Clinic Management Information System

By

Hassan Hammam

&

Mahdi Abdallah

Graduation Project Report

Submitted in Partial Fulfillment of the Requirements for the Degree of

Bachelor of Science in Computer Science

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Supervised by

Dr. Rabih Wazneh

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This Project Report for Hassan Hammam certifies

that this is the approved version of the following Project

Clinic Management Information System

APPROVED BY:

Dr. Rabih Wazneh: _____

Dr. Ali Raad: _____

Dr. Kassem Danach: _____

Acknowledgments

Dear Committee Members, As I come to the culmination of my senior project in computer science, I find myself overwhelmed with gratitude for your unwavering support and guidance throughout the entire journey. Your presence at the project presentation, taking the time to attend and witness my work, means the world to me. During these past three years, your commitment to teaching and pushing me to do my best has been truly invaluable. Your expertise and mentorship have shaped me into the computer scientist I am today, and I cannot thank you enough for believing in my potential even when I doubted myself. Completing this project would not have been possible without the continuous encouragement and motivation you provided. Your insightful feedback and constructive criticism challenged me to think critically and pushed me to explore new avenues of research and development. I would also like to extend my gratitude to my family and friends, whose love and encouragement bolstered my spirits throughout this journey. Your unwavering support reminded me that I was not undertaking this project alone, and it made the process even more fulfilling. To the entire computer science department, thank you for providing an environment that fosters creativity and intellectual growth. The resources and facilities you offer have been instrumental in the success of my senior project. In conclusion, I want to say thank you from the bottom of my heart. Your impact on my academic and personal growth has been immeasurable. Your presence at my project presentation meant a great deal to me, and I will always cherish the knowledge and experiences gained under your mentorship.

Abstract

Clinic Management Information System

In response to the urgent need to alleviate financial and time constraints facing many individuals seeking medical care in our country, this project, titled "Clinic Management Information System," was conceived. The high cost of fuel and the limitations of work schedules have made it increasingly difficult for people to visit clinics only to find no available appointments, thereby wasting both valuable time and money. This critical issue underscores the importance of our project.

The primary aim of this system is to efficiently manage doctor appointments, reducing unnecessary trips to the clinic and therefore saving both time and money for patients. In addition, the system provides up-to-date information on available pharmaceutical items at the clinic, further enhancing the user's experience and adding value by potentially preventing a separate trip to a pharmacy.

To accomplish these goals, we developed a comprehensive system that comprises a web application built using PHP and a mobile application created in Android Studio using Java. Our key focus throughout the development was to maintain a user-friendly interface and robust data management system, ensuring secure and effective handling of sensitive medical and personal data.

The system has been tested thoroughly, ensuring reliable performance in a variety of potential user interactions. It successfully facilitates the appointment-making process, enhancing both patients' and medical staff's experiences. The web application provides a robust platform for administrators to manage the system, whereas the mobile application offers doctors a convenient tool for patient management and appointment scheduling.

Overall, the Clinic Management Information System has a profound potential to revolutionize the way clinics operate and how patients interact with healthcare facilities. It not only addresses a significant problem but also provides a practical, user-friendly solution that could make a notable difference in the current healthcare landscape.

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Chapter 1: Introduction

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1.1 Background and Motivation:

The landscape of healthcare delivery is rapidly changing due to advancements in technology. While this provides many opportunities for improving patient care, it also presents significant challenges that need to be addressed. In our country, a significant hurdle that individuals face is the high cost of fuel, which makes frequent trips to clinics for appointments or to inquire about pharmaceutical availability financially prohibitive. Additionally, the limitations of work schedules often result in individuals finding no available appointments when they visit clinics, leading to wasted time and resources. This highlights an urgent need for a more efficient, cost-effective system to manage doctor appointments and the availability of pharmaceutical items.

The motivation behind this project, therefore, stems from the pressing need to alleviate these financial and time constraints for individuals seeking medical care. The proposed Clinic Management Information System aims to manage doctor appointments more efficiently, reducing unnecessary trips to the clinic and thus saving both time and money for patients. Furthermore, it seeks to provide real-time information on available pharmaceutical items at the clinic, enhancing user experience and adding value by potentially preventing a separate trip to a pharmacy.

1.2 Objectives:

The primary objective of this project is to develop a user-friendly Clinic Management Information System using PHP for the web application and Java for the Android mobile application. The system will facilitate appointment booking and management for patients and medical staff. It will also display the availability of pharmaceutical items in the clinic, which will be helpful for patients and may reduce the need for additional trips to a pharmacy.

1.3 System Development and Methodology

The system was developed with a key focus on ensuring a user-friendly interface and robust data management system. Sensitive medical and personal data need to be handled securely and effectively, necessitating the incorporation of stringent data management and security features. The PHP web application serves as a robust platform for administrators to manage the system, while the Android

mobile application provides doctors with a convenient tool for patient management and appointment scheduling.

1.4 Expected Outcomes

The system has been thoroughly tested to ensure reliable performance across a variety of potential user interactions. The Clinic Management Information System is expected to significantly enhance both patients' and medical staff's experiences. It is anticipated that this system will revolutionize the way clinics operate and how patients interact with healthcare facilities. By addressing a significant problem in our healthcare landscape, this project offers a practical, user-friendly solution that could make a notable difference in healthcare delivery.

1.5 Structure of the Report

The remainder of this report is organized as follows: Chapter 2 provides a comprehensive literature review related to clinic management systems and their impact on healthcare. Chapter 3 presents a detailed description of the system design and implementation. Chapter 4 discusses the results obtained from testing the system and feedback from the end-users. Chapter 5 offers conclusions and outlines future recommendations for enhancing the system.

Chapter 2: Literature Review

2.1 Product Perspective

2.2 Existing HealthCare Systems

2.3 Gaps In the Current Systems

2.4 Important of HealthCare Systems

2.5 Technologies Used

2.6 Overview

2.1 Product Perspective

This Hospital Patient Info Management System is a self-contained system that manages activities of the hospital. Due to improperly managed details medical center faces quite a lot of difficulties in accessing past data as well as managing present data. The fully functional automated hospital management system which will be developed through this project will eliminate the disadvantages caused by the manual system by improving the reliability, efficiency and performance. The usage of a database to store patient, employee, stock details etc. will accommodate easy access, retrieval, and search and manipulation of data. The access limitations provided through access privilege levels will enhance the security of the system. The system will facilitate concurrent access and convenient management of activities of the medical center.

2.2 Existing HealthCare System

The past decade has seen a surge in the development of Healthcare Management Systems to cater to the dynamic needs of the healthcare sector. Systems such as AdvancedMD offer practice management, electronic health records, and telemedicine services, providing an all-encompassing platform for clinics and hospitals. athenahealth is another comprehensive system designed to automate administrative, financial, and clinical operations of healthcare institutions. Kareo brings a platform that combines electronic health records, billing services, and a patient portal to enhance the patient-doctor relationship and streamline clinic operations.

Despite the functionality of these systems, they tend to be complex and may overshoot the specific requirements of small to medium-sized clinics. The cost of implementing and maintaining such systems can also be prohibitive for these smaller operations.

2.3 Gaps In the Current Systems

Despite the variety of functionalities offered by existing healthcare management systems, there are still noticeable gaps. For small to medium-sized clinics, these systems can often be excessively complex and costly. Moreover, these systems frequently lack certain functionalities such as allowing patients to schedule appointments online, offering doctors a mobile application for managing patient data and appointments, and displaying available pharmaceutical items to the public.

2.4 Important of HealthCare Systems

Effective appointment management systems are essential to the seamless operation of a healthcare facility. Such systems minimize patient wait times, improve patient satisfaction, and optimize resource utilization. An efficient pharmaceutical inventory management system is also vital for healthcare institutions, ensuring that essential medications are always in stock, thereby preventing potential healthcare delays.

2.5 Technologies Used

PHP and Java are notable languages used in the realm of web and mobile application development. PHP, with its server-side scripting capabilities, has found widespread use in web development, while Java, with its platform independence and object-oriented features, is widely utilized for mobile application development.

2.6 Overview

Our Web application contains two modules – the super admin module and the user module.
The software will also help the Doctors to monitor the appointments made. The super admin will be able to add doctors, admins, delete users and doctors and see messages sent by the user.
The user module where the patient can make appointments and view the items available at the clinic.

Our Mobile Application contains one module which is the doctor module where the doctor can view patient's appointments. The doctors can even add items through the mobile application to the web application. The doctor able to add patients to the system.

The literature review reveals a need for a more tailored Clinic Management Information System, specifically designed to address the unique needs of small to mid-sized clinics, provide efficient appointment management, and display a pharmacy's inventory. Our proposed project aims to fill these gaps using PHP for the web application and Java for the Android mobile application development.

Chapter 3: Methodology and System Software Specification

3.1 System Software

  3.1.1   System Interface

  3.1.2   System Specification

  3.1.3   Communication Interface

3.2 Software Function

3.3 Data Flow Diagram

3.4 Use Case Diagram

3.5 Use Case Diagram Description

3.6 Constraints

3.7 Assumptions and Dependencies

3.1 System Software

This chapter presents the research, software development methodology, and tools used in the development and implementation of the Clinic Management Information System. It also 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

3.1.1 System Interfaces

❖ **User Interfaces**

- The protocol used shall be HTTP
- The Port number used will be 21
- Hosted By 000 Web Host

❖ **Hardware Interfaces**

- Laptop/Desktop PC: Purpose of this is to add clients and view appointments and confirm them and expect patients on this time.
- Wi-Fi router - Wi-Fi router is used to for internetwork operations inside of a clinics and simply data transmission from pcs to server.

❖ **Software Interfaces**

- For Mobile Application: JDK 20 - Java is fast, secure, and reliable. From laptops to data centers, game consoles to scientific supercomputers, cell phones to the Internet.
- PHPMyadmin server - Database connectivity and management.
- OS Windows 8/and above - Very user friendly and common OS.
- JRE 11.0.20 - JAVA Runtime Environment for run Java Application and System.
- 000 Webhost for hosting the web application.
- Php 8.2.6 - scripting language geared towards dynamic web development.

3.1.2 System Specification

❖ **Hardware Requirement**

- Core i5 processor
- 4GB Ram.
- 20 GB of hard disk space in terminal machines
- 1TB hard disk space in Server Machine

❖ **Software Requirements**

- Windows 8 and above operating system
- JRE 20
- 000 Webhost
- PHPMyadmin
- PHP 8.2.6
- JDK 20

3.1.3 Communication Interface

❖ **Network Interface Card**

- It is a computer hardware component that allows a computer to connect to a network. May be used for both wired and wireless connections.

❖ **Category 5 network cable**

- for high signal integrity

❖ **Transmission Control Protocol /Internet Protocol**

- Internet service provider to access and share information over the Internet

❖ **Ethernet Communications Interface**

- Ethernet is a frame-based computer network technology for local area networks (LANs)

3.2 Software Functions

- Provide access to added users only.
- Registration of new patients.
- Generate appointment date and timing.
- Appointment viewed by doctor.
- Patients can view clinic's items.
- Super Admin can add Items.
- Super Admin can delete items, users, and doctors.
- Super Admin can view messages sent by the user.
- Doctors can add users.

3.3 Data Flow Diagram

Context Level Diagram

ADMIN

Add Admin, Item

Delete User Doctor

Show Message

Show Doctor

Show User

DFD LEVEL- 0

Doctors

Appointment Acc

Program of Appointment

Item

Profile

Profile

Add Client

CLINIC MANAGEMENT INFORMATION SYSTEM

Docotr

PATIENT

Name, Email

Add Item

DOCTOR

ID, Password

Name, Email, Password, Exp, Other data...

Doctor Name, Time, Date

Get Appointment
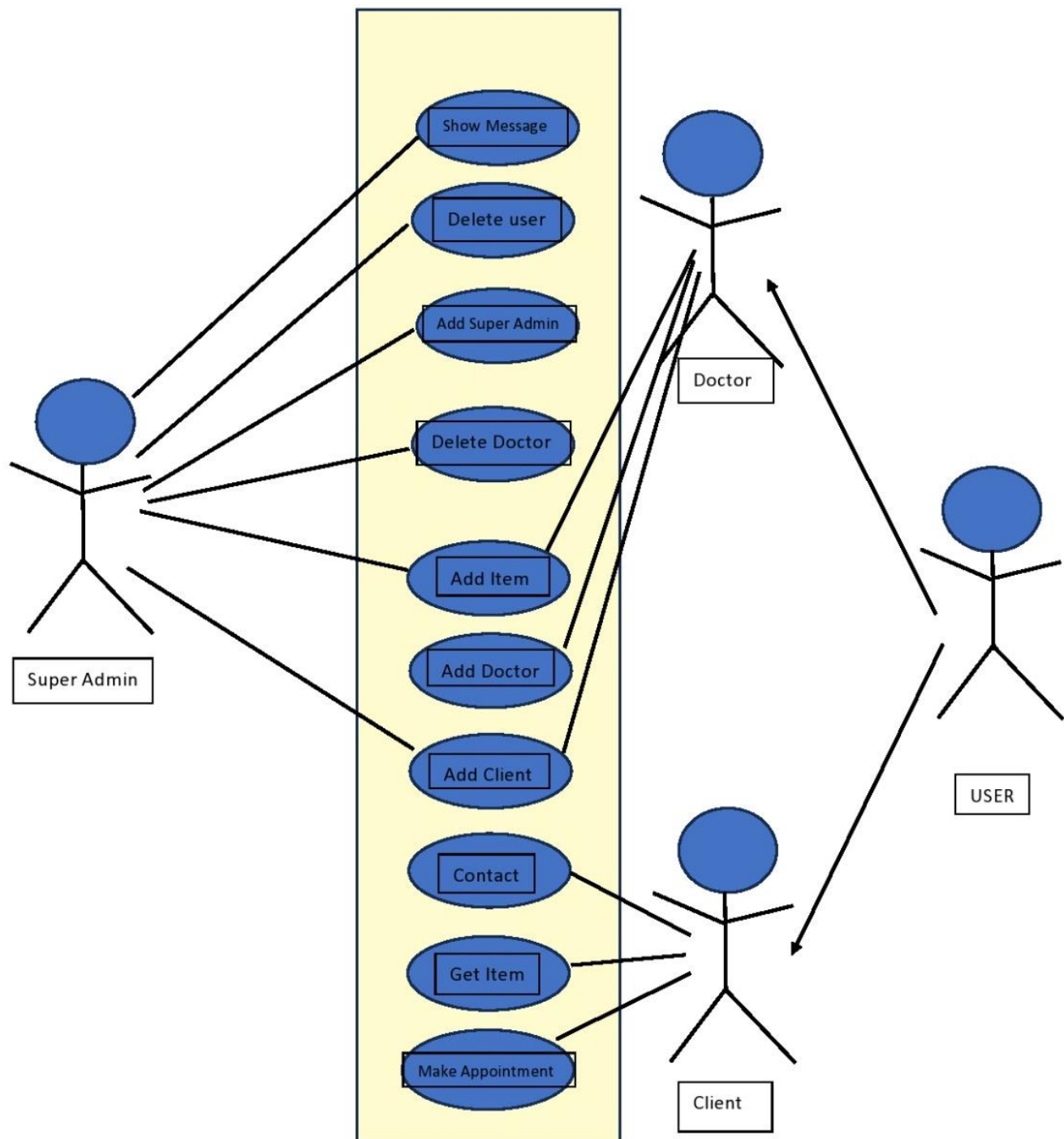
Contact
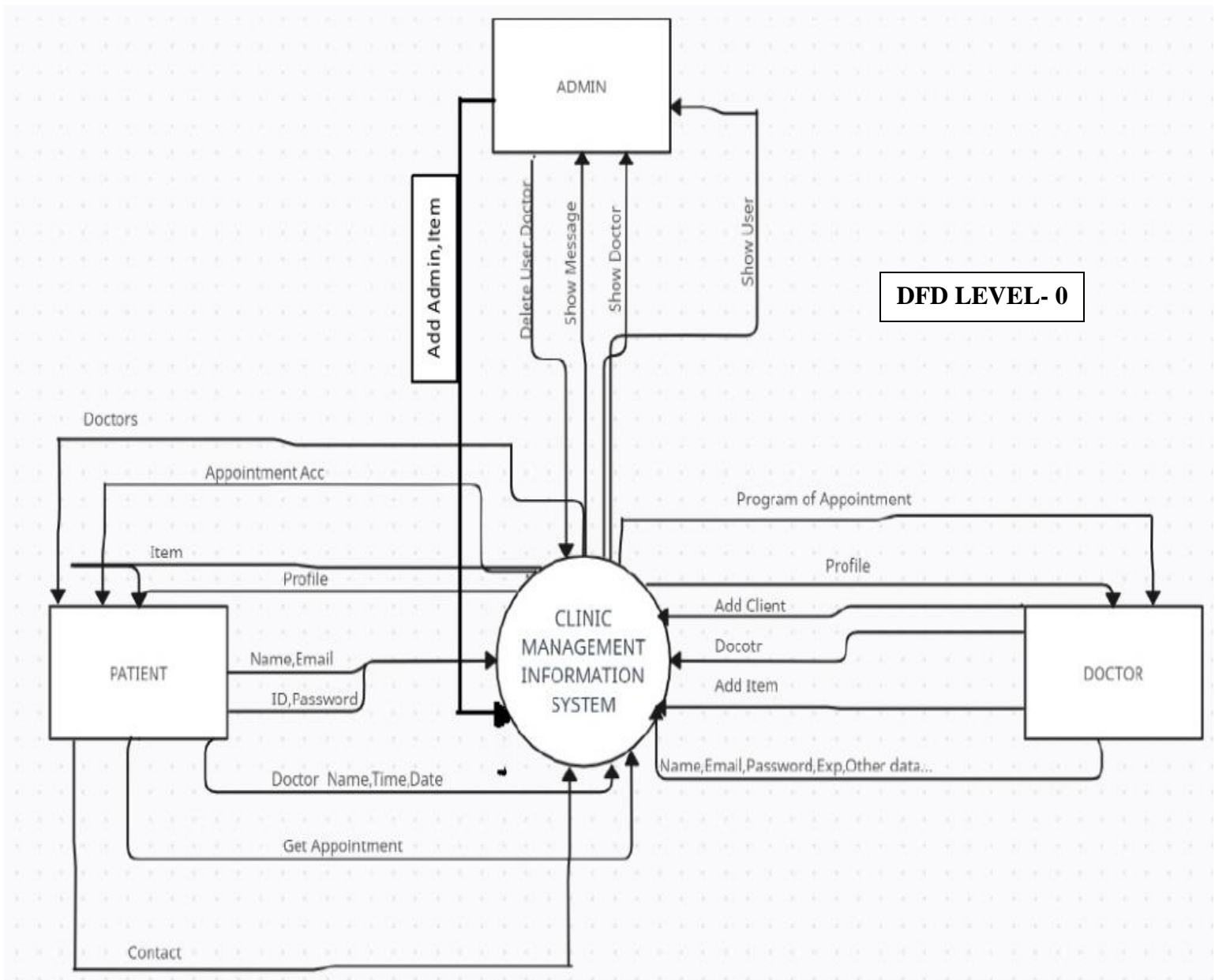
FIGURE 3.3.1 Context Level DFD

3.4 Use Case Diagram

3.5 Use Case Diagram Description

❖ **Super Admin**

- **Description:** The super admin can register into the admin panel and can add clinic items, clients, or delete items and clients, he / she can also view the count of total Doctors, Items, and Patients. All through Web Application

- **Main Flow Events:** Admin logs in the system -> Admin may add either items or clients -> Admin can also either delete items or clients -> Admin view the count of patients, doctors, and items and view messages sent by the patients.

- **Pre-Condition:** Admin must first log in with his/her credentials

❖ **Doctor**

- **Description:** The Doctor can register into the Doctor panel and can add clinic items, clients, he/ she can also view the available appointments of the patients. All through Mobile Application

- **Main Flow Events:** Doctor logs in the system -> Doctor may add either items or clients -> Admin can also view available appointments.

- **Pre-Condition:** Doctor must first log in with his/her credentials.

❖ **Patients**

- **Description:** The patients can register into the website and can add clinic items, clients, he/ she can also contact the super admin and view clinic items. All through Web Application

- **Main Flow Events:** Doctor logs in the system -> Doctor may add either items or clients -> Admin can also view available appointments.

- **Pre-Condition:** Doctor must first log in with his/her credentials.

❖ **Appointments**

- **Description:** It shows users a list of available doctors, timings, dates and enables patients to select the most suitable appointment date and doctor.

- **Main Flow Events:** Patient logs in the system -> Patients create new appointment through web application

- **Pre-Condition:** Patient must be registered patient; Patient can fix only one appointment for each doctor.

3.6 Constraints

- System is wirelessly networked with an encryption.
- System is only accessible within the clinic's website only.
- Database is password protected.
- Should use less RAM and processing power.
- Each user should have individual ID and password.
- Only administrator can access the whole system.

3.7 Assumptions and dependencies

- Each user must have a valid user id and password
- Server must be running for the system to function
- Users must log in to the system to make an appointment.
- Only the Administrator can delete records.

Chapter 4: System Design and Implementation

4.1 ER Diagram

4.2 Data Design

   4.2.1 Super Admin

   4.2.2 Doctor

   4.2.3 Users

   4.2.4 Items
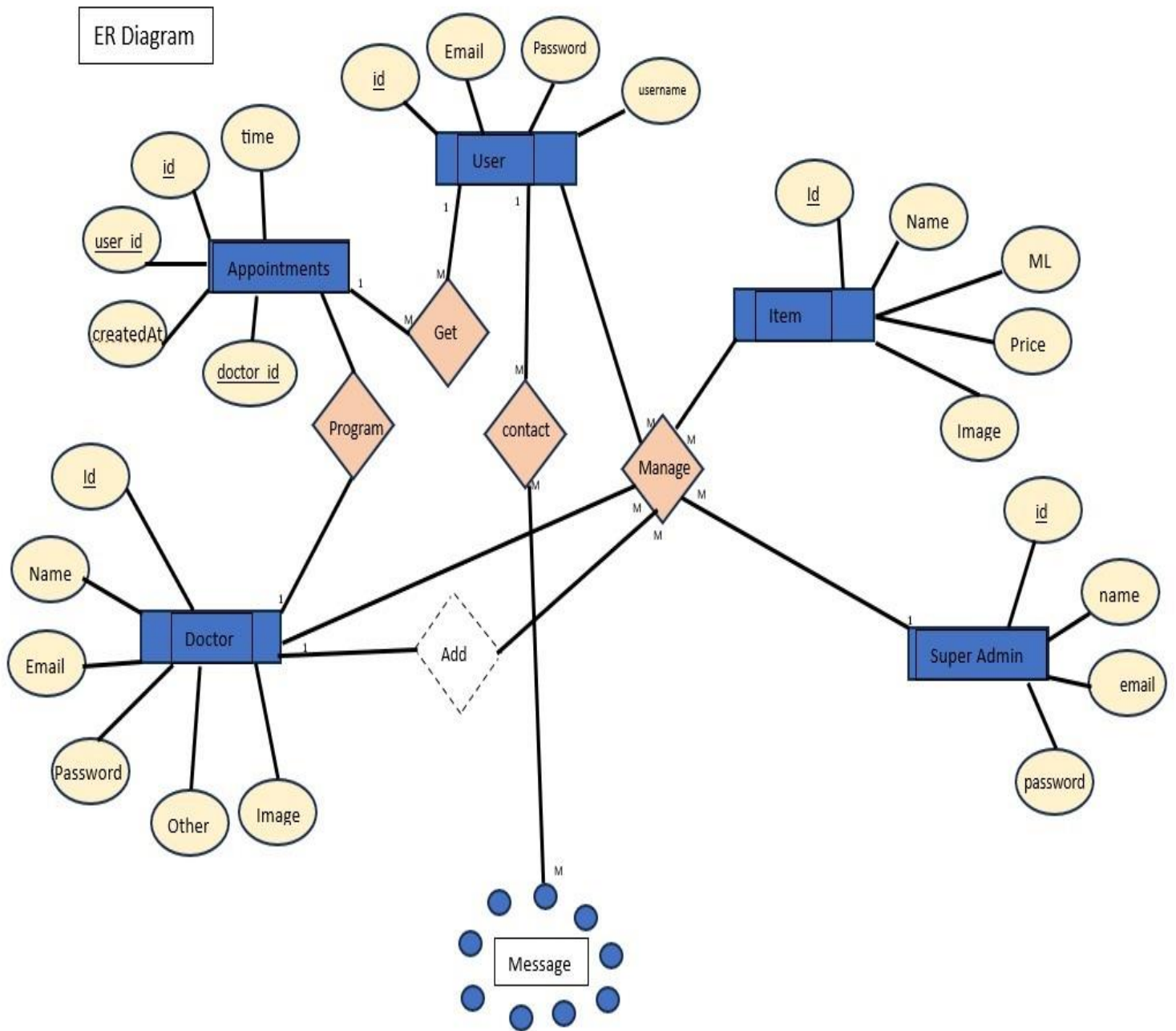
   4.2.5 Appointment

   4.2.6 Message

4.3 Component Level Diagram

4.4 UML Diagram

4.1 ER Diagram

ER Diagram

4.2 Data Design

4.2.1 Super Admin

S No.	Column Name	Data Type	Constraints	Description
1.	id	Int (11)	Primary Key	Contains Unique Id
2.	name	Varchar (50)	-	Contains Name
3.	email	Varchar (150)	-	Contain email address
4.	password	Varchar (20)	-	Contain Admin Password

4.2.2 Doctor

S No.	Column Name	Data Type	Constraints	Description
1.	Id	Int (11)	Primary Key	Contains Unique Id
2.	Name	Varchar (50)	-	Contains Name
3.	Email	Varchar (150)	-	Contain email address
4.	Password	Varchar (20)	-	Contain Doctor Password
5.	Age	Varchar (20)	-	Contain Doctor age
6.	Gender	Varchar (20)	-	Contain Doctor gender
7.	Image	Varchar (120)	-	Contain Doctor image
8.	Competence	Varchar (120)	-	Contain Doctor competence
9.	Location	Varchar (120)	-	Contain Doctor Location
10.	Language	Varchar (20)	-	Contain Doctor Language
11.	Experience	Varchar (20)	-	Contain Doctor Experience
12.	Avg	Varchar (20)	-	Contain Doctor Avg
13.	LinkedIn	Varchar (120)	-	Contain Doctor Linked in profile
14.	Whatsapp	Varchar (120)	-	Contain Doctor Whatsapp link
15.	Instagram	Varchar (120)	-	Contain Doctor Instagram profile

4.2.3 users

S No.	Column Name	Data Type	Constraints	Description
1.	id	Int (11)	Primary Key	Contains Unique Id
2.	name	Varchar (50)	-	Contains Name
3.	email	Varchar (150)	-	Contain email address
4.	password	Varchar (20)	-	Contain user Password

4.2.4 items

S No.	Column Name	Data Type	Constraints	Description
1.	id	Int (11)	Primary Key	Contains Unique Id
2.	image	Varchar (50)	-	Contains item image
3.	name	Varchar (150)	-	Contain item name
4.	ML	Varchar (20)	-	Contain item
5.	Price	Varchar (50)	-	Contain item Price

4.2.5 appointment

S No.	Column Name	Data Type	Constraints	Description
1.	id	Int (11)	Primary Key	Contains Unique Id
2.	user_id	Int (11)	Foreign Key	Contains reference id
3.	createdAt	datetime	-	Contain appointment date
4.	doctor_id	Int (11)	Foreign Key	Contains reference id
5.	time	Varchar (60)	-	Contain appointment time

4.2.6 Message

S No.	Column Name	Data Type	Constraints	Description
1.	name	Int (11)	-	Contains user name
2.	email	Varchar (50)	-	Contains user email
3.	subject	Varchar (150)	-	Contain message subject
4.	message	Varchar (20)	-	Contain message

4.3 Component Level Diagram

❖ **Book Appointment Module**

```
// Check if the form is submitted
if ($_SERVER['REQUEST_METHOD'] === 'POST') {

  $time_slot = $_POST['slot']; // Get the selected time slot from the form

  // Insert the appointment data into the database
  $query = "INSERT INTO Appointments (user_id, doctor_id, time)
        VALUES ('$user_id', '$doctorId', '$time_slot')";

  if (mysqli_query($con, $query)) {
    // Display a success alert if the appointment is successfully inserted
    echo '<script>alert("Appointment booked successfully!");</script>';
  } else {
    // Display an error alert if there was an issue with the appointment insertion
     echo '<script>alert("Error: ' . mysqli_error($con) . '");</script>';
  }

}
```
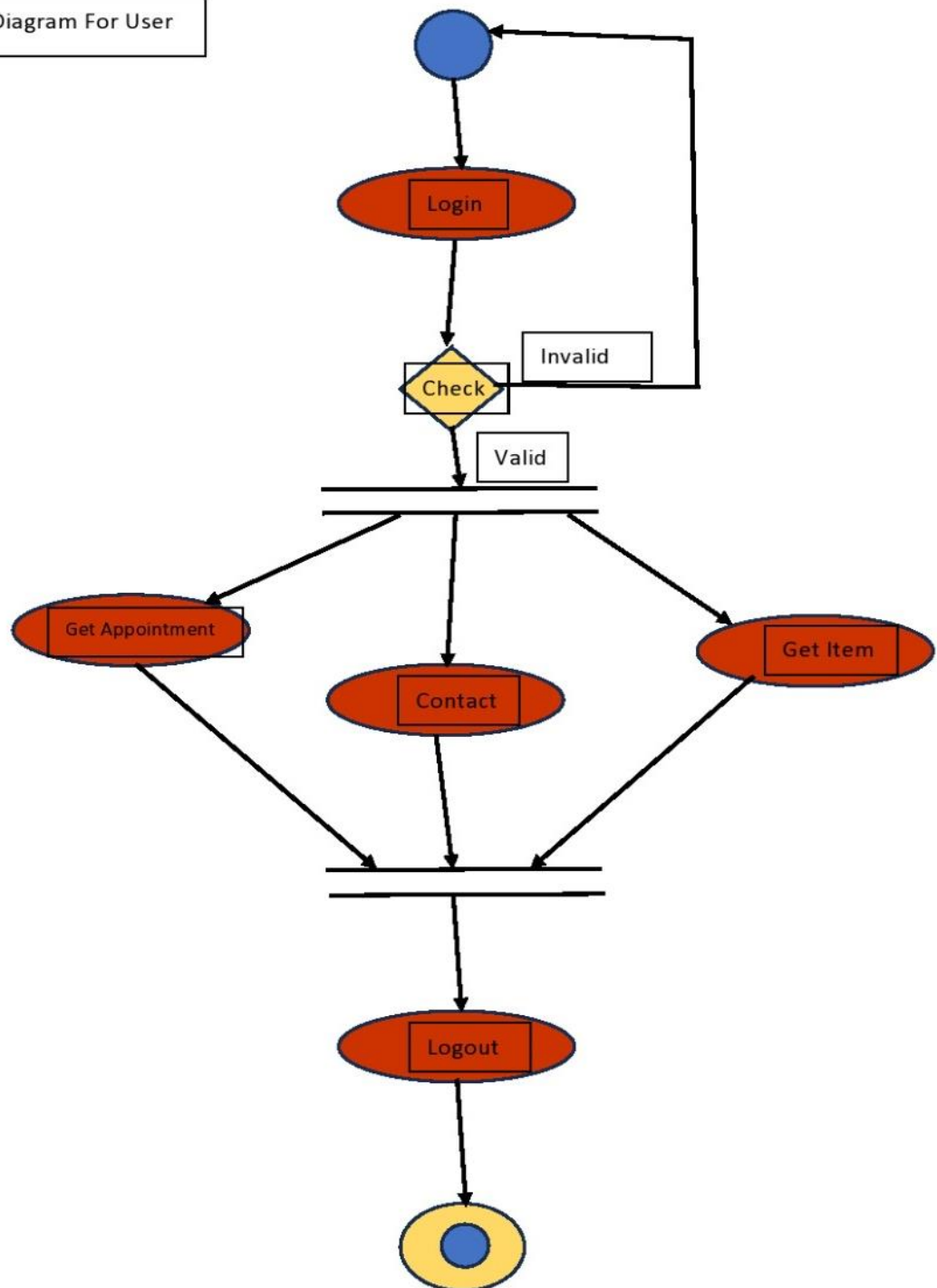
Activity Diagram For User

❖ **Doctor Module**

- Add patients

```
if (isset($_POST['username']) && isset($_POST['Email']) &&
isset($_POST['Password']) && isset($_POST['key'])) {
  $username = addslashes(strip_tags($_POST['username']));
  $Email = addslashes(strip_tags($_POST['Email']));
  $Password = addslashes(strip_tags($_POST['Password']));
  $key = addslashes(strip_tags($_POST['key']));

  if ($key != "hassan" || trim($Email) == "" || trim($Password) == "") {
    die("Invalid Key or Empty Record!");
  }

  $sql = "INSERT INTO users (Email, Password, username) VALUES ('$Email',
'$Password', '$username')";
  if (mysqli_query($con, $sql)) {
    echo "Record Added";
  } else {
    echo "Error: " . $sql . "<br>" . mysqli_error($con);
  }
}
```

- **Add Item**

```php
if ($_SERVER["REQUEST_METHOD"] === "POST") {
   if (isset($_POST['Name']) && isset($_POST['Ml']) && isset($_POST['Price'])
&& isset($_POST['Image'])) {
      $name = addslashes(strip_tags($_POST['Name']));
      $ml = addslashes(strip_tags($_POST['Ml']));
      $price = addslashes(strip_tags($_POST['Price']));
      $image = $_POST['Image'];
      $imageData = base64_decode($image);
      $imageFileName = uniqid() . '.jpeg';
      $imagePath = 'image/' . $imageFileName;

      if (file_put_contents($imagePath, $imageData)) {
         $query = "INSERT INTO Item (Name, Image, Ml, Price) VALUES
('$name', '$imageFileName', '$ml', '$price')";
         if ($con->query($query) === TRUE) {
            echo "Item Added";
         } else {
            echo "Failed to add item to database: " . $con->error;
         }
      } else {
         echo "Failed to save image";
      }
   } else {
      echo "Data not received";
   }
}
```

- **View Appointment**
```
if (isset($_GET["doctorId"])) {
    $doctorId = $_GET["doctorId"];
    $todayDate = date("Y-m-d");

    $sql = "SELECT A.time, A.createdAt, A.user_id, U.username
        FROM Appointments A
        LEFT JOIN users U ON A.user_id = U.id
        WHERE A.doctor_id = '$doctorId' AND DATE(A.createdAt) =
'$todayDate'
        ORDER BY A.time ASC";

    $result = $con->query($sql);

    if ($result) {
        if ($result->num_rows > 0) {
            $appointments = $result->fetch_all(MYSQLI_ASSOC);
            $jsonResponse = json_encode($appointments);
            echo $jsonResponse;
        } else {
            echo "No appointments found for doctor with ID: $doctorId on " .
$todayDate;
        }
    } else {
        echo "Error executing the query: " . $con->error;
    }
} else {
    echo "Doctor ID not provided. Please provide the doctor ID.";
}
```
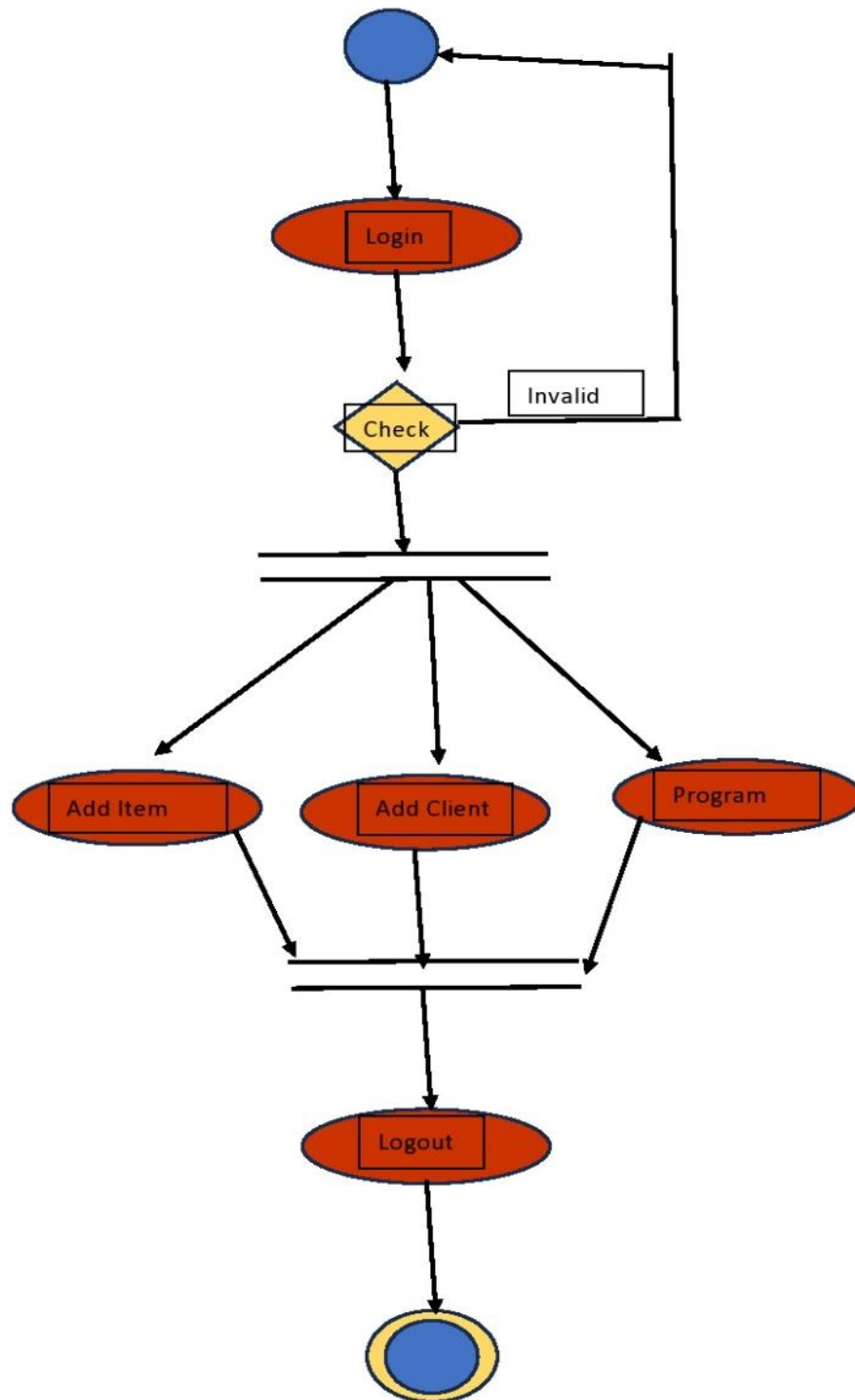
Activity Diagram For Doctor

❖ **Super Admin module**

- **Add admin**

```php
<?php
$con = mysqli_connect($servernmae, $username, $password, $dbnmae);
$name = $_POST["name"];
$email = $_POST["email"];
$password = $_POST["password"];
$sql = "INSERT INTO SuperAdmin (name, email, password) VALUES ('$name', '$email', '$password')";
$con->query($sql);
$con->close();
?>
```

- **Add item**

```php
<?php
include "connection.php";
$itemname = mysqli_real_escape_string($con, $_POST['Name']);
$itemType = mysqli_real_escape_string($con, $_POST['ML']);
$Price = floatval($_POST['Price']);
$file_name = $_FILES['item_image']['name'];
move_uploaded_file($file_tmp, "../CMIS/image/" . $file_name);
$query = "INSERT INTO Item (Image, Name, ML, Price) VALUES (?, ?, ?, ?)";
$stmt = mysqli_prepare($con, $query);
mysqli_stmt_bind_param($stmt, "sssd", $file_name, $itemname, $itemType, $Price);
mysqli_stmt_execute($stmt);
mysqli_stmt_close($stmt);
?>
```

- **Delete Doctor**

```php
<?php
$con = mysqli_connect($servernmae, $username, $password, $dbnmae);
$doctorId = $_GET['id'];
$checkQuery = "SELECT * FROM Doctor WHERE Id = $doctorId";
$checkResult = mysqli_query($con, $checkQuery);
$deleteQuery = "DELETE FROM Doctor WHERE Id = $doctorId";
$deleteResult = mysqli_query($con, $deleteQuery);
mysqli_close($con);
?>
```

- **Delete User**

```php
<?php
$con = mysqli_connect($servernmae, $username, $password, $dbnmae);
$delete_id = $_GET["delete_id"];
$sql = "DELETE FROM users WHERE id = '$delete_id'";
mysqli_query($con, $sql);
mysqli_close($con);
?>
```
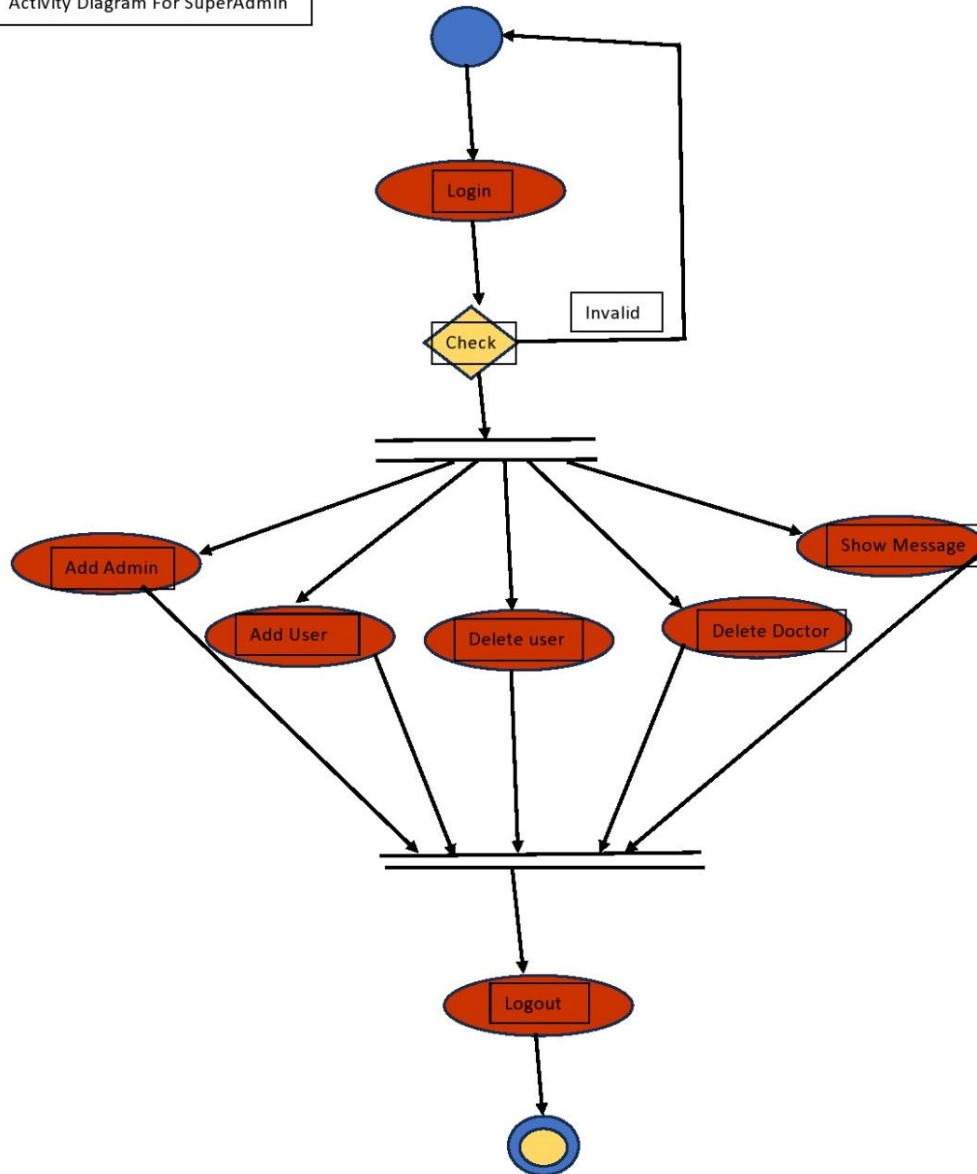
- **Delete Item**

```php
<?php
include "security.php";
include "connection.php";

function deleteItem($itemId) {
    global $con;
    $sql = "DELETE FROM Item WHERE Id = $itemId";
    if ($con->query($sql) === TRUE) {
        return true;
    } else {
        return false;
    }
}

if ($_SERVER["REQUEST_METHOD"] === "POST") {
    if (isset($_POST["itemId"])) {
        $itemId = $_POST["itemId"];
        $deleted = deleteItem($itemId);
        if ($deleted) {
            echo "Item with ID " . $itemId . " has been deleted.";
        } else {
            echo "Error deleting item with ID " . $itemId . ". Please try again.";
        }
        exit;
    }
}
?>
```
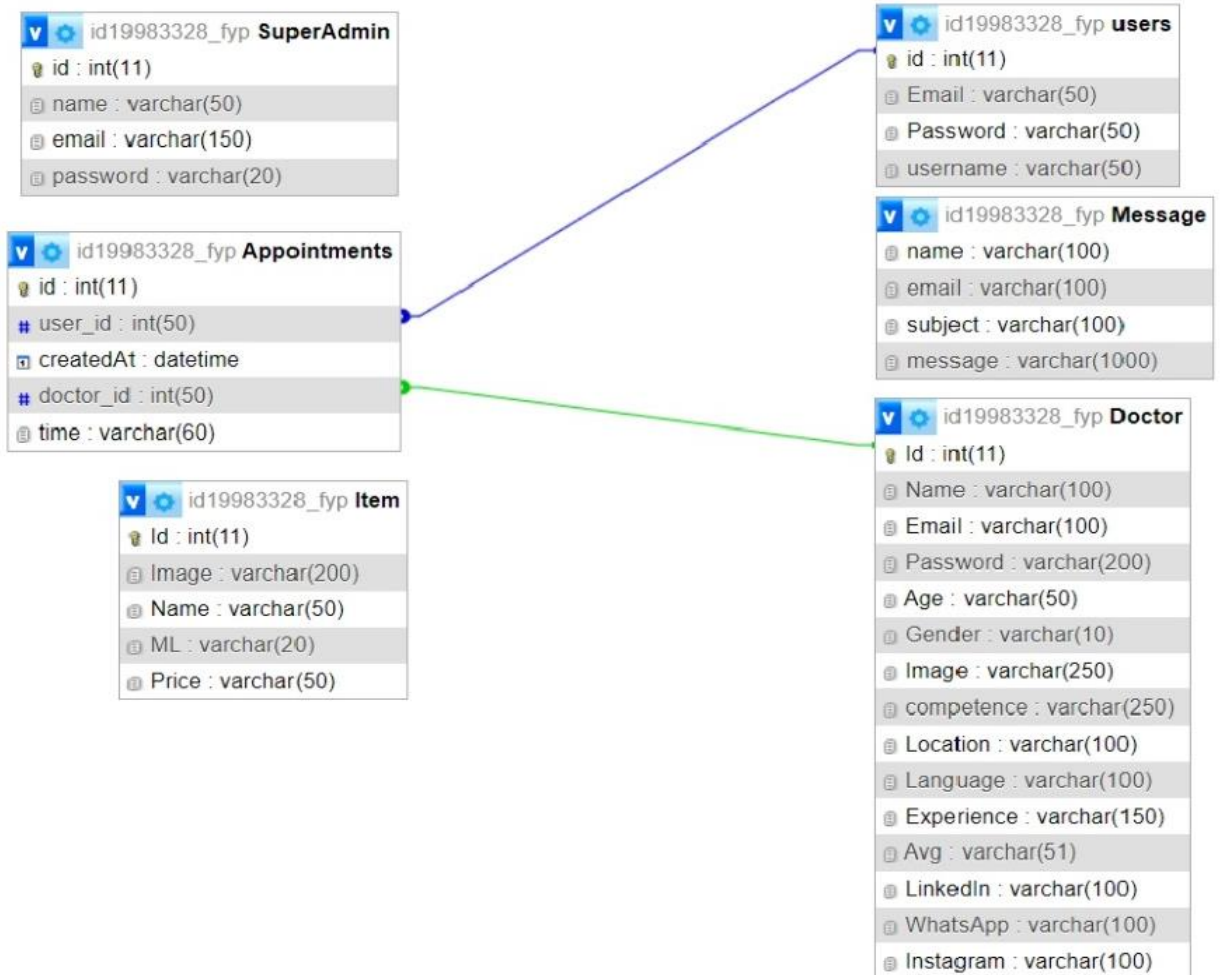
Login

Invalid

Check

Add Admin

Add User

Delete user

Delete Doctor

Show Message

Logout

4.4 UML Diagram

UML diagrams

	id19983328_fyp **SuperAdmin**
🔑	id : int(11)
▣	name : varchar(50)
▣	email : varchar(150)
▣	password : varchar(20)

	id19983328_fyp **Appointments**
🔑	id : int(11)
#	user_id : int(50)
▣	createdAt : datetime
#	doctor_id : int(50)
▣	time : varchar(60)

	id19983328_fyp **Item**
🔑	Id : int(11)
▣	Image : varchar(200)
▣	Name : varchar(50)
▣	ML : varchar(20)
▣	Price : varchar(50)

	id19983328_fyp **users**
🔑	id : int(11)
▣	Email : varchar(50)
▣	Password : varchar(50)
▣	username : varchar(50)

	id19983328_fyp **Message**
▣	name : varchar(100)
▣	email : varchar(100)
▣	subject : varchar(100)
▣	message : varchar(1000)

	id19983328_fyp **Doctor**
🔑	Id : int(11)
▣	Name : varchar(100)
▣	Email : varchar(100)
▣	Password : varchar(200)
▣	Age : varchar(50)
▣	Gender : varchar(10)
▣	Image : varchar(250)
▣	competence : varchar(250)
▣	Location : varchar(100)
▣	Language : varchar(100)
▣	Experience : varchar(150)
▣	Avg : varchar(51)
▣	LinkedIn : varchar(100)
▣	WhatsApp : varchar(100)
▣	Instagram : varchar(100)

Chapter 5: Software Sample Screenshots

5.1 Web Application
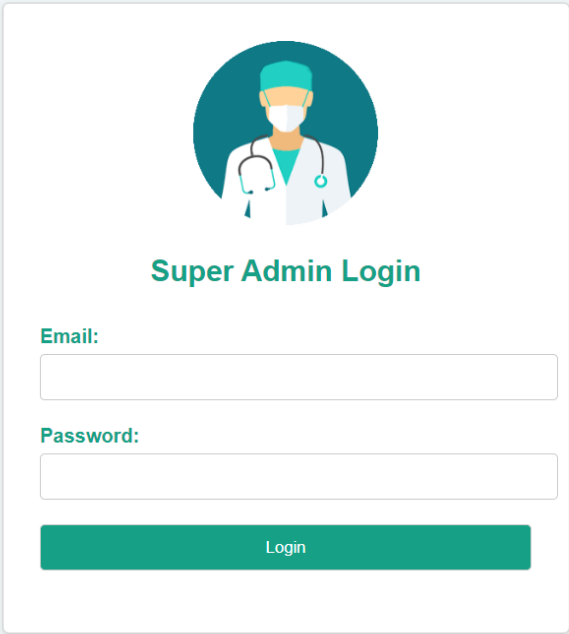
  5.1.1 Super Admin

5.2 Web Application

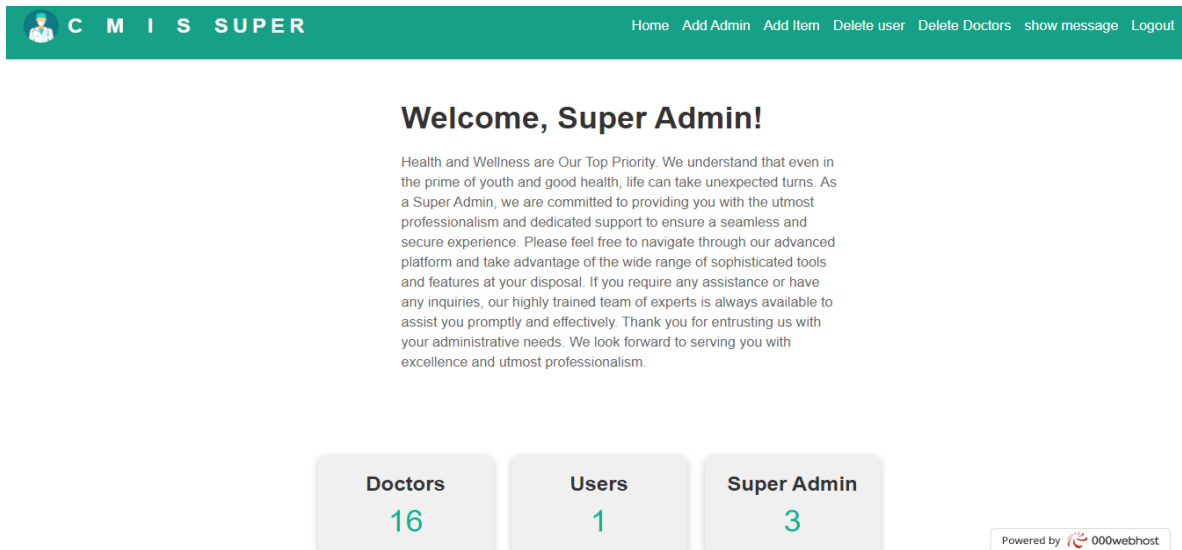 **5.2.1 Patient**

5.3 Mobile Application

  5.3.1 Doctor

5.1 Web Application

5.1.1 Super Admin

Figure 5.1.1.a: Log in Page

Welcome, Super Admin!

Health and Wellness are Our Top Priority. We understand that even in the prime of youth and good health, life can take unexpected turns. As a Super Admin, we are committed to providing you with the utmost professionalism and dedicated support to ensure a seamless and secure experience. Please feel free to navigate through our advanced platform and take advantage of the wide range of sophisticated tools and features at your disposal. If you require any assistance or have any inquiries, our highly trained team of experts is always available to assist you promptly and effectively. Thank you for entrusting us with your administrative needs. We look forward to serving you with excellence and utmost professionalism.

Doctors	Users	Super Admin
16	1	3

Powered by 000webhost

Figure 5.1.1.b: Home

Add Admin

Name:

Email:

Password:

Add Admin

Back to Home

Figure 5.1.1.c: Add Admin

Add Item

Image:

| Choose File | No file chosen |

Name:

ML:

Price:

Add Item   Back to Home Page

Figure 5.1.1.d: Add Item

Doctor Records

ID	Name	Email	Action
63	Shadi jamoul	Shadi.jamoul@gmail.com	Delete
64	Tania	tania.jeha@gmail.com	Delete

Back to Home

Figure 5.1.1.e: Delete Doctor

Messages

Email	Subject	Message
sajamsheik0@gmail.com	hii	
sajamsheik0@gmail.com	hii	test
hhhhhhh	vfbdbdbvdfbdfbfbdbfbfbdfbf	dxcv dfv dfvfdvddfb
vfdbdfb	vdfvdf	fvddfvd
reda213@gmail.com	hii	i want a website

Back to Home

Figure 5.1.1.f: View Message

5.2 Web Application

5.2.1 Patient

Figure 5.2.1.a: Home Page

Figure 5.2.1.b: Find Doctor

Figure 5.2.1.c: Clinic Items

Figure 5.2.1.d: Messaging

About Us

The Clinic Management Information System (CMIS) is a comprehensive solution designed to streamline the healthcare experience for users. It integrates various functions and processes within a medical facility, enhancing efficiency, accuracy, and overall patient care. With this system, users can conveniently book appointments remotely from anywhere, eliminating the need for in-person visits or long waiting times. CMIS empowers users to choose the most suitable doctor based on their specific illness or medical requirements. Remember, your health is an ongoing journey, and we're here to support you every step of the way.

Thank you for visiting CMIS. Here's to a healthier you!

Join Us in Your Health Journey
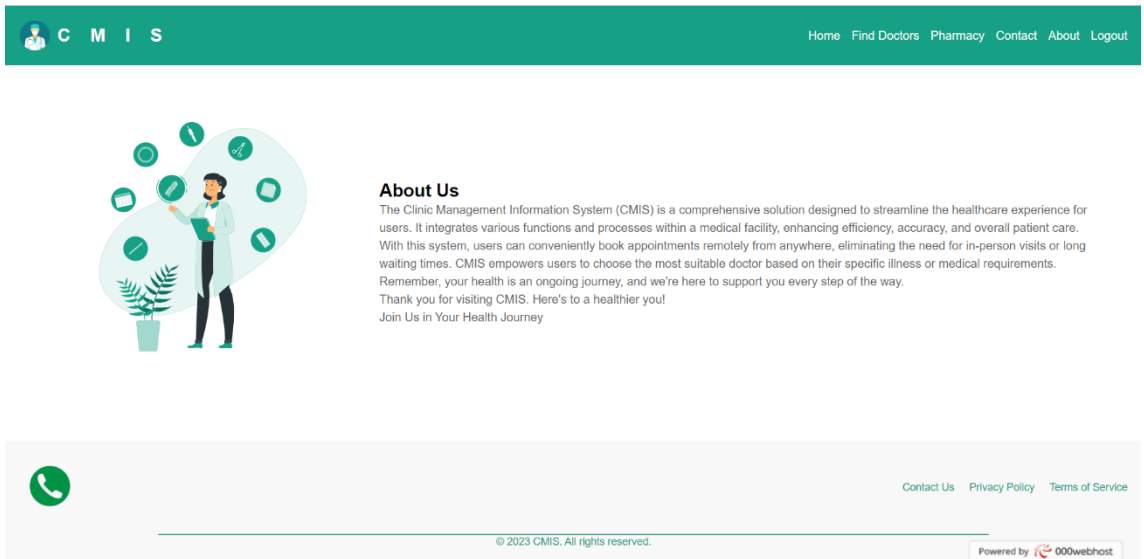
Figure 5.2.1.e: About us Page

5.3 Mobile Application
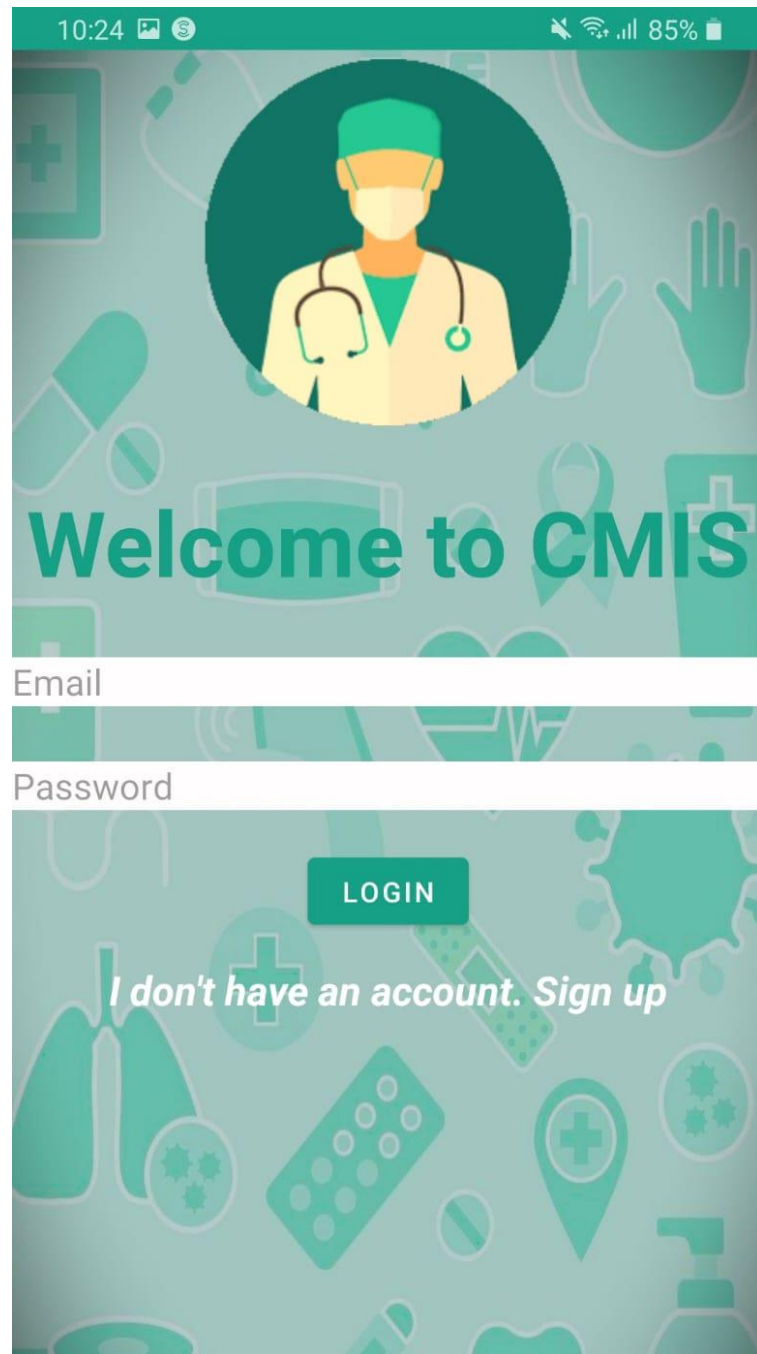
5.3.1 Doctor

Figure 5.3.1.a: Log in Page

Figure 5.3.1.b: Sign in Page
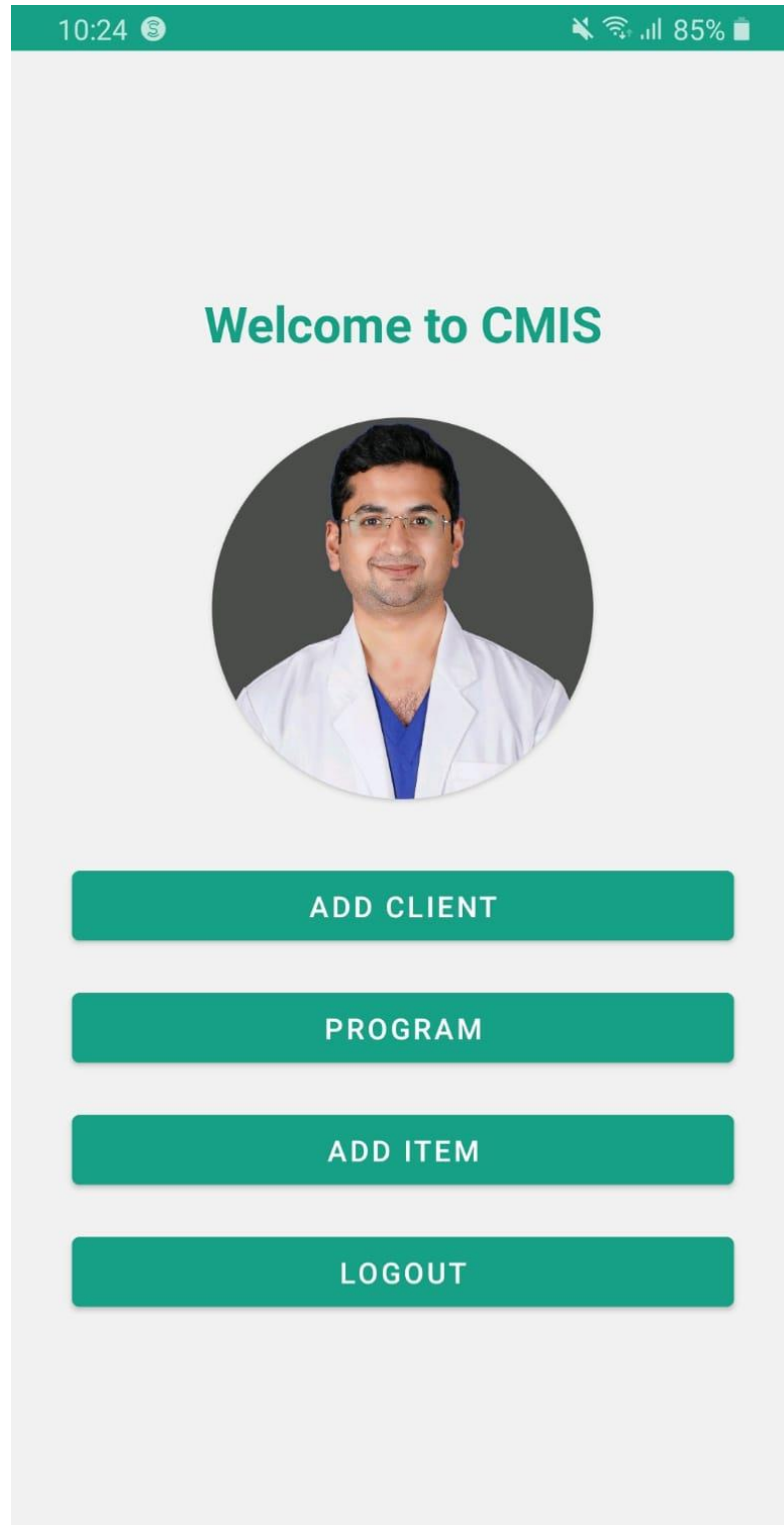
Figure 5.3.1.c: Home Page

Figure 5.3.1.d: Add Item Page

Figure 5.3.1.e: Add Customer Page

Appointment Time: 10:30
Created At: 2023-07-25
15:38:21
User ID: 5
Username: reda

==========================
=

Appointment Time: 10:00
Created At: 2023-07-25
15:37:43
User ID: 5
Username: reda

==========================
=

Figure 5.3.1.f: Appointments Program Page

Chapter 6: Risk Analysis

S. No	Risk	Category	Probability	Impact	RAMM Plan
1.	Some Team Member Become Sick In Between	Technical Risk	20%	2	Other Team Members Distribute The Work In Between Them
2.	Delivery Deadline Tightened	Project Risk	30%	1	Team May Use Extra Members To Do Job On Scheduled Time
3.	Losing Of All Project Data This May Happen Due To Hard Disk Failure	Project Risk	20%	2	Back Up The Project Online Or In Every System Of Every Member
4.	Team Distention / Lack Of Cohesion	Project Risk	10%	3	We Make Some Rules How We Consult Each Other

Chapter 7: General Conclusion and Future Recommendation

Working on the project was an excellent experience. It helped us to understand the importance of planning, designing and implementation so far, we have learnt in our theory books. It helped us unleashing our creativity while working in a team.

It also made realized the importance of team working, communication as a part of this project. The project was successfully completed after a lot of efforts and work hours. This project underwent number of compiling, debugging, removing errors, making it bug free, adding more facilities in Clinic Information Management System and interactivity making it more reliable and useful.

This project focused that scheduling a project and adhering to that schedule creates a hard sense of time-management. It has also let us known that co-operative teamwork always produces effective results.

The entire project has been developed and deployed as per the requirements stated by the instructor. It is found to be bug free as per the testing standards that are implemented.

This project was aimed at designing and implementing a Clinic Management Information System with both web and mobile interfaces to streamline the appointment booking process and provide additional functionalities like displaying available pharmaceutical items. The system was successfully developed using PHP for the web application, Java for the Android application, and MySQL for database management.

The objective was to resolve issues of inefficiency and wasted resources, as experienced by individuals who spend valuable time and money attempting to secure appointments at clinics, only to find out that there are no available slots. The system provides a platform that enables seamless communication between doctors and patients, thereby significantly reducing the inconveniences associated with physical appointment booking.

The Clinic Management Information System effectively meets the goals established at the outset of the project. It provides a comprehensive solution that addresses both patient convenience and doctor's needs. In addition, the system ensures secure handling and transmission of sensitive user data, making it a reliable solution for clinic management.

Moving forward, there are several potential enhancements and improvements that could be made to the Clinic Management Information System. These include:

1. Integration with payment systems for online payment of consultation fees.
2. Integration with health insurance providers to automatically process claims.
3. The addition of a feature for patients to leave reviews and ratings for doctors.
4. The inclusion of telemedicine features, allowing for remote consultations.
5. The development of an iOS version of the mobile application to cater to a wider audience.

Finally, we like to conclude that we put all our efforts throughout the development of our project and tried to fulfill most of the requirements of the user.

Chapter 8: References

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4. phpMyAdmin. (2023). Documentation for phpMyAdmin. phpMyAdmin.

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