



## American International University-Bangladesh (AIUB)

Department of Computer Science

Faculty of Science & Technology (FST)

Fall 22 23

Section: B

Software Quality Assurance and Testing

### Healthcare Application

A Report submitted

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### Checked By Industry Personnel

Name:

Designation:

Company:

Sign:

Date:

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# Software Test Plan

for

<Project>

Version 1.0 approved

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<American International University - Bangladesh (AIUB)>

<03/12/2022>

## **Checked By Industry Personnel**

Name:

Designation:

Company:

Sign:

Date:

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## Revision History

Revision	Date	Updated by	Update Comments
0.1	03/11/22	Anik Rahman	First Draft
0.2	04/11/22	MD Mahinur Rahman	Second Draft
0.3	04/11/22	Maweza Nargis Haider	Third Draft
0.4	06/11/22	Kashifa - Efaj - Mahe	Fourth Draft
0.5	07/11/22	MD Mahinur Rahman	Fifth Draft
0.6	09/11/22	Maweza Nargis Haider	Sixth Draft
0.7	11/11/22	Anik Rahman	Seventh Draft
0.8	12/11/22	MD Mahinur Rahman	Eighth Draft
0.9	13/11/22	Maweza Nargis Haider	Ninth Draft

### 1. TEST PLAN IDENTIFIER: **RS-MTP01.3**

### 2. REFERENCES

- <https://www.ibm.com/topics/software-testing>
- <https://www.geeksforgeeks.org/software-testing-basics/>
- <https://asq.org/quality-resources/software-quality>

### 3. INTRODUCTION

#### Background to the Problem

- o The hospital management system can provide an automated way of managing any hospital activities rather than a traditional system. It helps to generate the daily, weekly, monthly or yearly reports of sales, revenue, patients, lab test, bed management etc as requirement easily. To see these reports management needs to click on some options and more importantly an admin can observe everyone through the software.
- o Most of the time it can be seen that patients go through difficulties while booking an appointment. In this system patients can book an appointment in one click and patients can also delete an appointment. Even making a payment, purchasing medicine, doctor's suggestion etc are very complicated sometimes. For those reasons it is important to consider.

## Solution to the Problem

- o In this system we are looking to make a connection between doctors, clients and hospital management. As from this system management can easily handles all their data and other necessary things so surely it is beneficial for them and for patients they can easily make an appointment to their preferred doctor, make a payment, see doctor's suggestion and also make an emergency request and eventually doctor will be benefitted by this also.
- o The software is categorized into 3 types of users and they are Admin, Client, Doctor. Clients need to fill up necessary information in the registration section and create an account. Admins need to register themselves and they can control all databases and access all requests. The purpose of this software is to make things more easier
- o There are few system solutions available in the market but somewhere there is a gap remaining. Fewer hospitals have an automated system but not all things are not merged into one system and for that reason ultimately patients have to suffer. In our system we cover almost all the aspects of healthcare including admin panel, doctors and patients. Also in future thinking of upgrading the system to a higher one.

## System Specification:

Components	Minimum Requirements
Software Specification	
Solution Type	Web Application
Programming Language	HTML, Laravel, CSS
Database	My SQL
Browser Compatibility	Internet Explorer Google Chrome Mozilla Firefox
Server Specification	
Database Server	My SQL
Web Server	Apache

## Scope of work:

- Instant appointment bookings with the desired doctors & also appointment can be removed
- User can pay their bill easily
- Get emergency service
- Purchase medicine

## 4. REQUIREMENT SPECIFICATION

### 4.1 System Features

#### 1. System Login

##### Functional Requirements

- 1.1 The software shall allow users to login with their given email and password

Priority Level: High

Precondition: user have valid email and password

#### 2. System Registration

##### Functional Requirements

- 1.1 User can open an account by doing registration
- 1.2 Provide Name, Email, Password, Date of Birth, Mobile Number, Gender
- 1.3 Sign Up and create an account
- 1.4 User will get email whenever the account created successfully

Priority Level: High

Precondition: verify all the information according to the condition given by

#### 3. Profile Update

##### Functional Requirements

- 1.1 User can update their profile information without Email
- 1.2 Provide changed Name, Password, Phone number or Address
- 1.3 After clicking profile updated all the changes successfully applied

Priority Level: High

Precondition: user have to have a valid email and password

#### 4. Book Appointment

##### Functional Requirements

- 1.1 User can see all the doctors with their specialization
- 1.2 User can select doctor according to their problems
- 1.3 Set Date of Appointment, Time and detail Description of their problem
- 1.4 Confirm and it will be successfully added in the appointment list in the home page

Priority Level: High

Precondition: user have to have a valid email and password

## **5. Delete Appointment**

Functional Requirements

1.1 User can see all their appointment in the home page and by clicking delete they can remove the appointment

Priority Level: High

Precondition: user have to make at least one appointment

## **6. Make Payment**

Functional Requirements

1.1 After an successful appointment setup user can see the total bill

1.2 User can choose payment methods between online payment or direct payment

1.3 Get a confirmation message

Priority Level: High

Precondition: Have to have at least one appointment setup successfully

## **7. Prescription**

Functional Requirements

1.1 Doctor will see all his patients

1.2 They can prescribe according to the problem

1.3 Sign Up and create an account

Priority Level: Medium

Precondition: Have to have at least one appointment setup successfully

## **8. Add Medicine**

Functional Requirements

1.1 User can search their desired medicine in the system

1.2 User can enter quantity, home address, mobile number for get medicine delivered to their home

1.3 Upload prescription to get a discount (optional)

1.4 User will get email whenever the account created successfully

Priority Level: Medium

Precondition: Medicines information will be stored into the database

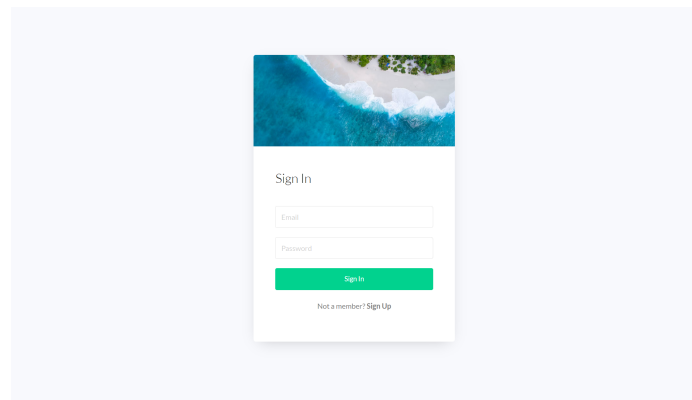


## 4.2 System Quality Attributes

- **Performance:** This characteristic relates to a software-driven system's capacity to adhere to timing specifications. It indicates that from the perspective of testing. This software quality characteristic displays how well a software product performs in relation to the amount of resources used under specific circumstances.
- **Efficiency:** The measurement of software performance in relation to resource usage is referred to as software efficiency. Efficiency testing assesses task time, resource usage, and conformance to standards and specifications. It is measured in terms of the amount of time needed to execute any job that the system is given.
- **Usability:** The usability characteristic refers to how simple it is for users to utilize the system and also describes the level of user assistance that the system offers.
- **Integrity:** Integrity refers to how well a software system guards against unwanted access to a file or other piece of data, prevents information loss and protects the privacy of data entered into the system.
- **Reliability:** The degree to which a software system or its components carry out particular tasks under given circumstances for a predetermined amount of time is referred to as dependability or reliability. Mainly if the system is reliable while using it.
- **Testability:** The effectiveness with which a software-driven system enables testers to conduct tests in line with established criteria is known as software testability. This trait measures how straightforward it is for software quality assurance engineers to develop test requirements for a particular system and all of its component pieces.
- **Security:** Security demonstrates how the system controls unauthorized access or alteration, which can ruin it and impair the experience of the system's legitimate users. The degree to which a program may function without endangering its users, the software environment or its resources is how secure it is.

## 4.3 System Interface

### 1. Login



## 2. Registration

The registration form is titled "Create an account". It includes fields for Name, Email, Password, Confirm Password, Date of Birth, Gender, Blood Group, Phone number, and Address. A "Create an account" button is at the bottom. To the left, a "Welcome to signup form" message states: "Healthcare Pharmaceuticals Limited (HPL) is one of the best kinds of company in the pharmaceutical industry in Bangladesh". A "Sign In" link is provided for existing members.

## 3. Profile Update

The "Update Profile" form is located under a navigation bar with "Home", "Profile", and "Doctors" links, and a "Logout" button. The form fields include Email (fahad@gmail.com), Name (Saif Fahad), Date of Birth (06/04/1997), Password (\*\*\*\*\*), Phone No (01936755437), and Address (167, Agargaon). An "Update Profile" button is at the bottom.

## 4. Doctor List

Home Profile Doctors Logout				
Here All Our Specialized Doctors				
Name	Email	Phone	Specialized	Appointment
Dr. Kabir	kabir@gmail.com	017856444578	Medicine	<button>Book Appointment</button>
Dr. Jubayer	jubayer@gmail.com	01865644523	Dermatology	<button>Book Appointment</button>
Dr. Ahad	ahad@gmail.com	019875655432	Neurology	<button>Book Appointment</button>
Dr. Sakib	sakib@yahoo.com	017625667362	Pediatrics	<button>Book Appointment</button>
Dr. Rohit	rohit12@gmail.com	01982566321	Urology	<button>Book Appointment</button>
Dr. Nila	nil@gmail.com	01872377123	Ophthalmology	<button>Book Appointment</button>
Dr. Minhaz	minhaz@gmail.com	01986655231	Neurology	<button>Book Appointment</button>
Dr. Fahim	fahim@gmail.com	019875566426	Medicine	<button>Book Appointment</button>
Dr. Mahmud	mahmud@gmail.com	01982233123	Surgery	<button>Book Appointment</button>
Dr. Taosif	taosif@gmail.com	01982233178	Medicine	<button>Book Appointment</button>
Dr. Karim	karim1@yahoo.com	01832233223	Medicine	<button>Book Appointment</button>

## 5. Book Appointment

[Home](#) [Profile](#) [Doctors](#) [Logout](#)

### Book Appointment

Doctor Name  
Dr. Kabir

Date of Appointment  
mm/dd/yyyy

Time

Description

Confirm

## 6. Show all Appointment (Home Page)

[Home](#) [Profile](#) [Doctors](#) [Logout](#)

Hello there ! welcome Saif Fahad

All Appointments : 9

Doctor Name	Email	Specialized	Time	Date	Action
Dr. Kabir	kabir@gmail.com	Medicine	8:00 AM	2022-11-06	<a href="#">Delete</a>
Dr. Jubayer	jubayer@gmail.com	Dermatology	8:00 AM	2022-11-07	<a href="#">Delete</a>
Dr. Sakib	sakib@yahoo.com	Pediatrics	6:00 AM	2022-11-18	<a href="#">Delete</a>
Dr. Minhaz	minhaz@gmail.com	Neurology	6:00 AM	2022-11-26	<a href="#">Delete</a>
Dr. Fahim	fahim@gmail.com	Medicine	3:00 PM	2022-11-26	<a href="#">Delete</a>

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## 4.4 Project Requirements

Software project type: Organic

**Coefficient<Effort Factor> = 2.4**

So, Project Complexity,  $P = 1.05$  and SLOT Dependent Coefficient,  $T = 0.38$

**SLOC = 9000 Lines**

**Persons-months,  $PM = \text{Coefficient<Effort Factor>} * (\text{SLOC}/1000) ^P$**

$$= 2.4 * (9000/1000) ^{1.05}$$

$$= 24.10$$

$$\text{Development time, DM} = 2.50 * (PM)^T$$

$$= 2.50 * (24.10) ^{0.38}$$

$$= 8.38 = 9 \text{ months} = 1584 \text{ Working hours}$$

$$\text{Required number of people, ST} = PM/DM$$

$$= 24.10/9$$

$$= 2.67 = 3 \text{ people}$$

### **Budgeting**

#### **Developer salary of 9 months:**

$$\text{Per developer salary per working hour} = 600 \text{ Taka}$$

$$\text{Total developer salary} = 600 * 1584 = 9,50,400 \text{ Taka}$$

#### **Requirement analysis:**

$$\text{Required time} = 1 \text{ month} = 22 \text{ working days} = 176 \text{ working hours}$$

$$\text{Requirement analysis persons per hour salary} = 250 \text{ Taka}$$

$$\text{Total requirement analysis salary} = 250 * 176 = 44,000 \text{ Taka}$$

$$\text{Transportation cost: } 10,000 \text{ Taka (Approximate)}$$

$$\text{Special training \& Hardware expenses: } 1,00,000 \text{ Taka (Approximate)}$$

#### **Rent expenses:**

$$\text{Room per month} = 11,000 \text{ Taka}$$

$$\text{Total in 9 months} = 99,000 \text{ Taka}$$

$$\text{Total utilities in 9 months: } 17,000 \text{ Taka}$$

Maintenance (Till 4 months after delivery):

$$\text{Cost per hour} = 1,100 \text{ Taka}$$

$$\text{Total estimated time needed for maintenance} = 40 \text{ hours}$$

$$\text{Total estimated maintenance cost} = 1,100 * 40 = 44,000 \text{ Taka}$$

Project manager's salary for 9 months:

**Per month salary** = 25,000 Taka

**Total salary** = 25,000 \* 9 = 2,25,000 Taka

**Accountant's salary for 9 months:** Per month salary = 5,000 Taka

**Total salary** = 5,000 \* 9 = 45,000 Taka

**Total estimated expense:** 9,50,400 + 44,000 + 10,000 + 1,00,000 + 99,000 + 17,000 + 44,000

+ 2,25,000 + 45,000 = 15,34,400 Taka

**Profit:**

**20% of total estimated expense** = 15,34,400 \* 20% = 3,06,880 Taka

**Project budget:** 15,34,400 + 3,06,880 = 18,41,280 Taka

## 5. FEATURES NOT TO BE TESTED

The following area will be not be specifically addressed

- Statistical data of users
- Maintenance of the system
- Network testing
- Repeated Create, Update, Delete features in the registration, profile update, appointment delete

## 6. TESTING APPROACH

### 6.1 Testing Levels

We will test our built features in four testing levels. These are: 1. Unit Testing, 2. Integration testing, 3. System Testing, and 4. Acceptance Testing.

**Unit Testing:** As we build our system, we will first maintain this whole testing. This testing will include testing of individual software modules to see if they have faults or not. This testing strategy is employed by the QA team and software developers. This testing's objective is to verify that each piece of software code performs as planned. White box testing will be applied in this situation.

**Integration Testing:** We will perform the integration testing portion after finishing the unit testing. During this testing, we will make sure that every software component is logically integrated, tested as a whole, and is operational. This level of testing looks for issues with how various software components interact when they are combined. In this stage, we'll employ the "Bottom-up Integration" technique.

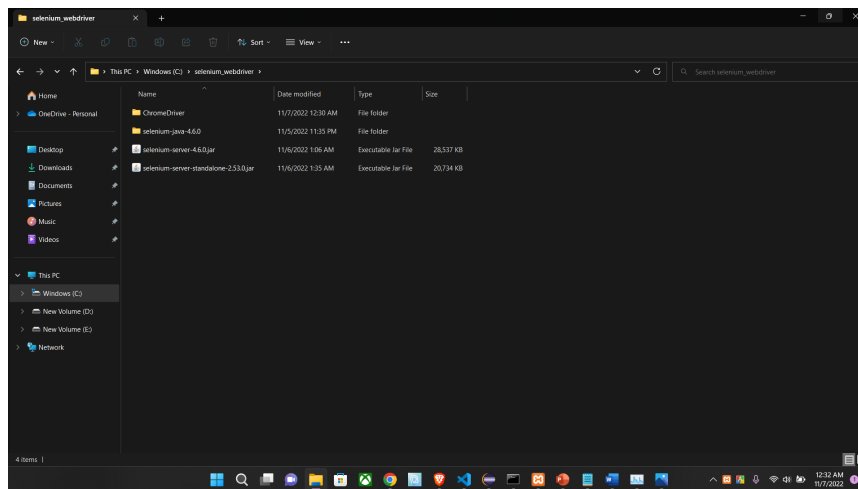
**System Testing:** System testing is the third section. Accordingly, the entire system will be put to the test. Through system testing, we will examine a fully functional, perfectly integrated system. After that, we'll determine if it fits all the criteria. This category includes testing that makes use of a black box. As a result, at this stage, we'll employ the "Black Box Testing" technique.

**Acceptance Testing:** The testing has reached its last phase. To determine whether our product is suitable, we will do this testing. This test will be run to check for any defects that may have gone unnoticed during the functional testing phase. At this point, we'll employ the "Black Box Testing" approach. The unit tests may then be repeated after that.

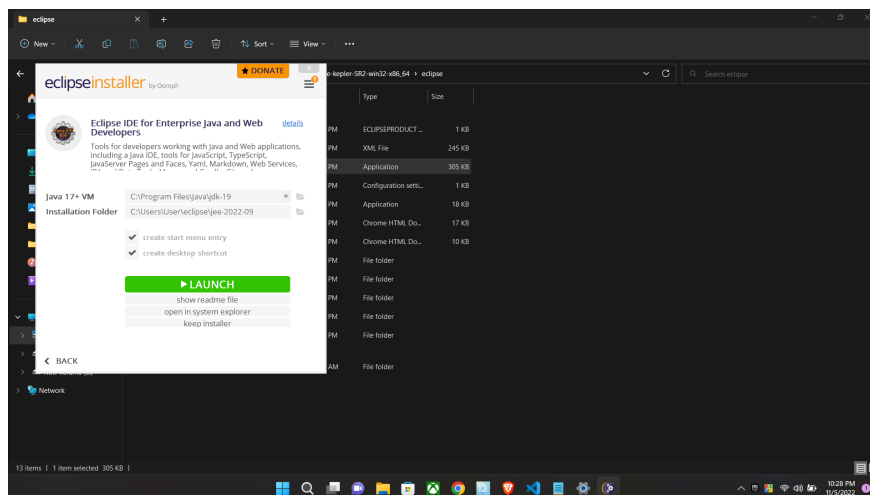
## 6.2 Test Tools

For automated testing we used Selenium and with the help of this tool we tested all the features to make sure it is reliable, responsive, progressive

- Installing selenium web driver



- Installing Eclipse



- Login

```

1 package name;
2 import org.openqa.selenium.By;
3
4 public class T_login {
5
6     public static void main(String[] args) {
7         System.setProperty("webdriver.chrome.driver", "C:\\\\selenium_webdriver\\\\chromedriver\\\\chromedriver.exe");
8         WebDriver driver = new ChromeDriver();
9         String result = "";
10        // TODO Auto-generated method stub
11
12        driver.get("http://127.0.0.1:8080/client/login");
13        driver.findElement(By.name("client_email")).sendKeys("tamin@23422@gmail.com");
14        driver.findElement(By.name("client_password")).sendKeys("12345678");
15        driver.findElement(By.xpath("//html/body/form/section/div/div/div/div/div[2]/div[4]/button")).click();
16
17        if(result.equals(result)) {
18            System.out.println("Successful");
19        } else {
20            System.out.println("Not Successful");
21        }
22        driver.quit();
23    }
24 }

```

Successful

- Book Appointment

```

1 package name;
2 import org.openqa.selenium.By;
3
4 public class Appointment {
5
6     public static void main(String[] args) {
7         System.setProperty("webdriver.chrome.driver", "C:\\\\selenium_webdriver\\\\chromedriver\\\\chromedriver.exe");
8         WebDriver driver = new ChromeDriver();
9         String result = "";
10        // TODO Auto-generated method stub
11
12        driver.get("http://127.0.0.1:8080/client/login");
13        driver.findElement(By.name("client_email")).sendKeys("tamin@23422@gmail.com");
14        driver.findElement(By.name("client_password")).sendKeys("12345678");
15        driver.findElement(By.xpath("//html/body/form/section/div/div/div/div/div[2]/div[4]/button")).click();
16
17        String expect = driver.getCurrentUrl();
18        driver.get("http://127.0.0.1:8080/client/appointment/1");
19        driver.findElement(By.name("doctor_name_h")).sendKeys("tamin@23422@gmail.com");
20        WebElement datebox = driver.findElement(By.xpath("//html/body/div[2]/div/form/div[3]/input"));
21        datebox.sendKeys("19/12/2021");
22        driver.findElement(By.name("doctor_appointment_time_h")).sendKeys("5:00");
23        driver.findElement(By.name("doctor_appointment_book_btn")).sendKeys("12345678");
24    }
25 }

```

Appointment setup successful

- Profile Update

```

1 package name;
2 import org.openqa.selenium.By;
3
4 public class UpdateProfile {
5
6     public static void main(String[] args) {
7         System.setProperty("webdriver.chrome.driver", "C:\\\\selenium_webdriver\\\\chromedriver\\\\chromedriver.exe");
8         WebDriver driver = new ChromeDriver();
9         String result = "";
10        // TODO Auto-generated method stub
11
12        driver.get("http://127.0.0.1:8080/client/login");
13        driver.findElement(By.name("client_email")).sendKeys("tamin@23422@gmail.com");
14        driver.findElement(By.name("client_password")).sendKeys("12345678");
15        driver.findElement(By.xpath("//html/body/form/section/div/div/div/div/div[2]/div[4]/button")).click();
16
17        driver.get("http://127.0.0.1:8080/client/profile");
18        driver.findElement(By.name("client_name")).sendKeys("tamin");
19        driver.findElement(By.name("client_password")).sendKeys("12345678");
20        driver.findElement(By.name("client_email")).sendKeys("tamin@23422@gmail.com");
21        driver.findElement(By.name("client_password")).sendKeys("12345678");
22        driver.findElement(By.xpath("//html/body/div[2]/div/form/div[3]/input")).click();
23
24        String expect = driver.getCurrentUrl();
25        if (expect.equals(expect)) {
26            System.out.println("Update successful");
27        } else {
28            System.out.println("Not Successful");
29        }
30    }
31 }

```

Update successful

## 6.3 Meetings

A good system can only be implemented in a timely manner if proper work is assigned among the members and work is done on time. A testing team's responsibility is to detect bugs/errors so that the system is bug-free, and the client receives a quality product. So, to ensure the success of our project, our testing team has scheduled weekly meetings to review each module, evaluate progress, and detect and resolve defects. The QA team had also met with the development team and the project manager to keep track of the system's progress. Meetings were also scheduled in the event of an emergency.

## 7. TEST CASES/TEST ITEMS

### 7.1 Login as Client

<b>Project Name:</b> Healthcare Application		<b>Test Designed by:</b> Anik Rahman		
<b>Test Case ID:</b> HA_01		<b>Test Designed date:</b> 10-12-2022		
<b>Test Priority (Low, Medium, High):</b> High		<b>Test Executed by:</b> Maweza Nargis Haider		
<b>Module Name:</b> Login Session		<b>Test Execution date:</b> 10-12-2022		
<b>Test Title:</b> Verify login with valid Email and password				
<b>Description:</b> Test website login page				
<b>Precondition:</b> User has valid username and password				
<b>Dependencies:</b> N/A				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the site 2. Enter username 3. Enter password 4. Click submit	Email : fahad@gmail.com Password : 12345678	User should login into the system	As expected,	Pass
<b>Post Condition:</b> Client is validated with the database and successfully login to account. The account session details are logged in the database.				

### 7.2 Registration as Client



<b>Project Name:</b> Healthcare Application		<b>Test Designed by:</b> Kashifa Efaj Mahe		
<b>Test Case ID:</b> HA_02		<b>Test Designed date:</b> 10-12-2022		
<b>Test Priority (Low, Medium, High):</b> High		<b>Test Executed by:</b> Kashifa Efaj Mahe		
<b>Module Name:</b> Registration session		<b>Test Execution date:</b> 10-12-2022		
<b>Test Title:</b> verify registration with valid Email, password, name, address, blood group, date of birth				
<b>Description:</b> Test the website registration page				
<b>Precondition:</b> N/A				
<b>Dependencies:</b> N/A				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the site 2. Click Sign up 3. Enter Name, Email, Password, Date of Birth, Gender, Blood Group, Phone number, Address 4. Click submit	Name: Sabbir Email fahad@gmail.com Password : 12345678 Date of Birth : 03/03/2000 Blood Group : A+ Phone Number : 01832344124 Address : Banani, Dhaka	Account information stored to the database and user should be able to login to the website	As expected,	Pass
<b>Post Condition:</b> User information is stored to the database and redirect to the login page				

<b>Project Name:</b> Healthcare Application		<b>Test Designed by:</b> Kashifa Efaj Mahe		
<b>Test Case ID:</b> HA_02.1		<b>Test Designed date:</b> 13-12-2022		
<b>Test Priority (Low, Medium, High):</b> High		<b>Test Executed by:</b> Kashifa Efaj Mahe		
<b>Module Name:</b> Registration session		<b>Test Execution date:</b> 13-12-2022		
<b>Test Title:</b> verify registration with valid Email, password, name, address, blood group				
<b>Description:</b> Test the website registration page				

<b>Precondition:</b> N/A				
<b>Dependencies:</b> N/A				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the site 2. Click Sign up 3. Enter Name, Email, Password, Date of Birth, Gender, Blood Group, Phone number, Address 4. Click submit	Name: Sabbir Email fahad@gmail.com Password : 12345678 Date of Birth : 03/03/2020 Blood Group : A+ Phone Number : 01832344124 Address : Banani, Dhaka	It should show the requirement message as age is not more than 3+	As expected	Fail
<b>Post Condition:</b> Stay on the registration page				

### 7.3 Booking Appointment

<b>Project Name:</b> Healthcare Application		<b>Test Designed by:</b> Anik Rahman		
<b>Test Case ID:</b> HA_03		<b>Test Designed date:</b> 10-12-2022		
<b>Test Priority (Low, Medium, High):</b> High		<b>Test Executed by:</b> Anik Rahman		
<b>Module Name:</b> Book Appointment		<b>Test Execution date:</b> 10-12-2022		
<b>Test Title:</b> Verify appointment with preferred date, time and detail description of problem				
<b>Description:</b> Test the appointment booking page				
<b>Precondition:</b> User has valid username and password				
<b>Dependencies:</b> N/A				
<b>Test Steps</b>	<b>Test Data</b>	<b>Expected Results</b>	<b>Actual Results</b>	<b>Status (Pass/Fail)</b>

1. Go to the site 2. Enter username and password 3. Go to Doctors 4. Go to Book Appointment 5. Enter Date, Time, Description 5. Click Confirm	Date : 10/12/22 Time : 5:00 PM Description : Fever	Appointment setup should be done	As expected,	Pass
<b>Post Condition:</b> Appointment saved at home page (all pointment list)				

<b>Project Name:</b> Healthcare Application		<b>Test Designed by:</b> Anik Rahman		
<b>Test Case ID:</b> HA_03.1		<b>Test Designed date:</b> 13-12-2022		
<b>Test Priority (Low, Medium, High):</b> High		<b>Test Executed by:</b> Maweza Nargis Haider		
<b>Module Name:</b> Book Appointment		<b>Test Execution date:</b> 13-12-2022		
<b>Test Title:</b> Verify appointment with preferred date, time and detail description of problem				
<b>Description:</b> Test the appointment booking page				
<b>Precondition:</b> User has valid username and password				
<b>Dependencies:</b> N/A				
<b>Test Steps</b>	<b>Test Data</b>	<b>Expected Results</b>	<b>Actual Results</b>	<b>Status (Pass/Fail)</b>
1. Go to the site 2. Enter username and password 3. Go to Doctors 4. Go to Book Appointment 5. Enter Date, Time, Description 5. Click Confirm	Date : 05/12/22 Time : 5:00 PM Description : Fever	The appointment setup failed because the appointment date had previously passed.	As expected	Fail
<b>Post Condition:</b> Client is validated with the database and successfully login to account. The account session details are logged in the database.				

#### 7.4 Update Profile

<b>Project Name:</b> Healthcare Application		<b>Test Designed by:</b> MD Mahinur Rahman		
<b>Test Case ID:</b> HA_04		<b>Test Designed date:</b> 10-12-2022		
<b>Test Priority (Low, Medium, High):</b> Low		<b>Test Executed by:</b> MD Mahinur Rahman		
<b>Module Name:</b> Update profile		<b>Test Execution date:</b> 10-12-2022		
<b>Test Title:</b> Update Profile of password, name, address, date of birth , phone number				
<b>Description:</b> Test the update profile page				
<b>Precondition:</b> User has valid username and password				
<b>Dependencies:</b> N/A				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to the site 2. Enter username 3. Enter password 4. Click Profile 5. Enter Name, Date of Birth, Password, Phone number, Address 6. Click Update Profile	Name : Ratul Date of Birth : 02/12/1997 Password : 1234hjyg1234 Phone Number : 01830233111 Address : Dhanmondi	Profile should be updated	As expected	Pass
<b>Post Condition:</b> N/A				

#### 7.5 Make Payment

<b>Project Name:</b> Healthcare Application		<b>Test Designed by:</b> Maweza Nargis Haider		
<b>Test Case ID:</b> HA_05		<b>Test Designed date:</b> 10-12-2022		
<b>Test Priority (Low, Medium, High):</b> High		<b>Test Executed by:</b> Maweza Nargis Haider		
<b>Module Name:</b> Payment method		<b>Test Execution date:</b> 10-12-2022		

<b>Test Title:</b> Payment online with card, mobile banking				
<b>Description:</b> Pay after doctor appointment				
<b>Precondition:</b> User have to book an appointment				
<b>Dependencies:</b> N/A				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to Doctors 2. Go to Book Appointment 3. Enter Date, Time, Description 4. Go payment 5. Choose payment method 6. Payment any option and Confirm payment. 7. Payment Successful message	Date : 10/12/22 Time : 5:00 PM Description : Fever	User should have successfully make payment	As expected	Pass
<b>Post Condition:</b> Receive an confirmation message				

## 7.6 Add Medicine

<b>Project Name:</b> Healthcare Application		<b>Test Designed by:</b> Anik Rahman		
<b>Test Case ID:</b> HA_06		<b>Test Designed date:</b> 10-12-2022		
<b>Test Priority (Low, Medium, High):</b> Medium		<b>Test Executed by:</b> Anik Rahman		
<b>Module Name:</b> Purchase medicine		<b>Test Execution date:</b> 10-12-2022		
<b>Test Title:</b> Purchase medicine from the system				
<b>Description:</b> Test the purchase medicine page				
<b>Precondition:</b> User have to have a valid email and password				
<b>Dependencies:</b> N/A				
<b>Test Steps</b>	<b>Test Data</b>	<b>Expected Results</b>	<b>Actual Results</b>	<b>Status (Pass/Fail)</b>

1. Go to the website 2. Login to the system 3. Go to Purchase medicine 4. Search medicine 5. Enter quantity, address, mobile number 6. Upload prescription (optional) 7. Click Confirm	Quantity : 5 Address : Mirpur, Dhaka Mobile Number : 01830233123 Prescription : dr_kabir.jpg	Medicines information will be stored into the database.	As expected	Pass
<b>Post Condition:</b> N/A				

### 7.7 Emergency System Services

<b>Project Name:</b> Healthcare Application		<b>Test Designed by:</b> MD Mahinur Rahman		
<b>Test Case ID:</b> HA_07		<b>Test Designed date:</b> 10-12-2022		
<b>Test Priority (Low, Medium, High):</b> High		<b>Test Executed by:</b> MD Mahinur Rahman		
<b>Module Name:</b> Test the website call for any emergency services method		<b>Test Execution date:</b> 10-12-2022		
<b>Test Title:</b> Verify login with valid Email and password				
<b>Description:</b> Test emergency system services page				
<b>Precondition:</b> User has valid username and password				
<b>Dependencies:</b> N/A				
<b>Test Steps</b>	<b>Test Data</b>	<b>Expected Results</b>	<b>Actual Results</b>	<b>Status (Pass/Fail)</b>
1. Go to the homepage 2. Click Add services 3. Click Emergency Service 4. Enter Time, Date, Description (optional), Mobile Number 5. Click submit	Time :	User should login into the system	As expected,	Pass
<b>Post Condition:</b> N/A				

## 7.8 Prescription

<b>Project Name:</b> Healthcare Application		<b>Test Designed by:</b> Anik Rahman		
<b>Test Case ID:</b> HA_08		<b>Test Designed date:</b> 10-12-2022		
<b>Test Priority (Low, Medium, High):</b> Medium		<b>Test Executed by:</b> Maweza Nargis Haider		
<b>Module Name:</b> Prescription		<b>Test Execution date:</b> 10-12-2022		
<b>Test Title:</b> Verify login with valid Email and password				
<b>Description:</b> Test the prescription page				
<b>Precondition:</b> User have to book an appointment				
<b>Dependencies:</b> N/A				
<b>Test Steps</b>	<b>Test Data</b>	<b>Expected Results</b>	<b>Actual Results</b>	<b>Status (Pass/Fail)</b>
1. Go to Doctors 2. Go to Book Appointment 3. Enter Date, Time, Description 4. Click Confirm 5. Doctor will write a prescription 6. Make Payment		Patients will see prescription and can go to purchase medicine	As expected	Pass
<b>Post Condition:</b> After successful payment user will redirect in to purchase medicine page				

## 7.9 Logout

<b>Project Name:</b> Healthcare Application		<b>Test Designed by:</b> Anik Rahman		
<b>Test Case ID:</b> HA_09		<b>Test Designed date:</b> 10-11-2022		
<b>Test Priority (Low, Medium, High):</b> High		<b>Test Executed by:</b> Maweza Nargis Haider		
<b>Module Name:</b> Logout		<b>Test Execution date:</b> 10-11-2022		
<b>Test Title:</b> verify log out option				
<b>Description:</b> Test whether logout option is working or not				

<b>Precondition:</b> User has valid username and password				
<b>Dependencies:</b> N/A				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to the website 2. Login to the system 3. Click logout		Logout from the system	As expected	Pass
<b>Post Condition:</b> User will redirect into Login Page				

## 8. ITEM PASS/FAIL CRITERIA

- In this system all information and data is stored in the database. If the system's input data is match with the database's stored information the test will be considered as pass criteria. We can only consider any test pass criteria when its passing rate will be 100%.
- If the system's input data doesn't match with the database's stored information the test will be considered as fail criteria.
- Sometimes user input correct information but the system can't recognize user's given correct information then it will be consider as a fail criteria.
- For some technical issue there is a minor issue in the database the test cases were failed but after solving the system's minor issue the test case are successful it will be consider as pass criteria.

## 9. TEST DELIVERABLES

### o Acceptance test plan

Acceptance testing is formal testing for product evaluation to determine whether a system is satisfy its acceptance criteria or not. Basic test cases will be executed to ensure that the system will eventually pass the UAT. If the test cases will pass and there is no bug during testing, then the software might be deliverable to the client. Testing team must check the system is included with the acceptance criteria.

### o System/Integration test plan

In this system all the functional and non-functional requirements will be written and designed. This testing is needed to verify the final software is working as expected result. Monitoring the test cases and report it time to time. Pass fail of test cases, execution number of test cases, and plan test cases vs final result all these points are documented in this phase.



- o **Unit test plans/turnover documentation**

After developing one module, the module will be tested if it is working properly or not.  
All module tested successfully and there is no defect.

- o **Screen prototypes**

Total nine prototypes were made and the last system (9th) one was the one we used in this project as this was the final latest modification

- o **Report mock-ups**

There were no mock-ups created for the report we are currently reviewing because it is the project report.

- o **Defect/Incident reports and summaries**

The defect report is about the detailed information about the defect we find and provide the information's to the developers. If the final result is not matched with the expected result of test cases, testing team will obviously mention it in the defect report so that developers can solve

- o **Test logs and turnover reports**

All of module's test logs were displayed. All of the tests were completed correctly.

## 10. STAFFING AND TRAINING NEEDS

At least one full-time tester should be assigned to the project's system/integration and acceptability testing stages. A person will need to be assigned part-time at the start of the project in order to participate in assessments, meetings, and so on. They will be allocated full-time after four months. If a separate test person is not easily available, the project manager/test manager will assume this job. In order to provide complete and suitable testing, the following training factors must be addressed.

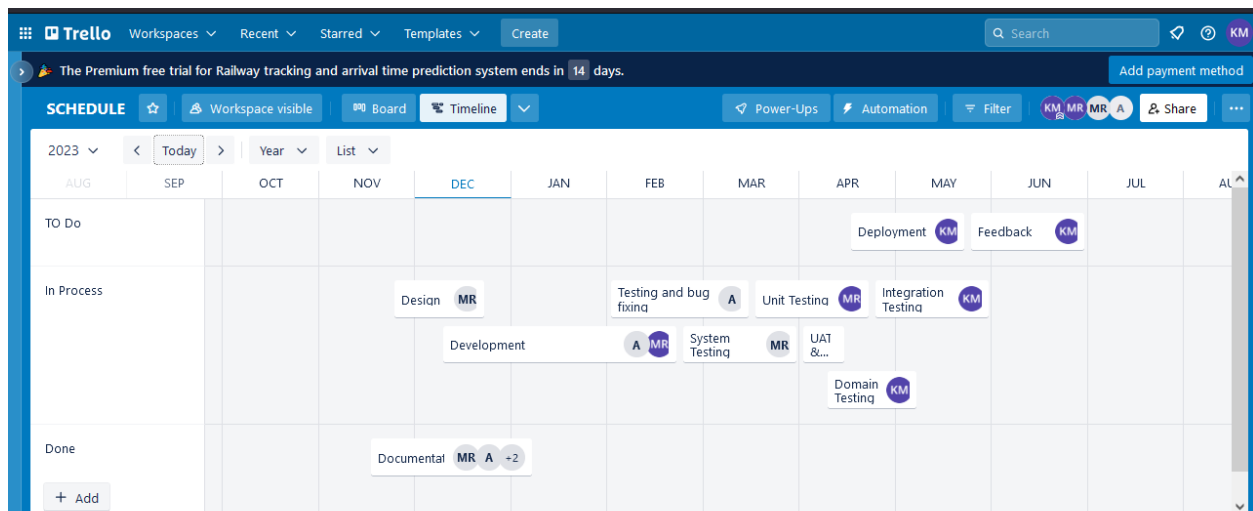
- o Employees of the operation will require communication and language training from a competent communicator.
- o For the project's ultimate approval, developers and testers will need to be instructed on the core functionalities of the EDI interface.

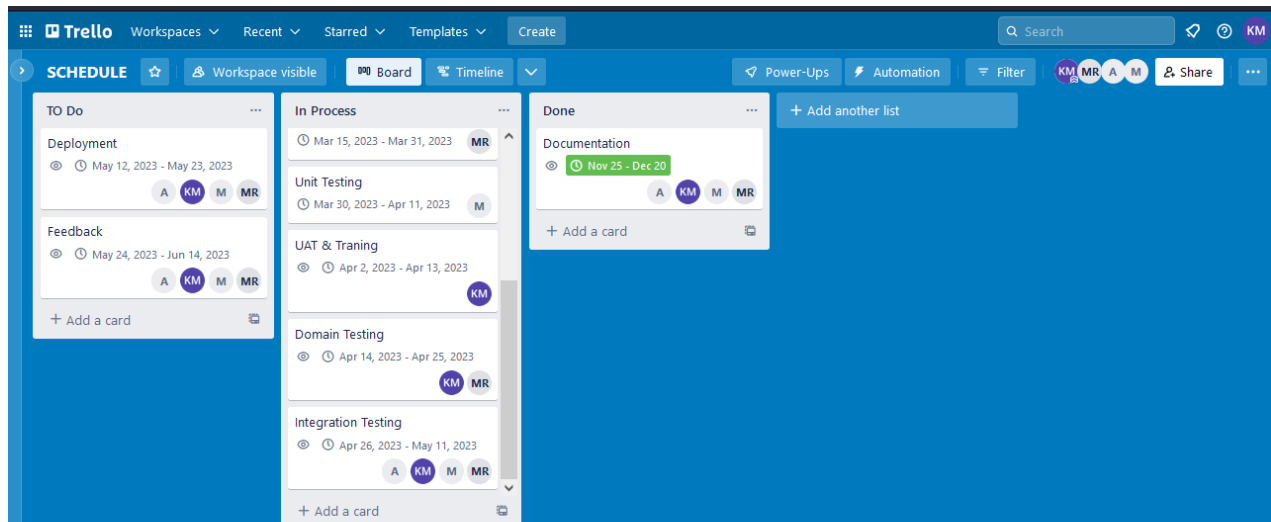
## 11. RESPONSIBILITIES

	Anik	Mahi	Ridi	Mahin
Project Proposal	X	X		
Requirement analysis			X	X

Planning		X	X	
System Design	X			X
Implementation	X		X	
Test case design		X	X	X
Test case implementation	X		X	
Integration Testing		X	X	X
Report Bugs & make summary		X		X
Documentation	X			X

## 12. TESTING SCHEDULE





**Documentation:** The whole process from starting to feedback, every single action should be documented.

**Design: :** According to the project plan, design user interface should be implemented. How a healthcare app will look like. .

**Development:** Now developers will start working to implement the whole project. as this is a web based project so there will be front end developers and back end developers .

**Unit Testing:** After developing one module, the module will be tested if it is working properly or not. All modules tested successfully and there is no defect.

**Domain Testing:** after selecting a small number of test cases from a nearly infinite group of candidate test cases.

**UAT and Training:** This phase will start just after the testing phase. And it will take max 11 days.

**Deployment:** It is the last step of the development process. In this phase the whole system will be completed with quality attributes and quality factors.

**Feedback:** to improve the system's quality attributes and quality factors we collect beta testing's feedback. And it will take max 22 days.

### 13. PLANNING RISKS AND CONTINGENCIES

The operational personal is limited and as a result of the manpower deficit there may be delays in getting necessary papers reviewed and participating in the acceptance test process. Any flaw in the system process may cause the entire procedure to be delayed. If we wanna mention a major difficulties for the customer it is the network problems and if the server is down by any chance. This app maybe misused if not be caution.

### 14. APPROVALS

<b>Project Sponsor</b>	<b>PASS</b>
<b>Development Management</b>	<b>PASS</b>
<b>EDI Project Manager</b>	<b>PASS</b>
<b>RS Test Manager</b>	<b>PASS</b>
<b>RS Development Team Manager</b>	<b>PASS</b>
<b>Ressigned Sales</b>	<b>PASS</b>
<b>Order Entry EDI Team Manager</b>	<b>PASS</b>