5.1.2: ER Diagram for User in Website

3.5.2 The State Diagram

The state diagram looks like this for Flutter Based Application Med Easy system.

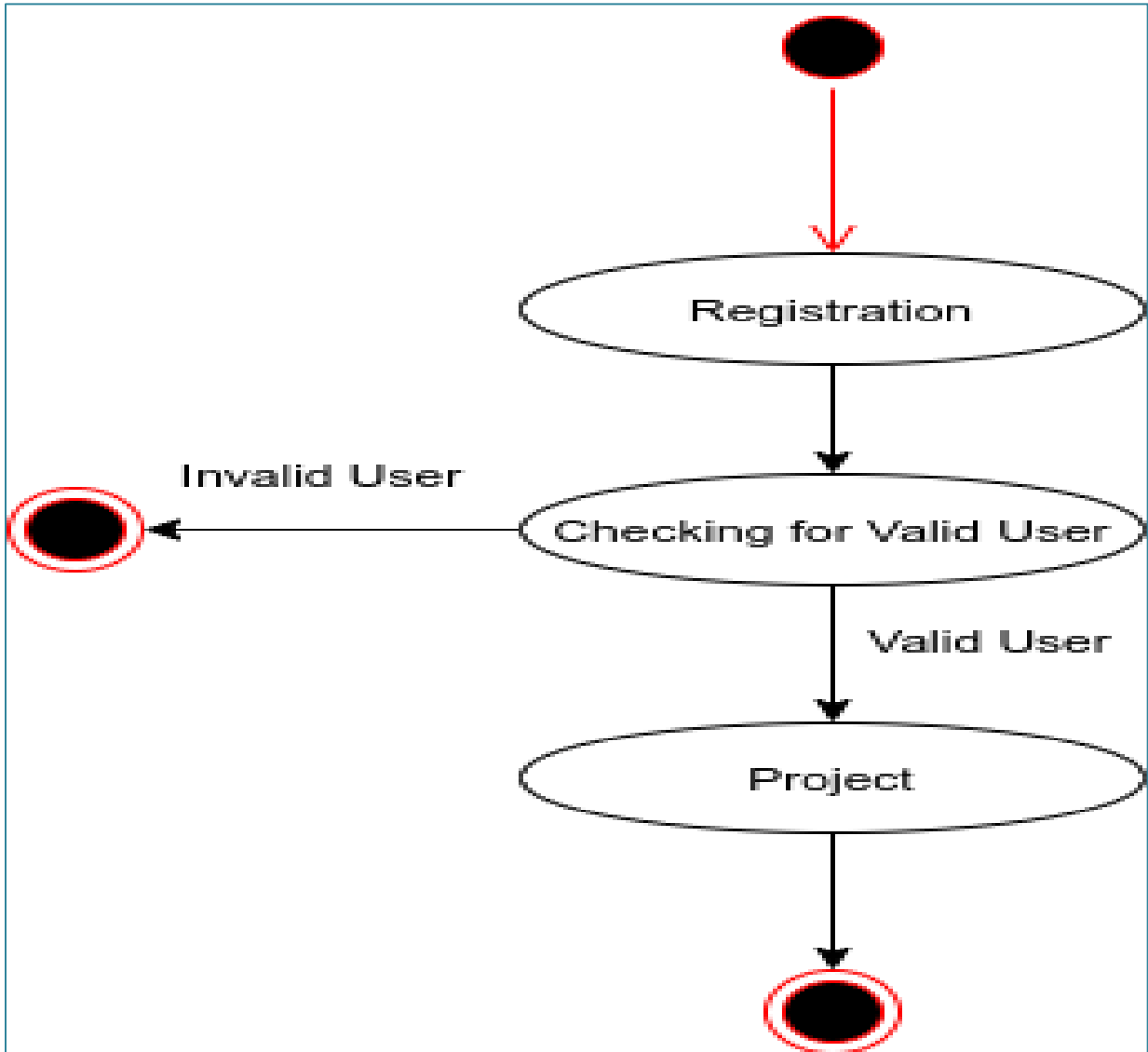


Figure 3.5.2.1: State Diagram

3.5.3 The Sequence Diagram

An Admin/User is communicated by sequence diagram. The series of correspondence is maintained gradually. It's a series diagram thus. Sequence diagrams are often referred to as event graphs or event scenarios [21].

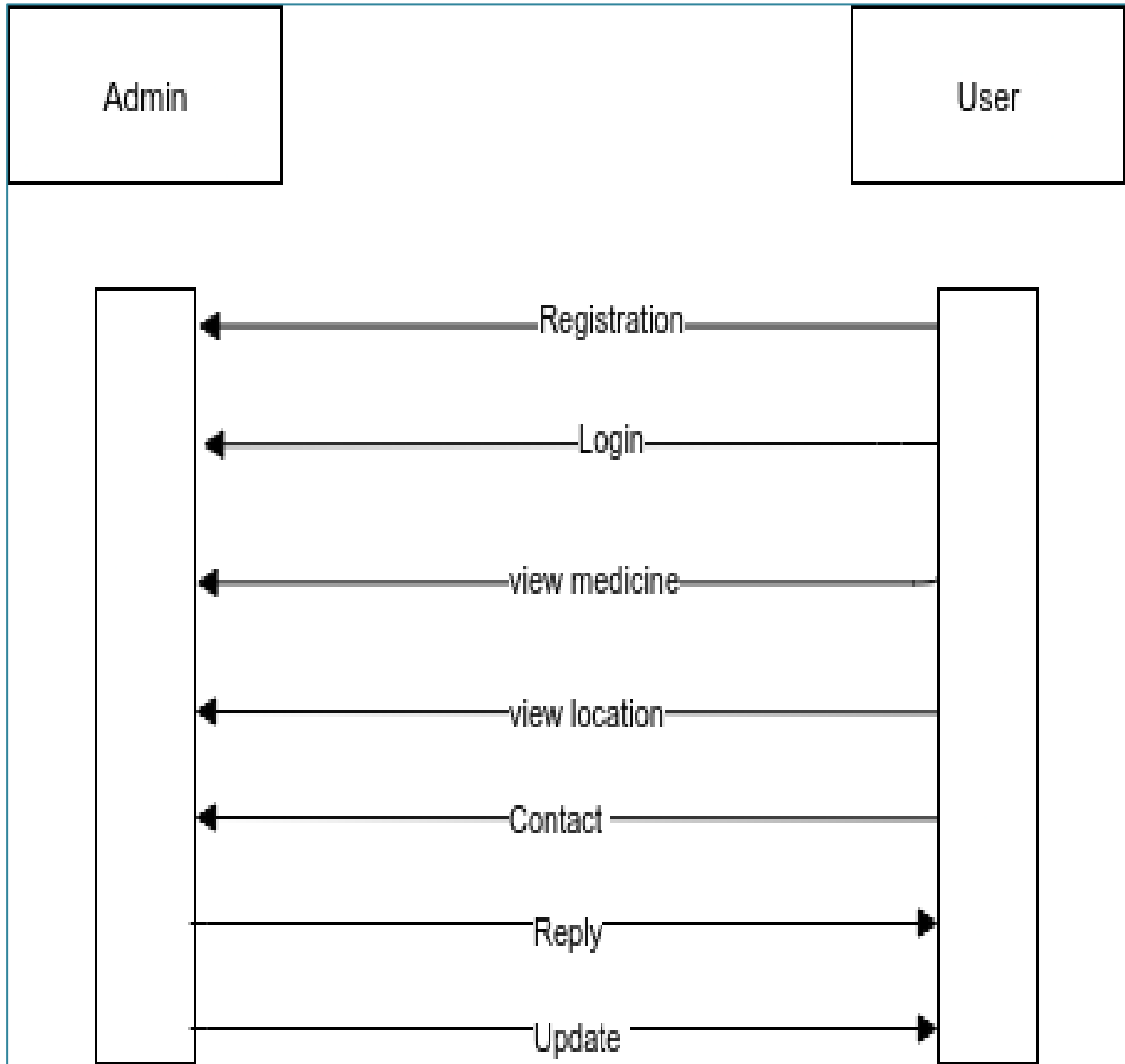


Figure 3.5.3.1: Sequence Diagram

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front-end Design

This front-end contains all the user sees, except interface and programming languages such as Dart, HTML, CSS, and PHP. Html and CSS are also widely used in front-end design. Html is being used to build a basic website template, and CSS is being used to keep the style of the Web page stable. Client-side action is implemented using JavaScript. A web designer creates a website. PHP is a server-side scripting language that can be used to create dynamic, interactive Web pages. PHP is a server-side scripting language that can be used to create dynamic, interactive Web pages. PHP is a common, free, and efficient alternative to competitors like Microsoft's Active Server Pages (ASP). We are creating Android / IOS application using Flutter framework. Flutter is free and open-source framework used to make cross platform application like Android, IOS, Windows, Linux, Max, WebApp [13]. So, we can use this application in all the platform.

4.2 Back-end Design

The server side is actually a back-end platform. SQL is a Relational Database with Structured Query Language. Many server forms are available like SQL. Back-end development needs to create a dynamic Website. For android, developer work with application programming interface which is known as API which is also used in both website and application, that the database knows something they need to deal with. And web developers work with websites with programming environment such as PHP, so the database knows something. The code they develop contains the api and then informs the program what the database should use. We are using MySql for API, and Firebase for Application [14].

4.3 Interaction Design and UX

For user interface, interaction design is an important aspect. It's a helpful pattern. Principally Interaction Design implies an Android application and a webpage user interface design. When the interface of the Android app or web page is user-friendly, UX essentially implies user experience. The front-end development is used in UX design. It defined how users use an app or website and then allowed developers to make improvements via developer testing. The creation of usability and compatibility guarantees customer satisfaction.

4.4 Implementation Requirements

We began implementing our software after the design phase was completed. To use the app, you'll need an Android-compatible smartphone and a web browser with an internet connection. For Front-end design we use Flutter and Dart in Application [8] and HTML, CSS in Web [16]. We also use PHP for designing Web. We have used online tools for creating different types of diagrams. For Android we use Android Studio and for HTML and CSS we use Visual Studio Code Editor. For Back-end development we use MySQL, Xampp and Postman for API testing. Microsoft SQL Server is a Structured Query Language (SQL) based, client/server relational database, PHP language for creating API and also Firebase for android application database. We are discussed about Software Requirement. For the hardware requirements, we'll need an Android-enabled system, such as a smartphone, and a computer that's connected to the local server. We work in MX Linux as our operating system.

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Database

Most information systems depend on data storage to function properly. Data is created, read, modified, and deleted by all information systems. Data can be saved in a database or a file. However, keeping data in a file has a number of drawbacks. The process of converting a logical data model (ERD in structured design) into physical database schemas is known as database design. A database schema is the physical model for a database that is built on the database technology that has been selected. A Database Management System (DBMS) serves as the foundation for database architecture (DBMS). The Relational Database Management System (RDMS) is now widely used to facilitate the creation and reengineering of a vast array of information systems. Data is stored in a relational database on a list of tables linked by foreign keys. When it comes to database architecture for Object-Oriented Technology, the first candidate for database implementation of the evaluated objects is the Object-Oriented Database System. However, the Object-Oriented Database is still a novel idea that isn't widely used. Because of the following benefits, the Relational Database is the preferred alternative for database implementations of the objects. Because of its various benefits, I have used Relational Database in our design outcomes as:

- The database is secured against device, transaction, and program failures.
- Many users can view the database at the identical time and read and write to the same database.
- It ensures that the data in the database is accurate.
- Unauthorized read and write operations on the database's data are prevented.

Table 5.1.1: Implementation of Database which will be used to store information for this application. This database is only for

<input type="text" value="Search by email address, phone number or user UID"/> Add user ↻ ⋮				
Identifier	Providers	Created	Signed in	User UID ↑
shifat@g.com	✉	25 Dec 2020	25 Dec 2020	4RXkukXxRdgMgGF1bCqIFi6FVdf1
shsh@h.co	✉	26 Dec 2020	26 Dec 2020	AeP4sDT6prR0yp5mGEBbk4hJgKy2
shifat@g.co	✉	25 Dec 2020	25 Dec 2020	EjFWIbhoswePwb5SymyovsDD2902
abul@e.co	✉	25 Dec 2020	25 Dec 2020	IEAB0FbKocVlh2i1C5bKVEX99ga2
as@g.co	✉	25 Dec 2020	25 Dec 2020	KMsKe1LJzthBJIFWB4Eh63J8TVI2
asa@g.co	✉	25 Dec 2020	25 Dec 2020	NOE3tfri5GdXr6Q4t99WVqhkcpM2
a@e.com	✉	25 Dec 2020	25 Dec 2020	Rouw0WhT6CciCPYSKwwLeduNy...
h@g.co	✉	21 Dec 2020	21 Dec 2020	VI07xRbfQoQI3dlKcn8nvH8YoWj2
firebase4545@gmail.com	✉	3 Mar 2021	3 Mar 2021	aiDAh7LEBaUuNP2Uh7tJiJHohLo2
mh@g.co	✉	22 Nov 2020	3 Mar 2021	bA9v25pzZHUg...z7iE6DXgxJmo32
a@g.co	✉	7 Dec 2020	10 Dec 2020	jMQakNh0UEeNAJBACQLi6FBNfdx1
a@e.co	✉	25 Dec 2020	25 Dec 2020	kOuMjVSCTTWijU3DPlyQblerEPq1
a@m.co	✉	25 Dec 2020	25 Dec 2020	mroA0yU8aRds7NIB8wQPYLhuM2...
dd@e.co	✉	25 Dec 2020	25 Dec 2020	n09ISwUGkfUoUA1GdstLoKAVoL12

5.2 Implementation of Front-end Design

The customer side development is another name for front end web development. Creation from the client is a practice in which to make HTML, CSS, JavaScript, PHP for website or mobile application with Flutter. That a user can easily understand and connect to them. The problem in association with front end development is to continually update the tools and methods used to build the front end of a website and an android app, and so the developer must always know how the field develops. The aim of the app development is to ensure that information can be received in an easy to understand and relevant and yet relevant format when users open the application, the same applies to web sites. Furthermore, users are now using several different devices of various screen dimensions and resolution, requiring the designer to take these factors into account when designing an app and a website. This is further complicated. You need to make sure the devices are available in multiple types and the site is available for different browsers (cross-browsers), different operating systems (cross-platforms) and different devices (cross-devices), so that careful preparation on the part of the established devices is needed [23].

Step 1:

- In step 1, figure 5.2.1, Users sees this Intro Screen when open this app.

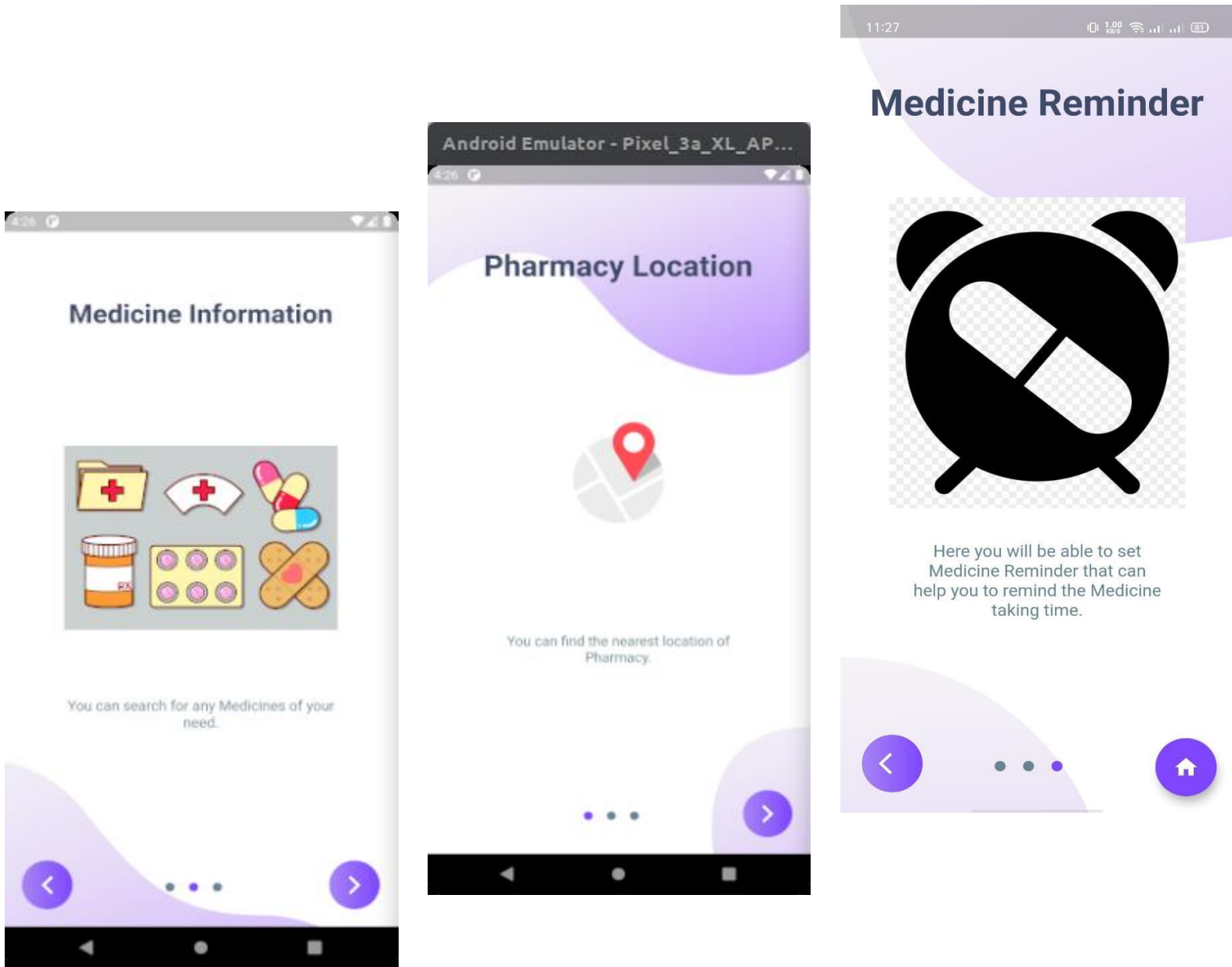


Figure 5.2.1: Intro Page

Step 2:

- In step 1, figure 5.2.1, Users can register themselves as a user of the app by their information like email, password etc.

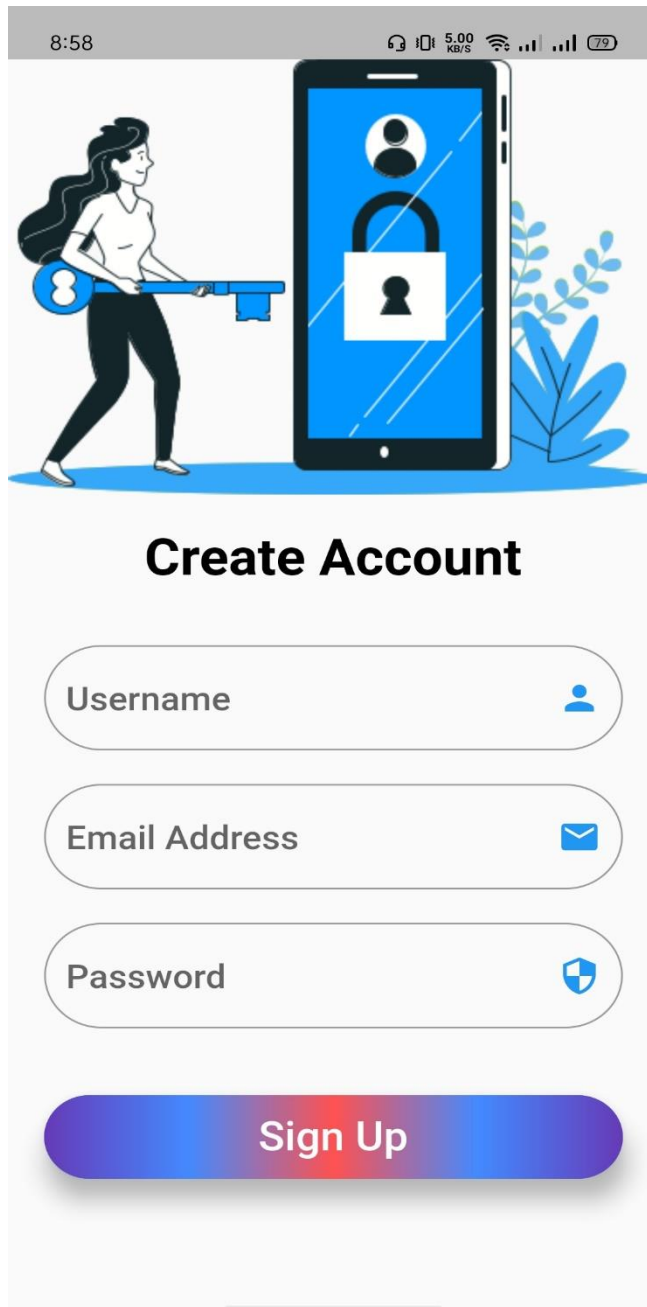


Figure 5.2.2: Registration Page

Step 3:

- In step 3, figure 5.2.3, Users have to login to enter in the system.

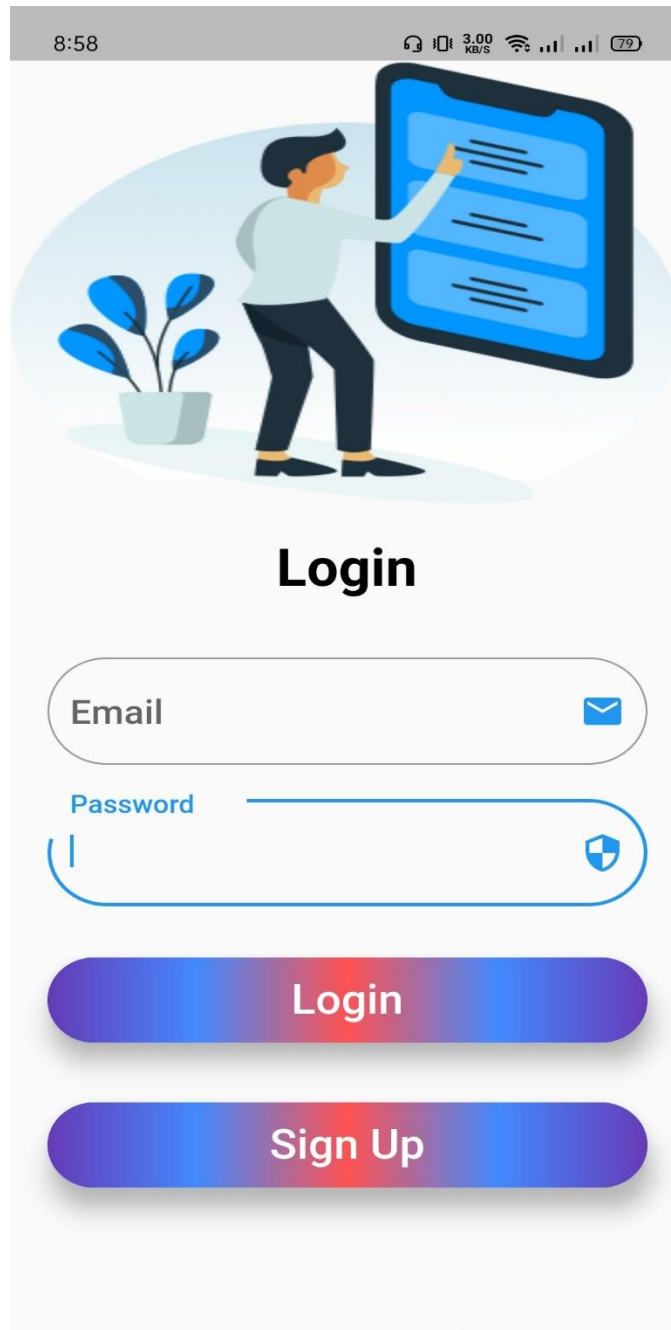


Figure 5.2.3: Login Page

Step 4:

- In step 4, figure 5.2.4, Users enter in the system and choose what to do.

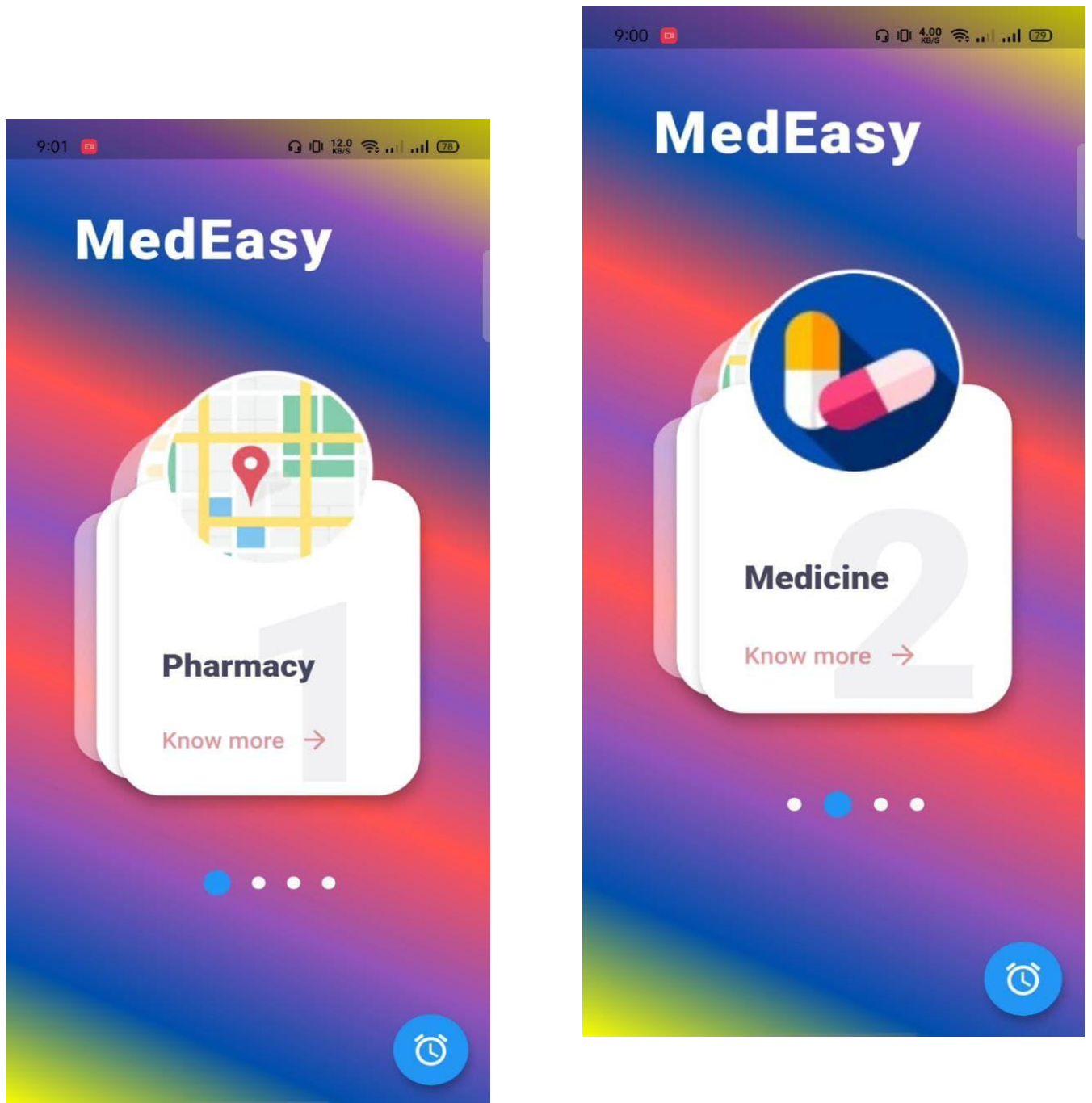


Figure 5.2.4: Home Page

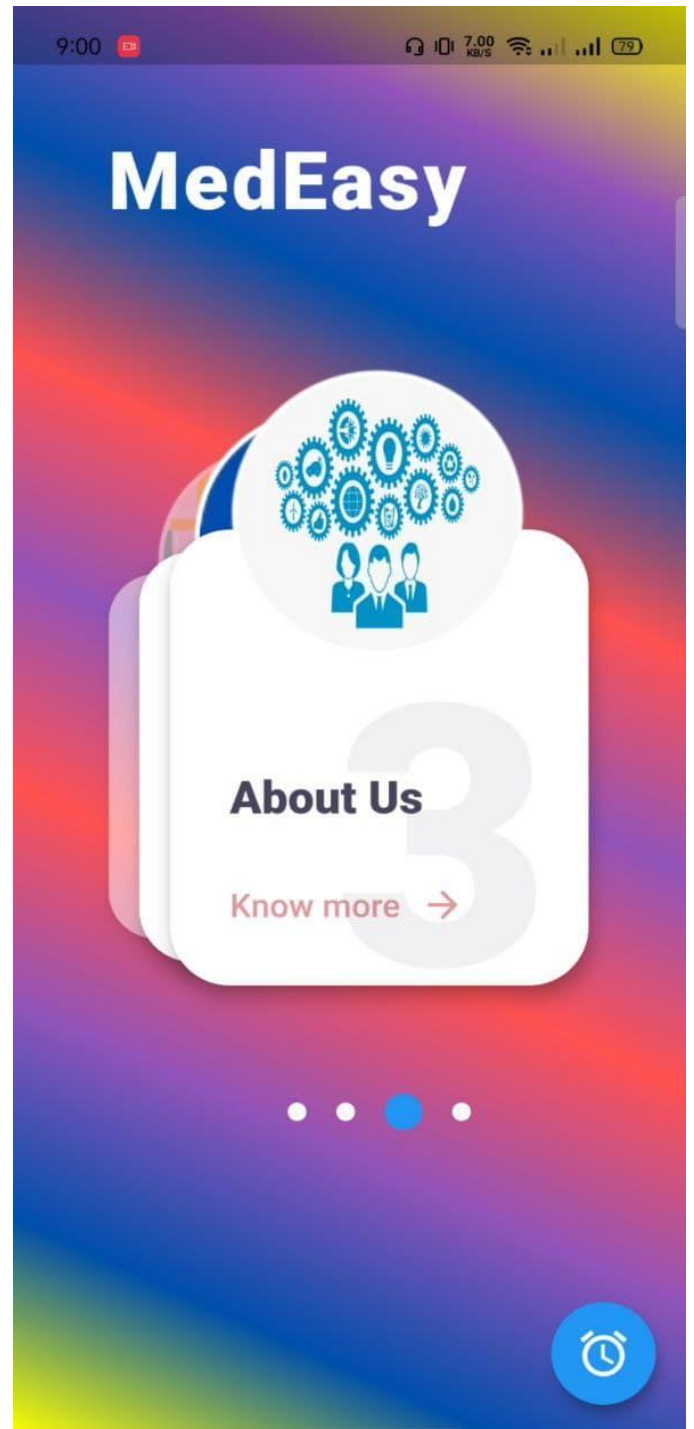
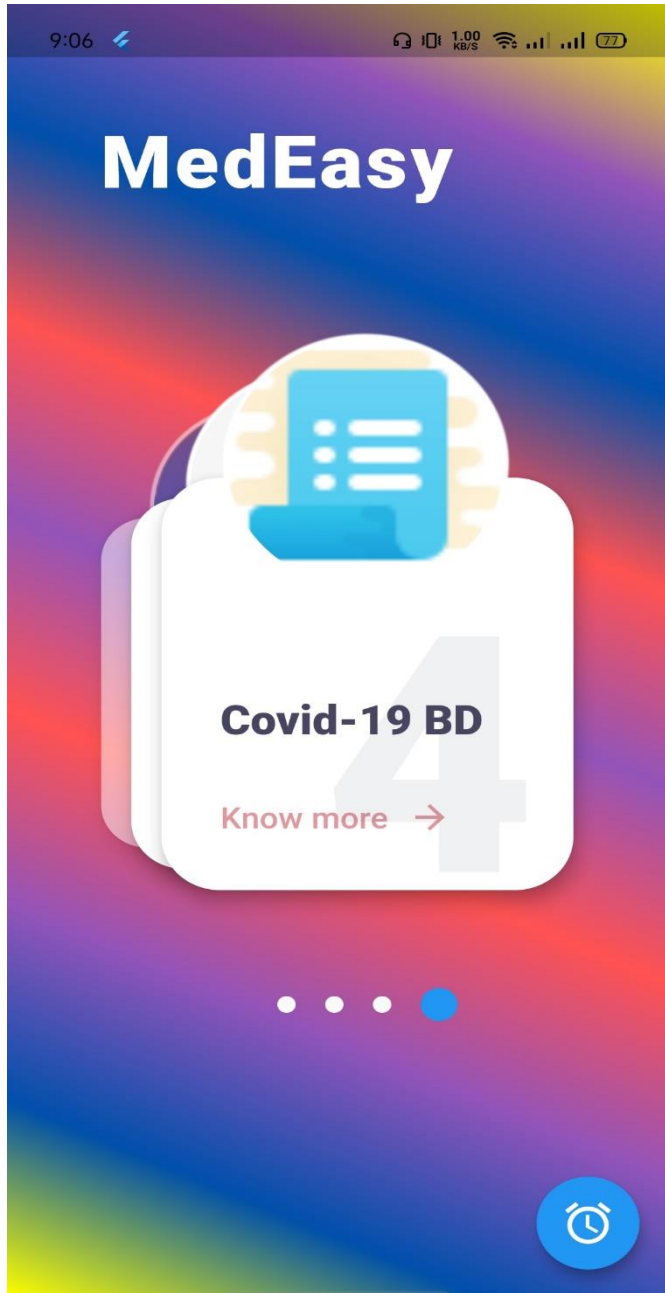


Figure 5.2.4: Home Page

Step 5:

- In step 5, figure 5.2.5, Users can find nearby location in Location section.

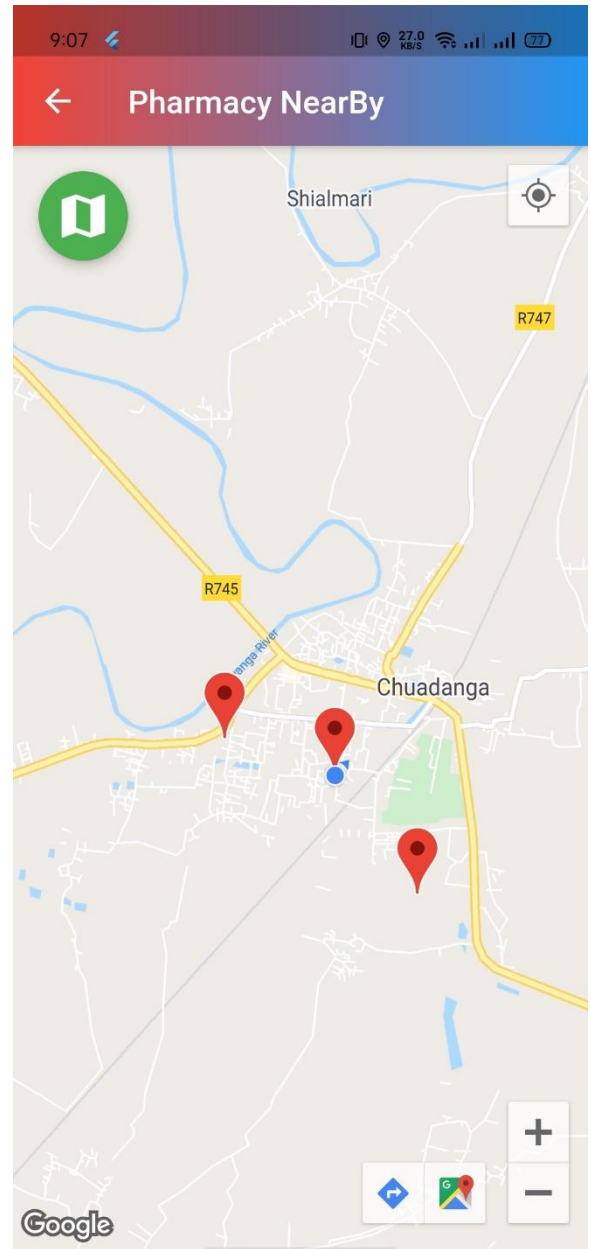
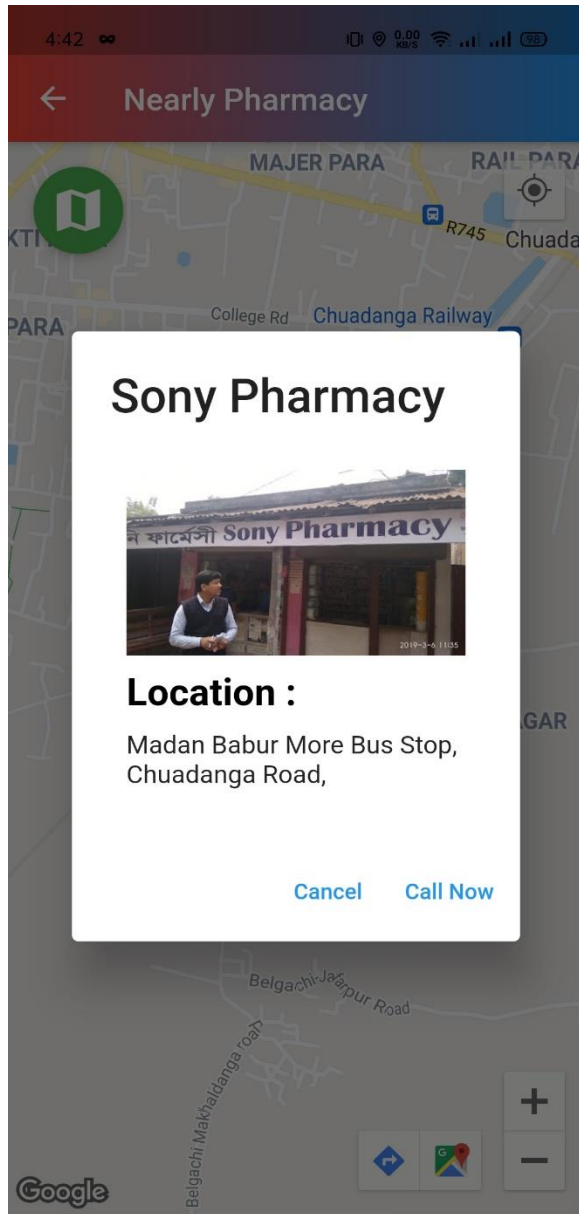


Figure 5.2.5: Pharmacy Location page.

Step 6:

- In step 6, figure 5.2.6, Users can find Covid-19 news BD in Covid-19 section.

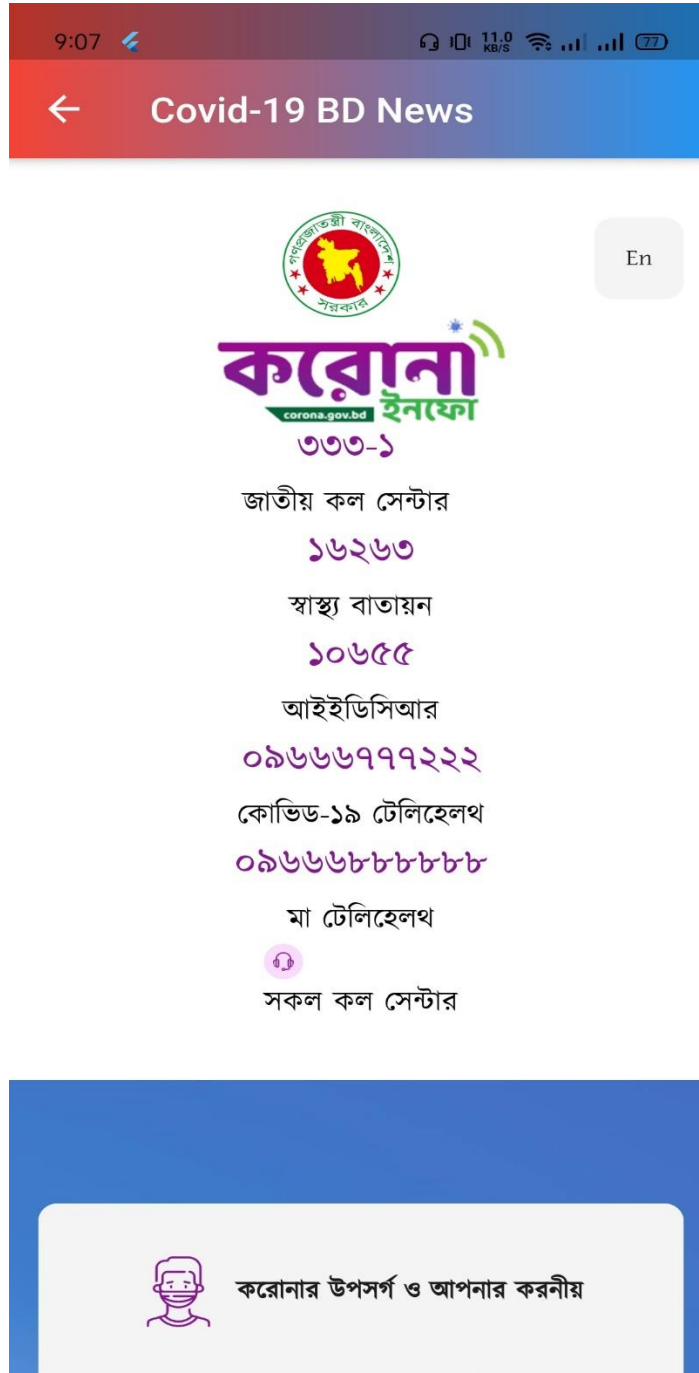


Figure 5.2.6: Covid-19 Bd news page.

Step 7:

- In step 7, figure 5.2.7, Users can find Medicine information in Medicine section.

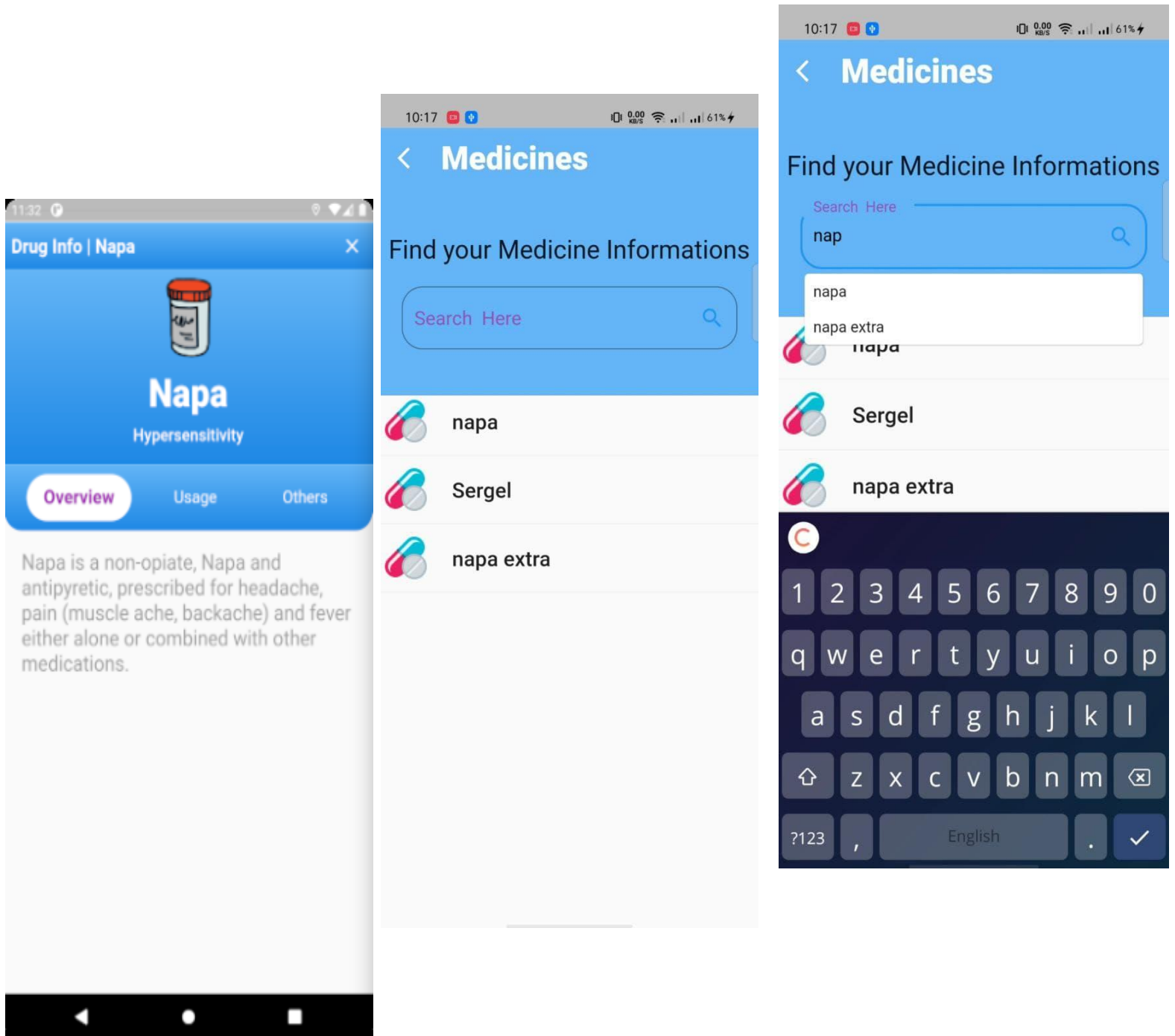


Figure 5.2.7: Medicine page.

Step 8:

- In step 8, figure 5.2.8, Users can find Medicine Reminder in Bottom section in Homepage.

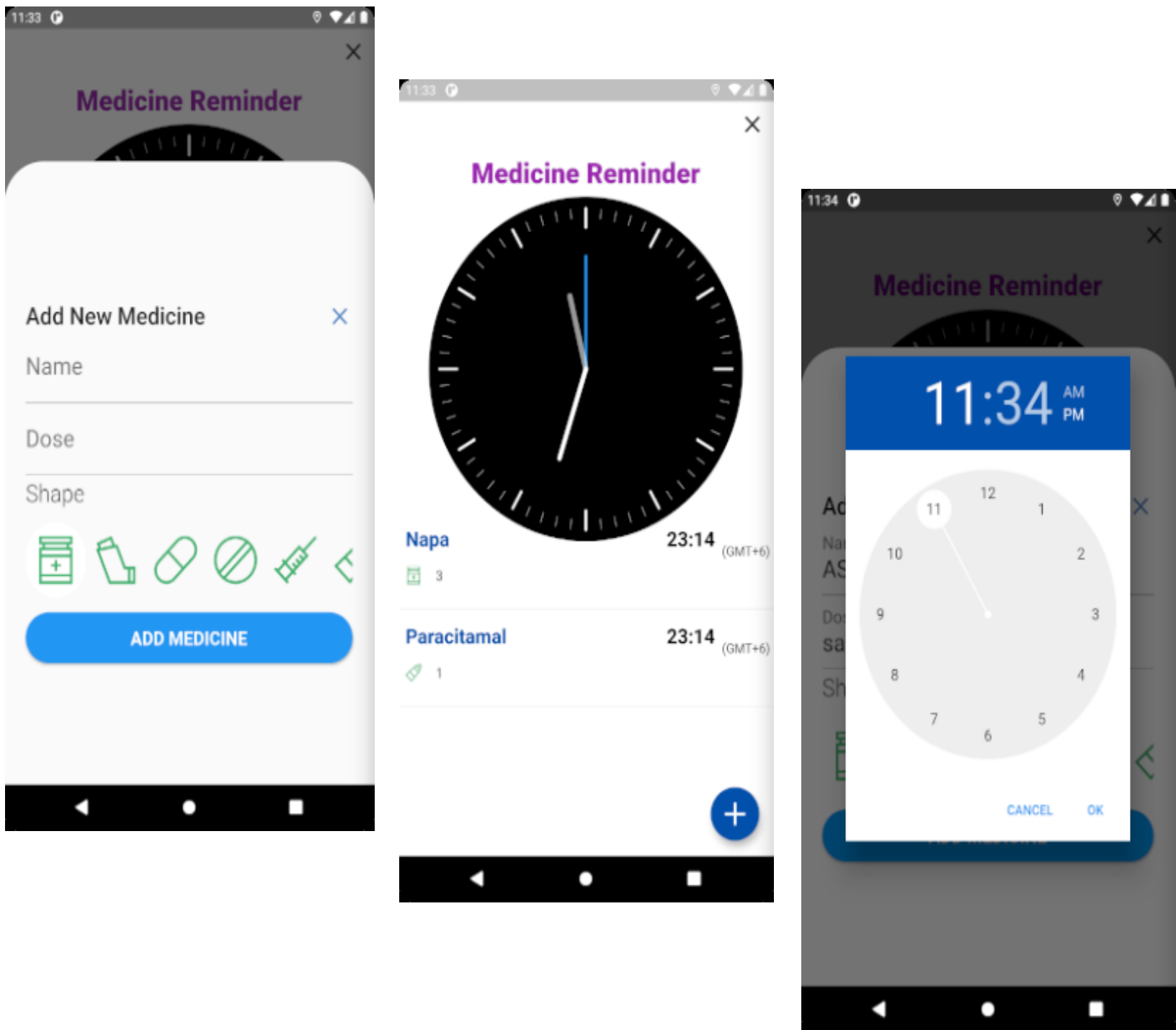


Figure 5.2.8: Medicine Reminder page.

Continue.....

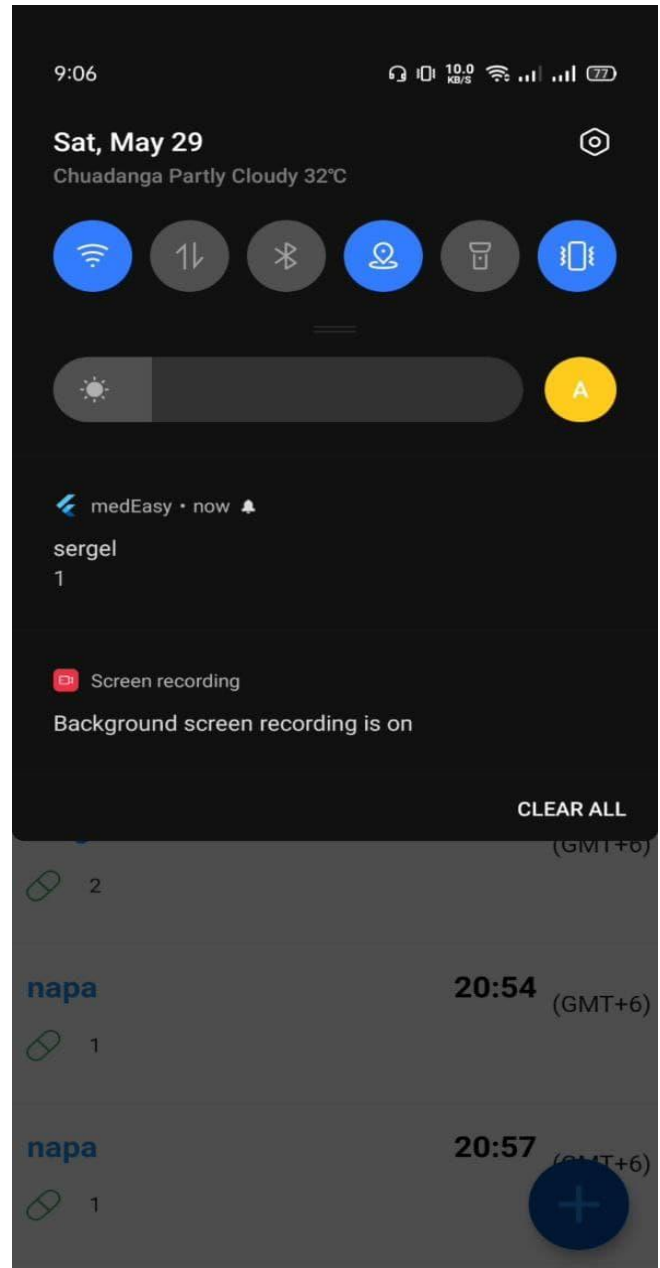
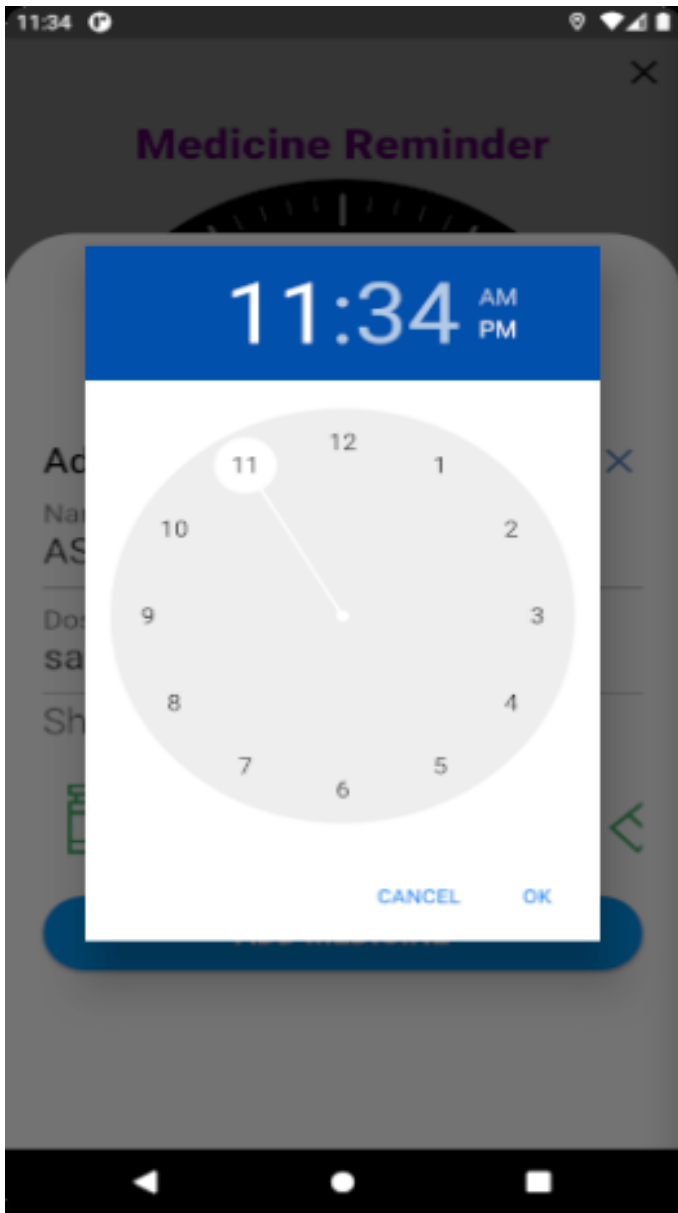


Figure 5.2.8: Medicine Reminder page.

Step 9:

- In step 9, figure 5.2.9, Users can see who is developer of this system.

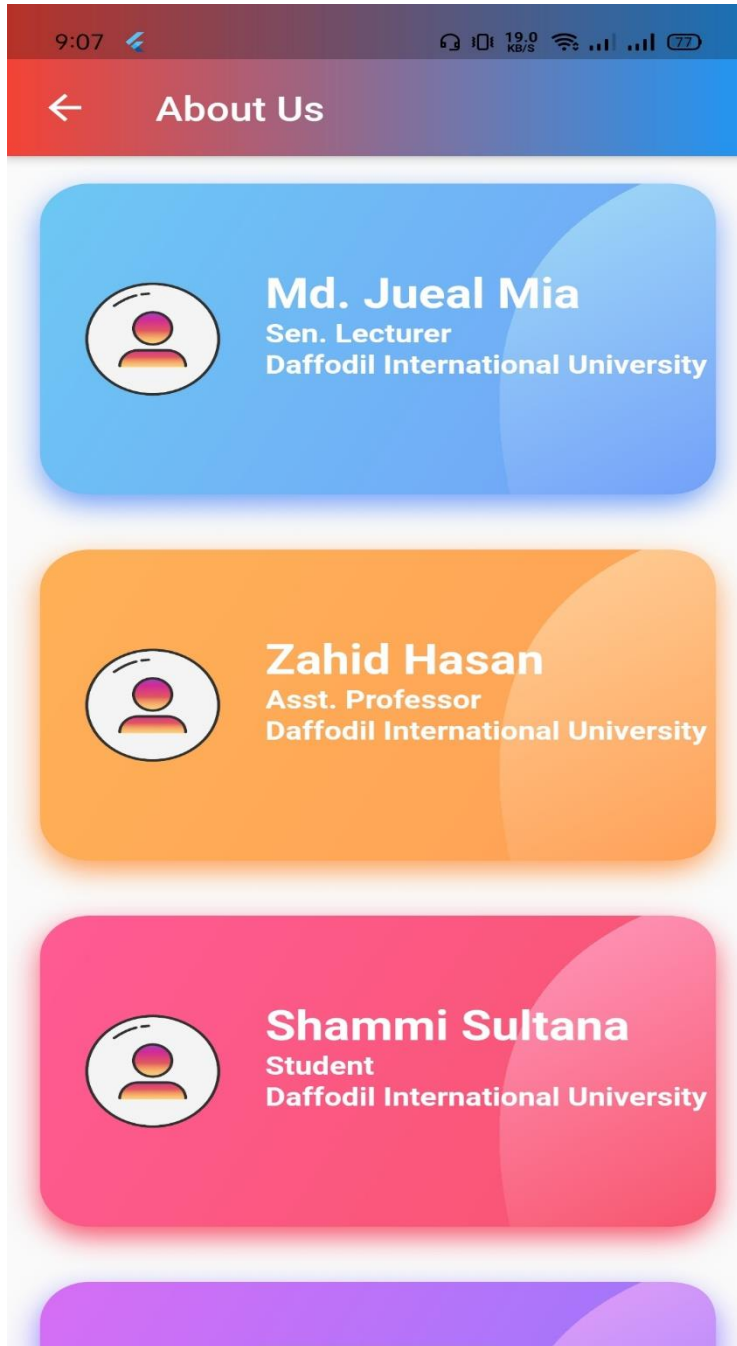


Figure 5.2.9: About Us page.

Step 10:

In step 10, figure 5.2.10, Users can find the Website of this system.

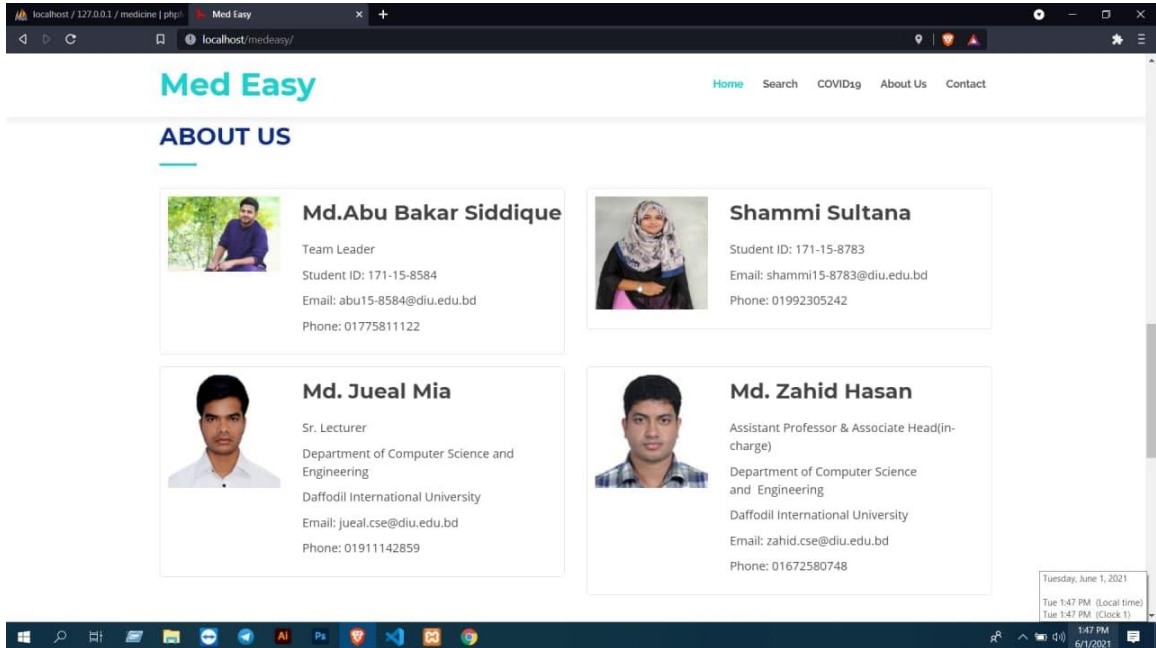
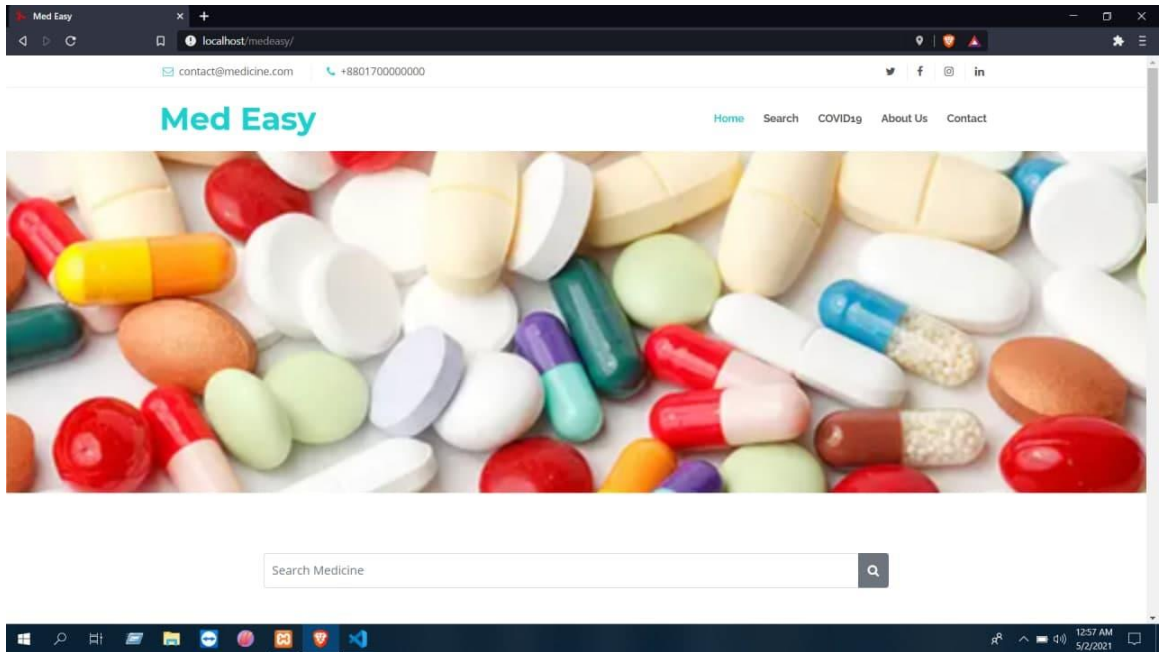


Figure 5.2.10: Home Page of Website.

Step 11:

In step 11, figure 5.2.11, Admin Panel of this Website.

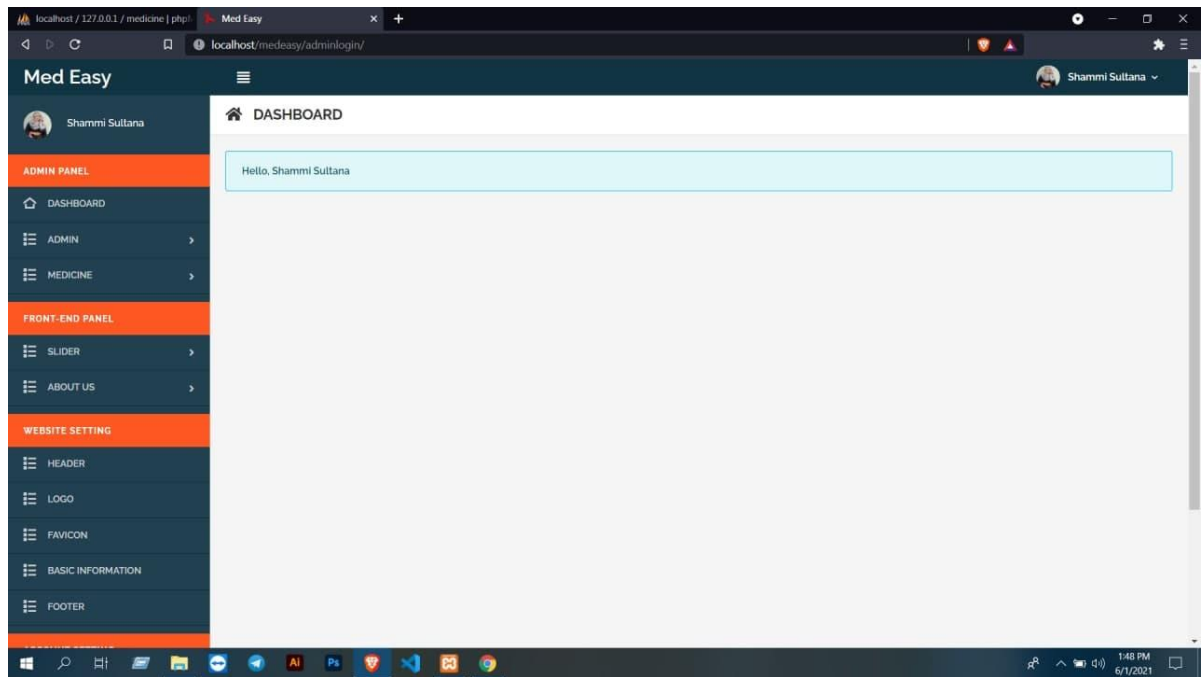
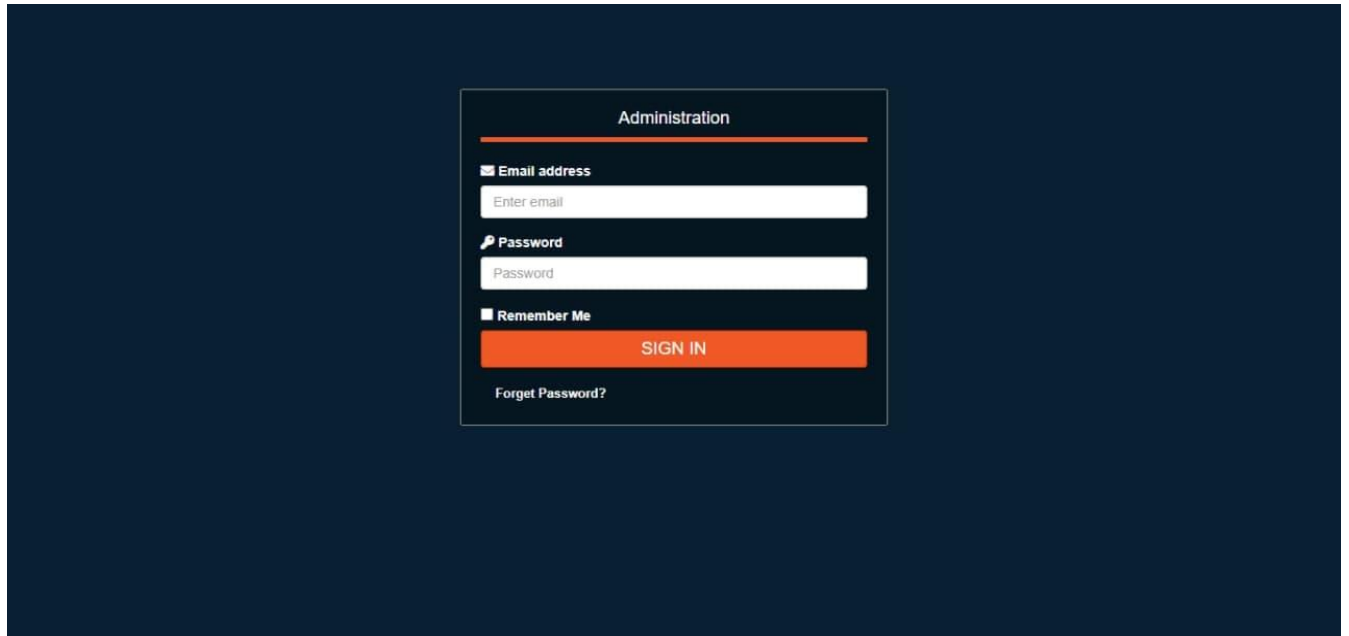


Figure 5.2.11: Admin Panel of Website.

5.3 Testing Implementation

As indicated by some management methodologies, these activities are carried out when the systems are either completed or in the testing stage.

Testing and assessment can be performed at the same time, but they have different meanings. These two activities are carried out in a variety of ways. One of the most popular methods is prototyping, and one was planned and proposed to some of the others in this project. Failures were illustrated in some cases because of the way it worked at first. They were able to be corrected in the final prototype, and the methods that would be used were also reconsidered.

Other experiments, such as the usability test, which required testing the product on random users, were made possible by prototyping. One such test aims to determine four major characteristics: the accuracy of the locations, the relevance of the content, the presentation style and its impact, and basically the key task rate, or how easily the users were able to complete the main objectives, with the main objective in this project being the ability to make an effective error-free login with proper authentication [26].

5.3.1 Test Cases

The test cases are created to ensure that the GUI form's components are functioning properly.

This is a method of ensuring that a document's output is accurate. A test case is a collection of conditions or variables that a tester uses to decide whether or not the device under test meets the criteria or functions properly. Creating test cases may also support in the detection of flaws in an application's specifications or design.

The following are some examples of test cases with screenshots:

5.3.1.1 User Login: Wrong User Input

If users give any wrong value, then it will be shown this error message.

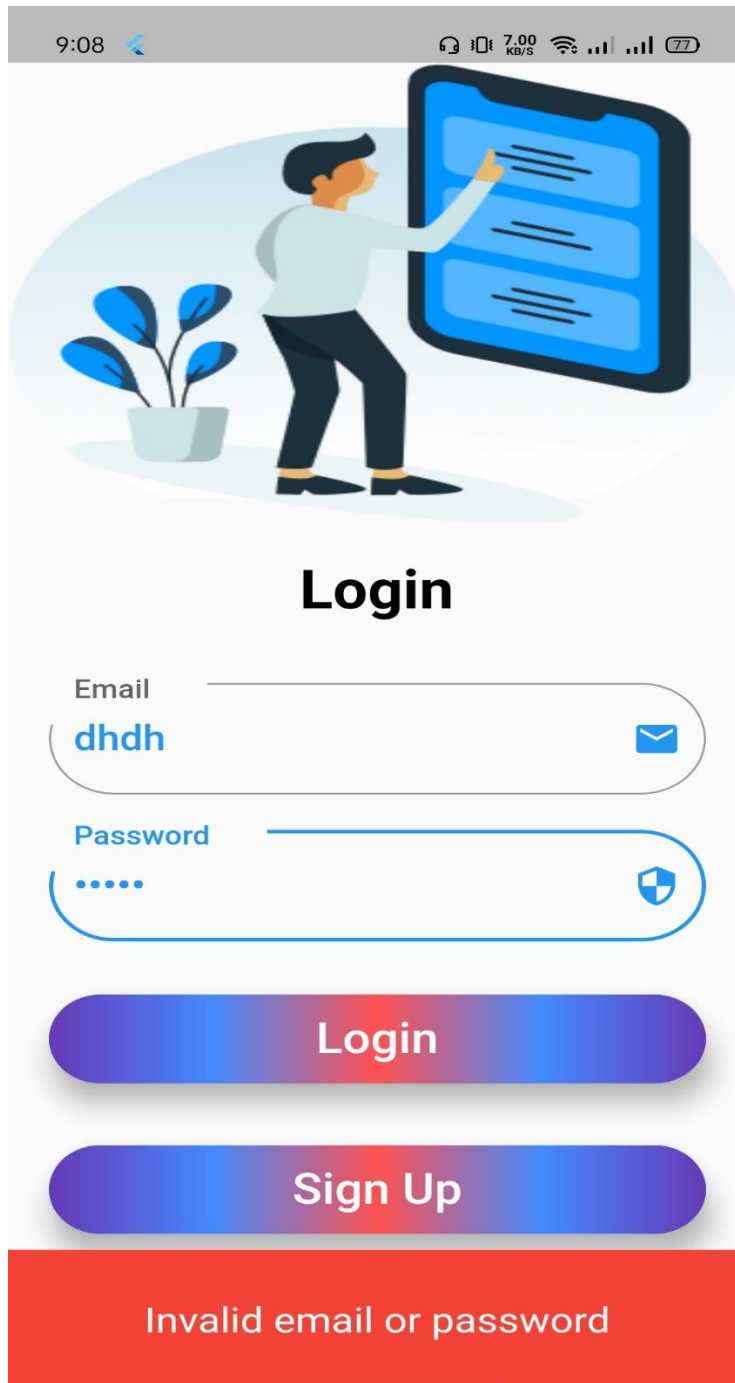


Figure 5.3.1.1: Login Error.

5.3.1.2 User Login: Success

If the user enters the correct value, the user is taken to the Homepage, then User Login will be successful.

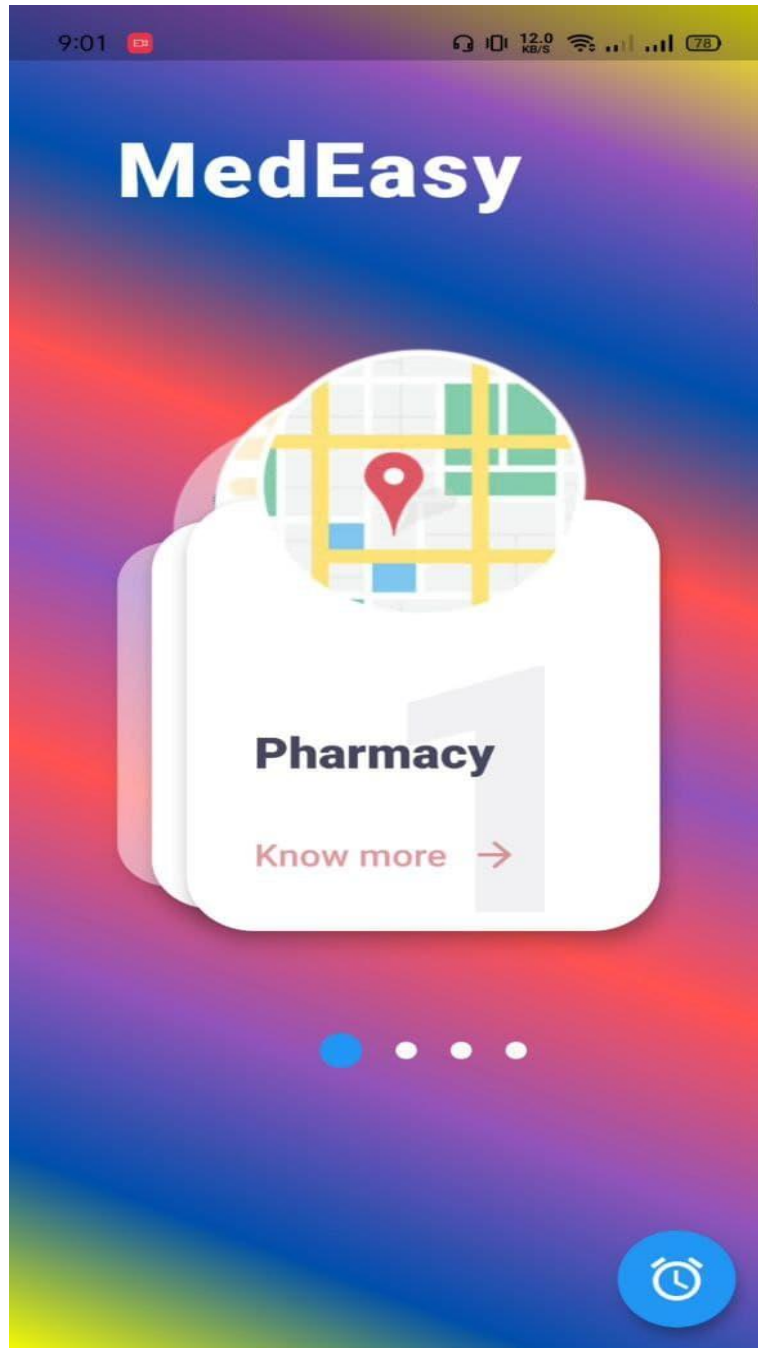


Figure 5.3.1.2: Login Successfully

5.3.6 Unit Tests

A unit test is needed to ensure that each module of the system is bug-free. It also helps in examining if the module contains any logical errors.

During the development phase, all of the system's modules are independently tested, so this testing has been completed successfully.

5.3.7 Integration Tests

Integration tests are often used to ensure that several components are working together properly.

The method of allocating resources is accompanied by a number of types. It consists of five papers, each of which is operating in parallel with the others. The situation is the same as before in other methods.

5.4 Test Results and Reports

A test report is needed to formally represent testing results, which allows for quick estimation of testing results. The test result is a document that organizes data from assessment analysis, describes the environment or operating conditions, and compares test results to the test objectives. So, once we've established the general architecture for interaction entities, we'll be able to carry out the products as the benefits of usability testing in the future. The issue then becomes how to configure its instances so that they can be used by user interface developers [24]. In our system, our own API works fine as we add new medicines. Our location service works just like Google Maps. If we want accurate pharmacy location information, then we have to add longitude and latitude of every pharmacy in our country. Medicine reminder works perfectly.

CHAPTER 6

Impact on Society, Environment & Sustainability

6.1 Impact on Society

Our app is designed to be a multi-platform app that works on all devices. We made this for those who need to know about the nearby location of pharmacy, shops, hospital. This app can help to find those locations as it is based on Google map [4]. Another thing is people who are sick and need to take medicine in time but sometimes forget to take medicine in time, there is an option for those people. Now in Covid-19 situation, we need to know about updated news of Covid-19 in Bangladesh [18]. This app can help to find the latest news.

6.2 Impact on Environment

Sometimes we go to an unknown place for some tour or like that. But sometimes there happens accident or need to find pharmacy or hospital. Through this app, people who need to know the location can find it easily. Sometimes we need to know about medicine details. Through this app, we can find medicine details. In this Covid-19 pandemic, there are a lot of bad things that happen to us. We need to know how the situation is running. We need to know how many people are affected, how they are got well etc. Through this app, we can find detailed information on the pandemic situation of Bangladesh.

6.3 Ethical Aspects

Ethics, also known as moral philosophy, is a subfield of philosophy that "involves systematizing, defending and recommending concepts of right and wrong behavior" [25]. This app is helping people to find a location, reminds medicine time, news of Covid-19 in Bangladesh, about the detail's news of medicines. Users can create many accounts, and those don't need real email. Admin don't do any harm to user email or password.

6.4 Sustainability Plan

Sustainable business practices will ensure efficiency, while a sustainability strategy improves the final product. Operational productivity can help save time and money by conserving energy. Companies who have sustainability strategies are better able to transform their objectives into reality. A financial sustainability plan requires an entity to perform a comprehensive review of its financial capacity to continue providing services over time on a regular basis. It aids a company in determining the long-term financial capital required to achieve its vision and mission. A non-profit organization must set long-term goals that it will strive to achieve in order to be sustainable. An organization cannot expect to be long-term sustainable if it does not understand why, it exists and what long-term goals it wishes to accomplish in order to effect social change. A non-sustainability profit's strategy details how it plans to continue operating in the long run. The approach typically focuses on the financial side of things, but it may also include how the company needs to manage leadership transfers and major external factors.

CHAPTER 7

Conclusion and Future Scope

This section discusses our decision and conclusion. We'll talk about the future scope and how it might have been improved.

7.1 Discussion and Conclusion

Nowadays, Medicine is an essential part of our daily life. Because everyone falls sick time by time. We need to take that medicine in time. But sometimes we forget it to take drugs in time. And nowadays everyone has smartphones both Android and IOS. So, medicine reminder can help to take medicine in time. Sometimes we need to know medicine details. We ask to the pharmacy person or doctor about more information. But through this app, we can find details information about medicine. Also, sometimes we need to find pharmacy location that is nearby. But sometimes we can't find it. This pharmacy location system can help to find pharmacy, hospital, shops, etc. But it can show the exact location of the Pharmacy if it is in Google map API [5][6].

7.2 Scope for Further Developments

We have the ability to make our app more developed and better than it is now. We are confident that we will expand our app's functionality and boost its efficiency. The apps currently have few functionalities, and the location information display isn't very successful. We'll make it more consumer-friendly in the future and add more fields for location information. Our app is now online-based, and users would be unable to use it unless they have access to the internet. Though now we are able to find exact location of the pharmacy because of manual input of pharmacy's location(longitude and latitude). If the API is richer to find only one place or pharmacy location, then we will apply this to our system. By properly preparing and investing valuable time, there are many opportunities to add new functionality and increase app usability.

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