

“MediPlus”
-An Android Application for Medical Support
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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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APPROVAL

This Project/internship titled “MediPlus-An Android Application for Medical Support”, submitted by **Md.Aftabur Rahman Tonmoy** and **Abdullah Al Fahim** ID No: 173-15-10423, 173-15-10430 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 04/01/2022.

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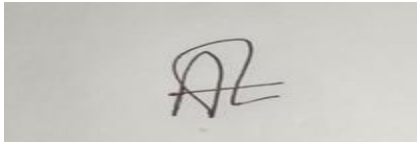
We hereby declare that, this project has been done by us under the supervision **of Ms. Refath Ara Hossain, Lecturer, Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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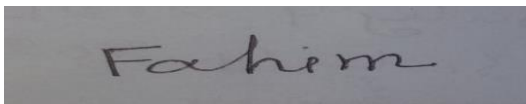


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ABSTRACT

Nowadays Bangladesh meets a lot of healthcare issues. So, we made an application about medicines “MediPlus”-An Android Application for Medical Support. Generally, we all know how painful to get proper Healthcare in an Emergency situation. By thinking about all stages of people we made this Application to get recover from this problem. And to make the long-term process as short as possible. Mainly here we keep a few buttons. The first one Medicine Book; where has been given all details about medicine. By consideration of the financial crisis in Bangladeshi people, we suggest high-quality medicines at the cheapest rate by qualified doctors. The second button about Disease Book where have every single disease detail and Its cure. In one word it’s healthcare. To find the disease and desire medicines there’s have search bar. Actually, it’ll make our daily life ease. Naturally when we get sick sometimes our health conditions make us as weak as we can’t able to go out or haven’t any mental condition to go to a hospital for the consultant. And It’s also a time-consuming process which makes us reluctant but we obliged because of cure. But this Application contains an easy way to cure. In this disease book, we can find the medicine name and the medicine-taking rules with the doctor’s suggestion. We might forget about the era when our grandparents use many kinds of herbs, the root of trees for treatments. Here’s also have a natural way option to get natural treatments. In other option, all about details of a doctor whom we met for research about the disease and get the medicine names, its treatment process and the rules of taking medicines. There’s also have the admin details in the About Us option. Basically, this application bears all kinds of facilities. But though there are any queries users meet by using this Application they can contact directly and also give feedback.

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CHAPTER 1

Introduction

1.1 Introduction

There is a big problem in our country with visiting by a doctor. Because without a major problem we cannot visit a doctor. Mainly, we prefer to go to a pharmacy and talk about our problem than pharmacist advises us a medicine. Even we know that the pharmacist doesn't have any medical qualification/certification. The main reason we go to a pharmacist is because of

- Inferiority complex
- Doctor's fees problem
- Schedule problem
- Pandemic problems

According to these problems, we are building a solution. We build an application, that will give us medicine with the certified doctor's suggestion. Including respected disease's natural ways and also with a minimum price.

1.2 Motivation of work

In our country, we have a large population. In this largely populated country, we have many disease problems we face every day. Still, nowadays some people in our country take medicines by pharmacist suggestion. As a developing country, many people of our country cannot afford doctors visiting fees. So, they depend on the pharmacist. In our childhood, our parents would not take us to the doctor for some minor ailments. For those diseases, they give us some natural methods for getting well fast. From the above situations, we get our motivation to build/create our application.

1.3 Objectives

Our main objective is to help people who have an Inferiority complex, Doctor's fees problem, Schedule problem, and Pandemic problems, etc. We are trying to give those people an application that they can use anywhere to get their problems solved. From our application, they will get ailments in both medicine and natural ways with the certified doctor's suggestion.

1.4 Expected Outcomes

From our study, we can give assurance of this application will give the above people get solutions for their particular disease with a minimum price of medicine. In our application, we can also expect that in some disease people doesn't need to take medicine to get well if they follow natural solution.

1.5 Business Policy

After completing our project/application we will upload it to the google play store. This way people can install it from play store and use it. when maximum people use our application, it will make us proud.

1.6 How it works

In our application, there is a home page. On the home page, we have 4 main buttons. The first button is called the "Search button". With this button, anyone who uses this app will search for their disease. If they click on the disease they will get 2 buttons "Medicine" and "Natural way". In those buttons, they can get medicine details and natural ways. The Second button is called the "Disease book". If they click it, they will get the list of all diseases. There is another button called "Reference". In this button, we will see the doctor's information who suggests medication and medicine names and natural ways. There is another button called "About Us". This button will show our member's information. They're also a menu bar on the home page. In the menu bar, we add a "Contact us" button. This button will show them our contact information. In the menu

bar, we also have a feedback button, this button will go directly to our email. This way anyone can send us their feedback or suggestion to improve our application or face some problems by using our application.

CHAPTER 2

BACKGROUNDS

2.1 Introduction

In our country health is an important prospect to improve. We face many health issues because of overpopulation. In this chapter, we will discuss project design. In this chapter, we will discuss what language, what tools we have used in our project. We have used JAVA ME for the android part, then we have used PHP's help for making an API, MYSQL Database, and we used Postman to check our URL data.

In this chapter, we will talk about related projects or work ideas that relate to our application idea. In this chapter, we will also talk about our project limitations. We will talk about how will make our application to users likable.

2.2 Related Works

In the early days of gathering project ideas, we stumble upon a lot of projects and research papers that are related to our idea. Some highlighted projects are "DIMS"(this a doctor app), Hospital Management System". There are also some ideas like "Animal Disease App", "Health care app" and some "Medicine app". All the projects we have mentioned some way or another they inspire us to make our project.

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2.3 Comparative Analysis

In our project, we have studied a lot of project ideas. Our most ideas got from an application called "DIMS". This is a doctor's app. In our case, we want to make an app that anyone can use for their benefit. We also tried to add a new feature is call the natural way. This will help people to get natural health solutions. This application we make is low-cost-worthy medicine and

medicine with doctor's suggestions.

2.4 Scopes of the Problems

In our project, we have faced many problems. The main problem we have faced is bugs, different devices have different shapes, in the early days of our work we also faced a major problem that is our app size.

This problem we face because we have created a large number of classes of disease name. That's the reason our application size gets bigger. We have also faced problems "s like creating API and running it on the web, then the API joining in Android. We also have problems in database SQL queries to properly work.

2.5 Goals of Proposed system

- **Planned approach towards working:** We first approach to planning how we are going to work on this project. We also get all the data information we are going to need to store our data. This way we can recover our data easily if some problem occurs.
- **Accuracy:** In our project we will try our best to get higher accurate data and result in we can get. We will try to eliminate all bugs we face.
- **Reliability:** In our project reliability is one of the most prioritized factors. Our project users is trusting us to give them the proper solution. That way this application needs to be very reliable.
- **No Redundancy:** In our project, we have tried to have no redundancy.
- **Immediate recovery of data:** In our project, we have tried to work on the best tools also the best language. In our project, our all data are in a database. if our database is secure then our data will save and sound. So, if we have any problem recovering data we just need to check our database is all right. If our user requirements any data we can give them fast enough.
- **Immediate capacity of data:** In our database, we have maximum storage to store data. If we need more space to add more data we will get easier.

- **Easy to Operate:** In our project, anyone can operate easily. Our project will be low-budget items user-friendly.

CHAPTER 3

PROJECT MANAGEMENT

3.1 Project planning and scheduling

Project planning and scheduling are some of the most important pre-work for any project. In our project, we first gather the ideas of what will be our project. Then comes our project planning. In this chapter, we will talk about how we planned the process of work, how we will get data, and how much time it will take. Also, schedule the process of work.

In this part, we will also talk about the methodology we use and the risk we might be facing in the project.

3.1.1 Methodology

We study all 7 SDLC models and learn what is the best model we can use for our project.

The model we use is Waterfall model. Waterfall model will Through all improvement stages (analysis, design, coding, testing, deployment), the technique actions in a cascade model. Each level has concrete deliverables and is exactly documented. The subsequent level cannot begin earlier than the preceding one is absolutely completed. Thus, for example, software program necessities cannot be re-evaluated similarly in improvement. There is likewise no cap potential to look and strive the software program till the closing improvement level is finished, which ends up in excessive assignment dangers and unpredictable assignment results. Testing is frequently rushed, and mistakes are high-priced to fix. The following figure 3.1.1 shows the step of waterfall model. [8]

Advantages of waterfall model

- Disciplined and structured
- Logical and intuitive progression

- No special training.
- Clear goals
- Hits the deadline
- Hits the budget
- Shows progress
- Straightforward, predictable and organized
- Great communication and documentation
- Works properly for smaller initiatives in which necessities are very properly understood.

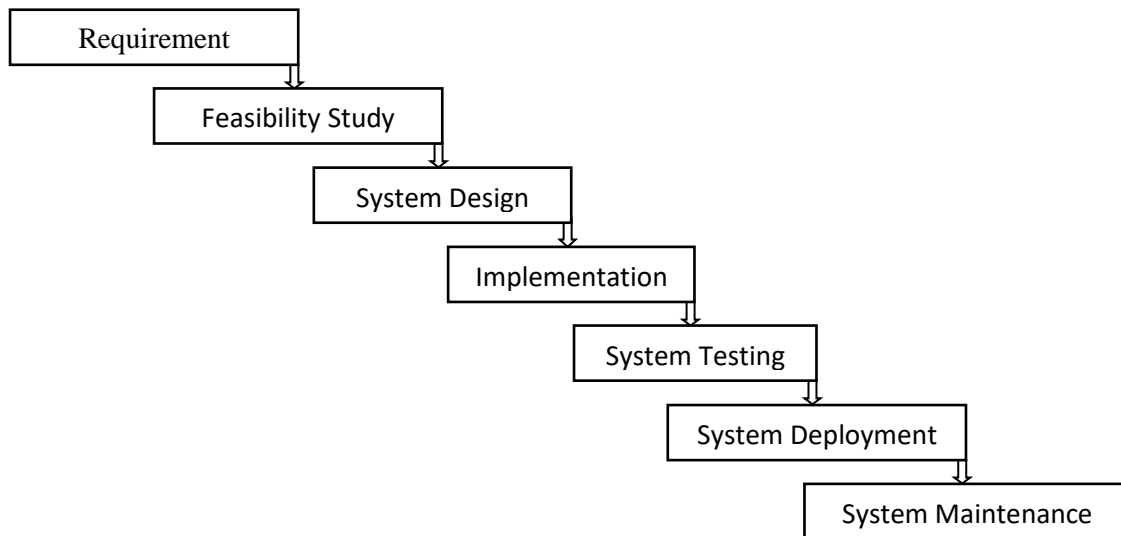


Figure 3.1.1: Waterfall Model

3.1.2 Project Management Life Cycle

The quantity of planning and work required to finish a project can appear overwhelming. There can be dozens or maybe masses of tasks that want to be finished at simply the proper time and in

only the proper sequence. Project managers regularly locate it simpler to control the overall scope of an undertaking by breaking it down into 5 project levels that make up the project management lifestyles cycle. Dividing your efforts into those 5 undertaking control levels can assist supply them structure and simplifying them into a sequence of logical and possible steps. The following figure 3.1.2 shows the step of Project Management Life Cycle. The four phases of Project Management Life Cycle are. [9]

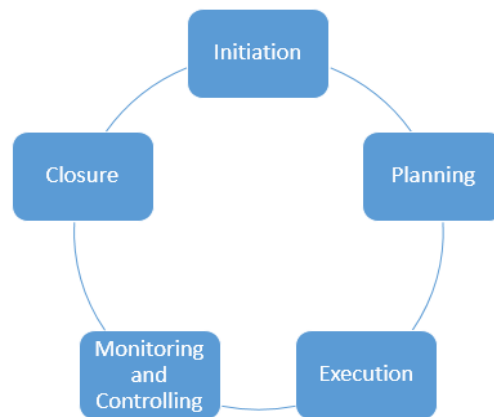


Figure 3.1.2: Iterative and Incremental Life Cycle

- Initiation
- Planning
- Execution
- Monitoring and Controlling
- Closure

3.1.3 Project Plan

When we start examining our project we also understand that it will take days to complete.

So, we make a project plan to define how many days it will take to plan, design, code, and delivery. Shows in table 3.1.3

TABLE 3.1.3: PROJECT PLAN

1	Task Name	Duration	Start	Finish
2	Planning	40 days	01/12/20	09/01/21
3	Design	45 days	14/02/21	01/04/21
4	Coding	62 days	20/07/21	20/09/21
5	Delivery and Testing	30 days	01/10/21	01/11/21

3.2 Risk Management

Risk management is one of the most important management. Risk management is the technique of identifying, assessing, and controlling threats to an agency's capital and earnings. These dangers stem from lots of assets inclusive of financial uncertainties, legal liabilities, generation issues, strategic management errors, accidents, and natural disasters. A successful hazard control application enables an agency to remember the overall variety of dangers it faces. Risk control additionally examines the connection among dangers and the cascading effect they might have on an agency's strategic goals. This holistic approach to handling risk is every now and then defined as business enterprise hazard control due to its emphasis on watching for and knowledge of risk throughout an agency. In addition to being a focal point on inner and outside threats, ERM emphasizes the significance of handling high-quality risk. Positive dangers are possibilities that might grow the enterprise cost or, conversely, harm an agency if now no longer taken. Indeed, the intention of any hazard control application isn't to get rid of all risk however to keep and add to enterprise cost through making smart risk decisions. There are some risk we have to face in the process of project: [7]

- Application Risk
- Joining Risk
- Market Risk
- Idea Risk
- Bugs Risk

CHAPTER 4

REQUIREMENTS SPECIFICATIONS

4.1 Requirement Collection and Analysis

In our country, health problems are faced regularly. In our case, many people have suffered from this problem. we're working on mainly these problems inferiority complex, doctor fees problem, pandemic, and problems. So, we need information about these problems they face. For information, we take a survey on these problems and related problems. The result of the survey will help a lot to improve our idea and project very much. In the following fig 4.1.1 shows, we have added some survey questions and results.

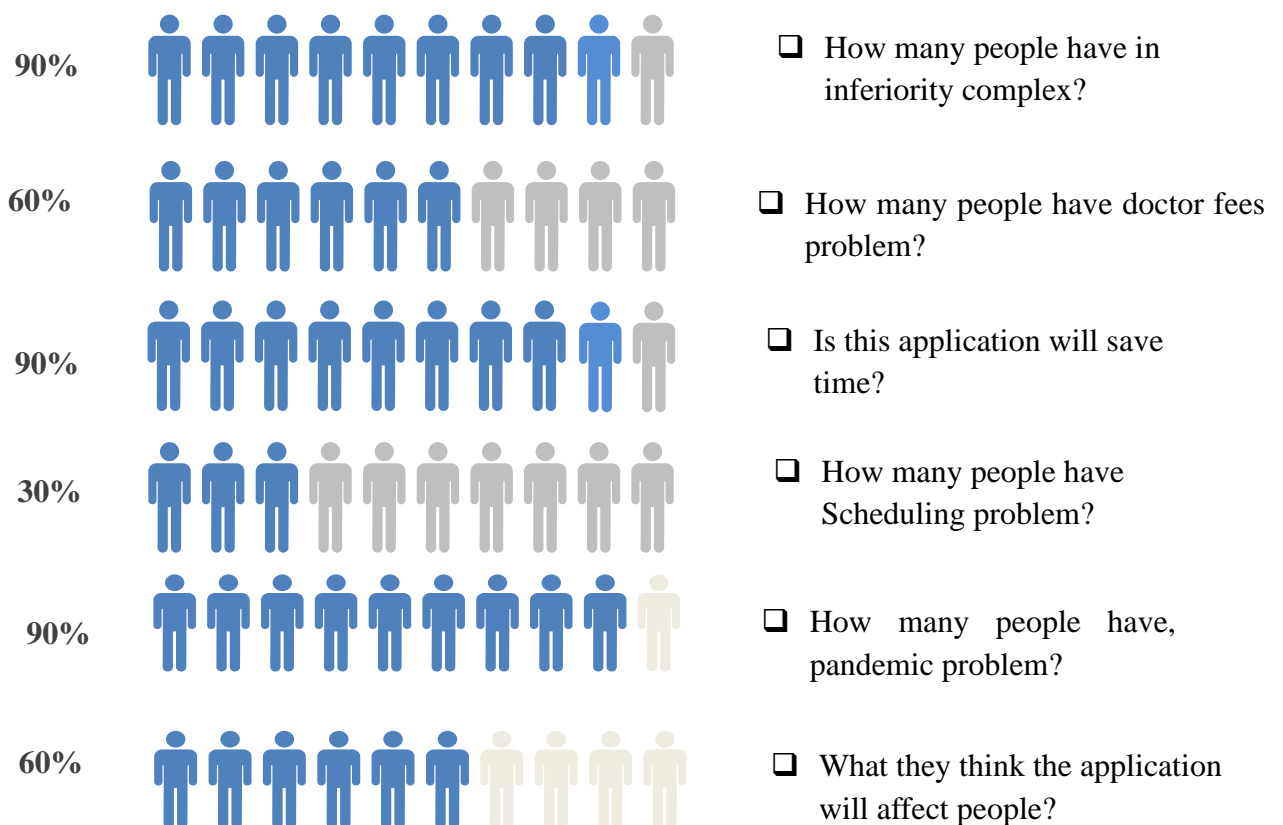


Figure 4.1.1: Requirements Collect by People

4.2 Hardware Specification

Imperative to the smooth operation of a collaborative relationship among the hardware and firmware groups is the flow of vital facts, and in particular, all essential hardware specifications and recognized hardware defects. This is a one-manner information exchange. Hardware specifications and disorder lists are needed by firmware engineers with a purpose to do their jobs. But firmware specs and disorder lists aren't usually required via way of means of hardware engineers. [2]

4.2.1 Hardware requirements for present project

Processor: core i7 Processor;

RAM: 8GB;

Hard disk: C drive 200 Mb

4.3 Software specification

A software requirements specification is a report that describes requirements for a software program product, program, or set of programs. Requirements within side the software program requirements specification is expressed in ordinary language and aren't worried about technical implementation. That's what the design documents are for. In software program development, the software program requirements specification represents the results of the requirements evaluation and describes the requirements of the software program beneath neath development. Though it's far historically created as a report, it could additionally be created in different forms, for example – a completely easy one – in spoken form. We morally work on minimizing run time and bugs and errors. We have worked on the most popular language in the development process. [1]

4.3.1 Software requirements for present project

For building up the website, we need the accompanying Software Requirements:

- Operating System: Windows 10
- Development Tool: Visual Studio IDE/ Code Editor, Postman, WAMPP/XAMPP
Local server

- Language: JAVA ME, PHP
- Database: MySQL
- Browser: Google Chrome

4.4 Design Requirement

Our application design is mainly how our buttons, them, pictures, list view will view. So, we have tried to give the best design we can give it. We also add some functions that users can use our application without any complexity.

CHAPTER 5

DESIGN SPECIFICATION

5.1 Business Process Model

Business process modeling (or) process modeling, is the analytical illustration or placed surely an instance of an organization's enterprise procedures. Modeling procedures is an essential element for powerful enterprise manner management. Process modeling software program gives an analytical illustration of 'as-is' procedures in an organization and contrasts it with 'to-be' procedures for making them greater efficient. The model of our application is given in fig 5.1. [3]

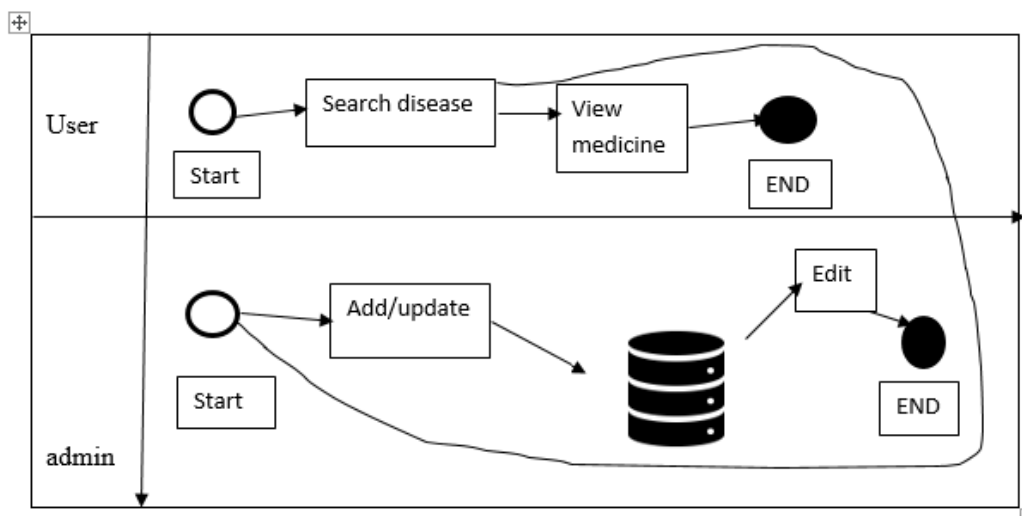


Figure 5.1: BPMN

5.2 Use Case Modelling and Description

The Use Case Model is used to outline the middle factors and approaches that make up a device. The key factors are termed as “actors” and the approaches are called “use cases.” The Use Case Model suggests which actors have interacted with every use case. This definition defines what a Use Case Model is generally made up of—actors and use cases. A Use Case Model has to seize

the purposeful device components. It embosses the enterprise approaches withinside the device. While you traverse your device, you may examine extensive device attributes which you version withinside the Use Case Model. Because Use Case Models are easy in nature, they may be freed from technical jargon, Use Case Models are an exceptional manner to storyboard flows with users. Use Case Models have some other essential role. Use Case Models outline the device necessities being modeled and assist write the situations later utilized in testing. The model of our application is given in fig 5.2. [4]

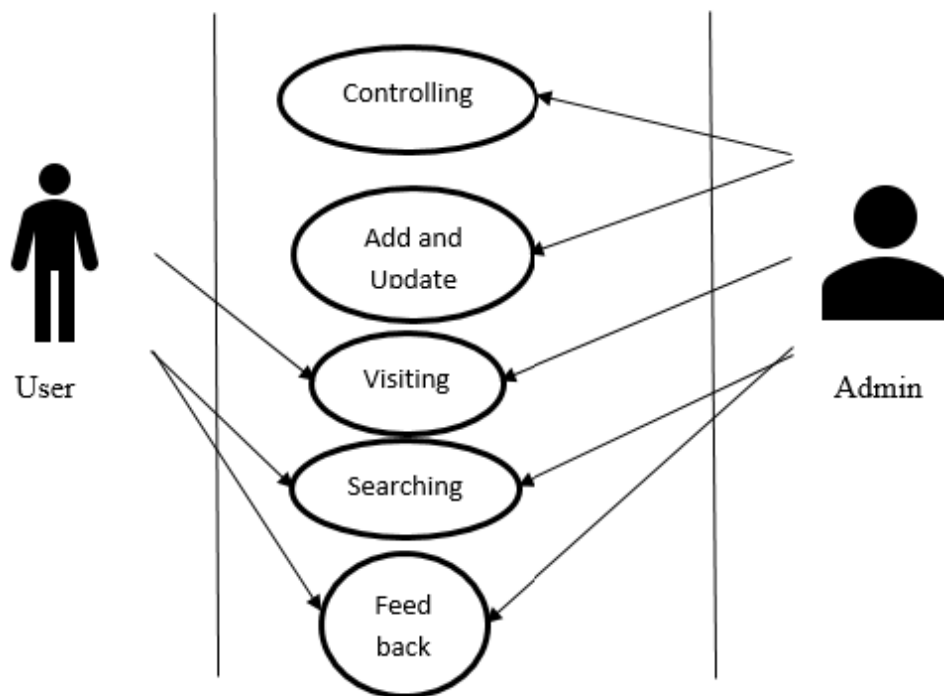


Figure 5.2: Use Case

Actors:

- User
- Admin

5.3 Entity Relationship Diagram

Entity Relationship may be a higher-ranges conceptual data version diagram. Entity-Connection model will depend upon the concept of true-complete global entities in addition to the relationship between the two. ER modeling permits you to have a look at information necessities systematically to make an effectively-developed database. So, it's far taken into consideration a completely great system to complete ER modeling nicely earlier than making use of the source of your statistics. The model of our application is given in fig 5.3.1 and 5.3.2. [10]

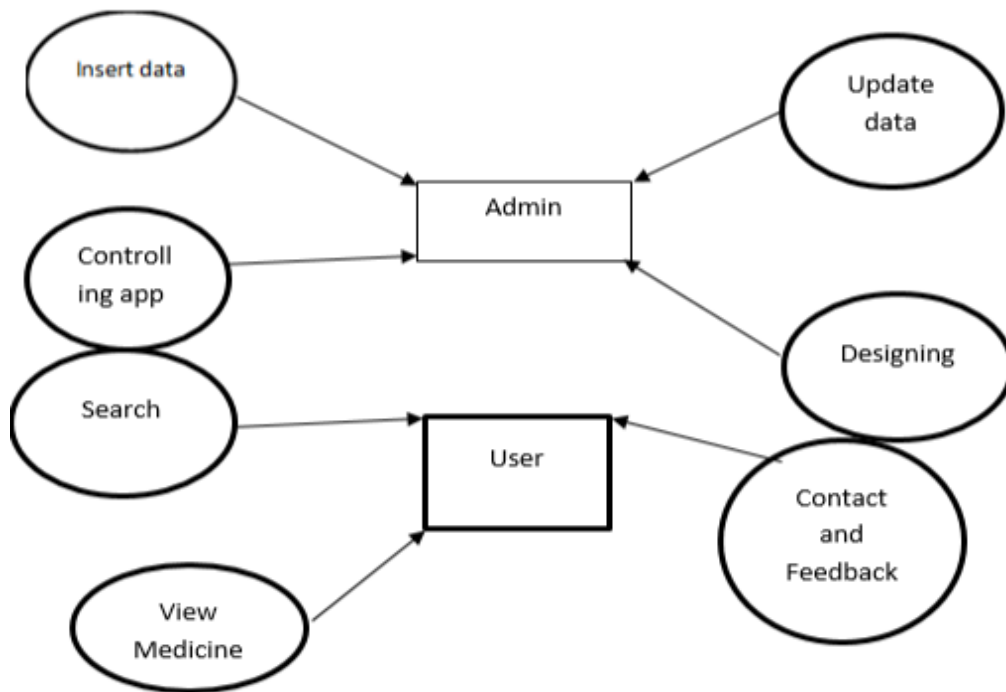


Figure 5.3.1: ERD Diagram (Only Entity and Attributes)

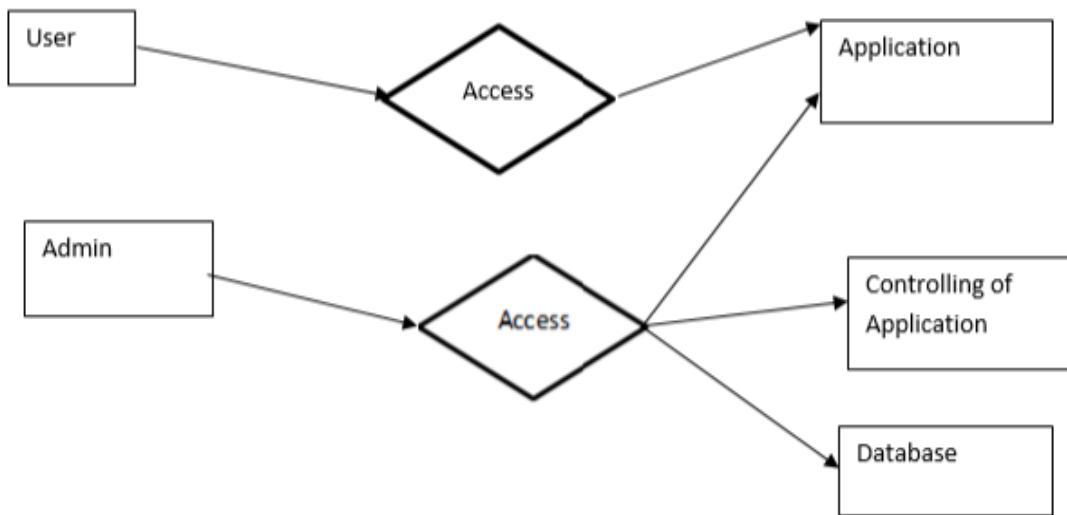


Figure 5.3.2: ERD Diagram (Only Entity to Entity Relationship)

5.4 Database Design

A database consists of bulk information deposited in a framework, making it less difficult to discover and discover applicable records. A well-designed database contains correct and updated records for evaluation and reporting. We cannot strain sufficient the significance of a database for an organization coping with lots of information regularly. The database layout can play an essential function in effectively executing queries and making sure records are consistent. In this blog, we'll communicate approximately database layout, its significance, lifecycle, and techniques, at the side of the important thing steps you may take to increase a sturdy database layout in your enterprise. Database layout is a set of steps that assist create, implementing, and holding a business's information control systems. The number one motive of designing a database is to provide bodily and logical fashions of designs for the proposed database system. A desirable database layout manner is ruled with the aid of using unique policies. The first rule in growing a database layout is to keep away from information redundancy. It wastes area and will increase the chance of faults and discrepancies in the database. The 2d rule is that the accuracy and comprehensiveness of records are imperative. A database containing misguided records will cause misguided evaluation and reporting. Consequently, it may deceive decision-makers and adversely affect a company's performance. Therefore, it's critical to maintain matters policies in thoughts while designing the database in your organization.

5.5 Logical Data Model

The logical data model is the subsequent layer down and is the only one we're maximum worried about whilst designing the BI application. It enables us to recognize the info of the statistics, however, it now no longer shows it's far implemented. The logical data model is the architect or designer's view of the statistics. This chapter covers use cases: Transactional or operation applications along with corporation useful resource planning (ERP) systems. BI or analytical applications along with DW, statistics marts, and OLAP cubes. The model of our application is given in fig 5.5. [5]

- **Admin:** Insert data, Update data, Edit design.
- **For User:** They can Search, they can view Medicine details.

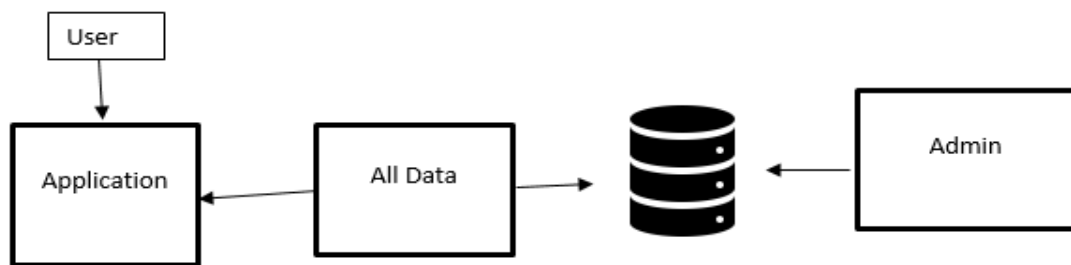


Figure 5.5: Logical Data Model

5.6 Relational Database Design

Relational database design (RDD) models facts and data into hard and fast tables with rows and columns. Each row of a relation/desk represents a record, and every column represents a characteristic of information. The Structured Query Language (SQL) is used to govern relational databases. The layout of a relational database consists of 4 stages, in which the information is modeled into a hard and fast of associated tables. The design of our application is given in fig 5.6.

[6]

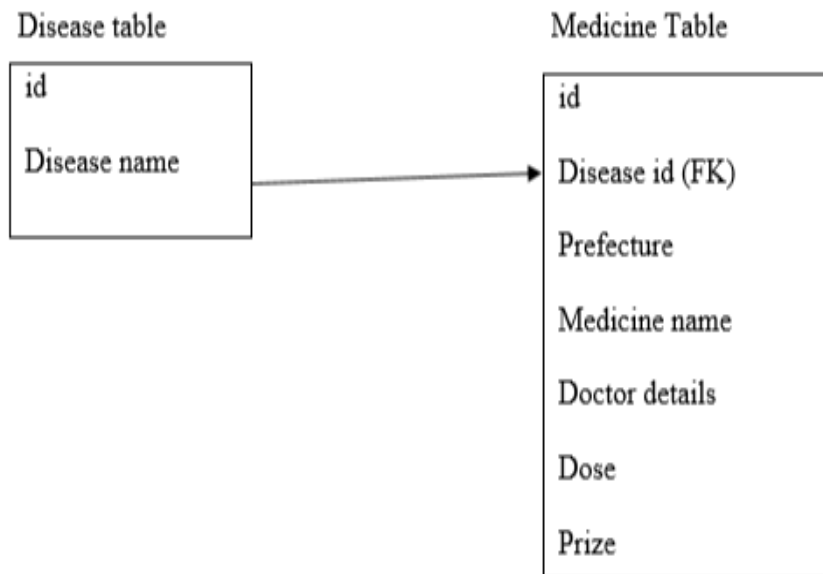


Figure 5.6: Relational Database Design

CHAPTER 6

IMPLEMENTATION AND TESTING

6.1 Implementation of Database Layout

6.1.1 MySQL definition

It is one of the most popular database management systems originally released way back in 1995. SQL is the center of MySQL. And 'My' with 'SQL' is there because it's the name of its co-founder Michael Wideners' daughter. It is an open-source relational database management system. which is used for adding, removing, and modifying information in the database. Standard SQL commands, such as ADD, DROP, INSERT, and UPDATE can be used with MySQL. MySQL is a free to be had database system. MySQL may be used for a variety of applications, however is most commonly discovered on Web servers. A website that makes use of MySQL might also additionally include Web pages that access data from a database. These pages are often called "dynamic," which means the content material of each page is generated from a database as the page loads. Websites that use dynamic Web pages are often called database-driven websites. However, there are numerous paid versions additionally available with which you could use advanced functionality. MySQL is straightforward to apply in comparison to different database software programs consisting of Microsoft SQL Server and Oracle database etc. It may be used with any programming language however is essentially used with PHP. MySQL can run on a couple of platforms consisting of Linux, Windows, Unix, and an information schema to define and manage your metadata. You can both set up it on your nearby system or maybe at the server as well. It is a flexible, scalable, fast, and reliable solution.

6.1.2 Why we use MYSQL

1. MySQL one of the most popular database management systems.
2. MySQL store Data in Tables. Tables further store data in Rows and Columns.
3. MySQL is a freely available Database System.

4. MySQL can run Multiple platforms such as Linus, Windows and Unix.
5. MYSQL is highly scalable database system.
6. MySQL **Security**:

Whenever a database is created, the very subsequent step is to identify and formulate a security policy earlier than giving access to the database users. It is taken into consideration to be incredibly rated within side the area of data safety. That's the reason, it is being depended on via way of means of the world's most popular web applications like Facebook, Instagram, Joomla, Twitter, etc. It offers various safeguards that stand via way of means of the database and save you from breaching.

7. MySQL **Encryption**: Encryption is a data securing process thru which touchy facts may be encoded and the handiest authorized customers can decode the same. It gives the provision of encrypting data thru Public Key Cryptography.

6.1.3 How we use MYSQL Database in our project:

We use MySQL database to store the data that we collected. Our project is about Giving medication, medicine, and natural ways of only those diseases that we collected from the three doctors suggested. Also, these doctors have given the medication, medicine, and natural ways.

We use MySQL database to store the data that we collected. Our project is about Giving medication, medicine, and natural ways of only those diseases we collected from the three doctors suggested. At first, we console (Dr. Sadia Halima, Dr.Md. Moyminul Islam, and Dr.Tahmina Sultana) these doctors about our project then they have given the medication, medicine, and natural ways of the suggested diseases. Now comes how we created the database? In the database, we called the database "MediPlus" and created two tables. The tables are "disease_table" and "medicine_t". In the disease table, we enter data of only disease names and give them an id. In the medicine table, we enter disease medicine name, prefecture (medicine or

Natural way), dose(medication), Prize, doctor details. The schema of our application is given in fig 6.1.3.

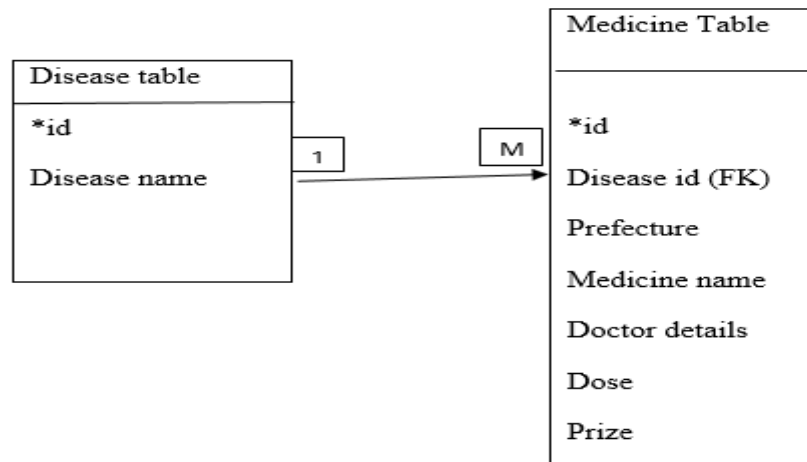


Figure 6.1.3: Database Schema

6.2 Implementation of API

An application program (API) is a set of routines, protocols, and tools for constructing software program applications. Basically, an API specifies how software program components should interact. Additionally, APIs are used when programming graphical user interface (GUI) components. A good API makes it less complicated to develop a program by imparting all of the constructing blocks. A programmer then puts the blocks together. It is a connection between computers or pc programs. It is a sort of software interface, providing a service to different portions of software. A file or standard that describes the way to construct or use this type of connection or interface is known as an API specification. A computer system that meets this

trendy is said to implement or reveal an API. The term API may also refer both to the specification or to the implementation.

6.2.1 API Use

A software intermediary that allows two applications to talk to each other. API gives us one data that we change into JSON format or HTML format. JSON (Java script object notation), we use it for JSON/JSON array data or notation due the fact JSON is the most popular notation. We use JSON because we are using rest (Representational state transfer) API.

6.2.2 Rest API

A software intermediary that permits applications to speak to each other. API gives us one data that we change into JSON format or HTML format. Rest API gives us only data that's all. API also we can use anywhere like desktop or IOS(IONIC) because we don't need to search or do anything for data we will get the data from API/URL.

6.2.3 How we are using Rest API in our project

In our project, we use rest API. At first, we use PHP to create a JSON object or JSON format. now we will explain how we use PHP

6.2.3.1 PHP

PHP is a general-purpose scripting language geared towards web development. We use PHP because it has more options for database connectivity, inexpensive website hosting, various benefits provided by cloud solutions, and excellent flexibility and combinability. We have done the PHP coding part with Visual Studio Code.

In PHP we have a database page that's for connection with the database it will help if we need database connection any other pages. We have created a page called "get_data" on this page we

have gotten a connection from the database page then we have done a query to call/select "Names of disease" from the disease table. Then we have created a JSON format for how the names will show of disease table. Then We copy the source path of the "get_data" page and run it in postman (Postman is an API platform for building and using APIs. Postman simplifies each step of the API lifecycle and streamlines collaboration so you can create better APIs—faster) to get a URL/API. This way we get the URL of the Names of diseases in the disease table. Now we also want another API or URL for the medicine table that will call or select all whole medicine tables but we also want to get id from the disease table. Our goal is to First get a name from the disease table then give a type (Medicine or Natural way) and search it in the medicine table and show the data. We created the "get_data_2" page on this page created 2 variables with Get Request method and call it "\$medicine name" and "\$medicine type" in these 2 variables we give 2 parameters "names" and "types". In this way, "name" will be represented as disease tables disease names than "types" will be represented as medicine tables 2 types Medicine and Natural way. For example we want [name="Fever"&Type="Medicine"]. So, we create 2 queries for this situation then we create a JSON format for the data the same way we did in the 1st URL. Then again we run it in postman. This way we get our 2nd URL.

6.3 Implementation of Front-end-Design

6.3.1 Java ME

The Java ME stands for Java Micro Edition. It is an improvement and deployment platform of transportable code for embedded and mobile phones (sensors, gateways, mobile phones, printers, TV set- top boxes). It is primarily based totally on object- oriented Java. The Java ME has a strong person interface, tremendous security, integrated network protocols, and a guide for applications that may be downloaded dynamically. Applications which can be advanced on Java ME are transportable and may run and also can leverage the of local competencies the device.

6.3.2 How we are using Java ME in our project

In our project, we have used java ME. Our application is for mobile phones/devices that's why we used java ME. First, we have created a project in the android studio. In this project, we have created a java and XML file named "Main Activity" and "Activity main" for "Home Page". In the XML part, we have created five buttons called Search, Disease Book, Medicine Book, Reference, and About Us. Now in the java part, we have given every button intent to go to their pages. We also added a menu bar on the home page. In the menu bar, we have added three buttons called Home, Feedback, and Contact us. All three buttons have their pages. The in-home button will go to our website, Feedback will go to email, and contact us will show contact details. In the java part, we have given the path to where the menu bar buttons will go.

Now for the Search button, we have created an XML and java page named "Search" "search_activity". In the XML file, we have created a search view, a listview . In the java page , we have given the filter to search view. That will search the data we need. In listview, we add a click listener. In click listener, we have used volley. Volley is an HTTP library that makes networking for Android apps less difficult and maximum importantly, faster. Volley is to be bad on GitHub. Volley gives the subsequent benefit, Automatic scheduling of network requests. Volley will help us to get the rest API that we created to add in listview. The API is to show all the names from the disease table. With help of volley, we add an intent to take the clicked data/name like "Fever" to the next page. Now on the next page is "Medicine Type". In this, we have an XML and java page called "Medicine type" and "medicine_type_activity". In the XML part, we have created a text view for the title and also created two buttons named Medicine and natural way. In the java part, we use volley again for those two buttons.

This time the URL we need is if we click medicine then all the medicine will show "Fever". Then if we click Natural way the button will show all the natural ways of "Fever". At last, we give this two-button intent. That means the data will show on the next page that is 'Medicine/natural ways Detail. On this page the XML part we have created a text view for the title and created a list view. In the java part, we have accepted the data given by Medicine type in listview. That means the medicine and also natural ways will show on our activity page. We also use intent for the

medicine and natural ways in listview for whom the doctor suggested. Now the "Reference" page. In this page XML part, we have created a text view for the title and, we have created a listview. In the java part, we have set all information of doctors who we console for this project. The next page is "Daisies Book". On this page, we have created a title and a list view in XML. In java, we have set data of search pages all disease names with help of volley. That means here anyone can get all the diseases that are inserted in the database. They don't have to search for it.

The next page is "Medicine Book". On this page, we have created a title and a list view in XML. In java, we have set data of search pages for all disease medicines with help of volley. That means here anyone can get all the only medicines that are inserted in the database. They also can search for it. The next page is "About us". In this page XML part, we have created a text view for the title and, we have created a listview. In the java part, we have set all information of our members who we have worked with and collected data for this project.

In Home page we have a home button its directly connected to our application website.

6.4 Testing Implementation

We tested our application very closely and safely, First, we run the project and try to use it on different phones or devices. This way we can see that how our application responds and works. We also test our database data insertion. if we add new data, we check if data came to our application safely. We also give the app to some users to test our application in the proper way like they will get help from this app. Their review was, they find the medicine at a minimum price and get help from the natural way. In this, we assure that the data we collected from doctors is pure.

6.5 Test Results and Report

Our application text result is good., But we need more features and design in our application. That we will work on in the future.

6.6 Sample Screenshot

In this part we gave screenshots of our application.

Home page

In this page we have 5 main buttons called Disease Book, Medicine Book, Search button, Reference button, About us button. We, also have a menu bar. The home page of our application is given in fig 6.6.1.

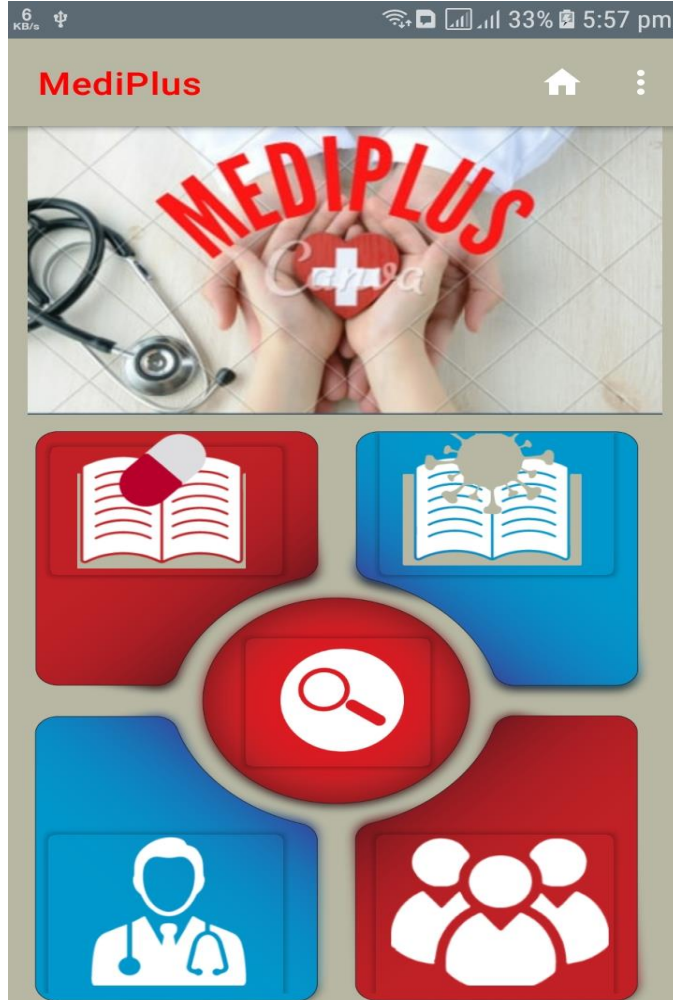


Figure 6.6.1: Home Page

Menu bar

In menu bar you will see 3 buttons. The buttons are Home button, contact us button, feedback button. The menu bar of our application is given in fig 6.6.2.

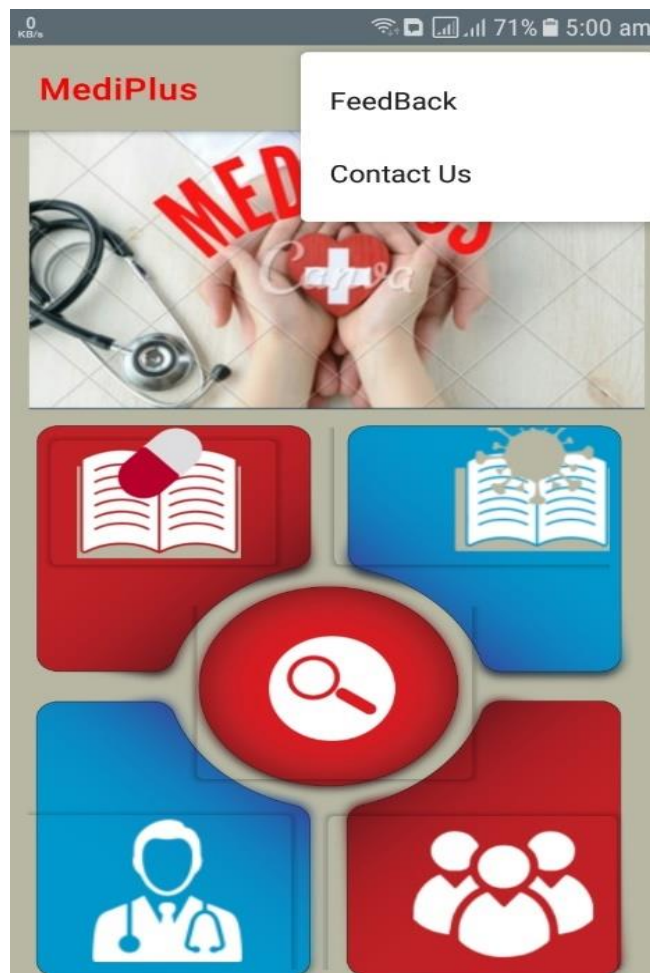


Figure 6.6.2: Menu Bar

Contact Us page

In this page you will see contact information. The contact us page of our application is given in fig 6.6.3.

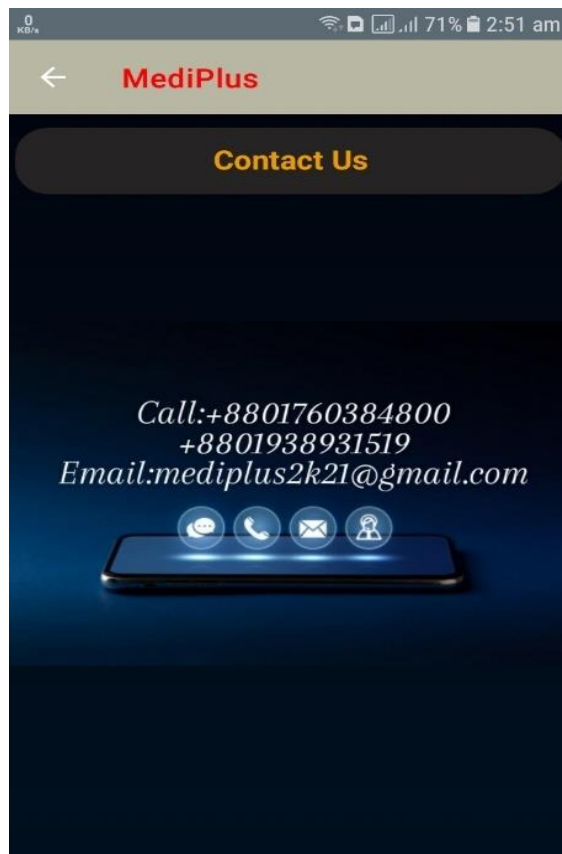


Figure 6.6.3: Contact us page

Feedback

If anyone click on feedback button they can give their feedback of our application. The feedback of our application is given in fig 6.6.4.

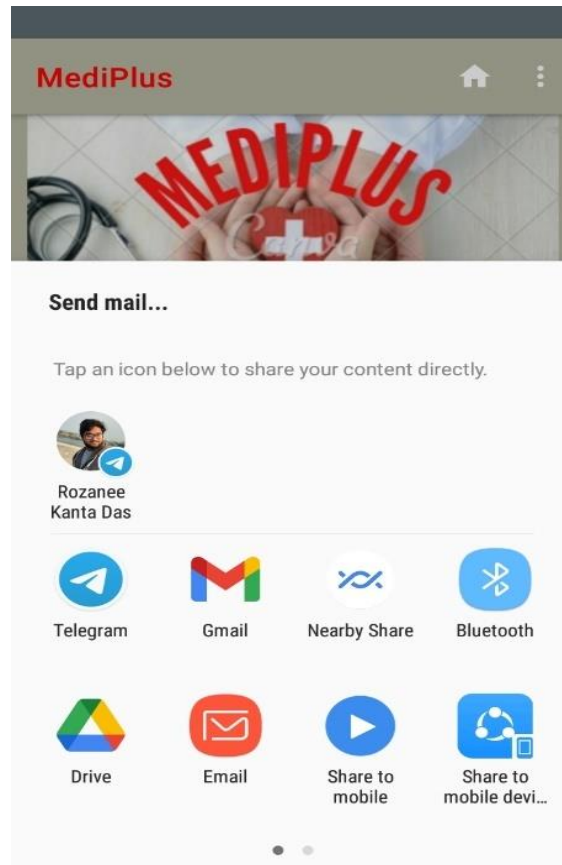


Figure 6.6.4: Feedback

Search page

In search page anyone can search their disease. The search page of our application is given in fig 6.6.5.



Figure 6.6.5: Search page

Medicine Book page

In this all the medicines are here. The medicine book page of our application is given in fig 6.6.6.



Figure 6.6.6: Medicine book page

Medicine Details page

In this page the medicine details will show. The medicine details page of our application is given in fig 6.6.7.



Figure 6.6.7: Medicine details page

Disease Book page

In this page all disease is here. The disease book page of our application is given in fig 6.6.8.

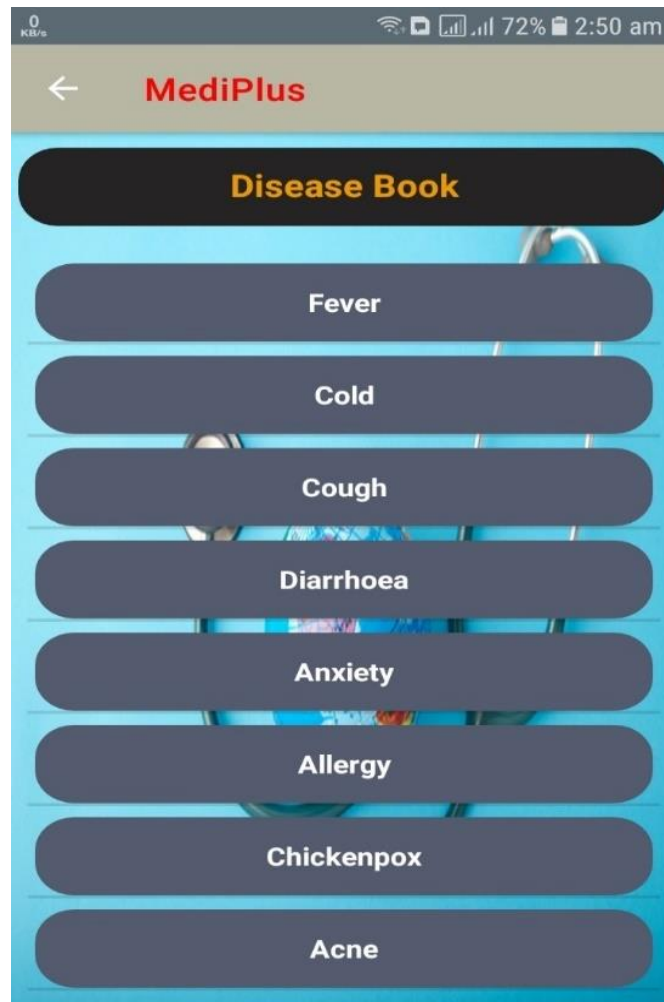


Figure 6.6.8: Disease book page

Medicine Type page

In this page medicine type will show. The medicine type page of our application is given in fig 6.6.9.

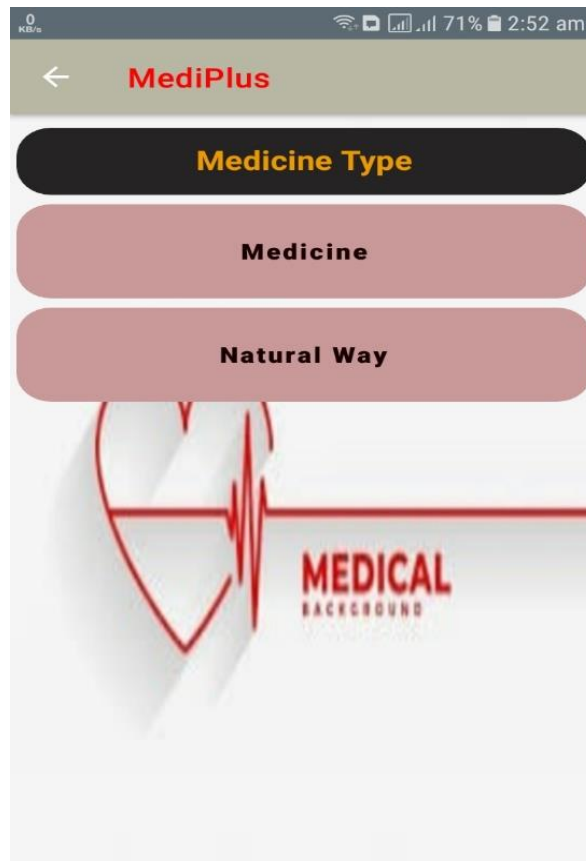


Figure 6.6.9: Medicine Type page

Medicine page

In this page medicine will show. The medicine page of our application is given in fig 6.6.10.

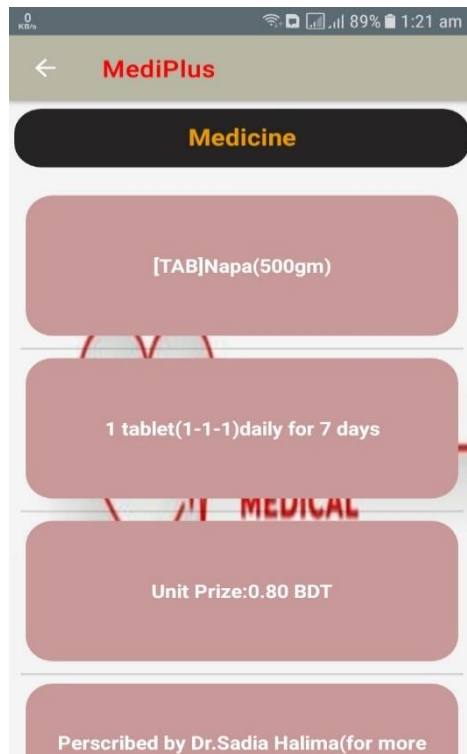


Figure 6.6.10: Medicine page

Natural Way page

In this page natural ways will show. The Natural way page of our application is given in fig 6.6.11.

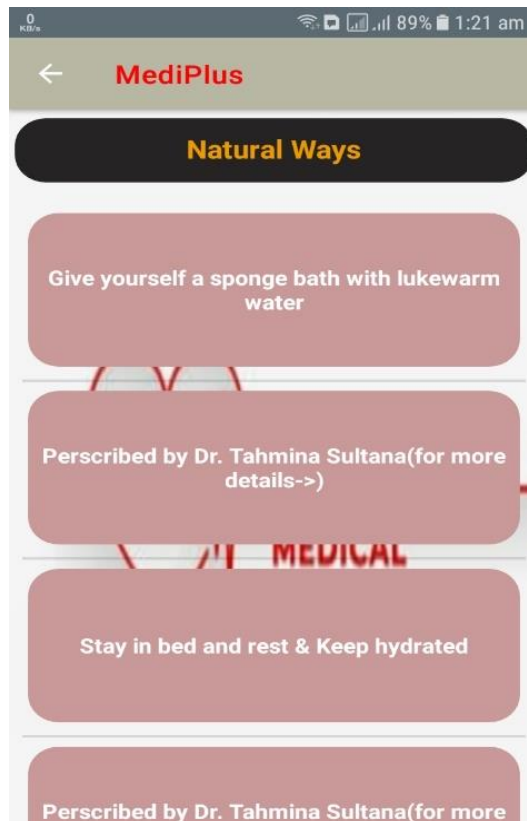
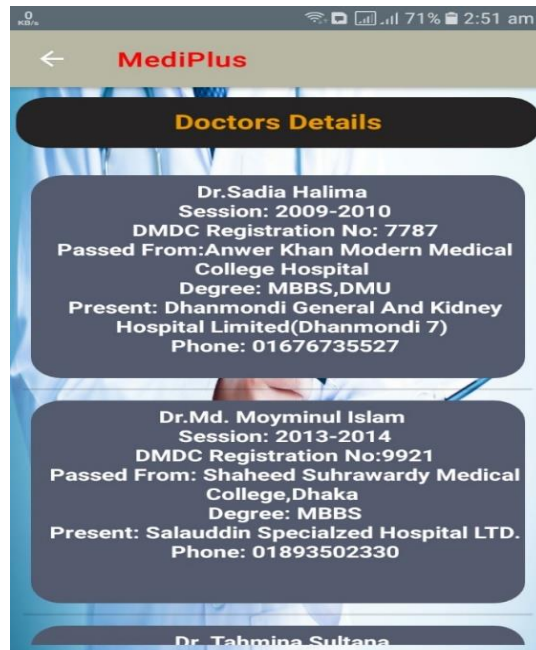


Figure 6.6.11: Natural Way page

Doctor Details page

In this page doctor details will show.



About us page

In this our member's info will show.



CHAPTER 7

IMPACT ON SOCIETY, ENVIRONMENT AND SUSTAINABILITY

7.1 Impact on society

This Application will have a lot of impact on society. This application is for society. In society, many people believe that they don't need to go to visit a doctor for a minor disease. They go to a pharmacist for medicine who doesn't have a medical certificate. So, In society, this application can change their thought because our application will give them certificated doctors suggest medicine and natural ways. It will take some but if we promote it well it can affect society.

7.2 Impact on Environment

Our project will impact the environment. This application is very smooth easy to understand and also it will help people. In our application, anyone can search for their disease and get medicine and natural ways. In our application, we don't have any native features that will put a negative impact on the environment.

7.3 Ethical Aspects

In our project development, we need some ethical aspects to follow. The aspect is:

- We need to always think about what we taking for data collection this data needs to be correct and justified. Because This application is about people's health are on it.
- This data we are taking this need to be doctor suggested only.
- Our whole database needs to be checked properly because it will show in the application.

7.4 Sustainability Plan

Our application and data need to be sustainable. Mainly the data needs to be perfect and well

justified then our application will be more sustainable. We need our project can be updated in the future and give good support to people. We plan to give more data and if anyone wants to work on it there open to it.

CHAPTER 8

CONCLUSION AND FUTURE SCOPE

8.1 Discussion and Conclusion

In conclusion, we can say that our country is a developing country. We face many problems every day. There is a major problem we face in medical sites. There few reasons are if we have a disease we have cannot go to the doctor for some minor disease because doctor fees are too costly. There are also lots of problems we face. we go to a pharmacist for medicines. So, our goal is to make this application for those people who don't go to the doctors for minor diseases and go to the pharmacist. This application will help them to get proper Doctor suggested medicine plus natural way of disease.

8.2 Scope for Further Development

In the future, we want to update our application. Now we are using the Java ME version that means we develop this application for mobile but in the future, we want to develop or change it to the IONIC(IOS) version and also build it in the flutter. We want to make an automation system using online other API, using cross-language like a flutter, IONIC we can also develop it for web, desktop, IOS. In this way, we can make this project develop in 4 different applications (mobile or Android, IOS, desktop, web).

In this project our development areas are

1. In our project we transfer data from one page to another (2nd page) to call some data on the 2nd page. When we call from the 2nd page, we need two values. One value will come from the 1st page, the 2nd value we will get from the 2nd page, and when we call the 2nd page all data needs to be on that page only. When getting the 1st value, we are getting a name that is not

unique but a unique id. So, if we can make only id to come from page one that will be our development.

2. In our project we can add a feature like "History Button" that will show the result of searching.

3. In our project we can add a search button like where we are searching daisies, we can also search only medicines.

4. In our project we can also make this app visually pleasing.

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