

SMART HEALTH MAINTENANCE

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

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APPROVAL

This Project titled “**SMART HEALTH MAINTENANCE**”, submitted by **S M Abdullah Sabbir** and **Manisha Barman** 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 (BSc) and approved as to its style and contents. The presentation has been held on 10 December 2018.

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We hereby declare that, this project has been done by us under the supervision of, **A S M Farhan Al Haque, Lecturer, Department of CSE** Daffodil International University and co-supervision of **Mr. Saiful Islam, Lecturer 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

This task is proposed to build up an electronic application on online which will give less demanding correspondence among Patients and Doctor. The proposed venture is an online application which can be gotten to all through the predetermined office to deal with the different procedures engaged with Smart Health Prediction System where Patient can see different Doctor For their medical problem, the framework indicates different embodiment. Programming additionally records different master Doctors accessible where client can look Doctor for their therapeutic issue. The desire of building up this venture is to give restorative direction to a patient who needs to think about the Disease Symptoms. Medicinal services is where choices as a rule have high-hazard and mind-boggling expense related with them. The choices identified with wellbeing are urgent as it might cost a man his/her life. While diagnosing the infection specialist investigations the indications of the patient. With respect to manifestations, the last infection is anticipated.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

We are making an online electronic application name as Smart Health Maintenance. Here we propose a framework that enables clients to get moment direction on their medical problems through a medicinal services framework on the web. The framework is encouraged with different indications and the ailments related with that framework. The framework is first educated with different indications and the infection related with every framework. The Health Prediction framework is an end client bolster and online conference venture. The framework contains information of different indications and the malady/disease related with those side effects. It likewise has a possibility for clients of sharing their side effects and issues. The framework enables client to share their side effects and issues. It at that point forms client's indications to check for sickness that could be related with it. In that we utilize a few information mining systems to figure the most exact ailment that could be related with patient's side effects. In the event that the framework can't give appropriate outcomes, it advises the client about the kind of illness or turmoil it feels client's side effects are related with. In the event that client's indications don't actually coordinate any sickness in our database, it demonstrates the infections client could most likely have making a decision by his/her side effects. It additionally comprises of specialist address, contacts alongside Feedback and director dashboard for framework activities. In present day times it is exceptionally gainful for clients.

1.2 Motivation

In created nations individuals are utilizing web for a gigantic time. We know present day's in our nation Internet wind up prominent so we needed to make a site that make our kin to accomplish the proficiency in quicker health treatment. So we were propelled from this quicker health treatment and attempt to make a total framework for Health Maintenance. Enables clients to help promptly. we believe it's not created and running yet at Bangladesh.

1.3 Objective

- ☐ To make a profile Doctor and patient
- ☐ To lessen correspondence cost
- ☐ To decrease time
- ☐ To make a network for the two clients
- ☐ To construct a completely utilitarian framework with the end goal to accomplish a productivity in quicker wellbeing treatment and online interviews framework.
- ☐ To make the essential treatment rapidly and effortlessly total online discussion framework.

1.4 Expected Outcome

- ☐ User can scan for specialist's assistance whenever.
- ☐ User can discuss their ailment and get moment analysis.
- ☐ Doctors get more customers on the web.
- ☐ To make the essential treatment rapidly and effectively.

1.5 Report Layout

We have sorted out our report as follows.

In part 2, we present the foundation conditions of our undertaking. We likewise informed about the related work, the degree and difficulties of the task and we are doing similar investigation with numerous other competitor frameworks. In part 3, we determined the prerequisite venture. We characterized the business procedure show, information stream chart, utilize case graph, ER outline and plan necessities. We likewise examined about the necessity gathering and investigation process. In part 4, we indicated the front-end and back-end structure of the undertaking. In part 5, we showed the usage of the entire task and we tried each segment of the venture whether the application is filling in of course. In section 6, we assigned about end and the extension for further improvement of the task. Finally, of all, we give some related reference to guarantee that the data in the report are must be right.

Chapter 2

BACKGROUND

2.1 Introduction

We as of now talk about that why we pick this venture; we endeavour to assist individuals with achieving the effectiveness in quicker health treatment and online discussion framework. Essentially we consider all conceivable client and endeavour to guarantee the ease of use. In this part we talk about all undertakings that we have to worry before making a stride ahead. Here we need to quickly examine about every related work, Comparative Studies, The Scope of the Problem and Challenges.

2.2 Related Work

There are some related work that we found there we defined some of them M. Durairaj, V. Ranjani presented a paper that aims to make a detailed study report of different types of data mining applications in the healthcare sector and to reduce the complexity of the study of the healthcare data transactions. Also presents a comparative study of different data mining applications, techniques and different methodologies applied for extracting knowledge from database generated in the healthcare industry. Finally, the existing data mining techniques with data mining algorithms and its application tools which are more valuable for healthcare services are discussed in detail [1]. Divya Tomar and Sonali Agarwal have presented a brief introduction of data mining techniques such as classification, clustering, association, regression in health domain and their advantages and disadvantages. This survey also highlights applications, challenges and future issues of Data Mining in healthcare [2] web application which is designed to support both Patient and doctor it allows to

- ☐ Search doctor by his name or department name
- ☐ Notice doctor about appointment.
- ☐ Admin can create and manage Doctor Department, Creates Doctor & Assistant.

Disservices of the current application

- ☐ It must be gotten to through an internet browser.
- ☐ It can't send push notices to the client.
- ☐ Online visiting framework isn't accessible.
- ☐ Security issue isn't addressable.

In our proposed application we give as much as highlight to client for helping them and expanding productivity our framework.

- ☐ It must be gotten to through an internet browser.
- ☐ It can't send push warnings to the client.
- ☐ Ensure ease of use that anybody from anyplace utilize our application effortlessly.
- ☐ Online arrangement framework office is accessible.

So we say that our proposed protest is extremely exact until further notice days and satisfy every single conceivable office.

2.3 Feasibility Study

A feasibility study surveys the operational, specialized and financial benefits of the proposed venture. The practicality think about is expected to be a fundamental audit of the actualities to check whether it is deserving of continuing to the examination stage. From the frameworks expert point of view, the plausibility investigation is the essential instrument for prescribing whether to continue to the following stage or to end the task.

A feasibility study is an administration arranged action. The goal of a practicality contemplate is to see whether a data framework undertaking should be possible and to propose conceivable elective arrangements [4].

Activities are started for two expansive reasons:

1. Problems that loan themselves to frameworks arrangements
2. Opportunities for enhancing through:
- 3 Upgrading frameworks
- 4 Altering frameworks
- 5 Installing new frameworks.

A plausibility study ought to furnish administration with enough data to choose:

- ☐ Whether the venture should be possible
- ☐ Whether the last item will profit its expected clients and association
- ☐ What are the choices among which an answer will be picked?
- ☐ Is there a favoured option?

We have checked every one of the conditions that are expressed above and gone to the choice that, it's a hundred percent doable task as well as a requesting one.

Technical Feasibility Study

An expansive piece of deciding assets needs to do with evaluating specialized possibility. It thinks about the specialized necessities of the proposed task. The specialized prerequisites are then contrasted with the specialized capacity of the association. The frameworks venture is considered actually possible if the inside specialized capacity is adequate to help the task necessities. The investigator must see if current specialized assets can be updated or added to in a way that satisfies the demand under thought [5]. When composing a possibility report, the accompanying ought to be taken to thought:

- ☐ A brief depiction of the business to evaluate more conceivable segments which could affect the study
- ☐ The part of the business being inspected
- ☐ The human and cash related variable

To satisfy the fundamentals of this assignment, it requires incredible data of web enhancement. As we have enough learning on Laravel PHP and its structures, HTML, CSS, Bootstrap and J Query, we were especially certain to satisfy us and everyone.

Operational Feasibility Study

Operational possibility is a proportion of how well a proposed framework takes care of the issues, and exploits the open doors distinguished amid extension definition and how it fulfils the necessities recognized in the prerequisites investigation period of framework advancement. Operational achievability surveys the eagerness of the association to help the proposed framework.

These incorporate such structure subordinate parameters, for example, unwavering quality, viability, supportability, ease of use, efficiency, superfluity, maintainability, reasonableness and others.

Economical Feasibility Study

Financial examination could likewise be alluded to as cost/advantage investigation. It is the most as often as possible utilized strategy for assessing the adequacy of another framework. In financial examination the technique is to decide the advantages and funds that are normal from a competitor framework and contrast them and costs. The investigator must gauge costs in every one of the accompanying regions:

People, including IT staff and clients

- ☐ Hardware and hardware
- ☐ Software, incorporating into house improvement and in addition buys from merchants.

- ☐ Licenses and expenses.
- ☐ Facility costs

Now, the anticipated expenses may be a harsh gauge. The correct expenses are not required to decide monetary practicality. It is just required to decide whether it is attainable that the task expenses will fall inside the objective spending plan or rate of profitability.

2.4 Scope of the Problem

We have just observed that some present application as of now helps however those sites don't give any offices about specialist and patient correspondence through online arrangement. We guarantee it, so specialist and patient correspondence issue is settled by our undertaking. In this undertaking Patients can scan for specialist and make online appointments. Patient can likewise give input. Specialists can give arrangements. Administrator has the expert to include/erase clients and doctors. He likewise sees the protestations of patients and takes vital actions. We attempt to our level best that individuals get their normal input.

2.5 Challenges

There is no work exists without test. When we will gather information from various region we discover a few troubles since we don't think about every one of the infections, their side effects and what sorts of sicknesses. We are not ready to discover this so it's irritating us excessively. We contend with other existing framework so we need to gather information from web and in some cases looking information from numerous healing centres to utilize our framework and make reasonable that our framework is simple and superior to other people.

Chapter 3

REQUIREMENT SPECIFICATION

3.1 Requirement Collection & Analysis

Our framework is gathered colossal measure of information when any client enlist in our framework. We examination information and consider the information that we gather from client. Administrator can get to the information and watch out for the client that on the off chance that they confront any issue they can without much of a stretch fix it.

For doctor

From specialist we gather their own data, Diseases data additionally patient's data. We can likewise observe the patient's arrangement history. So we utilize this data to build up our framework.

For Patient

From this project we gather their own data, their location versatile number. They can look specialist and take arrangement so here we see that the new correspondence develop among specialist and patients We utilize this data to build up our framework.

For Administrator

The Administrator is a definitive client of the framework. Administrator should login to the framework to work. None other than Admin can get to the full framework. Just administrator will have the capacity to alter, refresh, include and erase the information from this framework and he will have the specialist dashboard additionally persistent.

3.2 ER Diagram

An Entity Relationship (ER) Diagram is a kind of flowchart that shows how "substances, for example, individuals, items or ideas identify with one another inside a framework. ER Diagrams are regularly used to structure or troubleshoot social databases in the fields of programming designing, business data frameworks, training and research.

Entity

A perceptible thing, for example, a man, question, idea or occasion—that can have information put away about it. Consider elements things. Models: a client, understudy, auto or item. Ordinarily appeared as a rectangle.



Figure 3.1.1: Symbol of Entity

Relationship

How substances follow up on one another or are related with one another. Consider connections verbs. For instance, the named understudy may enlist for a course. The two substances would be the understudy and the course, and the relationship portrayed is the demonstration of selecting, interfacing the two elements in that way. Connections are normally appeared as precious stones or marks specifically on the interfacing lines.



Figure 3.1.2: Some symbol of relationship

Attribute

A property or normal for a substance. Regularly appeared as an oval or circle.

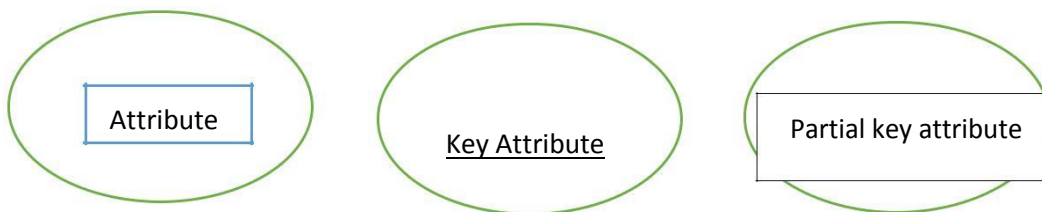
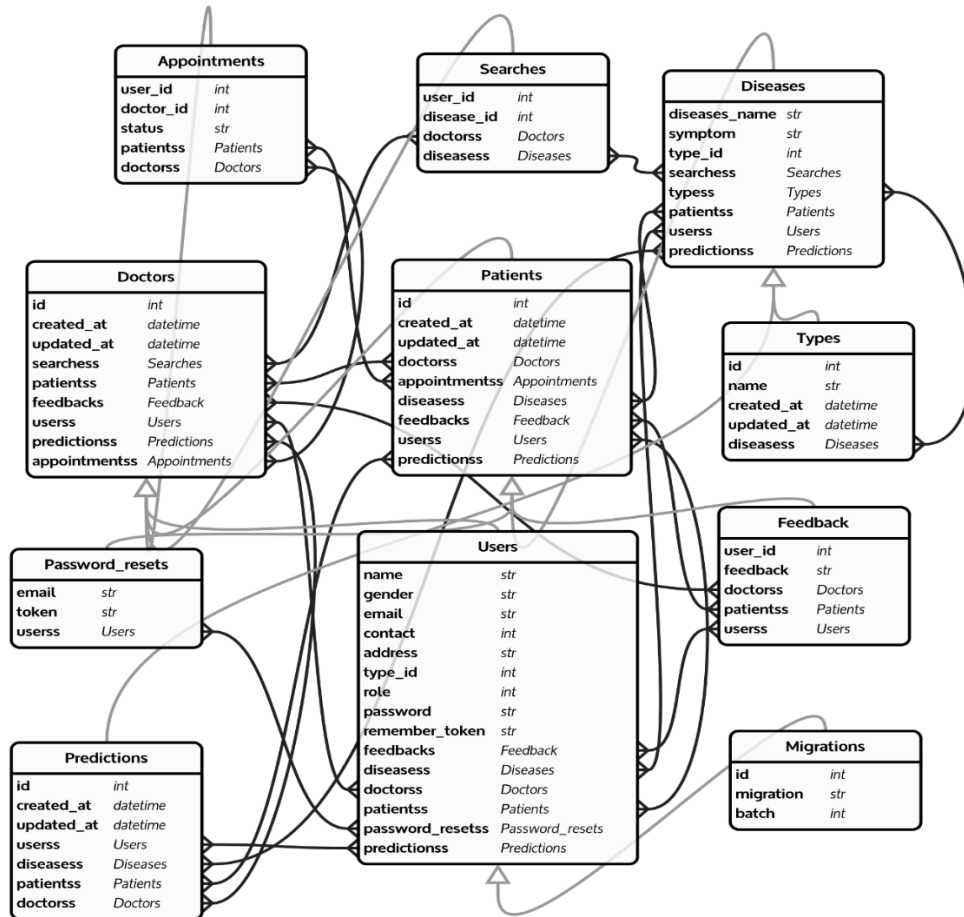


Figure 3.1.3: Some Symbol of Attribute.

Presently for our framework the ER outline given underneath



TONY

Figure 3.2: ER Diagram

3.3: Use Case Modelling and Description

UML Use Case Diagrams can be utilized to depict the usefulness of a framework on a level plane. That is, instead of only speaking to the subtle elements of individual highlights of a framework, UCDs can be utilized to demonstrate the majority of its accessible usefulness. It is critical to note, however, that UCDs are in a general sense unique in relation to succession graphs or stream outlines since they don't make any endeavour to speak to the request or number of times that the frameworks activities and sub activities ought to be executed [7]. The figures are appeared underneath for administrator, police, mortgage holder and inhabitant individually.

3.3.1 Use Case (Administrator Part)

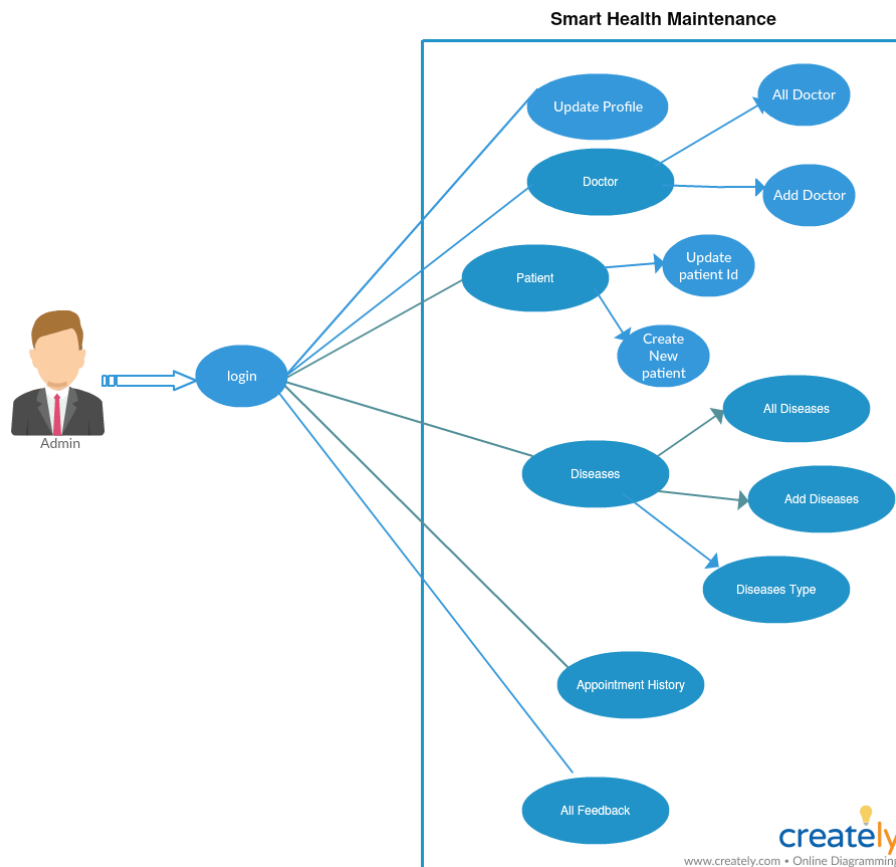


Figure 3.3.1: Use Case Model for Admin

3.3.2 Use Case (Doctor Part)

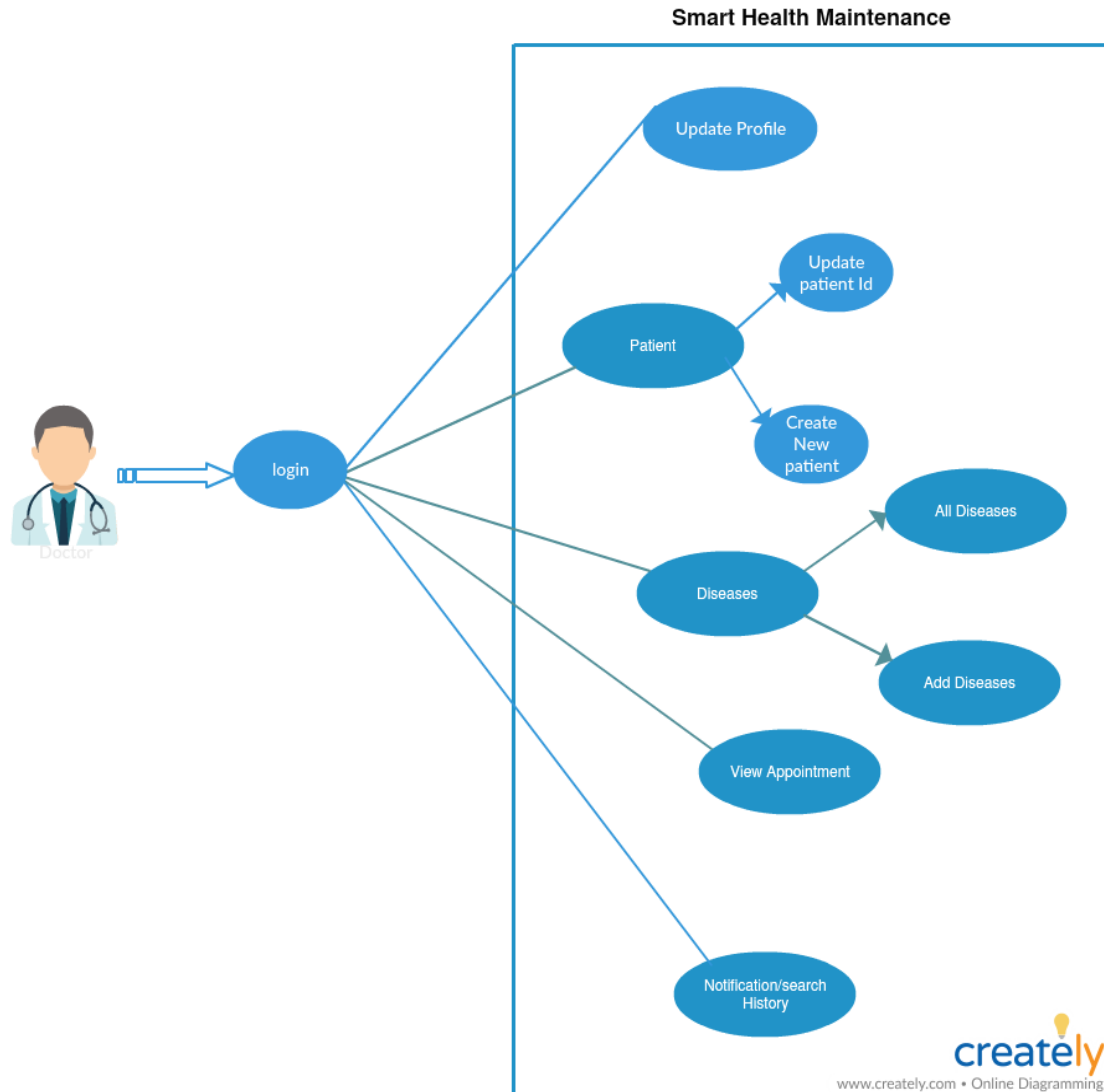


Figure 3.3.2: Use Case Model for Doctor

3.3.3 Use Case (Patient Part)

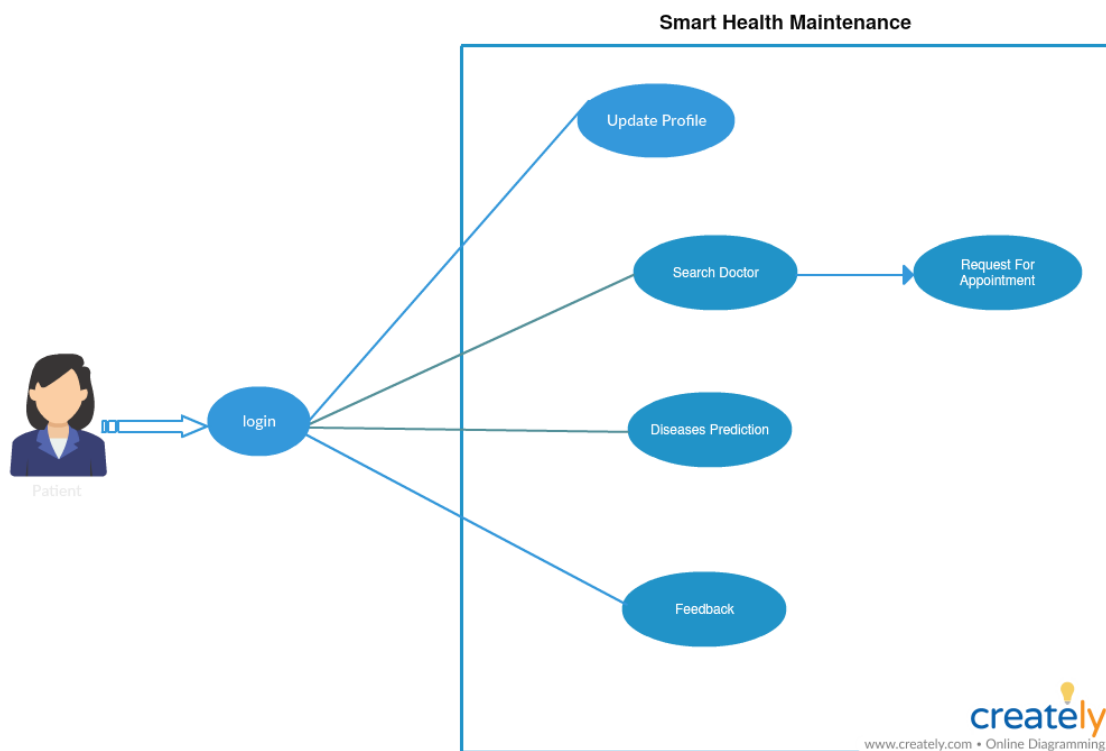


Figure 3.3.3: Use Case Model for Patient

3.4 Logical Data Flow Diagram

Above all else, we have presented about the whole image which we have use to draw the framework flowchart of the framework. The DFD clears up structure requirements and recognizes genuine changes that will get the chance to be extends in system diagram. It is IPO Chart: Here we have select five distinct images to start five unique purposes.

- Input, Process, Output Chart
- This is the sign the DFD, there are FIVE images:



This rectangular Defines an Input information

Distinguishes information spill out of Job examination to

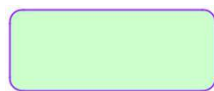
Retirement.



Speaks to a procedure that changes approaching information stream into active information stream.



Document store process information.



Distinguished Output Data.

To draw the framework stream outline of Smart Health Maintenance we will utilize these graphs.

3.4.1 Data Flow Diagram

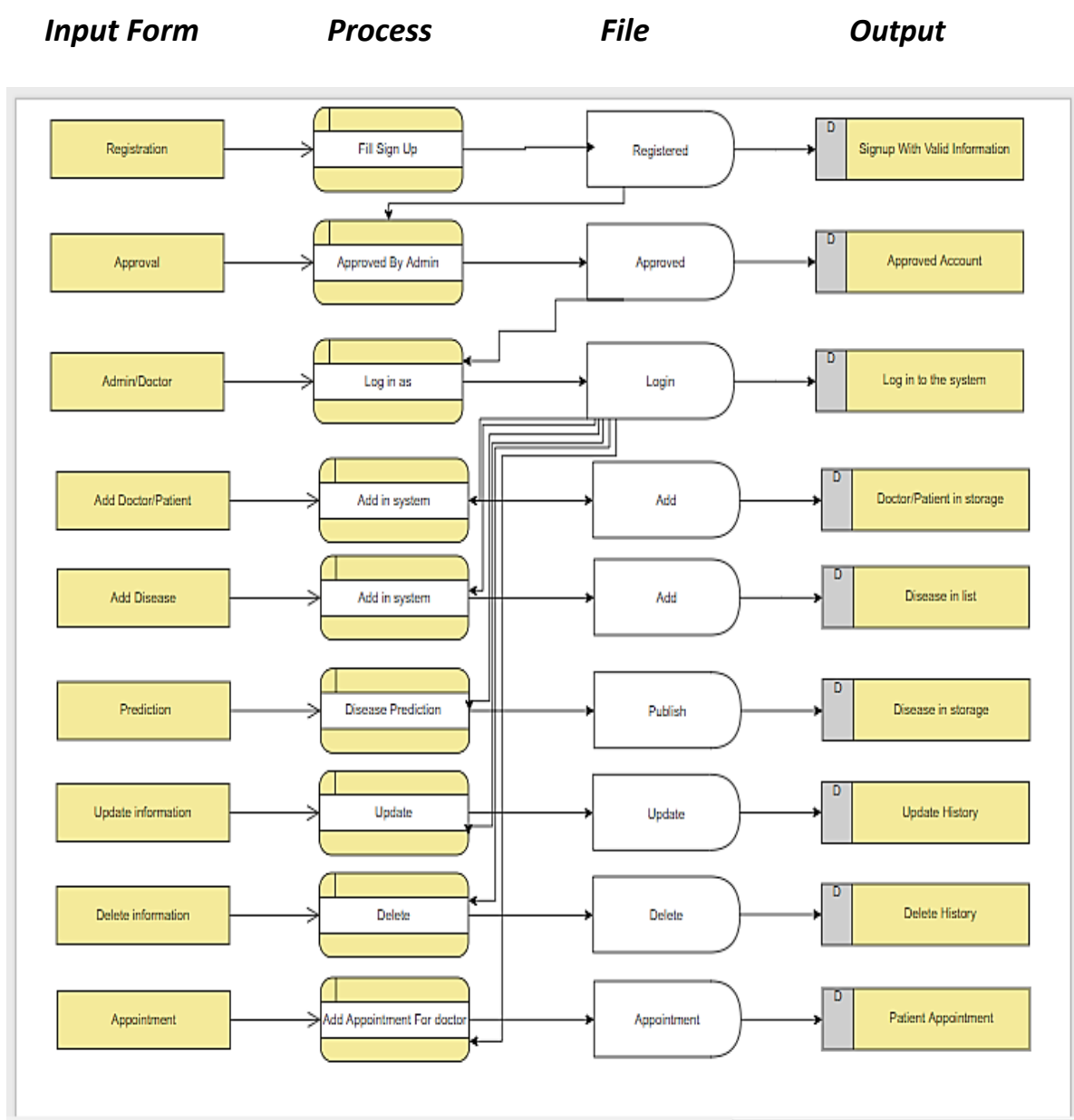


Figure 3.4: Data Flow Diagram

3.5 Design Requirements

Dashboard has been utilized to actualize the website pages of the proposed framework. HTML, CSS, JavaScript, JQuery likewise have been utilized to assemble the site page. Here we present four distinct dashboards for our framework admin, s and patient consciously. Each dashboard has diverse highlights which are structured premise of Bootstrap with HTML, CSS, JavaScript, and JQuery.

Chapter 4

DESIGN SPECIFICATION

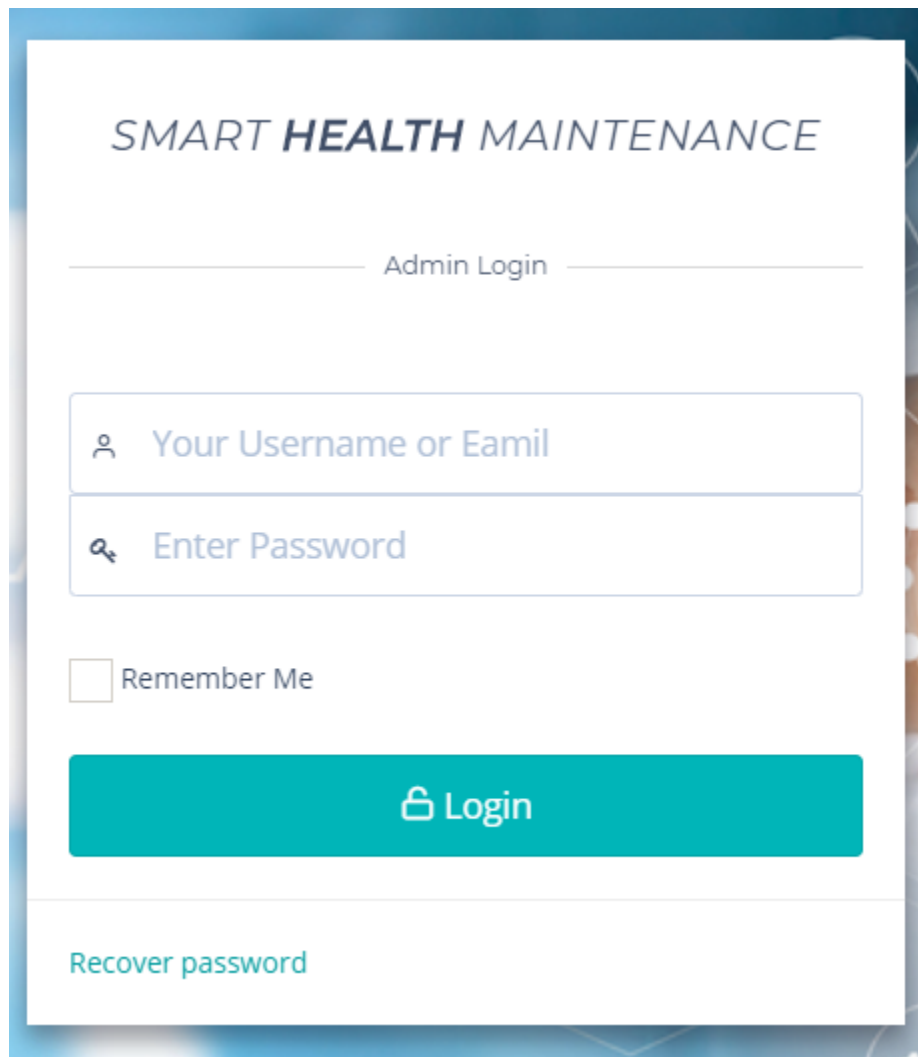
In this part we will talk about procedure of the proposed data framework. A data framework (IS) is any composed framework for the accumulation, association, stockpiling and correspondence of data [7]. All the more particularly, it is the investigation of reciprocal systems that individuals and associations use to gather, channels, and process, make and disseminate information. In this part we will quickly clarify about each capacity of our framework and will demonstrate the procedure how it functions. Here we will quickly clarify about every last capacity which we have incorporated into this venture.

4.1 Front-end design

Our task front-end has planned by HTML, which remains for Hypertext Mark-Up Language, is the dialect for portraying organized reports and in addition the dialect used to make website pages in the Internet. CSS and Bootstrap system utilized. Falling Style Sheets (CSS) is a template dialect utilized for portraying the introduction of a report written in an increase dialect. Bootstrap contains HTML-and CSS-based plan layouts for typography, frames, catches, route and other interface segments, and additionally discretionary JavaScript augmentations. A few alarms and intuitive undertakings are produced by JavaScript. Very nearly 35 pages of our undertaking have substance of front-end. Numerous highlights of a protest situated dialect and Tools for structure UI are included as an undertaking need.

4.1.1 Login

In PC security, a login insinuates the affirmations required to get access to a PC system or other restricted region. Along these lines, in this structure in other to pick up induction to the backend, the system requires a customer confirmation (login) for security purposes. The customer will install his username and mystery word and after that he will go for login. In case such customer exists in the database the system will give the customer access to the structure, if not the system will show a bumble message to the customer. This suggests he can't approach the structure. The figure is showed up underneath



SMART *HEALTH* MAINTENANCE

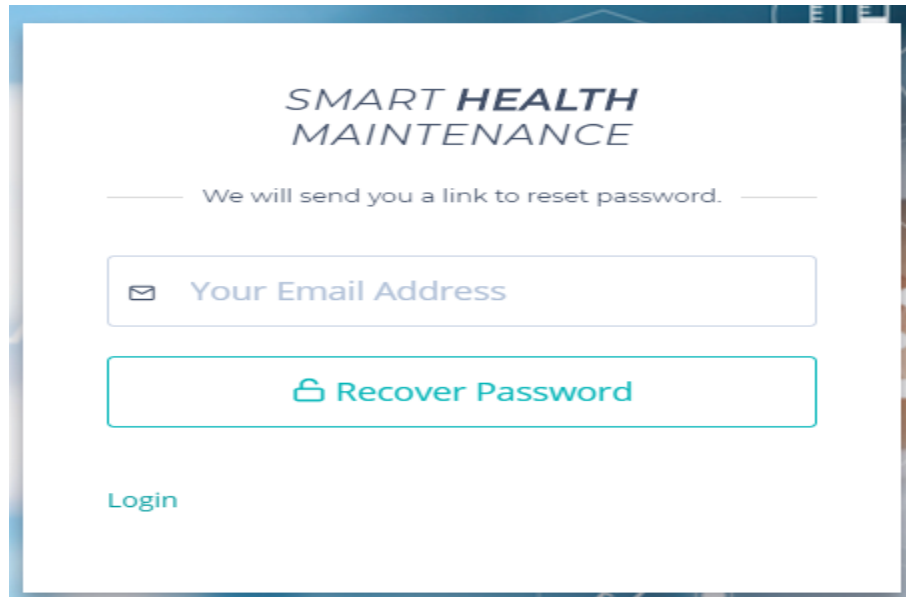
Admin Login

☐ Remember Me

Login

[Recover password](#)

Figure 4.1: Login

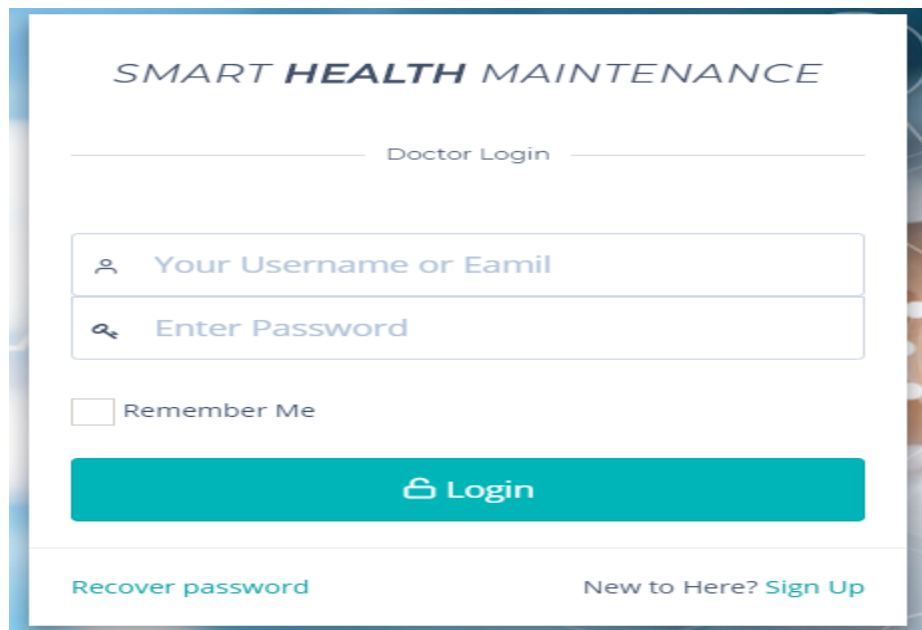


The image shows a web form titled "SMART HEALTH MAINTENANCE". Below the title, a message states: "We will send you a link to reset password." The form contains a text input field with a mail icon and the placeholder text "Your Email Address". Below this is a teal button with a lock icon and the text "Recover Password". At the bottom left of the form area, there is a teal link labeled "Login".

Figure 4.2: Recover Password Form.

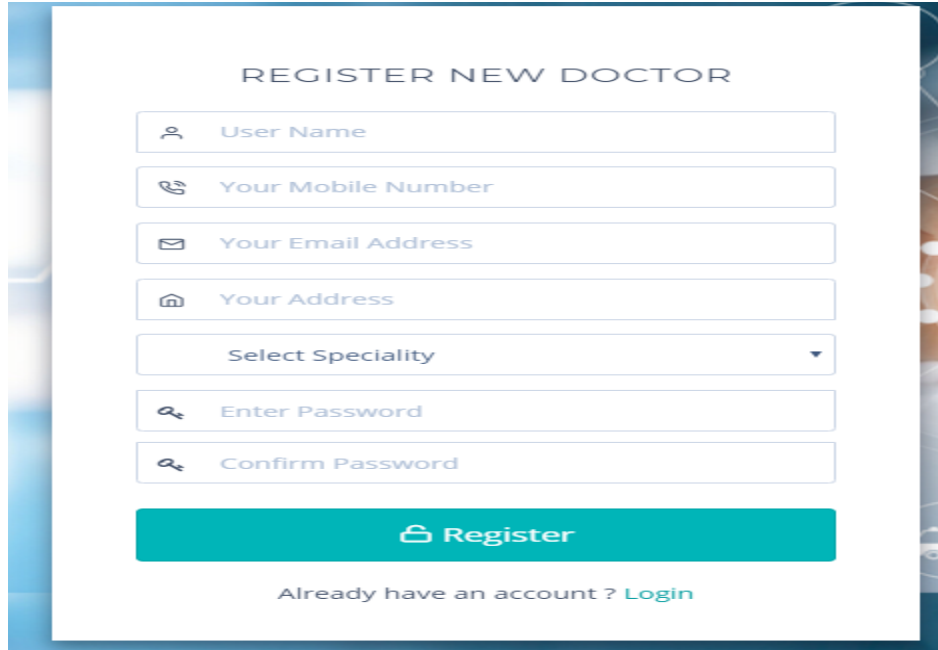
4.1.2 Fill the Form as Doctor

After login to the framework client discover this sort of screen for this they need to fill the shape as Doctor. The circumstance appeared in figure underneath.



The image shows a web form titled "SMART HEALTH MAINTENANCE". Below the title, a message states: "Doctor Login". The form contains two text input fields: the first has a person icon and the placeholder text "Your Username or Email", and the second has a key icon and the placeholder text "Enter Password". Below these fields is a checkbox labeled "Remember Me". A large teal button with a lock icon and the text "Login" is positioned below the checkbox. At the bottom of the form, there are two links: "Recover password" on the left and "New to Here? Sign Up" on the right.

Figure 4.3: Login (As Doctor)

A registration form titled "REGISTER NEW DOCTOR". It contains several input fields: "User Name", "Your Mobile Number", "Your Email Address", "Your Address", a "Select Speciality" dropdown menu, "Enter Password", and "Confirm Password". Each field has a small icon to its left. Below the fields is a large teal "Register" button. At the bottom, there is a link that says "Already have an account ? Login".

REGISTER NEW DOCTOR

User Name

Your Mobile Number

Your Email Address

Your Address

Select Speciality

Enter Password

Confirm Password

Register

Already have an account ? [Login](#)

Figure 4.4: Registration Form for Doctor

A user profile form titled "USER PROFILE". It has a teal "Update" button and window control icons (minimize, maximize, close) in the top right corner. The form contains a table with user details.

Name	masud
Gender	Male
email	masud@gmail.com
Contact Number	199999990
Address	46/1 shukrabad
User Create	01 Nov 2018, 06:40 PM

Figure 4.5: After Fill the Form.

4.1.3 Making Patient account

Patient account made by doctor and admin. It's the basic issue of our system that the first step to security reason.

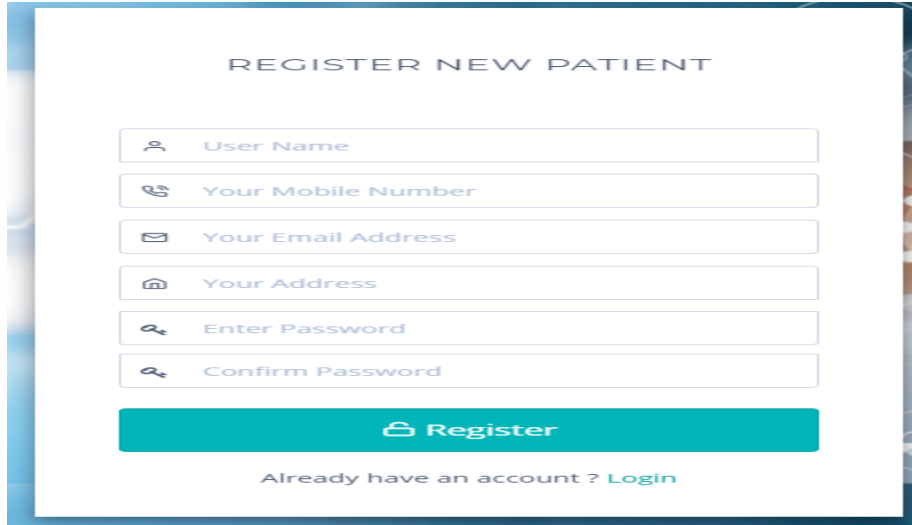
The image shows a web form titled "REGISTER NEW PATIENT". It contains six input fields, each with a small icon on the left: "User Name" (person icon), "Your Mobile Number" (phone icon), "Your Email Address" (envelope icon), "Your Address" (house icon), "Enter Password" (key icon), and "Confirm Password" (key icon). Below these fields is a large teal button with a white house icon and the text "Register". At the bottom, there is a link that says "Already have an account ? Login".

Figure 4.6: Patient Account Making Interface.

4.1.4 Admin Account

Admin is all things considered of any framework. In our framework administrator account is made by administrator themselves and they can do anything what they need with improvement and dashboard also. Administrator can make their record to utilizing database.

4.2 Back-end Design

Our project back-end has planned by PHP; PHP is a server-side scripting dialect structured essentially for web advancement yet in addition utilized as a broadly useful programming dialect. MySQL database has utilized. Right around 45 pages of our venture have substance of back end implies push PHP. In our task 14 tables made to oversee information. There are some center tables, a few tables are brief premise and client information contains by a few tables. PHP have a solid holding with SQL inquiry dialect parsing, every sensible guidance made by PHP. Client session creation and obliterate are overseen by PHP libraries. Information exchange between pages are utilized \$_POST technique a large portion of time. We are intrigued to specify some imperative assignment done by PHP point to point.

- ☐ PHP makes session for clients and in addition approve client.
- ☐ PHP have authority over all information exchanging User end to Saver end.
- ☐ All Logical statement created utilizing PHP code
- ☐ Loops, If-else and control articulation done by PHP
- ☐ Main calculation wrote in PHP
- ☐ Data exchange between pages utilizes \$_POST strategy for PHP

4.2.1: Admin Dashboard

An admin can see all reports, all record that is are affirmed or dropped, all doctor list, all patient rundown, Admin can control entire framework.

Here given the administrator dashboard subtle elements.

DOCTORS

Show 10 entries

Search:

No	Name	Specialist	Email	Gender	Action
1	masud		masud@gmail.com	Male	View Edit Delete
2	kingshuk kumar paul		kingshuk@gmail.com	Male	View Edit Delete
3	Novel Rahman	Heart	novel@gmail.com	Male	View Edit Delete
4	Emran	Brain	emran@gmail.com	Male	View Edit Delete
5	doctor	Heart	doctor@gmail.com	Male	View Edit Delete

Showing 1 to 5 of 5 entries

Previous 1 Next

Figure 4.7.1: Admin Dashboard

DISEASES TYPE

Show 10 entries

Search:

No.	Disease Type	Action
1	Heart	Edit Delete
2	Brain	Edit Delete
3	Physio	Edit Delete
4	Bone	Edit Delete
5	Infectious	Edit Delete
6	STD	Edit Delete
No.	Disease Type	Action

Showing 1 to 6 of 6 entries

Previous 1 Next

Figure 4.7.2: Admin Dashboard

APPOINTMENTS HISTORY

Show 10 entries

Search:

No	Patient Name	Doctor Name	Created
1	Test	doctor	11/01/2018 12:55am
2	Test	doctor	11/01/2018 12:55am
3	Test	doctor	11/01/2018 12:54am
4	Test	doctor	11/01/2018 12:54am
5	Test	doctor	11/01/2018 12:54am
6	Patient	doctor	11/01/2018 12:47am
7	Patient	doctor	11/01/2018 12:47am
8	Patient	kingshuk kumar paul	11/01/2018 12:43am
9	Patient	doctor	10/30/2018 1:01am
10	Patient	Novel Rahman	10/25/2018 10:36am
No	Patient Name	Doctor Name	Action

Showing 1 to 10 of 17 entries

Previous 1 2 Next

Figure 4.7.3: Admin Dashboard

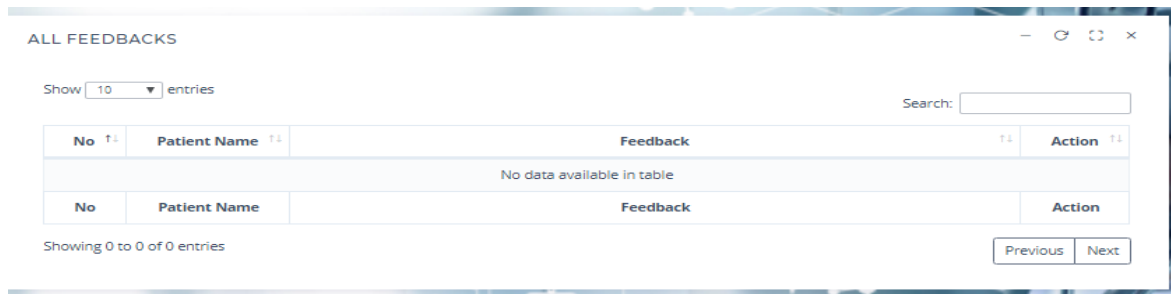


Figure 4.7.4: Admin Dashboard.

4.2.2 Doctor dashboard

As a Doctor login in our system you can find out dashboard like below



Figure 4.8.1: Doctor Dashboard.

DISEASES AND ITS SYMPTOMS

Show 10 entries

Search:

No	Disease Name	Symptoms	Type	Action
1	Diphtheria	chills fatigue bluish skin coloration sore throat hoarseness cough headache difficulty swallowing painful swallowing difficulty breathing	Infectious	Edit Delete
2	Pneumonia	fever rigors cough runny nose chest pain shortness of breath	Infectious	Edit Delete
3	Amoebiasis	diarrhea severe dysentery	Infectious	Edit Delete
4	Paget's Disease	bone pain joint stiffness bone fractures hearing loss skeletal deformities	Bone	Edit Delete
5	Rickets	skeletal deformities muscle cramps bones fractures impaired growth tender	Bone	Edit Delete
6	Hypercalcemia	excessive thirst excessive urination nausea abdominal pain decreased appetite constipation weakness	Bone	Edit Delete
7	Osteomyelitis	fever redhead over infected area swelling stiffness	Bone	Edit Delete
8	Osteoporosis	rounded upper back height loss	Bone	Edit Delete
9	Pericarditis	sharp chest pain low grade fever increased heart rate	Heart	Edit Delete
10	Heart Valve Disease	shortness of breath weakness dizziness palpitations irregular heartbeat	Heart	Edit Delete

Figure 4.8.2: Doctor Dashboard

Show entries

Search:

Name	Email	Mobile	Gender	Action
1	Test	test@gmail.com	Male	View
2	Patient	patient@gmail.com	Female	View
Name	Email	Mobile	Gender	Action

Showing 1 to 2 of 2 entries

Previous **1** Next

Figure 4.8.3: Doctor Dashboard.

APPOINTMENTS HISTORY

Show entries

Search:

No	Patient Name	Created At	Status
1	Test	11/01/2018 12:55am	Completed
2	Test	11/01/2018 12:55am	Completed
3	Test	11/01/2018 12:54am	Completed
4	Test	11/01/2018 12:54am	Completed
5	Test	11/01/2018 12:54am	Completed
6	Patient	11/01/2018 12:47am	Completed
7	Patient	11/01/2018 12:47am	Completed
8	Patient	10/30/2018 1:01am	Completed
9	Patient	10/21/2018 10:11pm	Completed
10	Patient	10/21/2018 10:11pm	Completed
No	Patient Name	Created At	

Showing 1 to 10 of 12 entries

Previous **1** 2 Next

Figure 4.8.4: Doctor Dashboard.

4.2.2 Patient Dashboard

As a Patient login in our system you can find out dashboard like below

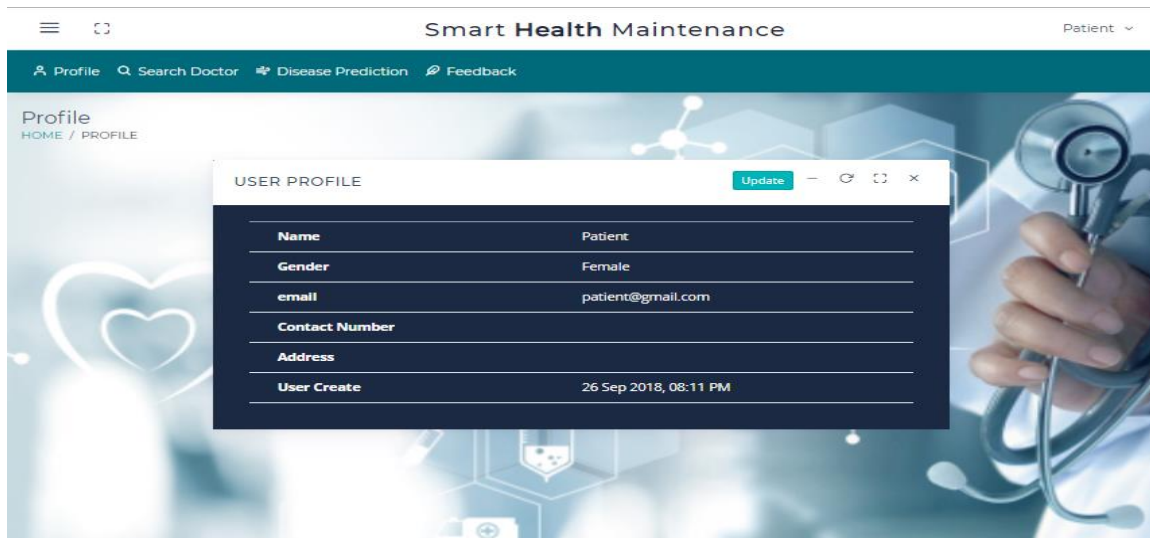


Figure 4.9.1: Patient Dashboard.

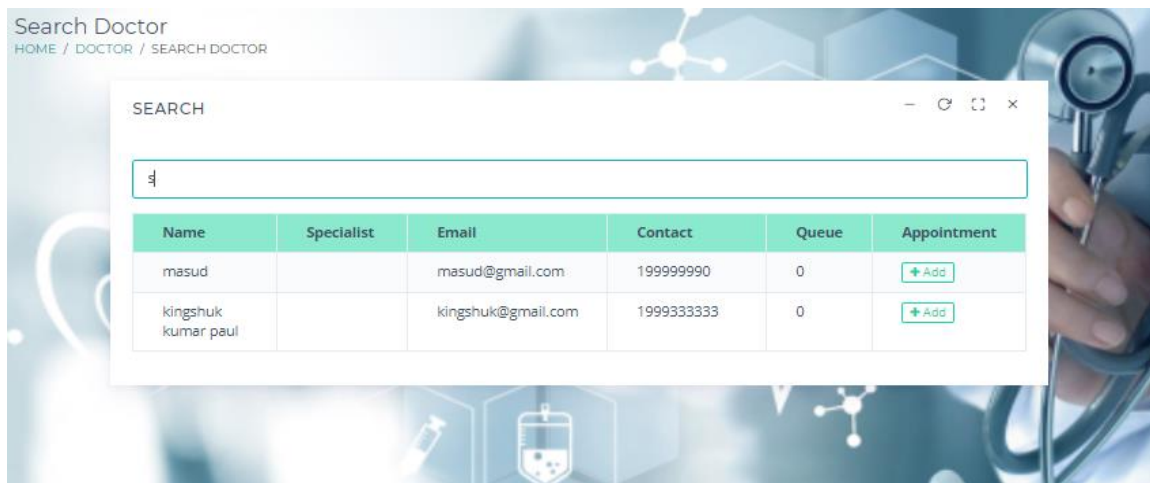


Figure 4.9.2: Patient Dashboard.

DISEASE PREDICTION

Are you experiencing any of these symptom too?

- chills
- fatigue
- bluish skin
- coloration
- sore throat
- hoarseness
- cough
- headache
- difficulty swallowing
- painful swallowing
- difficulty breathing

Select experiencing Symptom

chills

→ Next ✕ I Have None of Above Symptoms

Figure 4.9.3: Patient Dashboard.

4.3 Interaction Design and UX

Collaboration structure fundamental for any venture what is uncommonly an ideal standard between a framework and client. This is consolidated structure what will assist client with interacting with framework effortlessly. It encourages client to spare their time. There have a few measurements of portrayal of a framework or programming to clients what will improve client encounter. For example, Button Labels, Images, Typography, Icons that guide in client collaboration.

4.4 Implementation of Requirements

We require two sorts of necessities. The necessities are:

- ☐ Hardware necessity.
- ☐ Software necessity.

Hardware Requirement

One database server must be accessible to actualize the framework with following arrangement.

- ☐ PC
- ☐ 1 server class mark PC facilitating MySQL
- ☐ Database Server

Software Requirement

- ☐ Any PC working framework (least refresh 2007)
- ☐ Wamp or xampp server [PHP, APACHE, MySQL] introduced
- ☐ Laravel v5.2 introduced
- ☐ Composer introduced
- ☐ Any content manager can be utilized
- ☐ Any program

Server

All the work happens on the server. A particular application, called a web server, will be in charge of speaking with the program. A social database server stores whatever data the application requires. At long last, we require a dialect to representative demands between the web server and database server, it will likewise be utilized to perform automatic errands on the data that comes to and from the web server. Obviously none of this is conceivable without a working framework. The web server, programming dialect, and database server we utilize must function admirably with the working framework.

There are many web servers out there in the market. To actualize exam mechanization framework, it is financially savvy. It is speedy and intense. It might not have each chime and shriek accessible for a social database, however for most clients there is bounty. WAMP or XAMPP server is blend of PHP, APACHE, and MYSQL server.

Chapter 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Database

For our task database is a basic part. We know numerous database administration framework are utilizing around the world. We decide for our task MySQL. MySQL is the world's most mainstream open source database. With its demonstrated execution, unwavering quality and usability, MySQL has turned into the main database decision for electronic applications .MySQL is an open-source social database administration framework (RDBMS).

All database related data's are given in no time:

- ☐ Database name: Health
- ☐ 11 tables and each table have different sections

We are demonstrating a figure 5.1 which will indicate table name with its motivation and a rundown of site pages to which this tables has a place with. Database usage incorporates the execution of the functionalities of every module and the usage of information reinforcement and reclamation. Here we will accentuation on presenting the usage of information reinforcement. Information reinforcement alludes to capacity of client information including documents, database, application programs and so forth for information recuperation. In this manner, it is basic to give information reinforcement and rebuilding component to enhance framework security.

Here, is our database 11 tables and each table has various segments and each section pronounced distinctive credit which are help to execute our framework.

The screenshot shows the phpMyAdmin interface for a database named 'health'. The left sidebar lists the database structure, including tables like appointments, diseases, doctors, feedback, migrations, password_resets, patients, predictions, searches, types, and users. The main panel displays a table structure view for the 'health' database, showing 11 tables with their respective actions, rows, types, collations, sizes, and overheads.

Table	Action	Rows	Type	Collation	Size	Overhead
appointments	17	InnoDB	utf8mb4_unicode_ci	48 K	-	
diseases	15	InnoDB	utf8mb4_unicode_ci	32 K	-	
doctors	0	InnoDB	utf8mb4_unicode_ci	16 K	-	
feedback	0	InnoDB	utf8mb4_unicode_ci	32 K	-	
migrations	10	InnoDB	utf8mb4_unicode_ci	16 K	-	
password_resets	0	InnoDB	utf8mb4_unicode_ci	16 K	-	
patients	0	InnoDB	utf8mb4_unicode_ci	16 K	-	
predictions	0	InnoDB	utf8mb4_unicode_ci	16 K	-	
searches	25	InnoDB	utf8mb4_unicode_ci	64 K	-	
types	6	InnoDB	utf8mb4_unicode_ci	16 K	-	
users	8	InnoDB	utf8mb4_unicode_ci	32 K	-	
11 tables	Sum				304 K	0 B

Figure 5.1: Database.

5.2 Implementation of Front-end Design

Admin

We already see after login to the system admin dashboard and admin can see the list of doctor and patient. Admin can make doctor and patient account in Admin can search as requirement of their necessary. Here given the all figure about the feature of admin.

Figure of create a Doctor

Figure 5.2.1: List of Admin Account

The screenshot shows the 'CREATE DOCTOR' form in the admin dashboard. The form includes fields for Full Name, Gender (Male/Female), Email, Contact Number, Address, Specialist In (Select Speciality), Password, and Confirm Password. There are 'Cancel' and 'Add Doctor' buttons at the bottom.

Figure of create Disease

The screenshot displays the 'Smart Health Maintenance' web application interface. The top navigation bar includes links for Dashboard, Profile, Doctor, Disease, Patient, Appointment, and All Feedback. The main content area shows the 'Disease' section with a breadcrumb trail: HOME / DISEASE / CREATE NEW DISEASE. A modal window titled 'CREAE DISEASE' is open, featuring the following fields: 'Disease Name' (text input), 'Symptoms' (text input with a note 'separated by Space'), and 'Type of Disease' (dropdown menu). At the bottom of the modal are 'Cancel' and 'Add New' buttons. The background of the application features a medical-themed image with a stethoscope and a heart icon.

Figure 5.2.2: List of Admin Account

Figure of create a Patient

The screenshot displays the 'Smart Health Maintenance' web application interface, specifically the 'CREATE PATIENT' modal window. The modal is titled 'CREAE PATIENT' and contains the following fields: 'Full Name' (text input), 'Gender' (radio buttons for Male and Female), 'Email' (text input), 'Contact Number' (text input), 'Address' (text input), 'Password' (text input), and 'Confirm Password' (text input). At the bottom of the modal are 'Cancel' and 'Add New Patient' buttons. The background of the application features a medical-themed image with a stethoscope and a heart icon.

Figure 5.2.3: List of Admin Account

Figure of Search History

Show entries

Search:

No	User Name	Symptoms	Disease	Type	Date
1	Patient	rashes fever headache throat inflammation large tender lymph nodes	AIDS	Infectious	10/30/2018 10:35am
2	Patient	rounded upper back height loss	Osteoporosis	Bone	10/25/2018 10:34am
3	Patient	diarrhea severe dysentery	Amoebiasis	Infectious	10/25/2018 10:32am
4	Patient	discomfort pressure heaviness chest pain indigestion sweating nausea extreme weakness irregular heartbeat	Heart Attack	Heart	10/25/2018 10:31am
5	Patient	palpitation chest pounding dizziness shortness of breath fainting	Arrhythmias	Heart	10/25/2018 10:31am
6	Patient	chills fatigue bluish skin coloration sore throat hoarseness cough headache difficulty swallowing painful swallowing difficulty breathing	Diphtheria	Infectious	10/25/2018 10:30am
7	Patient	rounded upper back height loss	Osteoporosis	Bone	10/23/2018 8:00am
8	Patient	jointpains headache fever measles like rashes	Dengue	Infectious	10/23/2018 7:58am
9	Patient	fever rigors cough runny nose chest pain shortness of breath	Pneumonia	Infectious	10/21/2018 10:05pm

Figure 5.2.4: List of Admin Account

Doctor

As a Doctor if you login our system you can find the doctor profile, notification panel disease panel feedback section and add patient section.



Figure 5.3.1: List of Doctor Account

Doctor Search History

Smart Health Maintenance

History
HOME / SEARCH HISTORY

SEARCH HISTORY

Show 10 entries

Search:

No	User Name	Symptoms	Disease	Type	Date
1	Patient	rashes fever headache throat inflammation large tender lymph nodes	AIDS	Infectious	10/30/2018 10:35am
2	Patient	rounded upper back height loss	Osteoporosis	Bone	10/25/2018 10:34am
3	Patient	diarrhea severe dysentery	Amoebiasis	Infectious	10/25/2018 10:32am
4	Patient	discomfort pressure heaviness chest pain indigestion sweating nausea extreme weakness irregular heartbeat	Heart Attack	Heart	10/25/2018 10:31am
5	Patient	palpitation chest pounding dizziness shortness of breath fainting	Arrhythmias	Heart	10/25/2018 10:31am
6	Patient	chills fatigue bluish skin coloration sore throat hoarseness cough headache difficulty swallowing painful swallowing difficulty breathing	Diphtheria	Infectious	10/25/2018 10:30am
7	Patient	rounded upper back height loss	Osteoporosis	Bone	10/23/2018 8:00am
8	Patient	joint pains headache fever measles like rashes	Dengue	Infectious	10/23/2018 7:58am
9	Patient	fever rigors cough runny nose chest	Pneumonia	Infectious	10/21/2018

Figure 5.3.2: List of Doctor Account

Disease Item

Smart Health Maintenance

Disease
HOME / DISEASE

+ Create

DISEASES AND ITS SYMPTOMS

Show 10 entries

Search:

No	Disease Name	Symptoms	Type	Action
1	Diphtheria	chills fatigue bluish skin coloration sore throat hoarseness cough headache difficulty swallowing painful swallowing difficulty breathing	Infectious	Edit Delete
2	Pneumonia	fever rigors cough runny nose chest pain shortness of breath	Infectious	Edit Delete
3	Amoebiasis	diarrhea severe dysentery	Infectious	Edit Delete
4	Paget's Disease	bone pain joint stiffness bone fractures hearing loss skeletal deformities	Bone	Edit Delete
5	Rickets	skeletal deformities muscle cramps bones fractures impaired growth tender	Bone	Edit Delete
6	Hypercalcemia	excessive thirst excessive urination nausea abdominal pain decreased appetite constipation weakness	Bone	Edit Delete
7	Osteomyelitis	fever redhead over infected area swelling stiffness	Bone	Edit Delete
8	Osteoporosis	rounded upper back height loss	Bone	Edit Delete
9	Pericarditis	sharp chest pain low grade fever increased heart rate	Heart	Edit Delete
10	Heart Valve Disease	shortness of breath weakness dizziness palpitations irregular heartbeat	Heart	Edit Delete

Figure 5.3.3: List of Doctor Account

Patient create

The screenshot displays the 'Smart Health Maintenance' web application interface. The top navigation bar includes a menu icon, a search icon, the application title 'Smart Health Maintenance', and a user profile dropdown labeled 'doctor'. Below the navigation bar, a breadcrumb trail shows 'HOME / PATIENT'. A '+ Create' button is visible in the top right corner. The main content area is titled 'PATIENTS' and features a 'Show 10 entries' dropdown and a search bar. A table lists two patients with columns for Name, Email, Mobile, Gender, and Action. The first patient is 'Test' with email 'test@gmail.com' and gender 'Male'. The second patient is 'Patient' with email 'patient@gmail.com' and gender 'Female'. Both have a 'View' button in the Action column. The table footer indicates 'Showing 1 to 2 of 2 entries' and includes 'Previous', '1', and 'Next' pagination links. The background of the interface features a blurred image of a medical professional and a stethoscope.

Name	Email	Mobile	Gender	Action
1	Test	test@gmail.com	Male	View
2	Patient	patient@gmail.com	Female	View

Showing 1 to 2 of 2 entries

Previous 1 Next

Figure 5.3.4: List of Doctor Account

Appointment history

The screenshot displays the 'Smart Health Maintenance' web application interface for the 'Appointment' section. The top navigation bar is identical to the previous screenshot. The breadcrumb trail shows 'HOME / APPOINTMENT'. The main content area is titled 'APPOINTMENTS HISTORY' and features a 'Show 10 entries' dropdown and a search bar. A table lists 10 appointments with columns for No, Patient Name, Created At, and Status. All appointments are marked as 'Completed'. The first five appointments are for 'Test' and the last five are for 'Patient'. The 'Created At' column shows dates from 11/01/2018 to 10/21/2018. The table footer indicates 'Showing 1 to 10 of 12 entries' and includes 'Previous', '1', '2', and 'Next' pagination links. The background of the interface features a blurred image of a medical professional and a stethoscope.

No	Patient Name	Created At	Status
1	Test	11/01/2018 12:55am	Completed
2	Test	11/01/2018 12:55am	Completed
3	Test	11/01/2018 12:54am	Completed
4	Test	11/01/2018 12:54am	Completed
5	Test	11/01/2018 12:54am	Completed
6	Patient	11/01/2018 12:47am	Completed
7	Patient	11/01/2018 12:47am	Completed
8	Patient	10/30/2018 1:01am	Completed
9	Patient	10/21/2018 10:11pm	Completed
10	Patient	10/21/2018 10:11pm	Completed

Showing 1 to 10 of 12 entries

Previous 1 2 Next

Figure 5.3.5: List of Doctor Account

Patient

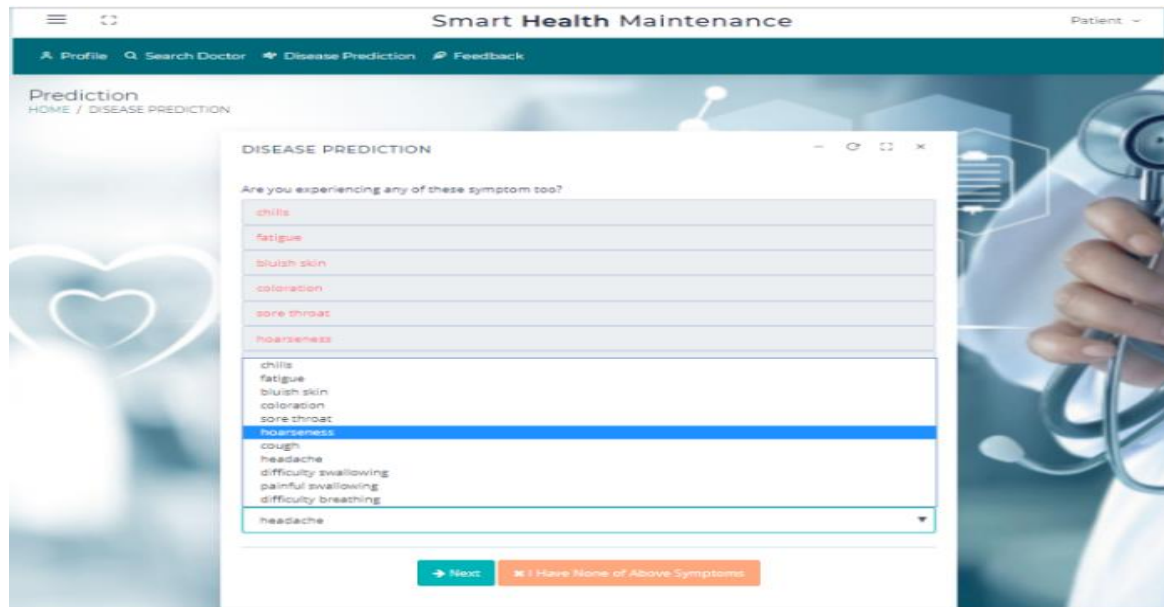
We already see if any Patient login our system can see the Patient profile and it has some feature like search doctor, disease, prediction and feedback for our system.



Figure 5.4.1: List of Patient Account

Disease Prediction

Figure 5.4.2: List of Patient Account



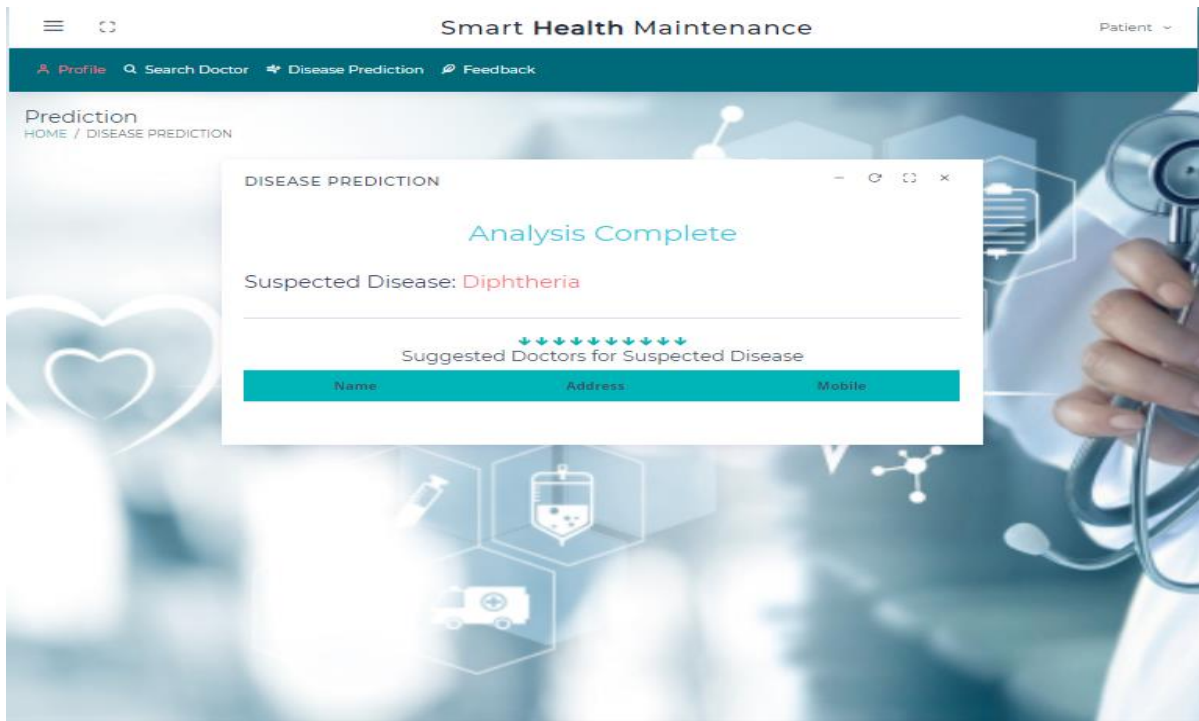


Figure 5.4.3: List of Patient Account

Feedback Table

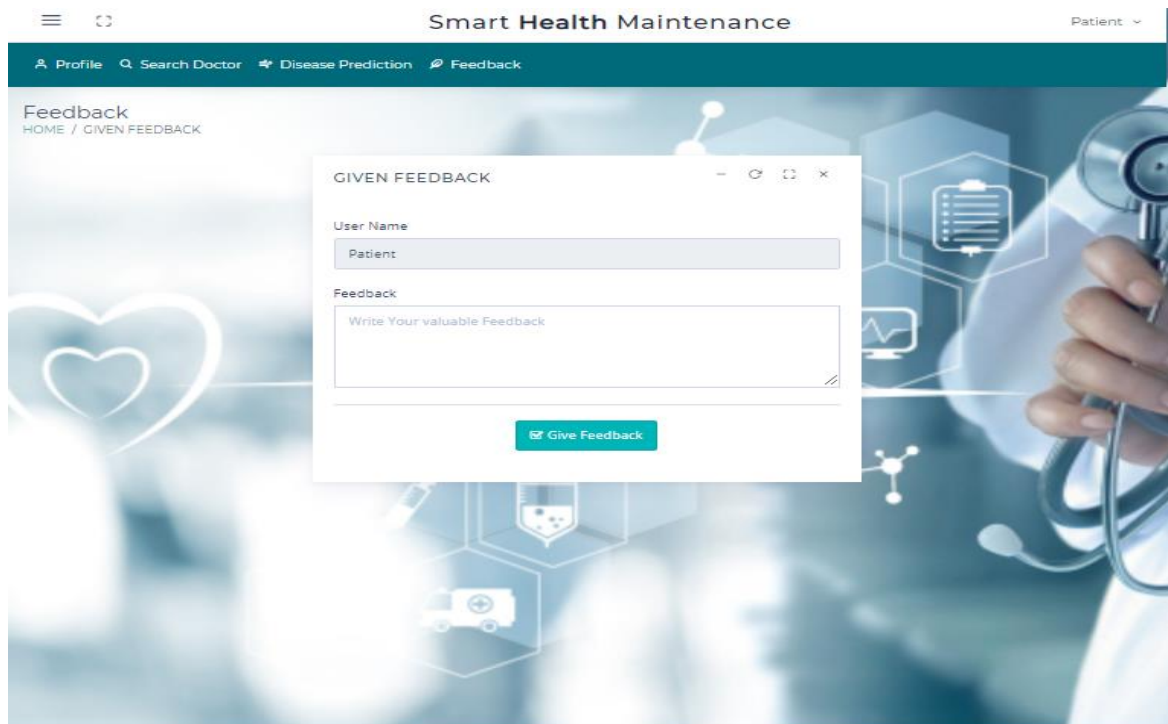


Figure 5.4.4: List of Patient Account

Doctor Search And Take Appointment

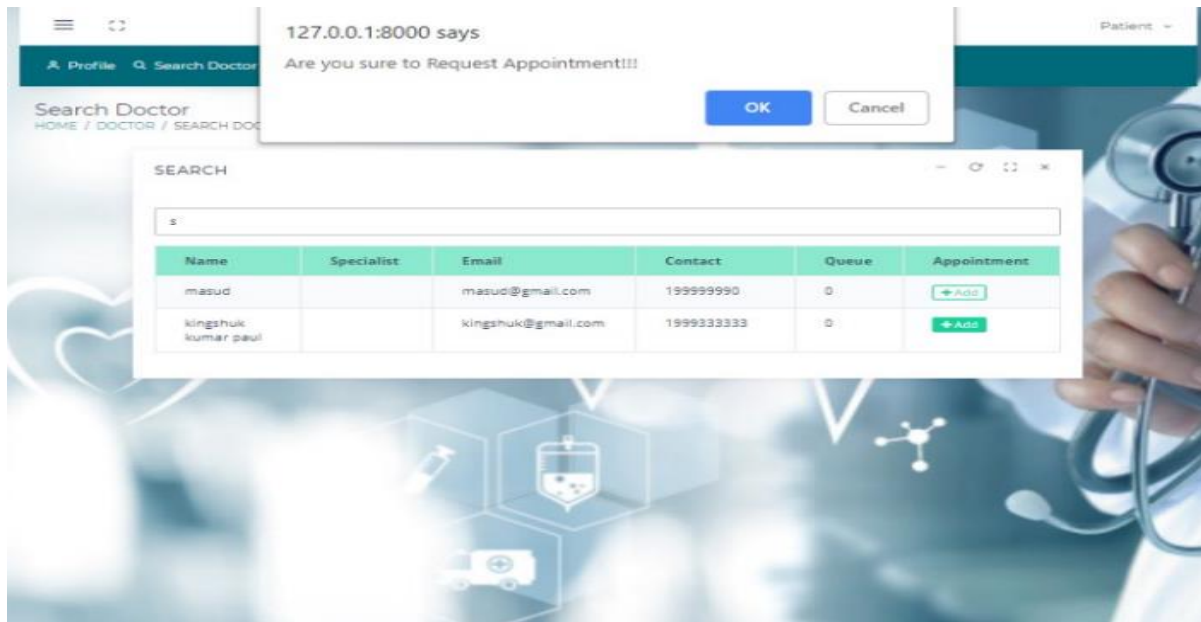


Figure 5.4.5: List of Patient Account

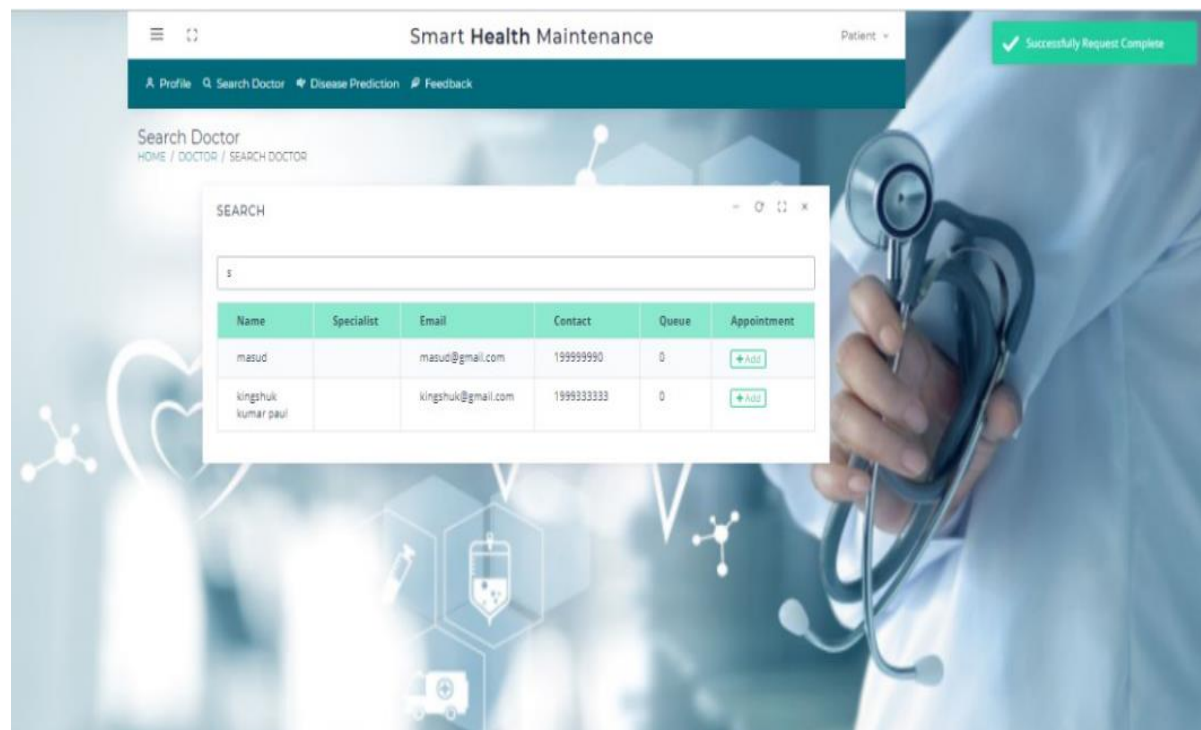


Figure 5.4.6: List of Patient Account

5.3 Implementation of Interaction

To make our framework (All in one healing facility administration framework) we have executed intuitive UI for better client encounter. As a rule we have utilized intelligent symbol instead of content connection or catch. The framework configuration planned with arrangement of back to back strides to help individuals for comprehension.

Execution of Interactions is basic assignment for all improvement ventures. As our undertaking is a web base venture such a significant number of assets and client movement need to cooperate. Here we utilize database like MySQL. Furthermore, our venture greatest assignment is identified with information. So every time server and customer imparting to each other's. Information read, compose and alteration, information getting all are continuous a considerable lot of the movement. Information exchange between page to page likewise take places.

5.4 Testing Implementation

Testing is a set of activity that can be planned in advance and conducted systematically. Developer of the software and an independent test group conducts testing. The software should be tested for expected result and efficiency after implementation of the system. Because during implementation everything may not be done according to the system design. So without testing those errors cannot be detected and then corrected. Therefore system testing is very important phase of a system development.

5.4.1 Test plan

Prior to testing starts, a test plan is made. An average test plan reports input esteems for the test, techniques used to play out the testing and the normal yield esteems or results. Test designs run from exceptionally easy to extremely mind boggling, ordinarily in connection to the Complexity of programming forms which are to be tried.

For example, testing whether another client provoke is added to a screen may not require a test plan by any stretch of the imagination, while testing a confounded procedure may require archiving many shifted input situations and the relating expected outcomes and yields for each case. Amid testing, the test plan is refreshed to log test exercises, results and differences with what was initially anticipated.

5.4.2 Unit Testing

Unit testing focuses verification effort on the smallest unit of the system design the software component or module. All the inputs taken each module will be tested by testing data and different in results before and after adding validation will be shown.

Different tests are conducted as part of unit testing are as follows:

- ☐ Interface testing
- ☐ Local data structure testing
- ☐ Error handling paths testing
- ☐ Boundary condition testing
- ☐ Independent paths testing
- ☐ Execution path testing

During the design of the system we had conducted these tests frequently.

5.4.3 System Testing

Framework testing includes testing of the entire arrangement of utilization program. This testing will be completed to guarantee that the program can be meet the requests of clients. In the event that would check the usefulness of the proposed framework. The test would pick the zones that should be adjusted any oversight or insufficiencies in the manner in which the framework works. We create one specific component and attempt to test it and if it's not work right we experience the coding or actualize it on the program over and over until the point that it works legitimately.

Expected to check center point is the site will do all center functionalities. Content help and cross-site and cross-area checking issues additionally should have been considered.

5.5 Test Result and Report

Results are the principle worry of our task. As a matter of first importance our undertaking is result arranged. Each undertaking needs a yield subsequently. According to our testing background we have discovered every normal outcome.

We performed required experiments as per advancement criteria. Distinctive experiments have made for a particular procedure and put away all experiment results appropriately to translate all outcome. This will settle on choice with better level of exactness.

We have made cycle shrewd and robotized testing to settle on better choice. When test results are deliverable, at that point it has been discharged. A test outcome ought to be assess as per DOD (Definition of done) of particular piece of an undertaking.

Chapter 6

CONCLUSION & FUTURE SCOPE

6.1 Discussion & Conclusion

At the end of our project we want to remember that this is fully unique system and we sure that it will helpful us all as well as any hospital business can add this with their existing feature. Hope this application will be very demandable in coming future.

6.2 Scope for Further Development

This framework can be gotten to by others in future to make android applications, or can be installed in different applications locally accessible specialists could be alluded to the patients. Further, the product we made might be reached out, by including a connection, for purchasing meds on the web, for anticipated ailments, endorsed by specialists. Likewise, highlights like, identifying the reasons for the recognized illnesses can be included. For more worry of the patients, the programming can have highlights, saying what things ought to be maintained a strategic distance from by the patients, amid the sickness time frame.

APPENDIX

Project Reflection

From Summer-2017 semester we had begun our adventure to make a framework. where clients can scan for specialist's assistance anytime of time, can discuss their illness and get instant analysis and Doctors get more customers in online effectively and it will spare significant occasions and in addition another intricacy. We pursued the model to actualize and screen our framework, with the all diligent work and investing a considerable measure of energy at long last we could achieve our objective finally. Along these lines, we trust that our "Smart Health Maintenance" will have a positive and powerful thing for the client. What's more, soon we will begin updating our framework all the time as it requires.

Project Drive Link:

https://drive.google.com/file/d/1G_QUe72TYRBB3xXvSIeq4h259m80NHnt/view?usp=sharing

REFERENCES

- [1] M. Durairaj, V. Ranjani, INTERNATIONAL JOURNAL OF SCIENTIFIC & TECHNOLOGY RESEARCH “Data Mining Applications in Healthcare Sector: A Study” VOLUME 2, ISSUE 10, OCTOBER 2013 <<<https://www.scribd.com/document/282584913/1-Data-Mining-Applications-in-Healthcare-Sector-a-Study>>>
- [2] SMART HEALTH PREDICTION USING DATA MINING by Dr.Mahboob Khan PhD Apr 30, 2016 <<<https://www.slideshare.net/mahboob804/smart-health-prediction-using-data-mining-by-drmahboob-khan-phd>> Retrieved 12 July 2018
- [3] Aditya Tomar, “An Approach to Devise an Interactive Software Solution for Smart Health Prediction using Data Mining,” Vol. 5, Issue 7, July2016 << <https://www.ijarcce.com/upload/2016/july-16/IJARCCE%20125.pdf>>>
- [4] “Data Flow Diagram” Internet: available at <<<https://go.gliffy.com/go/html5/launch>>>Retrieved 1 November 2018
- [5] “Big data in health care” Internet: available at <<https://scholar.google.com/scholar?q=smart+health+prediction+using+data+mining+pdf&hl=en&as_sdt=0&as_vis=1&oi=scholar>> Retrieved 1 November 2018
- [6] “Use Case and UML Diagram” Internet: available at <<https://creately.com/app/?tempID=gc7qvpsj1&login_type=demo#>>Retrieved 2 November 2018
- [7] “PHP MySQL Database, PHP syntax, PHP xml” Internet: available at <<https://www.w3schools.com/php/php_mysql_intro.asp>>Retrieved January 13,2018
- [8] “Download MySQL” Internet: available at <<<https://www.oracle.com/technetwork/database/mysql/index.html>>>Retrieved January 13,2018
- [9] “Laravel Framework” Internet: available at <<<https://laravel.com/docs/5.7>>> Retrieved 2 November 2018

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