

# American International University-Bangladesh (AIUB)

Department of Computer Science Faculty of Science & Technology (FST) Summer 22-23

Section: F
Software Quality and Testing

# **HEALTH CARE SYSTEM**

# Report submitted By

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	Software Test Plan
	for
	<health care="" system=""></health>
	Version 1.0 approved
	Prepared by <author></author>
	<organization></organization>
	<date created=""></date>
<b>Checked By Industry Personnel</b>	
Name:	
Designation:	
Company:	
Sign:	
Date:	

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# **Revision History**

Revision	Date	Updated by	<b>Update Comments</b>
0.1	2023.08.02	Arifin	Version 1
0.2	2023.08.06	Arifin	Version 2
0.3	2023.08.09	Arifin	Version 3
0.4	2023.08.11	Arifin	Version 4
0.5	2023.08.13	Arifin	Version 5
0.6	2023.08.15	Arifin	Version 6
0.7	2023.08.16	Arifin	Version 7

# 1. TEST PLAN IDENTIFIER: Health Care System - MTP01.3

#### 2. REFERENCES

- Fayezah Anjum, Abu Saleh Mohammed Shoaib, Abdullah Ibne Hossain, Mohammad Monirujjaman Khan "Online health care," 2018 IEEE 8th Annual Computing and Communication Workshop, Las Vegas, NV, USA, 2018, pp. 580-583, doi: 10.1109/CCWC.2018.8301617
- o 1G.Preethi, 2P.Maha Lakshmi, 3V.Ramya, 4M.A.Parthiban "Smart E-Healthcare System" JETIER Research journal doi: https://www.jetir.org/papers/JETIR2305703.pdf
- Manogaran G., Varatharajan R., Lopez D., Kumar P. M., Sundarasekar R., Thota C. A new architecture of Internet of Things and big data ecosystem for secured smart healthcare monitoring and alerting system. Future Generation Computer Systems . 2018;82:375–387. doi: 10.1016/j.future.2017.10.045

#### 3. INTRODUCTION

### Background to the Problem

People frequently struggle with the decision of whether they will go to doctor or not. Now a day, acquiring a serial at a government hospital is an extremely difficult process. More than an hour must be spent waiting in line. Then, after getting the serial, some people use political scheming to meet the doctor more quickly. Again, taking tests and other tasks are difficult. If the patient loses his previous paperwork, he also has to face great suffering. In terms of prescriptions, medications, procedures, and other services, some doctors and hospital administrators occasionally overcharge patients. These problems can be solved by a digital web-based system that can erase these complexities and will save money and time.

Many individuals encounter challenges when making the decision to seek medical attention, particularly in relation to visiting a doctor. Presently, obtaining a serial number or appointment at a government hospital has become an arduous and time-consuming process. Patients often have to endure long queues that require them to wait for over an hour. Even after acquiring a serial number, some individuals resort to employing political connections or schemes in order to expedite their meeting with the doctor. Additionally, undergoing necessary medical tests and procedures can prove to be a cumbersome task.

Complications further arise when patients misplace their previous medical records and paperwork, which can lead to significant suffering and inconvenience. Moreover, patients may encounter instances wherein doctors and hospital administrators overcharge for services, prescriptions, medications, and procedures. These issues not only cause financial strain but can also lead to distrust and discontent among patients.

To address these challenges and alleviate the associated complexities, a digital web-based system is proposed. This system aims to streamline the entire healthcare process, saving both time and money for patients. By implementing this solution, individuals can eliminate the hurdles they currently face in accessing the necessary medical services.

#### Solution to the Problem

This application will help people save their time. It will help the patients to perform their tasks more efficiently for patients, as well as the need for easy access to medical records for doctors, we propose the development of a web-based application. This application aims to provide the following features:

- Storing patient's medical documents: The application will allow patients to upload and store their medical documents securely. This will eliminate the risk of losing important documents and provide easy access to them whenever needed.
- Set time for meeting with doctors: The application will provide a user-friendly interface
  for patients to schedule appointments with doctors as quickly as possible. Patients will
  be able to view the availability of doctors, choose a convenient time slot, and book
  appointments accordingly.
- Doctor's easy access to medical records: The application will enable doctors to easily retrieve and access patient's medical records. This will save time during consultations and ensure that doctors have all the necessary information at hand.
- Managing exercise routine according to daily activity: The application will include a
  feature that allows patients to manage their exercise routine based on their daily activity.
  This can be achieved through integration with fitness trackers or by manually inputting
  daily activity levels. The application will provide personalized exercise
  recommendations based on the input and help patients stay on track with their fitness
  goals.

The application will be developed with a user-friendly interface and intuitive design to ensure ease of use for both patients and doctors. It will prioritize data security and privacy to protect patient confidentiality. Regular updates and improvements will be made to enhance the functionality and user experience of the application.

Overall, the proposed web-based application will help save time for patients, facilitate efficient communication between patients and doctors, streamline access to medical records, and assist in managing exercise routines.

# 4. REQUEIREMNT SPECIFICATION

# **4.1** System Features

#### 4.1.1. User Signup

- New Patients/Doctor will require valid personal information such as phone number, email, Username and password.
- If the registration process in successful, the User will see a popup confirming such and will be redirected to sign in page.
- Priority level: High
- Precondition: User must have valid information's.

•

#### 4.1.2. Patient Login

- Patient will log into the system with their own Username and password.
- If the login is successful, the Patient will be redirected to the website homepage. Otherwise, it will load the login page again with wrong credentials massage.
- Priority Level: High
- Precondition: Patient must have valid Username and password.

#### 4.1.3. Set Appointment:

- A patient can set an appointment based on their symptoms and date.
- The appointment will require the patient to specify the category of their disease.
- Priority Level: Medium
- Precondition: Patient must have valid Username and password.

#### 4.1.4. Regular Exercise:

- The system will collect regular exercises the patient is prescribed from the doctor.
- The patient can keep track of the exercise and maintain a record of exercise performed.
- Priority Level: Medium
- Precondition: Patient must have valid Username and password.

#### 4.1.5. Medicine Reminder:

- The system will remind the regular medicine the doctor prescribes to the patient.
- The patient can keep track of the medicine and maintain a record of medicine taken.
- Priority Level: Medium
- Precondition: Patient must have valid Username and password.

#### 4.1.6. Emergency Ambulance Service:

- A patient can access the emergency ambulance service and call for an ambulance.
- After clicking the emergency ambulance service, the patient will be required to put their current location.
- Priority Level: Medium
- Precondition: Patient must have valid Username and password.

#### 4.1.7 Admin Login

- Admin will log into the system with admin Username and password.
- If login is successful, admin homepage will be shown.
- Priority Level: High
- Precondition: admin must have valid Username and password.

#### 4.1.8 Patient Update Profile

- Patient has to Login with valid Patient name and password in order to do Update Patient profile.
- If a patient wishes to update their profile, they have to log in with the correct username and password. If the patient will be redirected to their profile page if they are successful. Otherwise, the Update profile page will be shown again with a specific error message.
- Priority Level: Medium
- Precondition: Patient must log into the system in order update their profile.

#### 4.1.9. Delete User

- An admin can delete Patient or doctor from admin page.
- If the admin selects delete option and clicks the confirm button, the patient doctor profile will be deleted.
- Priority Level: Medium
- Precondition: An Admin must log into the system.

#### **4.1.10 Donor List:**

- Admin can add a donor in the system.
- Donors will be sorted based on blood group.
- Priority Level: low
- Precondition: Admin login required.

#### 4.1.11 Doctor Login

- The doctor login the account with a valid Username and password.
- After login, the doctor gets a notification if any patient sets an appointment under that doctor.
- The doctor then gives a prescription or treatment to the patient, based on measuring the BMI.
- Priority Level: Medium
- Precondition: Valid Username and password.

#### **4.1.12 Give Prescription**

- After a doctor log into the system, they can see the information's of the patient who require their counseling.
- The doctor can then see the information of the patient and calculate their BMI based on weight and height.
- The doctor can then prescribe some medicine to the patient.
- Priority Level: Medium
- Precondition: Valid Username and password.

#### 4.1.13 User Logout

- A user will be able to log out of the system from his valid account.
- Logout will be successful if after pressing logout it redirects to the login page.
- Priority Level: High
- Precondition: User needs to successfully log in first.

# **4.2** System Quality Attributes

There are some software quality attributes as per ISO/ IEC 9126 that are very important to ensure the quality of software.

**Functionality:** A valid Patient can see all services or functionality after login into the system. Invalid Patients cannot access the system.

**Security:** System security should be sufficient to prevent unauthorized access to the system operations

**Reliability:** All features will work as intended across a range of working environments or devices.

**Usability:** The health care system is a system that is easy to understand for everyone. Any patient should be able to register and access the system easily

**Efficiency**: Our system size is small and efficient so that it can be handled by any device.

Maintainability: If a bug or problem is found in the system, it will be solved as soon as possible.

**Portability:** Switching the host or environment can be done in a short time.

Accessibility: As it is web-based software, it can be accessed from anywhere through Internet.

**Installation:** There won't be any time-consuming downloads or installations because it is web-based. It is based on web addresses. It is very easy for anyone to access.

# 4 .3 System Diagram

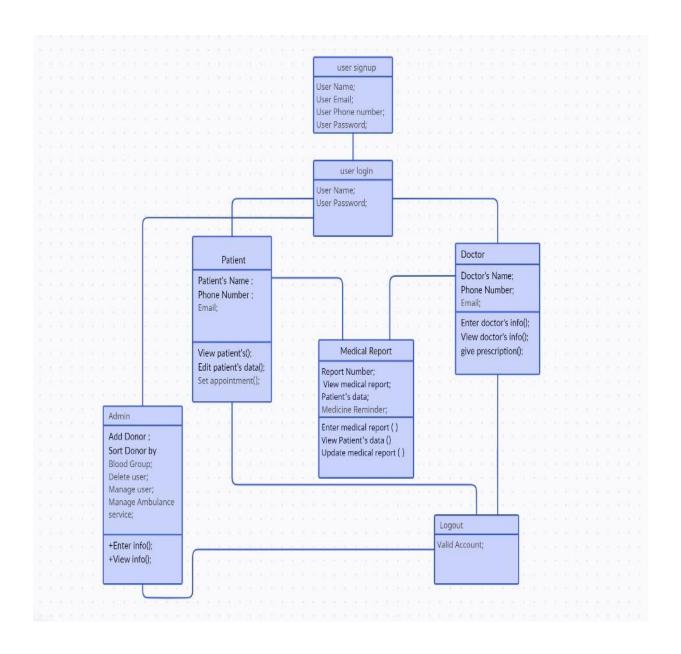


Fig: Class Diagram

# **4.4 System Interface**

This is the system home user interface. All types of users will first see this home page when they visit this Health Care Web application



Fig 1: System Home Page

This is the login page for user (Doctor and Patient). User will provide their credentials to login to the system



Fig 2: User Login Page

This is the Dashboard of the Patient. After successfully login into the system, Patient will redirect to this page



Fig 3: Patient Home Page

This is the patient profile page. Patient can view and update his/her personal information from here

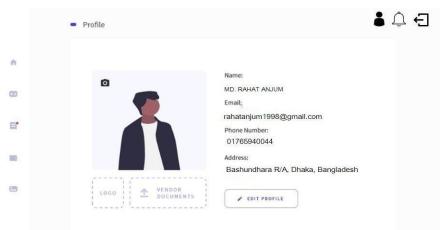


Fig 4: User Profile Page

This page is for updating patient health data. From here, the patient can enter his regular health data.



Fig 5: User Exercise Data Page

This page is for viewing the patient's previous data. The patient can view his previous health data on this page



Fig 6: User Previous Exercise Data Page

This page is for viewing the donor's information. Patients can also use this page to lookfor donors based on their blood group.



Fig 7: Donor List Page

This page is for calling the ambulance. Patient will be able to call ambulances by giving their address

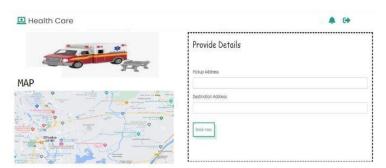


Fig 8: Ambulance Call Page

This page is for the medicine reminder page. The patient can set up medication reminders from here

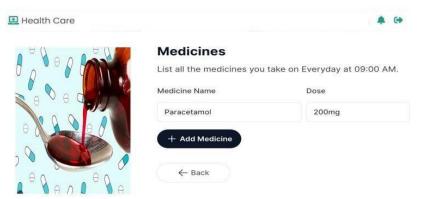


Fig 9: Medicine Reminder Page

This page is for prescription giving. Here, the doctor can give prescriptions and also calculate the BMI of the users by inputting their data.

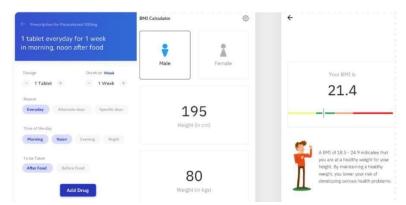


Fig 10: Prescription giving Page

This page is for the admin dashboard. The admin user can view the statistics of the registered patient, doctor, donner.

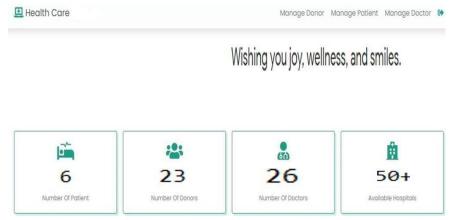


Fig 11: Admin Dashboard Page

This page is for the patient's vaccination history. The user can add vaccination details and take a printout of them

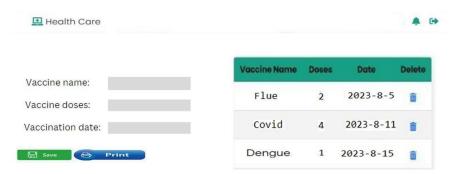


Fig 12: Vaccination History Page

# **4.5** Project Requirements

- Time: This web-based application may take about 3 months (90 days) to complete.
- Budget: 50,000 BDT
- Size: The final size of this web-based application will not be more than 100-200 MB.
- HTML, CSS, PHP, JavaScript, Mysql and Ajax will be used to build this web-based application.

#### 5. FEATURES NOT TO BE TESTED

Some of our system features are implemented using APIs and Iframes. The COVID-19 module is fetching the Iframe from the Bangladesh government's COVID-19 website. The COVID-19 test module is embedded in an Iframe within our system, which pulls information from the Bangladesh government's website and interacts with it. So, we can skip this component for testing. We do not need to worry about any security concerns with this module as it is hosted and maintained by the Bangladesh government. The only concern is that the website may be unavailable due to the Bangladesh government's regular maintenance and updates, but we will monitor this closely and ensure that our testing process remains uninterrupted.

### 6. TESTING APPROACH

### **6.1** Testing Levels

**UNIT TESTING:** Unit testing is the first phase of testing, which is done by the developer himself. During the development of the software, after completing the code of a small unit, the developer tests whether it is working perfectly or not. It will be approved by the development team leader. A progress report for the unit testing is provided to the test person to let them know the current situation of the software. unit testing is a type of software testing that focuses on verifying the individual components or units of a system. In the context of a healthcare system project, unit testing involves testing the smallest testable units of software, such as functions, methods, or classes, to ensure that each unit performs as expected. Unit testing in a healthcare system project typically involves the following steps:

- Identify the individual units to be tested, such as modules or components related to specific functionalities in the healthcare system.
- Develop test cases that cover different scenarios for each unit, including normal and boundary cases, to ensure comprehensive coverage.
- Debug and fix any issues or defects found during unit testing.
- Re-test the fixed units to verify that the issues have been addressed.

**SYSTEM TESTING:** System testing should be performed to ensure that all modules work properly together after they have been connected as a whole software. It is a black box test. Depending on the requirement and specification, a test case is generated to test the system as a whole without knowing the inside of the module. system testing, on the other hand, verifies the behavior and functionality of the entire healthcare system as a whole. It focuses on testing the interactions and integration between different components or units to ensure that the system functions correctly as a complete entity. In the context of a healthcare system project, system testing includes the following aspects:

- Test the functionalities and features of the software system from end-to-end, simulating real-world scenarios.
- Verify that the system behaves as intended, considering different user roles, workflows, and use cases.
- Test the integration between various components and modules of the healthcare system, ensuring smooth communication and data exchange.
- Validate the system's compliance with regulatory requirements and standards applicable to healthcare software.
- Perform performance testing to assess the system's stability, scalability, and response time under load or stress conditions.
- Conduct security testing to identify vulnerabilities and ensure the system's protection against unauthorized access or data breaches.

In summary, unit testing focuses on testing individual units of a healthcare system project, while system testing verifies the system as a whole, including its functionalities, integration, compliance, performance, and security. Both types of testing are crucial in ensuring the overall quality and reliability of the software in a healthcare system.

### **6.2** Test Tools

**Selenium:** The only test tool to be used is Selenium IDE. Selenium automates browser-based web applications, allowing an agile tester to automate repeated test scripts so they can come up with more critical test scenarios. The testing will be done in the Chrome Browser with Start record and stop record.

# **6.3** Meetings

The test team will meet once in every week to evaluate progress to date and to identify error trends and problems as early as possible. The test team leader will meet with development and the project manager once every two weeks as well. These two meetings will be scheduled on different weeks. Additional meetings can be called as required for emergency situations

### 7. TEST CASES/TEST ITEMS

#### **Test Case 1:**

Project Name: Heath Care System			Test Designed by: Arifin				
Test Case ID: FR_1			Tes	t Designed date: 12-08	8-23		
Test Priority (Low, Medium, High): Medium			Tes	t Executed by: Arifin			
Module Name: Patient Signup			Tes	t Execution date: 13-8	3-23		
Test Title: Signup With valid Information							
Description: Check If Patient signup works perfectly with valid information  Precondition (If any): N/A							
Test Steps	Test Data	Expected Resul	ts	Actual Results	Status		
1. Go to the website 2. Then Click Patient Signup 3. Put valid Information 4. Click submit  Put valid Information and fill up all input level  Sign up must be successful Sign-up Successful  Sign-up Successful  A successful					Pass		
Post Condition: Redirected to Patient sign in page.							

# Test Case 2:

Project Name: Heath Care System			Test Designed by: Arifin			
Test Case ID: FR_2			Tes	t Designed date: 12-8	-23	
Test Priority (Low, Medium, High): High			Tes	t Executed by: Arifin		
Module Name: Patient Login			Tes	t Execution date: 13-0	08-23	
Test Title: Patient login with	valid Username ar	nd password				
Description: Check If Patient Username and password.  Precondition (If any): Patient						
Test Steps	Test Data	Expected Resul	lts	Actual Results	Status	
1. Go to the website 2. Then Click Patient Login 3. Put valid Username and password 4. Click sign in button  Username: Arifin Password: 1234  Login must be successful successful 4. Login must be successful 4. Login must be successful 5. Login must be successful 4. Click sign in button					Pass	
Post Condition: Redirected to	Patient Dashboar	ď		<u> </u>	1	

# **Test Case 3:**

Project Name: Heath Care System			Test Designed by: Arifin		
Test Case ID: FR_3			Test Designed date: 12-08-23		
Test Priority (Low, Medium, High): Medium			Tes	t Executed by: Arit	fin
Module Name: Patient Details	modification		Tes	t Execution date: 1	3-08-23
Test Title: Patient update profil	e				
Description: Check If Patient of Username and password.  Precondition (If any): Patient M					
Test Steps	Test Data	Expected Resu	ılts	Actual Results	Status
<ol> <li>Go to the website</li> <li>Then Patient profile update</li> <li>Put New valid data</li> <li>Click save button</li> </ol>	Username: Arifin Password: 12345678 New Phone: 01712000222 Gender: Male	Update must be successful	oe .	Update successful	Pass
Post Condition: Redirected to P	atient profile				

# **Test Case 4:**

Project Name: Heath Care System				Test Designed by:Arifin			
Test Case ID: FR_4				esigned date: 12-08	3-23		
Test Priority (Low, Medium, High): Medium			Test E	xecuted by: Arifin			
Module Name: Appointment			Test Ex	xecution date: 13-0	8-23		
Test Title: Set Appointment							
Description: Check If Patient Ca	n Set Appointment	perfectly					
Precondition (If any): Patient M	ust be registered in	to the system	•				
Test Steps	Test Data	Expected Results	s A	Actual Results	Status		
1. Go to the website 2. Then Click set     appointment 3. Put valid Visiting date     and time 4. Click button  Visiting date: Any valid     upcoming date  Succe  Any valid     upcoming date				uccessful	Pass		
Post Condition: Redirected to Patient profile							

# **Taste Case 5:**

Project Name: Heath Care System			Test Designed by: Arifin			
Test Case ID: FR_5				Designed date: 12-08-2	23	
Test Priority (Low, Medium, High): Medium			Test I	Executed by: Arifin		
Module Name: Doctor Signup			Test E	Execution date: 13-08-	23	
Test Title: Signup With valid Information						
Description: Check If doctor signiformation	gnup works perfectly	y with valid				
Precondition (If any): N/A						
Test Steps	Test Data	Expected Results		Actual Results	Status	
<ol> <li>Go to the website</li> <li>Then Click Doctor signup</li> <li>Put valid information</li> <li>Click signup button</li> </ol>	Put valid Information and fill up all input level	Sign up must be successful		Sign-up Successful	Pass	
Post Condition: Redirected to Doctor sign in page.						

# **Taste Case 6:**

Project Name: Heath Care Sy	Project Name: Heath Care System			
Test Case ID: FR_6	Test Designed date: 12-08	3-23		
Test Priority (Low, Medium,	Test Executed by: Arifin			
Module Name: Doctor Login	Test Execution date: 13-0	8-23		
Test Title: Doctor login with				
Description: Check If Doctor Username and password				
Precondition (If any): Doctor	Must be registered	into the system		
Test Steps	Test Data	Expected Results	S Actual Results	Status
<ol> <li>Go to the website</li> <li>Then Click Doctor Login</li> <li>Put valid Username and password</li> <li>Click sign in button</li> </ol>	Username: SABID Password: 1234	Login must be successful	Log in Successful	Pass
Post Condition: Redirected to	Doctor Dashboard	I		

# **Taste Case 7:**

Project Name: Heath Care System			Test Designed by: Arifin				
Test Case ID: FR_7			Tes	t Designed date:13-08	-23		
Test Priority (Low, Medium, High): High				t Executed by: Arifin			
Module Name: Doctor Details Modification			Tes	t Execution date: 14-0	08-23		
Test Title: Doctor update profil	e						
Description: Check If Doctor coursename and password		•					
Precondition (If any): Doctor N	Must be registered	into the system					
Test Steps	Test Data	Expected Result	ts	Actual Results	Status		
<ol> <li>Go to the website</li> <li>Then Doctor profile update</li> <li>Put New valid data</li> <li>Click save button</li> </ol>		Update successful	Pass				
Post Condition: Redirected to Doctor profile							

# **Test Case 8:**

Project Name: Heath Care System			Test Designed by: Arifin				
Test Case ID: FR_8			Test D	esigned date: 13-08	3-23		
Test Priority (Low, Medium, High): Medium			Test E	xecuted by: Arifin			
Module Name: Give Prescript	ion		Test E	xecution date: 14-0	8-23		
Test Title: sent prescription							
Description: Check If Doctor	Can Sent prescription	properly					
Precondition (If any): Doctor I	Must be registered into	the system	•				
Test Steps	Test Data	Expected Results	s A	Actual Results	Status		
<ol> <li>Go to the website</li> <li>Then Click give prescription</li> <li>Put data</li> <li>Click set button</li> </ol>	Provide prescription: Napa extra 1 0 1	Set must be successful	S	et successful	Pass		
Post Condition: Redirected to Doctor Dashboard							

# **Taste Case 9:**

Project Name: Heath Care Syst	Test Designed by: Arifin				
Test Case ID: FR_9	Test Designed date: 13-08-23				
Test Priority (Low, Medium, H	Test Executed by: Arifin				
Module Name: Admin Login	Test Execution date: 14-08-23				
Test Title: Admin login with v	ssword				
Description: Check if admin lo					
Precondition (If any): N/A					
Test Steps	Test Steps Test Data Expected Result				
<ul> <li>5. Go to the website</li> <li>6. Then Click admin Login</li> <li>7. Put valid Username and password</li> </ul>	Username: admin Password: 123	Login must be successful.	Successful	pass	

# Test Case 10:

Project Name: Heath Care Syste	Test Designed by: Arifin						
Test Case ID: FR_10	Test Designed date13-08-23						
Test Priority (Low, Medium, Hi	Test	Test Executed by: Arifin					
Module Name: Manage Patient	Test Execution date: 14-08-23						
Test Title: Sent Notification, Propatient							
Description: Check if managed	successfully.						
Precondition (If any): Admin m							
Test Steps	Expected Results	3	Actual Results	Status			
Go to the website     Then Click Admin     Login     Put valid Username     and password     Click sign in button	be ete lly	Successful	pass				
Post Condition: Redirect to admin dashboard							

# **Taste Case 11:**

Project Name: Heath Care Syste	Test Designed by: Arifin						
Test Case ID: FR_11	Test Designed date13-08-23						
Test Priority (Low, Medium, Hi	Test Executed by: Arifir	1					
Module Name: Manage Doctor	Test Execution date:14-08-23						
Test Title: Delete Doctor							
Description: Check if Doctor de	letes successfully.						
Precondition (If any): Admin n							
Test Steps	Test Data	Expected Results	Actual Results	Status			
9. Go to the website 10. Then Click Admin Login 11. Put valid Username and password 12. Click sign in button	Successfully.	Pass					
Post Condition: Redirect to admin dashboard							

#### **Taste Case 12:**

Project Name: Heath Care Syste	Test Designed by:Arifin					
Test Case ID: FR_12	Test Designed date: 13-08-23					
Test Priority (Low, Medium, H	Tes	Test Executed by: Arifin				
Module Name: Manage Donor			Tes	Test Execution date: 14-08-23		
Test Title: Add and Delete Don						
Description: Check if Donors an	e added or delete	d successfully.				
Precondition (If any): Admin n		•				
Test Steps	t Steps Test Data Expected Resul				Status	
<ol> <li>Go to the website</li> <li>Then Click Admin Signup</li> <li>Put valid Information</li> <li>Click submit</li> </ol>	nor	Add & delete successful.	Pass			
Post Condition: Redirect to ma	nage donor.				•	

# 8. ITEM PASS/FAIL CRITERIA

The main objective of this section is to describe the PASS/FAIL criteria for the tests that are a part of this project. Any system or unit receiving a score of less than 90% will be subject to the failure criteria, and any component, unit, system, or integrated test item receiving a score of 90% to 95% will be considered to meet the pass criterion.

#### 9. TEST DELIVERABLES

Test Deliverables are documents that are given to the stakeholders when the software is being developed. It contains a list of documents, tools, and other equipment that must be created, provided, and maintained to support testing activities in a project.

- Unit testing findings and results will be properly documented. To stay on track, a continuous progress report is required.
- Audience for acceptance tests will be carefully selected, as wrong users can lead to incorrect results and feedback. It is similar to a contract for development team release and software delivery.
- During the time of integration testing, new modules are integrated into the system. And these records needed to be kept for further checking.
- Project management tools such as Jira, Trello, and others can be used to keep track of the progress report.
- After completing the each of the testing phase the details report will be generated containing the test results.

#### 10. STAFFING AND TRAINING NEEDS

The goal of this staffing strategy is to maximize the likelihood that enough qualified people will be assigned to the project to ensure its successful completion. Proper training and staffing enable employees to think outside the box and also increase efficiency, which is very important for product development. We need at least one full-time tester during the system/integration and acceptance testing phases of our project. A dedicated tester will work on the project full- time for the first four months. When there isn't enough time for a dedicated tester, the test manager steps in. Developers and testers will need training on the basics of our project's user interface. Operations staff must also undergo comprehensive training in this project communication procedure before the project is greenlit. As we will be using Selenium, we have to bring all necessary tools to support the testing team, and necessary training is also needed to be provided if it's necessary

# 11. RESPONSIBILITIES

	TM	PM	Dev.	Test	Client
			Team	Team	
Acceptance test Documentation &	X	X		X	X
Execution					
System/Integration test Documentation	X		X	X	
& Exec.					
Unit test documentation & execution	X		X	X	
System Design Reviews	X	X	X	X	X
Detail Design Reviews	X	X	X	X	
Test Procedures and rules	X	X	X	X	
Screen & Report Prototype reviews			X	X	X
Change control and Regression testing	X	X	X	X	X

# 12. TESTING SCHEDULE

Week	W -1	W - 2	W -3	W -	W - 5	W -6	W -7	W -8	W -9	W- 10	W- 11	W- 12	W- 13	W- 14	W-15
Test		_										12			
Product analyze															
analyze															
Test planning															
Design test strategy															
Define test object															
Define test criteria															
Resources planning															
Test environment setup															
Testing															
Unit Testing															
Design test care															
Design part 1															
Design part 2															
System Testing															
Reporting															
Report															
All															
All															
All															

# 13. PLANNING RISKS AND CONTINGENCIES

Effective risk and emergency planning is extremely important to a project's success. It is employed within a project to manage the risk of exceptions. The designed product has to be aligned with the service areas, ethics, and etiquette; otherwise, it will not be able to reach its own goal. Also, there are some rules and regulations for the organization to cope with the uncertain situations. It is very important to have this sort of system and to maintain it appropriately.

# 14. APROVALS

Project Sponsor	N/A
Development Management	N/A
EDI Project Manager	N/A
RS Test Manager	N/A
RS Development Team Manager	N/A
Reassigned Sales	N/A
Order Entry EDI Team Manager	N/A