

## 1. ABSTRACT

In today's world of automation, the field of biomedical is no longer aloof. Application of engineering and technology has proved its significance in the field of biomedical. It not only made doctors more efficient but also helped them in improving total process of medication. The Patient monitoring system is also a new step in the automation of supervision for doctors. This paper presents a current invention for monitoring the patient health by continuous observation. The basic idea behind this project is, it implies that whether a person is at home, on a trip, or at this work place, he/she can stay connected with the doctor and he can take immediate action if necessary.

The health monitoring system is employed as the method to measure the observation data. The experimental modal analysis is one of the effective health monitoring systems for the case where the modal parameters such as natural frequencies are adopted as the observations. To provide awareness of symptoms and easy booking of appointments. The patients who got/ will get treatment in our hospital. This allows us to know the rate of increase/decrease of the illnesses. The overall idea of which disease is pervading and spreading more or which disease is eradicating can be understood. Pie charts are the best way to get conclusions.

## 2. INTRODUCTION

### MOTIVATION:

The reality of modern medicine is that there are many more patients than doctors who are able to help them. The recent pandemic has proven that the world isn't ready for emergencies of that sort and that there is a global need for qualified doctors. The technology can support the medical staff available and lighten the burden. The remote health monitoring system is especially useful to monitor patients with chronic diseases. Most chronic diseases are incurable, so it is necessary to monitor the state of the patient while at home, and quickly respond if health indicators worsen.

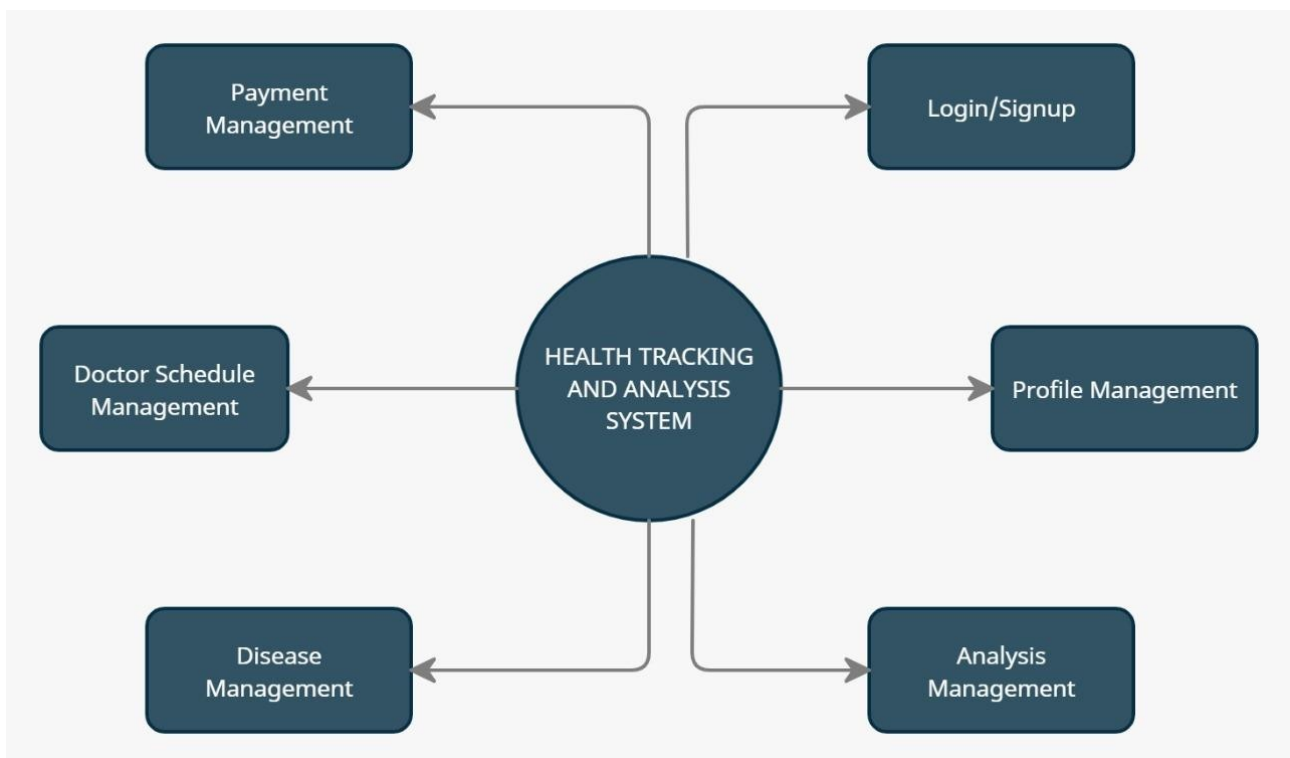
### AIM:

To present the information of the diseases of the patients treated in the hospital

### OBJECTIVES OF PROPOSED WORK:

The objective of this work is providing an effective application for Real Time Health Monitoring and Tracking. The system will track, trace, monitor patients and facilitate taking care of their health; so efficient medical services could be provided at appropriate time. This allows patients to book appointments online and patients can know about disease symptoms and precautions very clearly.

### **3. ARCHITECTURE**



## 4. BACKGROUND STUDY

### SURVEY OF EXISTING SYSTEMS:

Aging Population ratios are rising significantly. Health monitoring systems (HMS) in smart environments have evolved rapidly to become a viable alternative to traditional healthcare solutions. The aim of HMS is to not only reduce costs but to also provide timely e-health services to individuals wishing to maintain their independence. In this way, elderly people can avoid, for as long as possible, any interaction with healthcare institutions (e.g. nursing homes and hospitals), which in turn reduces pressure on the health system. To fully realise this vision of seamless e-health services supporting people in need of them, a number of challenges that need further investigation still exist. To this end, we provide an overview of the current state of the art for smart health monitoring systems.

#### A. HealthifyMe:

HealthifyMe is an Indian digital health and wellness platform that provides services such as calorie tracking, one-on-one nutrition and fitness coaching, and diet and workout plans. Developed for both android and ios platforms, the app takes a holistic lifestyle tracking approach to keep users engaged and motivated. HealthifyMe operates on a freemium model, providing nutritional and fitness advice from certified nutritionists and fitness coaches to users with premium subscription. The company claims to have access to the world's first and largest Indian food database. It has developed a calorie counter for regional foods and an exercise tracker for logging in physical activities. It also shows the count of proteins, carbohydrates, fats and fibre. The AI-driven digital nutritionist Ria can create personalised diet plans and workout routines. Ria reportedly handles 80% of user queries, and was integrated as an alexa skill for amazon echo speakers and Alexa built-in devices in 2019.

#### A. HEALTH MATE:

Withings's smart health mate you should consider for a healthy and happier future. It is the perfect partner in letting you take the right action to keep you healthy. From tracking your weight, sleeping patterns, heart rates, and much more, Withings comes with so many options to let you know every detail of your body. Set goals every week and make Withings remind you about it unless you attain it. You have once done reward yourself to keep yourself motivated. You can also look for inspiration by connecting with your friends or family through the app.

## 5. METHODOLOGY

### MODULE SPLIT-UP:

#### **Login and Signup**

Just a normal Signup for patients to register and a separate hidden login for Doctor

#### **Profile Management:**

This Contains all info about the patient and all his medical history he has and his info like address etc

#### **Appointment:**

User can book an appointment to meet or consult the doctor

#### **Payment :**

after taking appointment patient should pay the fee for the doctor through any online payment portal(eg:-credit/debit card,upi etc)• Notification: if the appointment is confirmed the user will be notified 5 hrs before appointment so he can make him available for it.

#### **Disease info and precautions:**

The respective Doctor can write or suggest precautions and symptoms of the disease

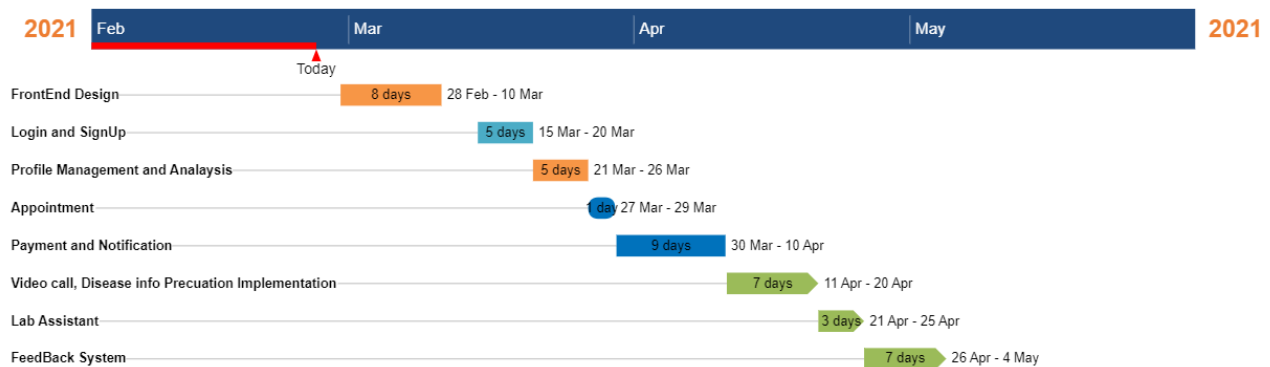
#### **Lab assistant:**

A lab assistant can upload the test results online so the patient can view his test report and it will also make online consultancy easy.

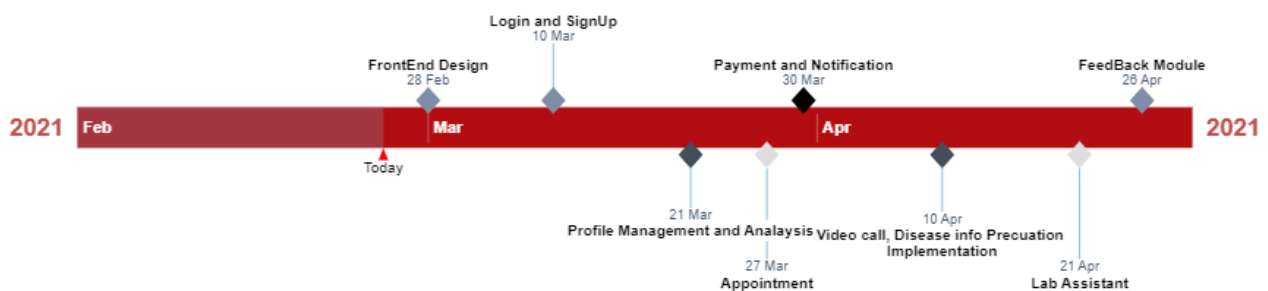
## SCHEDULING DIAGRAMS:

### GANTT CHART:

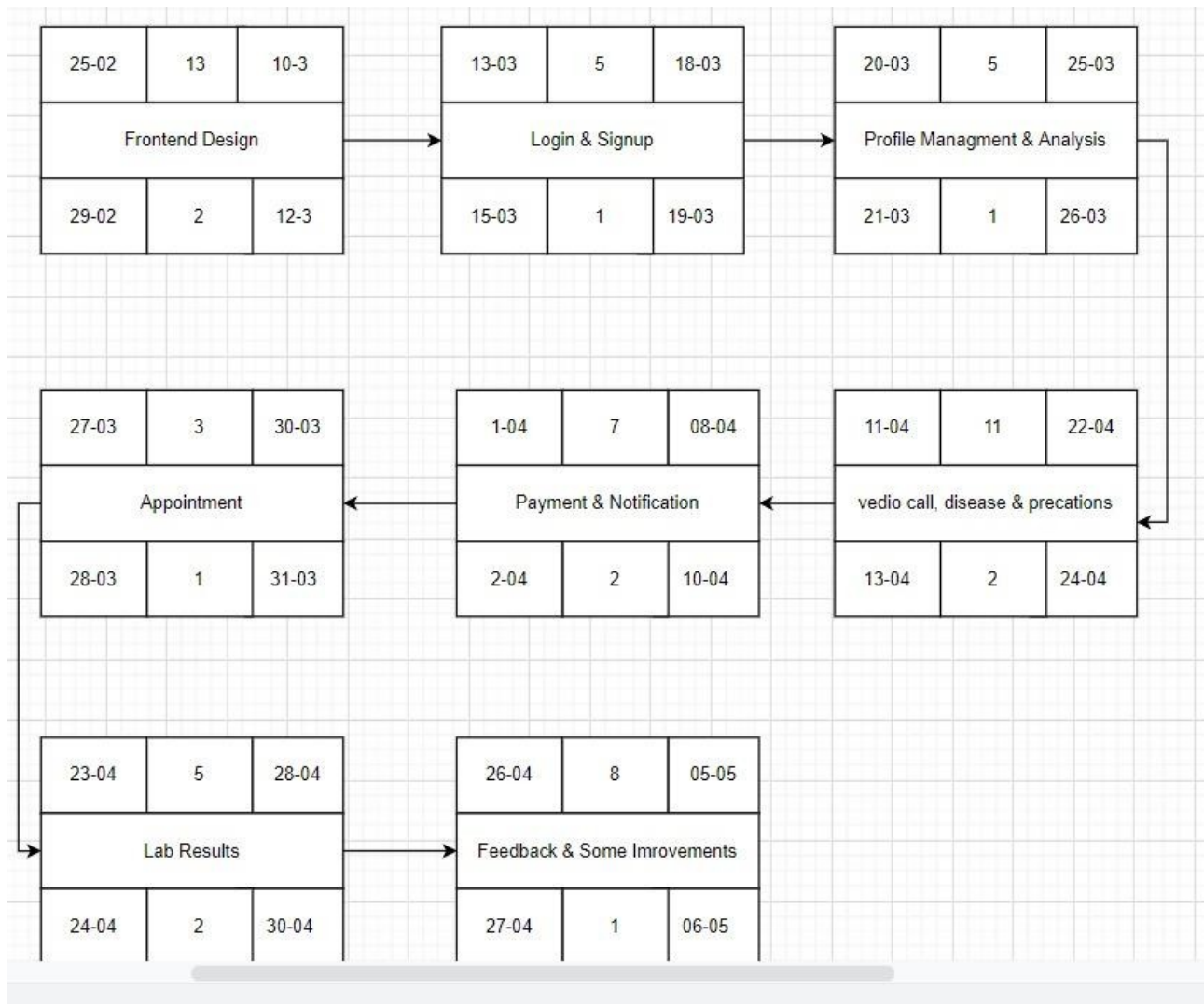
## Gantt Chart



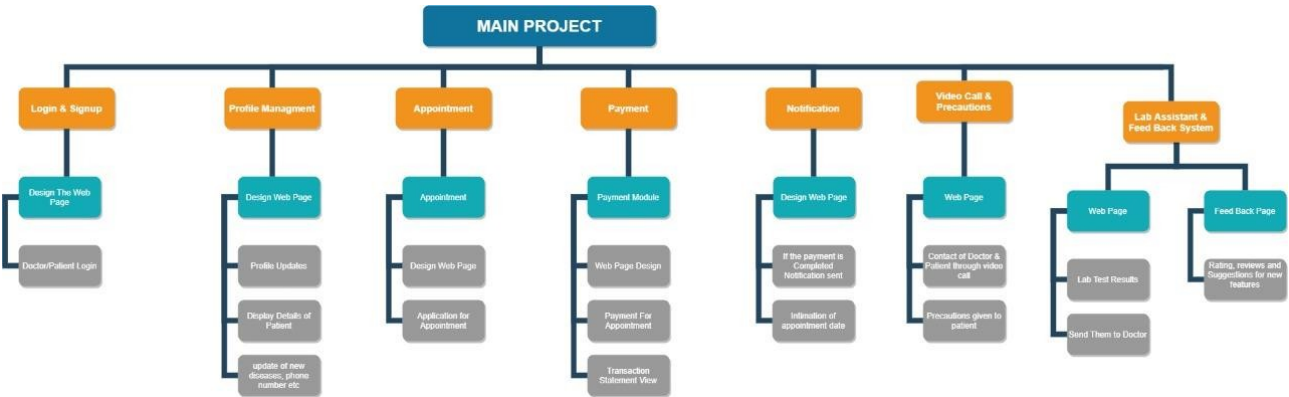
### TIMELINE CHART:



### PERT CHART:



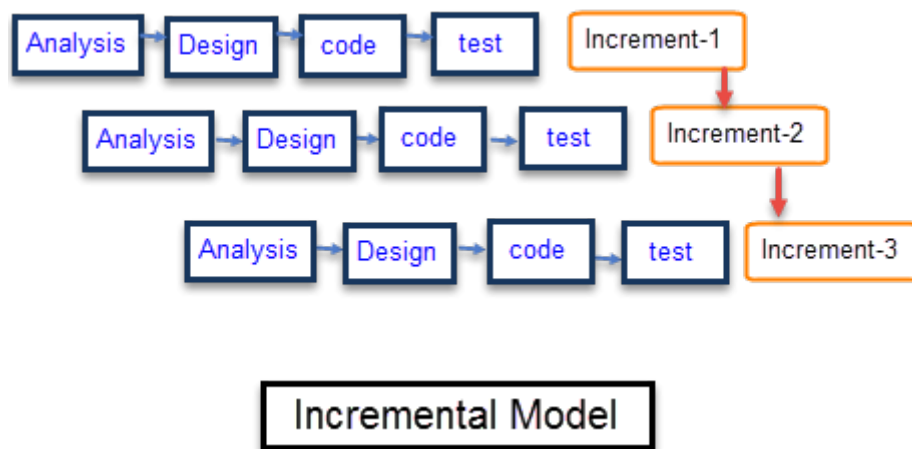
WORK BREAKDOWN STRUCTURE:



## 6. PROPOSED MODEL

For our Project we would like to use Incremental process model

We are using this because we will deploy a basic user and admin system first and then we will add features required options, and also if we want to add new features we can add it to by another increment.



Justification:

Incremental Model is a process of software development where requirements divided into multiple standalone modules of the software development cycle. In this model, each module goes through the requirements, design, implementation and testing phases. Every subsequent release of the module adds function to the previous release. The process continues until the complete system achieved.



## REQUIRMENT ANALYSIS:

### FUNCTIONAL REQUIREMENTS:

#### User Interfaces

🌐 This section provides a detailed description of all inputs into and outputs from the system. It also gives a description of the hardware, software and communication interfaces and provides basic prototypes of the user interface.

🌐 The protocol used shall be HTTP.

🌐 The Port number used will be 80.

🌐 There shall be logical address of the system in IPv4 format ask for.

#### Registration Process of SRS (Software Requirements Specification)

- Assigning an ID to the patients: The HMS enables the staff in the front desk to provide a unique ID for each patient and then add them to the record sheet of the patient. The patients can utilize the ID throughout their hospital stay.

#### 🌐 Check Out of SRS:

🌐 • Deleting Patient ID: The staff in the administration section of the ward can delete the patient ID from the system when the patient's checkout from the hospital.

#### 🌐 Report Generation of SRS:

- Information of the Patient: The Hospital Management System generates a report on every patient regarding various information like patients name, Phone number the doctor's name whom its assigns.

#### 🌐 Database of SRS:

🌐 • Mandatory Patient Information: Every patient has some necessary data like phone number, their first and last name, personal health number, postal code, country, address, city, 'patient's ID number, etc.

🌐 • Updating information of the Patient: The hospital management system enables users to update the information of the patient as described in the mandatory information

included.

#### Software requirements:

- 🌐 Video call :- patients should consult the recommended doctor by providing the link for the video call which is given by the software.
- 🌐 Payment method :- Any type of online payments are accepted by us.
- 🌐 Response time-The system will give responses within 1 second after checking the patient information and other information.
- 🌐 Capacity-The system must support 1000 people at a time
- 🌐 User interface- User interface screen will response within 5 seconds

#### Safety Requirements:

- 🌐 If there is extensive damage to a wide portion of the database due to catastrophic failure, such as a disk crash, the recovery method restores a past copy of the database that was backed up to archival storage and reconstructs a more current state by reapplying or redoing the operations of committed transactions from the backed up log, up to the time of failure. All the administrative and data entry operators have unique logins so system can understand who is login in to system right now no intruders allowed except system administrative nobody cannot change record and valuable data.

#### Software Quality Attributes

- 🌐 AVAILABILITY: The system shall be available all the time.
- 🌐 CORRECTNESS: A bug free software which fulfill the correct need/requirements of the client.
- 🌐 MAINTAINABILITY: The ability to maintain ,modify information and update fix problems of the system
- 🌐 USABILITY: software can be used again and again without distortion.
- 🌐 ACCESSIBILITY: Administrator and many other users can access the system but the access level is controlled for each user according to their work scope.
- 🌐 ACCURACY: The reliability on the information/output. Can depend/be sure of the outcome.
- 🌐 STABILITY:The system outcome/output won't change time to time. Same output Will be given always for a given input.

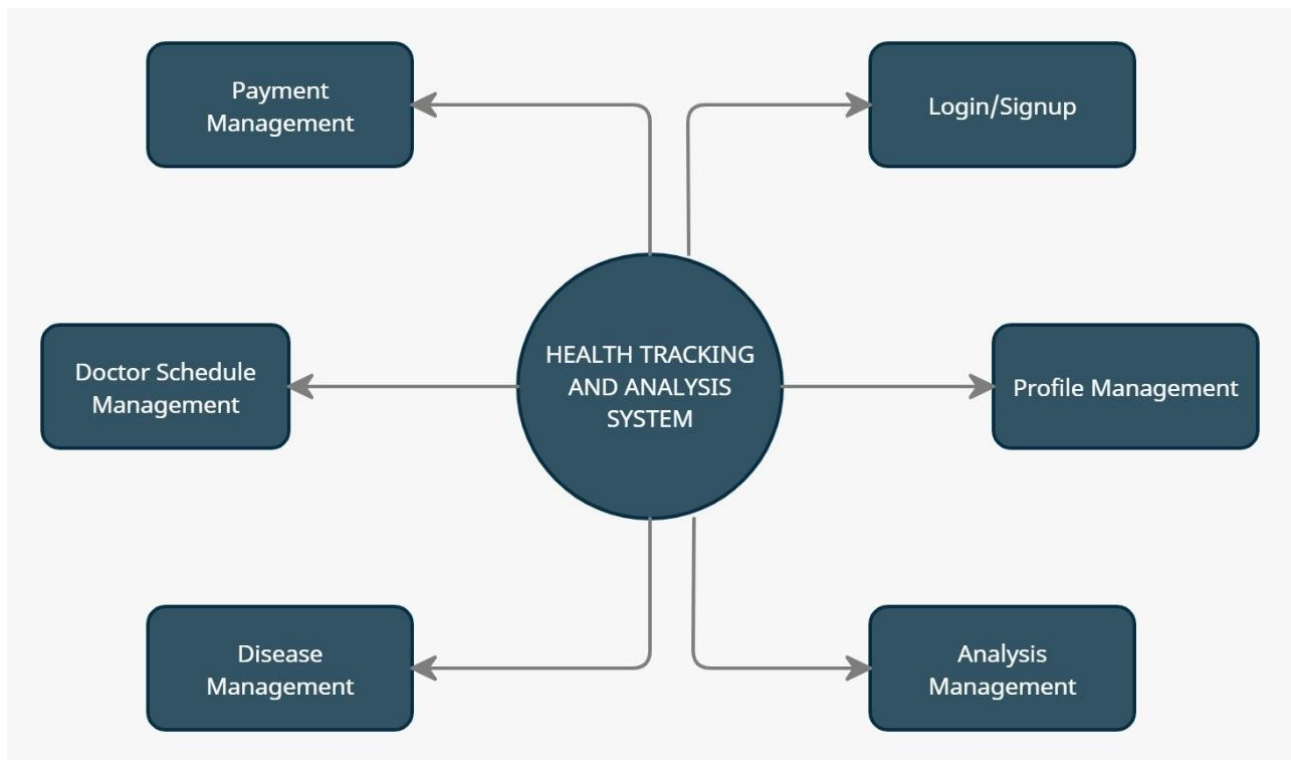
### Security Requirements

1. Want take the responsibility of failures due to hardware malfunctioning.
2. Warranty period of maintaining the software would be one year.
3. Additional payments will be analysed and charged for further maintenance
4. If any error occur due to a user's improper use. Warranty will not be allocated to it.
5. No money back returns for the software.

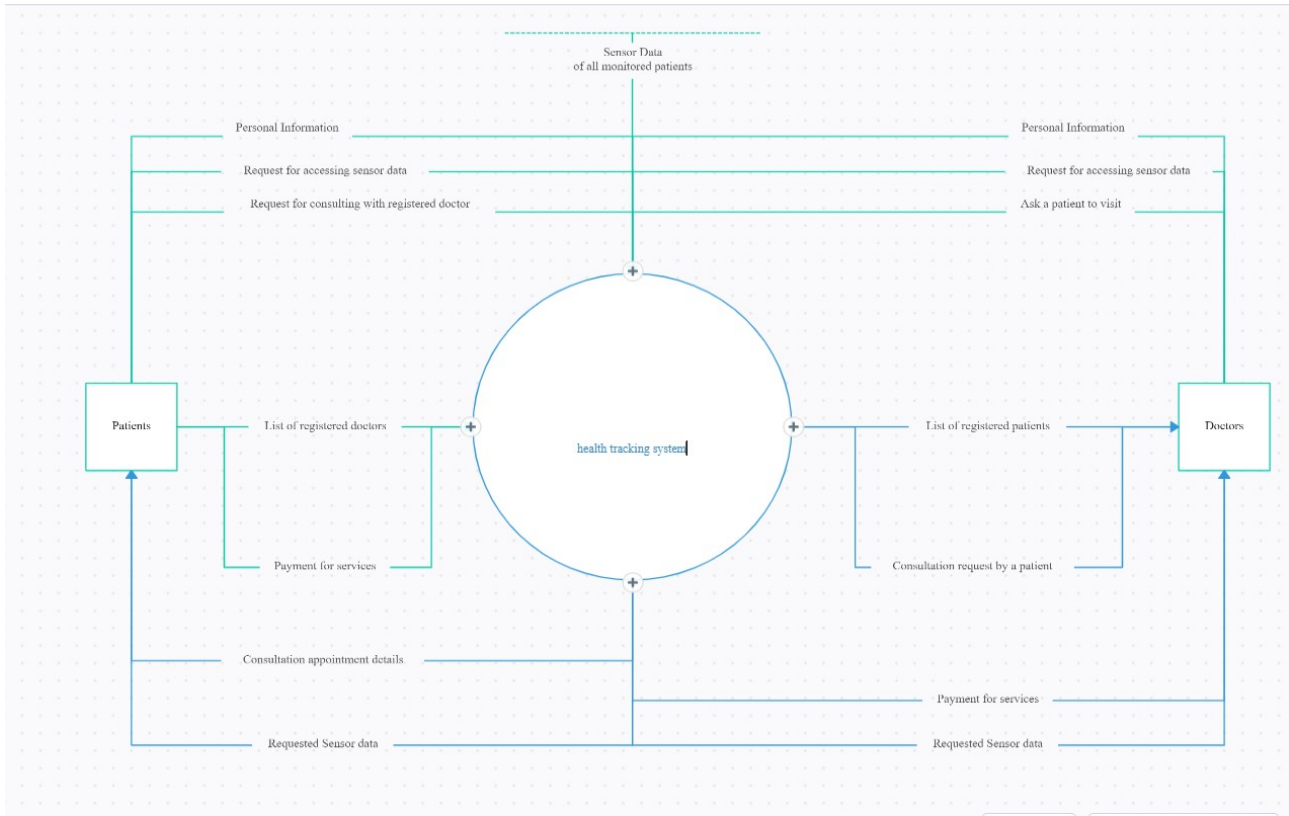
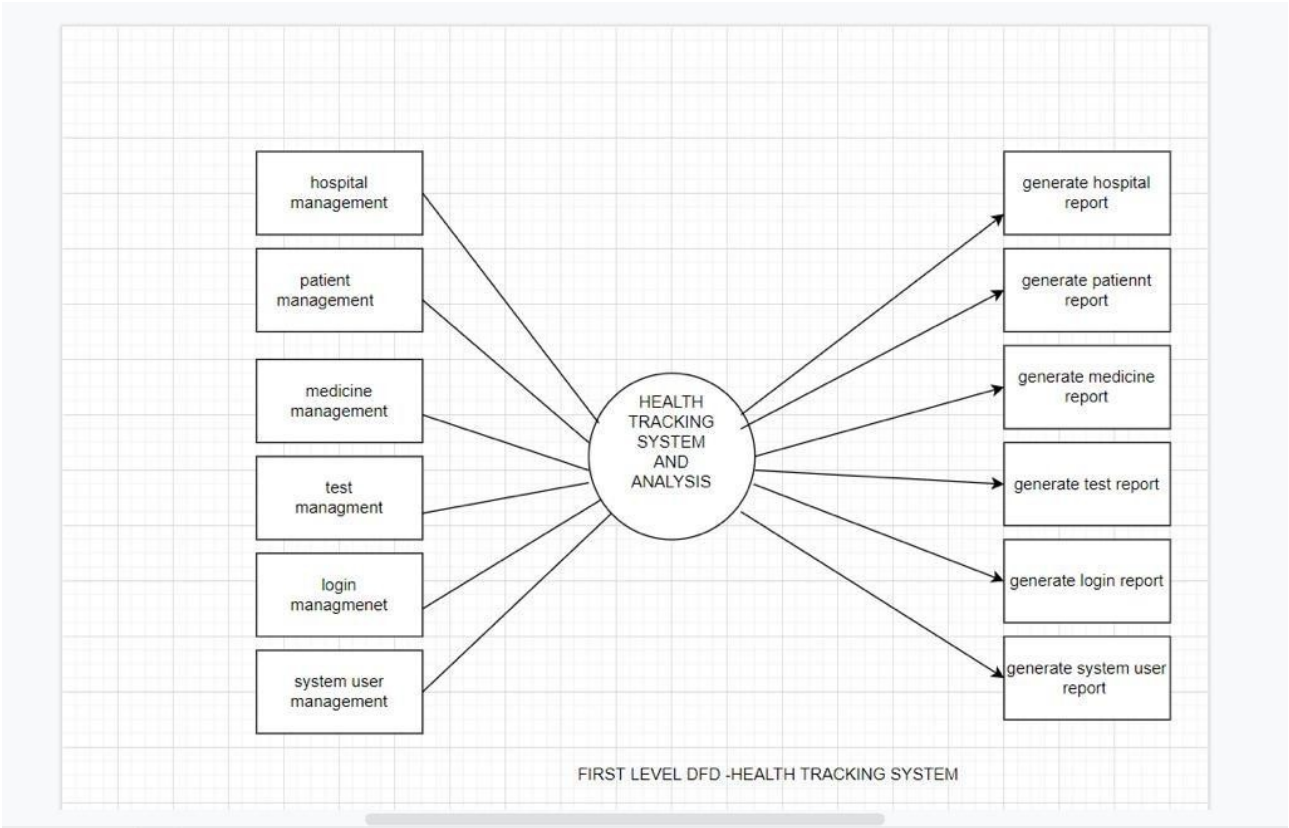
## UML DIAGRAMS:

Data Flow diagram:

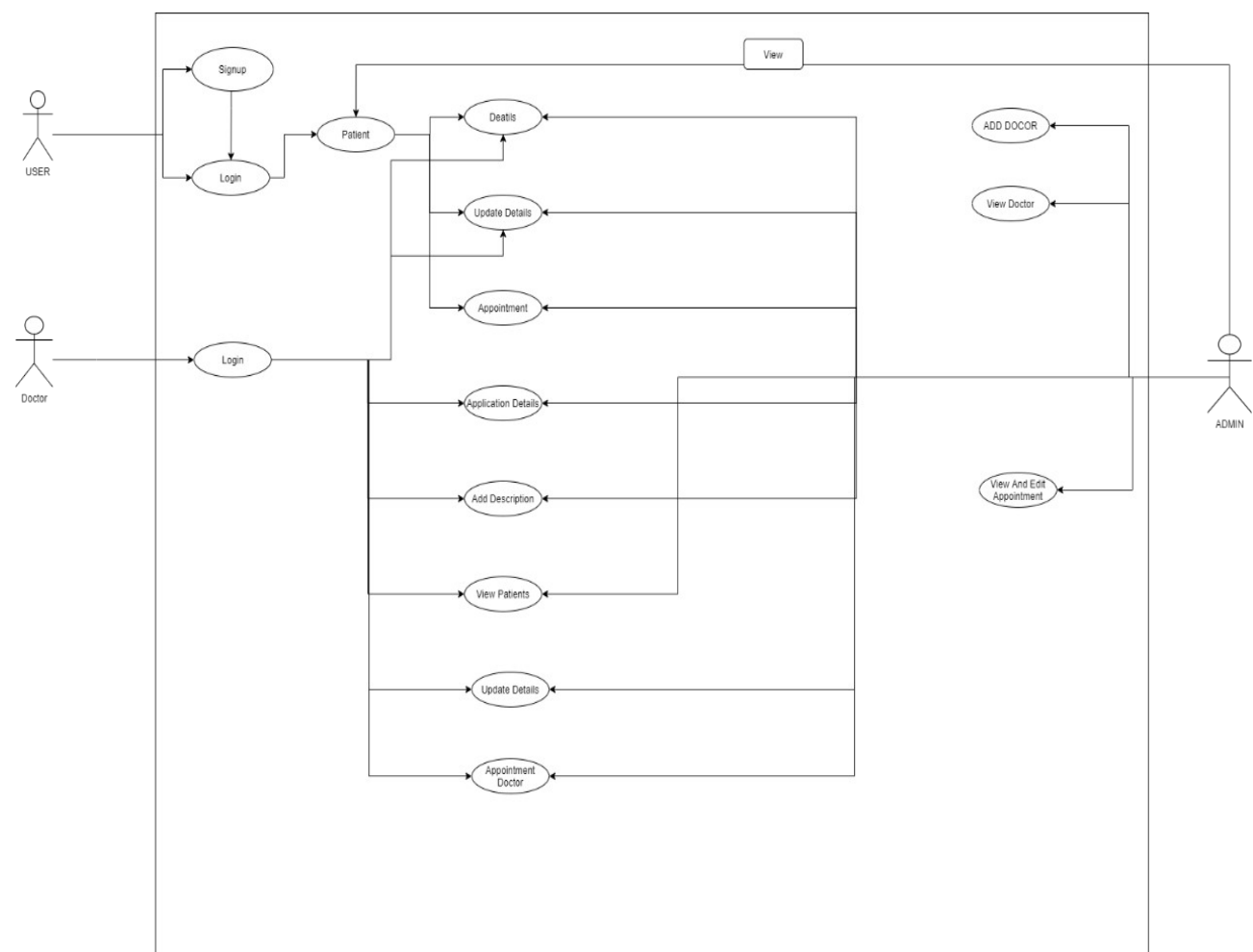
Level 0:



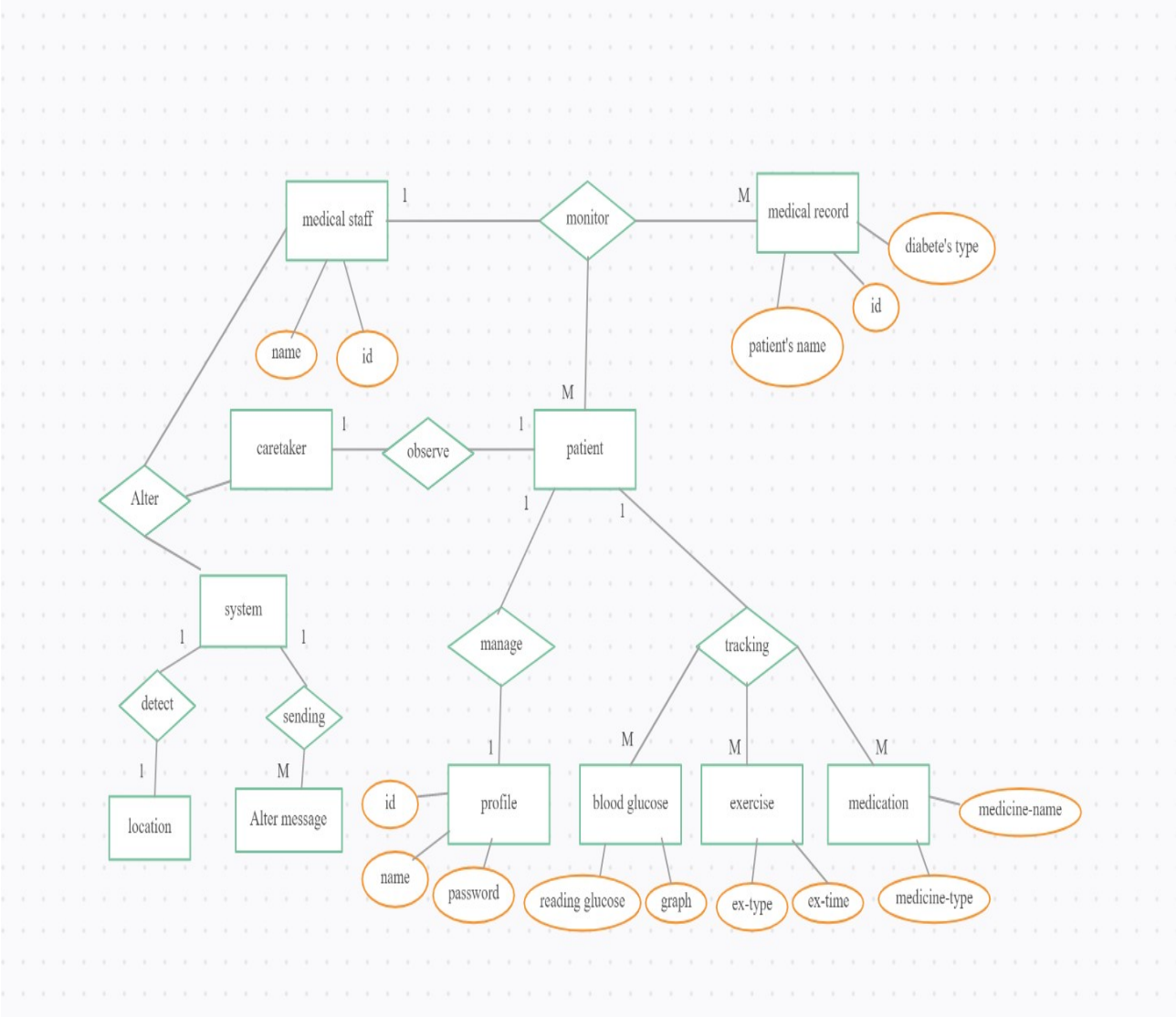
Level 1:



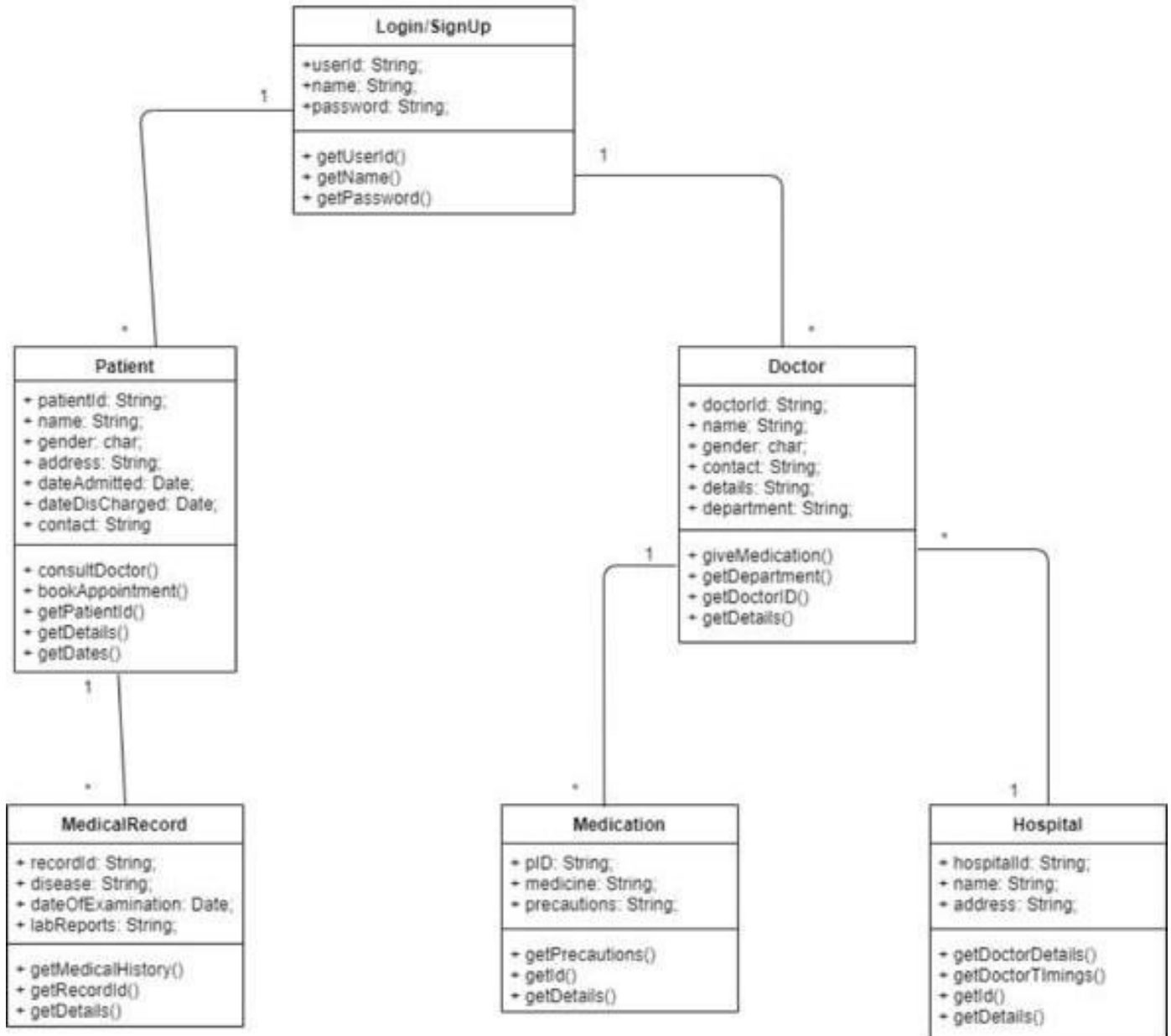
Use Case diagram:



ER diagram:

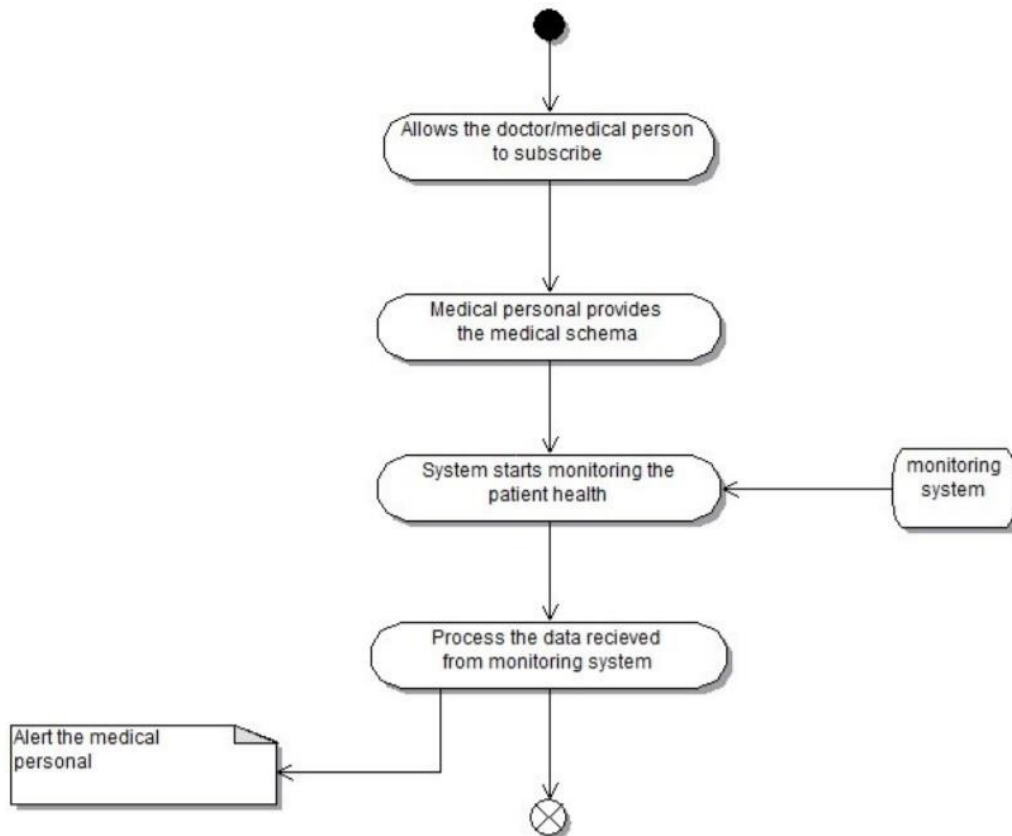


Class diagram:

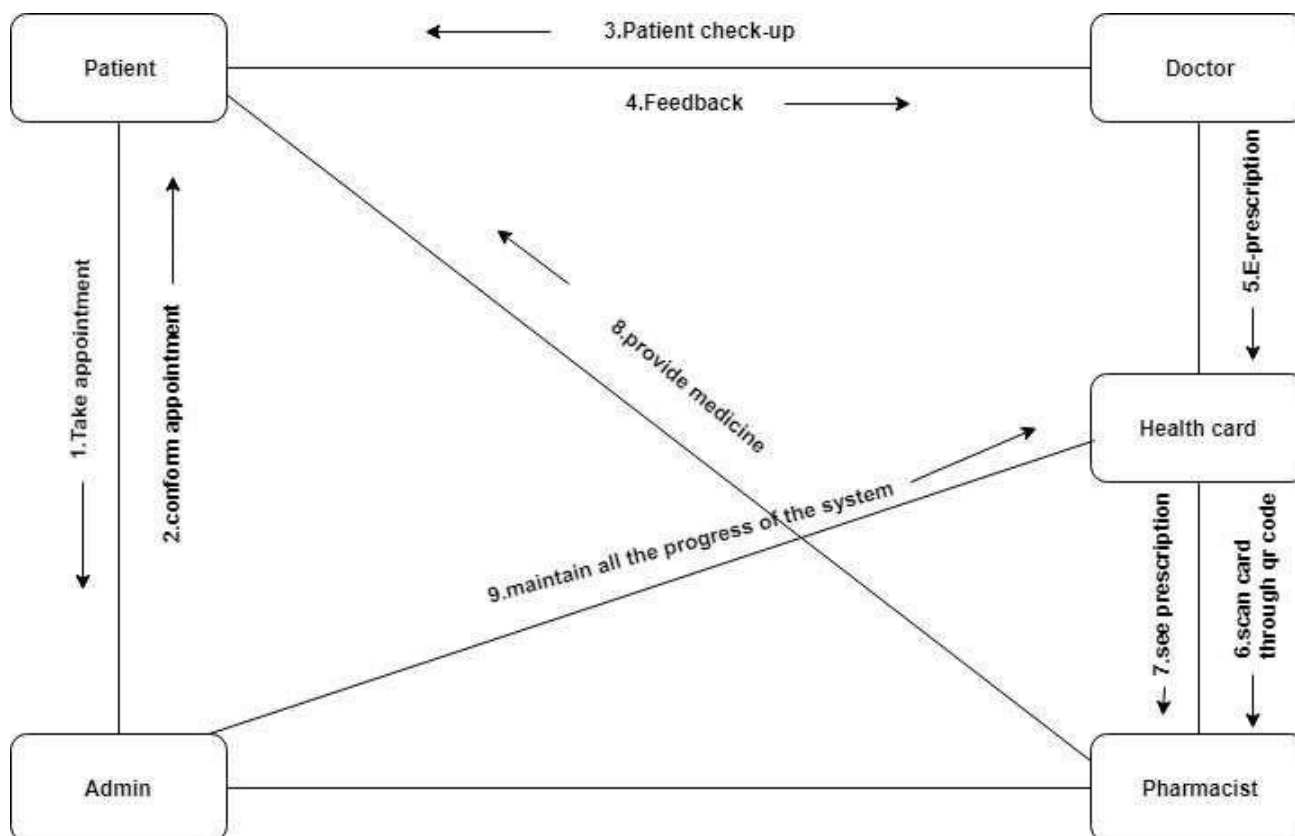




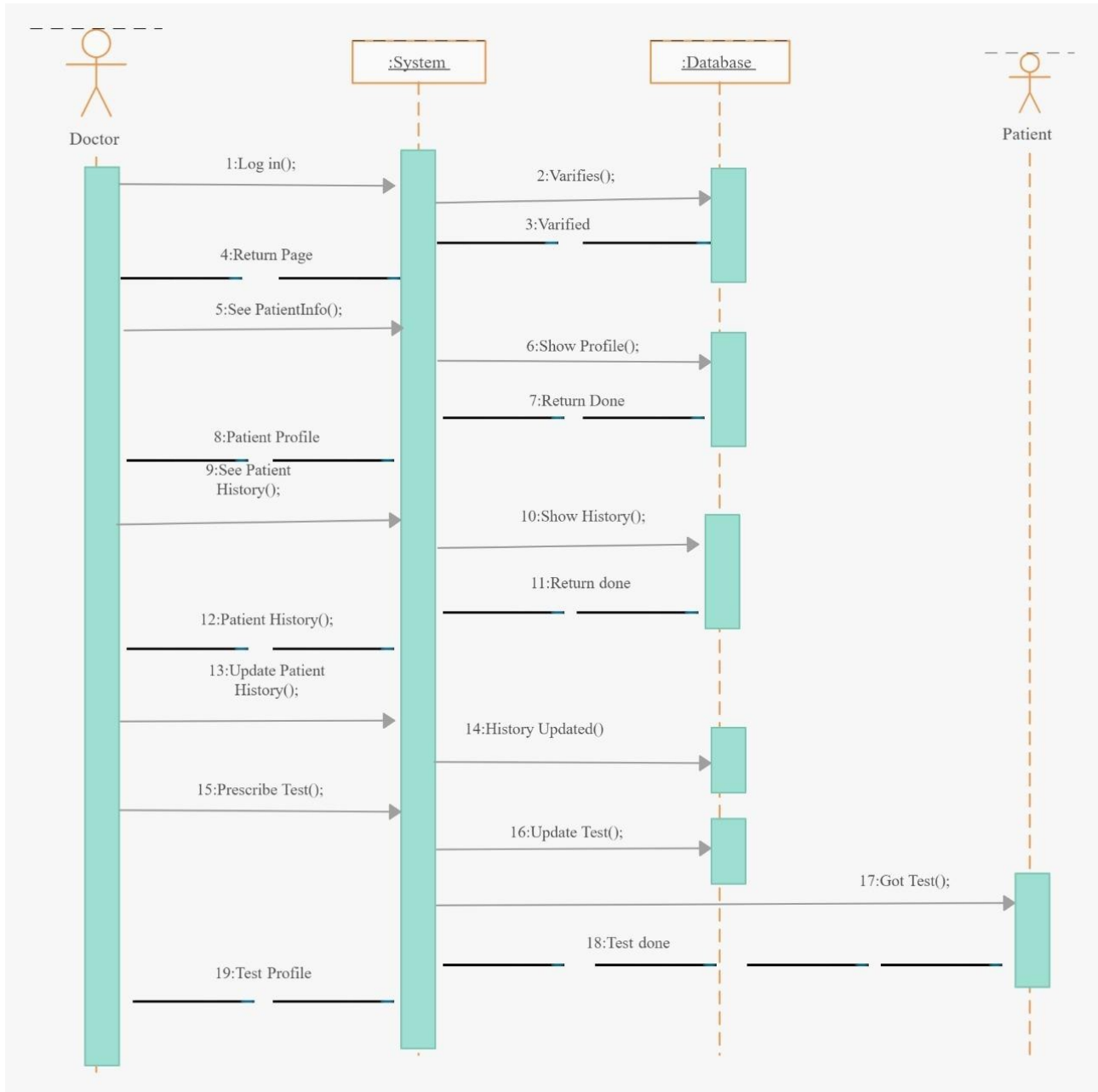
Activity diagram:



Collaboration diagram:



Sequence diagram:



## 7. RESULTS AND DISCUSSION

### Test Case report:

#### Table-Test case Scenario name- Login:

Test case Id	Activity	Inputs	Expected Result	Actual Result	Status [Pass/Fail]	Comments
TC-01	Luanch Application	http://localhost:5000/index.html	Home Page	Home Page	Pass	Launch Successful
TC-02	Enter invalid email and any password and press login button	Email: <a href="#">invalid@abc.com</a> Password: *****	The expected address entered doesn't match any account	The expected address entered doesn't match any account	Fail	Invalid login attempt stopped
TC-03	Enter correct email and password and press login button	Email: <a href="#">test@abc.com</a> Password: *****	Login Success	Login Success	Pass	Login successful

Table-Test case Scenario name- SignUp:

Test case Id	Activity	Inputs	Expected Rusult	Actual Result	Status [Pass/ Fail]	Comments
TC-01	Click Sign Up button	Click	Open SignUp page	As expected	Pass	Opened Signup page
TC-02	Leaving required fields	Blank in some required fields	Disable SignUp button display message Display	SignUp button not disabling	Fail	Displaying errors
TC-03	Filling invalid email	Email: invalid#12\$	message this is not a valid email	As expected	Fail	Email is invalid
TC-04	Password and Confirm password doesn't match	Password: ***** Confirm pass: *****	display message passwords doesn't match	As expected	Fail	displaying error passwords doesn't match
TC-05	Filling all requiured fields and click Signup button	Name: testname email: <a href="mailto:test@abc.com">test@abc.com</a> password: ***** confirm pass: *****	Show pop up registerd successfully and redirect to appoint page	As expected	Pass	Signup Successfull

Table-Test case Scenario name- Making Appointment:

Test case Id	Activity	Inputs	Expected Rusult	Actual Result	Status [Pass/Fail]	Comments
TC-01	Clicking Take Appointment link	Click	Open appointment page	As expected	Pass	Opened Appointment
TC-02	Leaving some required fields	Blank in some required fields	Disable fix button display message	Fix button not disabling	Fail	Displaying errors
TC-03	Filling all requird details and clicking fix appointment button	Name testname email: <a href="mailto:test@abc.com">test@abc.com</a> phone: 9876345983	Fix appointment as requested	As expected	Pass	Appointment fixed

Table-Test case Scenario name- Disease and Precuations:

Test case Id	Activity	Inputs	Expected Rusult	Actual Result	Status [Pass/Fail]	Comments
TC-01	Clicking Disease button	click	Open Disease info page and display options	As expected	Pass	Opened disease info page
TC-02	Click on one disease name link	Click on Tuberculosis	Open respective disease page and display info about the disease and images if available	As expected	Pass	Displayed disease info

Table-Test case Scenario name- Logout:

Test case Id	Activity	Inputs	Expected Rusult	Actual Result	Status [Pass/Fail]	Comments
TC-01	Click on logout	Click on loguot button	Redirect index page	As expected	Pass	Successfully logged out

Code:

Login page:

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <meta name="description" content="">
    <meta name="author" content="">

    <title>Healtho Tracker</title>

    <!-- css -->
    <link href="css/bootstrap.min.css" rel="stylesheet" type="text/css">
    <link href="font-awesome/css/font-awesome.min.css" rel="stylesheet"
type="text/css" />
    <link rel="stylesheet" type="text/css"
href="plugins/cubeportfolio/css/cubeportfolio.min.css">
    <link href="css/nivo-lightbox.css" rel="stylesheet" />
    <link href="css/nivo-lightbox-theme/default/default.css" rel="stylesheet"
type="text/css" />
    <link href="css/owl.carousel.css" rel="stylesheet" media="screen" />
    <link href="css/owl.theme.css" rel="stylesheet" media="screen" />
    <link href="css/animate.css" rel="stylesheet" />
    <link href="css/style.css" rel="stylesheet">

    <!-- boxed bg -->
    <link id="bodybg" href="bodybg/bg1.css" rel="stylesheet"
type="text/css" />
    <!-- template skin -->
    <link id="t-colors" href="color/default.css" rel="stylesheet">

</head>

<body id="page-top" data-spy="scroll" data-target=".navbar-custom">

<div id="wrapper">
```

```

<nav class="navbar navbar-custom navbar-fixed-top" role="navigation">
  <div class="top-area">
    <div class="container">
      <div class="row">
        <div class="col-sm-6 col-md-6">
          <p class="bold text-left">Monday - Sunday, 24 hour
service</p>

        </div>
        <div class="col-sm-6 col-md-6">
          <p class="bold text-right">Call us now +62 007 43
221</p>

        </div>
      </div>
    </div>
  </div>
  <div class="container navigation">

    <!-- Collect the nav links, forms, and other content for toggling --
>

    <div class="collapse navbar-collapse navbar-right navbar-main-
collapse">

      <ul class="nav navbar-nav">
        <li><a href="index.html">Home</a></li>
        <li><a href="Login.html">Login</a></li>
        <li><a href="IPloginpage.html">IPLogin</a></li>
      </ul>

    </div>

    <!-- /.navbar-collapse -->
  </div>
  <!-- /.container -->
</nav>

<!-- Section: intro -->
<section id="intro" class="intro">
  <div class="intro-content">
    <div class="container">
      <div class="row">
        <div class="col-lg-6">
          <div class="wow fadeInDown" data-wow-offset="0"
data-wow-delay="0.1s">

            <h2 class="h-ultra">Healtho Tracker Group</h2>

```

```

        </div>
        <div class="wow fadeInUp" data-wow-offset="0"
data-wow-delay="0.1s">
            <div class="col-lg-9">
                <div class="form-wrapper">
                    <div class="wow fadeInRight" data-wow-duration="2s" data-wow-
delay="0.2s">
                        <div class="panel panel-skin">
                            <div class="panel-heading">
                                <h3 class="panel-title"><span class="fa fa-
pencil-square-o"></span> You can login here</small></h3>
                            </div>
                            <div class="panel-body">
                                <form role="form" class="lead" method="POST"
action="login.php">
                                    <div class="row">
                                        <div class="col-xs-6 col-sm-6 col-md-6">
                                            <div class="form-group">
                                                <label>Username</label>
                                                <input type="text" name="uname"
id="uname" class="form-control input-md">
                                            </div>
                                        </div>
                                    </div>
                                    <div class="row">
                                        <div class="col-xs-6 col-sm-6 col-md-
6">
                                            <div class="form-group">
                                                <label>Password</label>
                                                <input
type="password" name="pass" id="pass" class="form-control input-md">
                                            </div>
                                        </div>
                                    </div>
                                    <input type="submit" value="Login"
class="btn btn-skin btn-block btn-lg">
                                <p class="lead-footer">Don't have an
account?

```



```
<a href="signup.html"><i>Signup
here</i></a>

</p>

</form>
</div>
</div>
</div>
</div>
</div>
</div>
</div>
</div>
</div>
</section>

<!-- /Section: intro -->

<!-- /Section: testimonial -->
<footer>

    <div class="container">
        <div class="row">
            <div class="col-sm-6 col-md-4">
                <div class="wow fadeInDown" data-wow-delay="0.1s">
                    <div class="widget">
                        <h5>About Healtho Tracker</h5>
                        <p>
                            It is a best place to get the treatment.
                        </p>
                    </div>
                </div>
            </div>

            <div class="col-sm-6 col-md-4">
                <div class="wow fadeInDown" data-wow-delay="0.1s">
                    <div class="widget">
                        <h5>Healtho Tracker center</h5>
                        <p>
                            This is present in many cities across the
globe
                        </p>
```

```

        <ul>
            <li>
                <span class="fa-stack fa-lg">
                    <i class="fa fa-circle fa-
stack-2x"></i>
                    <i class="fa fa-calendar-o
fa-stack-1x fa-inverse"></i>
                </span> Monday - Sunday, 24 hour
service
            </li>
            <li>
                <span class="fa-stack fa-lg">
                    <i class="fa fa-circle fa-
stack-2x"></i>
                    <i class="fa fa-phone fa-
stack-1x fa-inverse"></i>
                </span> +62 007 43 221
            </li>
            <li>
                <span class="fa-stack fa-lg">
                    <i class="fa fa-circle fa-
stack-2x"></i>
                    <i class="fa fa-envelope-o
fa-stack-1x fa-inverse"></i>
                </span> hello@healthotracker.com
            </li>
        </ul>
    </div>
</div>
</div>
</div>
<div class="col-sm-6 col-md-4">
    <div class="wow fadeInDown" data-wow-delay="0.1s">
        <div class="widget">
            <h5>Our location</h5>

            <p>Mumbai<br>Hyderabad<br>Chennai<br>Delhi<br>Bengaluru</p>

        </div>
    </div>
</div>
</div>
</div>

```

```

    </div>
    <div class="sub-footer">
    <div class="container">
        <div class="row">
            <div class="col-sm-6 col-md-6 col-lg-6">
                <div class="wow fadeInLeft" data-wow-delay="0.1s">
                    <div class="text-left">
                        <p>&copy; Copyright 2021 - Health Tracker. All
rights reserved.</p>
                    </div>
                </div>
            </div>
        </div>
    </div>
</div>
<div class="scrollup">
    <a href="#" class="scrollup"><i class="fa fa-angle-up active"></i></a>

    <!-- Core JavaScript Files -->
    <script src="js/jquery.min.js"></script>
    <script src="js/bootstrap.min.js"></script>
    <script src="js/jquery.easing.min.js"></script>
    <script src="js/wow.min.js"></script>
    <script src="js/jquery.scrollTo.js"></script>
    <script src="js/jquery.appear.js"></script>
    <script src="js/stellar.js"></script>
    <script
src="plugins/cubeportfolio/js/jquery.cubeportfolio.min.js"></script>
    <script src="js/owl.carousel.min.js"></script>
    <script src="js/nivo-lightbox.min.js"></script>
    <script src="js/custom.js"></script>

</body>

</html>

```

## GUI Screenshots:

Monday - Sunday, 24 hour service

Call us now +62 007 43 221

HOME

LOGIN

IPLOGIN

# Healtho Tracker Group

You can login here

Username

Password

LOGIN

Don't have an account? [Signup here](#)

ABOUT HEALTHO TRACKER

It is a best place to get the treatment.

HEALTHO TRACKER CENTER

This is present in many cities across the globe

Monday - Sunday, 24 hour service

+62 007 43 221

hello@healthotracker.com

OUR LOCATION

Mumbai

Hyderabad

Chennai

Delhi

Bengaluru

Monday - Sunday, 24 hour service

Call us now +62 007 43 221

HOME

LOGIN

IPLOGIN

SIGNUP HERE

First Name

Last Name

User Name

Password

Age

Sex

Select Option ▾

Email

BloodGroup

Address

Phone Number

REGISTER

# Healtho Tracker Group

Provide **best quality healthcare** for you

- ✓ **Choose your favourite doctor**  
Get a very cool and amazing doctors
- ✓ **Only use friendly environment**  
Best Interaction for you with the doctors



## Make an appointment

This website helps you to take the appointment from your favorite doctors



## Help by specialist

Doctors prescribed in this site are professionals and are very friendly towards the patients

## Our facilities



### Birth control pills

My rating: ★★★★★

I was really very happy with the treatment by the doctors here. They were so kind and treated us very well.



**Lucas Thompson**  
Hyderabad

### Radiology

My rating: ★★★★★

I was really very happy with the treatment by the doctors here. They were so kind and treated us very well.



**Ella Mentry**  
Delhi

### Cervical Lesions

My rating: ★★★★★

I was really very happy with the treatment by the doctors here. They were so kind and treated us very well.



**Suzanne Adam**  
Hyderabad

### ABOUT HEALTHO TRACKER

It is a best place to get the treatment.

### HEALTHO TRACKER CENTER

This is present in many cities across the globe

- Monday - Sunday, 24 hour service
- +62 007 43 221
- hello@healthotracker.com

### OUR LOCATION

Mumbai  
Hyderabad  
Chennai  
Delhi  
Bengaluru

## Healtho Tracker Group

Take an Appointment here

First Name

Last name

Email

Phone Number

**FIX AN APPOINTMENT**

We will send a message to you by mail or phone

## Major Health Issues

Tuberculosis

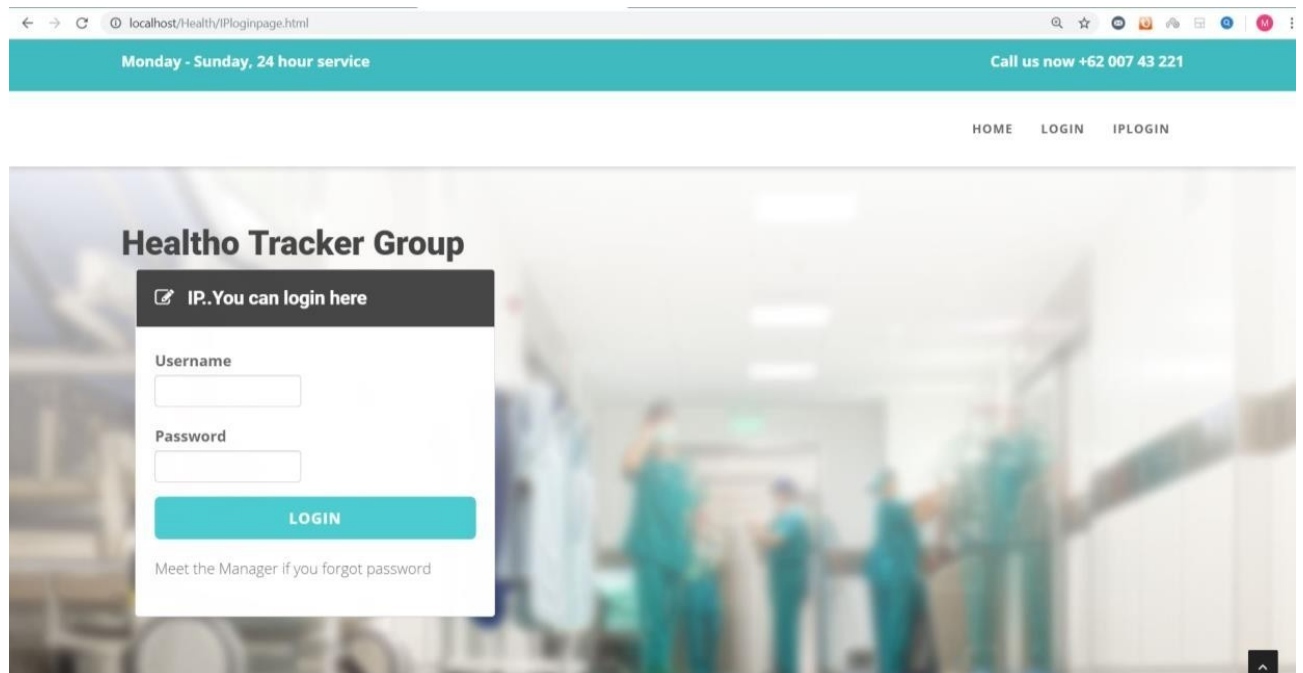
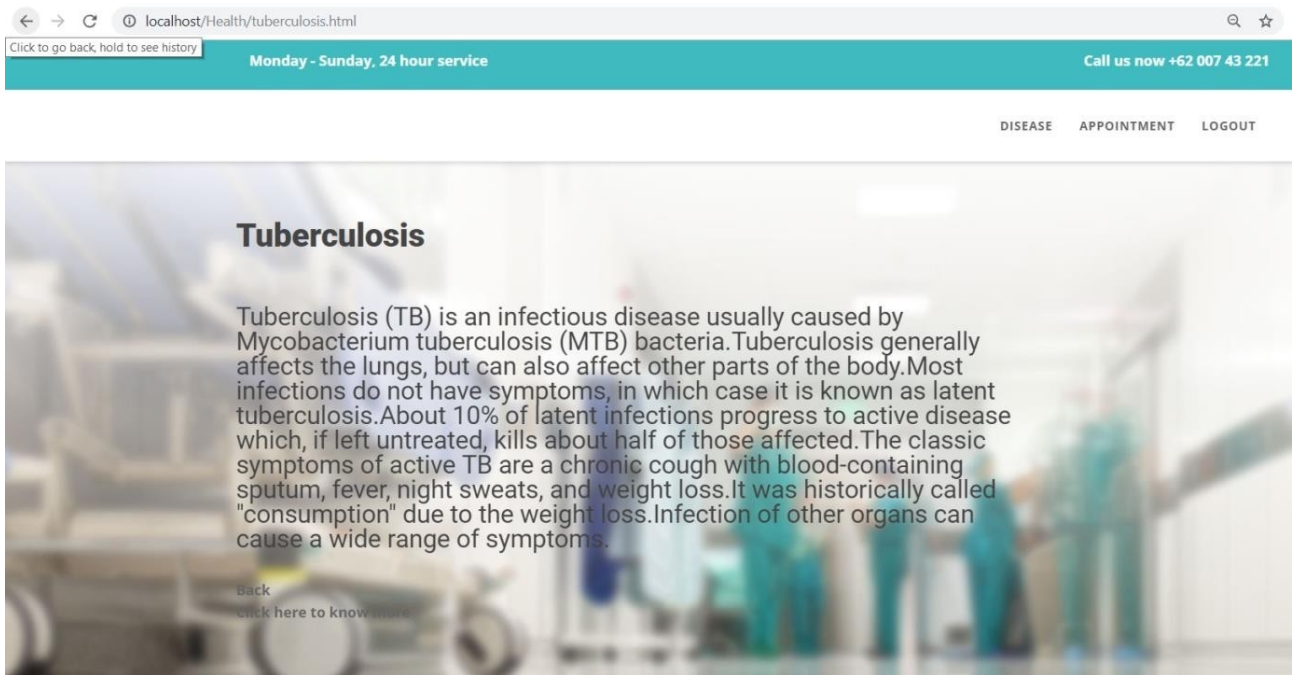
Blood Cancer

Lower Respiratory Infections

Diarrheal Diseases

Chronic Obstructive Pulmonary  
Disease

Diabetes Mellitus





← → ↻ localhost/Health/Registration%20form.html 🔍 ☆ 🌐 📱 📄 📌 📌 📌

Monday - Sunday, 24 hour service Call us now +62 007 43 221

REGISTER PATIENT INFORMATION VIEW DATA LOGOUT

✍ Registration Form

First Name

Last Name

Age

Sex

Select Option ▾

Height(in cm)

Weight(in kg)

Symptoms

Disease

Days of suffering

BloodGroup

Address

Phone Number

REGISTER

Monday - Sunday, 24 hour service

REG

## DATA ANALYSIS

A pie chart illustrating the distribution of various diseases. The chart is divided into six segments, each representing a different disease and its corresponding percentage of the total. The segments are color-coded and labeled with their respective percentages. A legend on the right side of the chart provides the names of the diseases corresponding to each color.

Disease	Percentage
Blood cancer	31.3%
Chronic Obstructive Pulmonary Disease	12.5%
Diabetes Mellitus	18.8%
Diarrheal Diseases	6.3%
Lower Respiratory Infections	12.5%
tuberculosis	18.8%



## Database screenshots:

The screenshot shows the phpMyAdmin interface for a database named 'healtho tracker'. The left sidebar displays the database structure, including tables like 'appointment', 'ip\_login', 'patient', and 'usertable'. The main panel shows the 'Structure' tab for the 'healtho tracker' database. It lists four tables: 'appointment', 'ip\_login', 'patient', and 'usertable'. Each table has a star icon, a 'Browse' button, and a 'Structure' button. The 'Rows' column shows the number of rows for each table: 5 for 'appointment', 6 for 'ip\_login', 18 for 'patient', and 3 for 'usertable'. The 'Type' column shows 'InnoDB' for all tables. The 'Collation' column shows 'latin1\_swedish\_ci' for all tables. The 'Size' column shows '16.0 KiB' for all tables. The 'Overhead' column shows '-' for all tables. A 'Sum' row at the bottom shows a total of 32 rows, InnoDB type, utf8\_general\_ci collation, 64.0 KiB size, and 0 B overhead. Below the table list, there are buttons for 'Print' and 'Data dictionary', and a 'Create table' button.

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> appointment		5	InnoDB	latin1_swedish_ci	16.0 KiB	-
<input type="checkbox"/> ip_login		6	InnoDB	latin1_swedish_ci	16.0 KiB	-
<input type="checkbox"/> patient		18	InnoDB	latin1_swedish_ci	16.0 KiB	-
<input type="checkbox"/> usertable		3	InnoDB	latin1_swedish_ci	16.0 KiB	-
4 tables	Sum	32	InnoDB	utf8_general_ci	64.0 KiB	0 B

The screenshot shows the phpMyAdmin interface for the 'appointment' table. The left sidebar displays the database structure, including tables like 'appointment', 'ip\_login', 'patient', and 'usertable'. The main panel shows the 'Structure' tab for the 'appointment' table. It displays the table structure with columns: 'fname', 'lname', 'email', and 'phn'. Below the table structure, there is a query editor showing the SQL query: `SELECT * FROM `appointment``. Below the query editor, there are buttons for 'Profiling', 'Edit inline', 'Edit', 'Explain SQL', 'Create PHP code', and 'Refresh'. Below these buttons, there is a 'Show all' button, a 'Number of rows' dropdown set to 25, and a 'Filter rows' input field with the text 'Search this table'. Below the filter rows input field, there is a '+ Options' button. Below the '+ Options' button, there is a table showing the data of the 'appointment' table. The table has four columns: 'fname', 'lname', 'email', and 'phn'. The data rows are: Rohith, B, Rohit@gmail.com, 5415161212; Vishal, A, Vishal@gmail.com, 7894561230; Chaitanya, Alluri, chaitan@gmail.com, 1234567890; Sai, Preetham, preetham1008@gmail.com, 9390334949; and Sai, Preetham, preetham1006@gmail.com, 9390334949. Below the table, there is a 'Show all' button, a 'Number of rows' dropdown set to 25, and a 'Filter rows' input field with the text 'Search this table'.

Showing rows 0 - 4 (5 total, Query took 0.0010 seconds.)

```
SELECT * FROM `appointment`
```

☐ Profiling [\[ Edit inline \]](#) [\[ Edit \]](#) [\[ Explain SQL \]](#) [\[ Create PHP code \]](#) [\[ Refresh \]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

fname	lname	email	phn
Rohith	B	Rohit@gmail.com	5415161212
Vishal	A	Vishal@gmail.com	7894561230
Chaitanya	Alluri	chaitan@gmail.com	1234567890
Sai	Preetham	preetham1008@gmail.com	9390334949
Sai	Preetham	preetham1006@gmail.com	9390334949

☐ Show all | Number of rows: 25 | Filter rows: Search this table

Recent Favorites

New

- healtho tracker
  - New
    - appointment
    - ip\_login
    - patient
    - usertable
  - information\_schema
  - mysql
  - performance\_schema
  - phpmyadmin
  - test

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 5 (6 total, Query took 0.0009 seconds)

SELECT \* FROM `ip\_login`

Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

uname	pass
SAI951	Sai@4321
Tarun	Tarun@1234
Chaitanya	Chaitanya@1234
Rohith	Rohith@1234
Gopi	Gopi@4321
Vishal	Vishal@4321

Show all | Number of rows: 25 | Filter rows: Search this table

Query results operations

Print Copy to clipboard Export Display chart Create view

phpMyAdmin

Recent Favorites

New

- healtho tracker
  - New
    - appointment
    - ip\_login
    - patient
    - usertable
  - information\_schema
  - mysql
  - performance\_schema
  - phpmyadmin
  - test

Server: 127.0.0.1 Database: healtho tracker Table: patient

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 17 (18 total, Query took 0.0012 seconds)

SELECT \* FROM `patient`

Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

fname	lname	age	sex	hgt	wgt	sym	dis	days	bldgrp	addr	phn
Ritu	Verma	43	Female	154	50	cough with blood,night sweats,fever,lose of appiti	tuberculosis	7	O+	Syamala Nagar,Guntur,Andhra Pradesh	8919604838
Varu	Chakravarthy	19	Male	170	60	pain in bones,dizziness,mouth ulcer,weight loss	Blood cancer	10	A+	Kanchipuram,TamilNadu	9876543210
Rohith	Velaga	45	Male	175	50	fatigue,fever,cough,breath shortness	Lower Respiratory Infections	50	B+	Amalapuram,Andhra Pradesh,India	7890654321
Nelson	Mandela	34	Female	152	54	abdominal pain,loose stools,nausea	Diarrheal Diseases	10	O+	Chennai,Tamil Nadu,India	7989808083
Mounika	reddy	19	Female	160	42	chest pressure,dry cough,fatigue	Chronic Obstructive Pulmonary Disease	NULL	AB+	Tagore Street,Bengaluru,India	8564256856
Saranya	Somepalli	12	Female	150	40	excessive thirst and urination,weight loss	Diabetes Mellitus	36	A-	JKC Nagar,Vijayawada,Andhra Pradesh	8908097007
Vaishnavi	Balaji	45	Female	165	70	cough with blood,nightsweats,fever,loseof appiti	tuberculosis	4	AB+	Kothapeta,Guntur,Andhra Pradesh India	8989878675
Mounika	Yasam	24	Female	160	56	pain in bones,dizziness,mouth ulcer,weight loss	Blood cancer	8	B-	NT nagar,Nellore,Andhra pradesh,India	8098978676
Mani	Teja	21	Male	180	65	fatigue,fever,cough,breath shortness	Lower Respiratory Infections	NULL	O+	Ongole,Prakasam,Andhra Pradesh,India	7907836873
Sai	Teja	23	Male	186	60	chest pressure,dry cough,fatigue	Chronic Obstructive Pulmonary Disease	11	B+	Kadapa,Andhra Pradesh,India	9087676565
Bindu	k	22	Female	157	50	excessive thirst and urination,weight loss	Diabetes Mellitus	4	O-	SVN colony,Srikalahasti,Andhra Pradesh,India	9878667856
Donald	Trump	23	transgende	167	45	cough with blood , night sweats	tuberculosis	3	O+	Ameerpet,Hyderabad,Telangana	7897896765

Show all | Number of rows: 25 | Filter rows: Search this table

Query results operations

Print Copy to clipboard Export Display chart Create view

phpMyAdmin

Recent Favorites

New

- healtho tracker
  - New
    - appointment
    - ip\_login
    - patient
    - usertable
  - information\_schema
  - mysql
  - performance\_schema
  - phpmyadmin
  - test

Server: 127.0.0.1 Database: healtho tracker Table: usertable

Browse Structure SQL Search Insert Export Import Privileges Operations Triggers

Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 2 (3 total, Query took 0.0011 seconds)

SELECT \* FROM `usertable`

Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

fname	lname	uname	pass	age	sex	email	bldgrp	addr	phn
Sai	preetham	SAI951	Sai@4321	19	male	preetham@gmail.com	O+	Tolanagana	1234567891
Rohith	reddy	Rohith	Rohith@1234	19	male	rohith@gmail.com	O+	Guntur,Andhra Pradesh,India	5415161212
Tarun	S	Tarun	Tarun@4321	12	male	taru@gmail.com	A+	kc nagar	9948516178

Show all | Number of rows: 25 | Filter rows: Search this table

Query results operations

Print Copy to clipboard Export Display chart Create view

## 8. CONCLUSION

The system developed patient monitoring based on Internet of things, is an alternative that can be used to help patients with chronic diseases. Likewise with this set of solutions the aim is to improve the quality of life of patients, not just monitoring them, but also to enable direct them to improve their eating habits and workout routines.

The context model developed for the system proved to be efficient when making inferences related to the context, such as recommendations for taking measures through sensors, as well as recommendations and workout routines tips to improve the eating habits of patients.

## 9. REFERENCES

- (1) Archer 'Reasons to build a health monitoring system for hospital' \ <https://archer-soft.com/blog/5-reasons-build-health-monitoring-system-hospital#technology>
- (2) Bodenheimer T. Coordinating care—a perilous journey through the health care system. *New England Journal of Medicine*. 2008;358(10):1064–1071.
- (3) Leape L, Berwick D, Clancy C, Conway J, Gluck P, Guest J, Lawrence D, Morath J, O'Leary D, O'Neill P, Pinakiewicz D, Isaac T. Transforming healthcare: A safety imperative. *Quality and Safety in Health Care*. 2009;18(6):424–428.
- (4) Meyer H. At UPMC, improving care processes to serve patients better and cut costs. *Health Affairs*. 2011;30(3):400–403.
- (5) Kenter R, Warmerdam L, Brouwer-Dudokdewit C, Cuijpers P, van Straten A. Guided online treatment in routine mental health care: An observational study on uptake, drop-out and effects. *BMC Psychiatry*. 2013;13:43.