



American International University-Bangladesh (AIUB)

Department of Computer Science
Faculty of Science & Technology (FST)
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Section: K
Software Quality Assurance and Testing
Online Appointment System

A Report submitted
By

SN	Student Name	Student ID
1	A.F.M Zobair	18-38104-2
2	ABID MAHMUD RABBI	17-35546-3

Under the supervision of

MOHAMMAD ARIFUR RAHMAN
Department of Computer Science
Faculty of Science and Technology
American International University Bangladesh

Software Test Plan

for

<Online Appointment System>

Version 1.0 approved

Prepared by <Zobair,Abid>

<American International University-Bangladesh>

<03-May-23>

Checked By Industry Personnel

Name: **Md. Jamil Ahsan**

Designation: **Software Engineer**

Company: **Brain Station 23**

Sign: **jamil**

Date: **02-05-2023**

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Revision History

Revision	Date	Updated By	Update Comments
0.1	2023.04.23	A.F.M Zobair	First Draft
0.2	2023.04.25	Abid Mahmud Rabbi	Second Draft

1. TEST PLAN IDENTIFIER: Online Appointment System

2. REFERENCES

- Software Requirement Specification (SRS) of the system
- Technical Specification
- Rules of User Interface Design Content
- Requirement Specification
- <https://cloudsmallbusinessservice.com/blog/top-10-clinic-appointment-scheduling-software.html>
- <http://www.papid.com>
- <http://www.kareo.com>
- <https://app.medicssbd.com/>
- <https://www.sakraworldhospital.com/>

3. INTRODUCTION

Background to the Problem

- Medical Appointment has become the part and parcel of everyone's life. Almost everyone have to take appointment. If many client try to get appointment at the same time, then the server may not be able to handle resulting in denial to service.
- Patients do use phone calls to make appointments, despite the fact that more users are being enamored with the prospect of scheduling appointments electronically. At a certain time patient have to take the appointment through a call that's sometimes quite impossible. And again there is a fixed time and you have to continuously keep trying and trying for make an appointment.

Solution to the Problem

- Healthcare has now recognized that patients are clients and have a say in their care.
- The online supplier registry aided in the improvement of the customer experience. This method differs from conventional provider repositories in that it requires patients to check for specific conditions or expectations details in order to find the best provider match. Patients will arrange their appointments in their desired manner thanks to the technology. Patients should wait online and book an appointment remotely, or they can dial. Both are combined into a single stream to assist appointment schedulers in determining which physician is seeing which patient. This app can display information about the physician such as qualification, operating history, medicals associated with, contact data, chamber address, availability schedule, and fee, allowing

users to easily locate the physicians they need. Doctors will also handle the patient well by visiting the patient's profile, which contains information about the patient's past problems.

- There are many clinic Appointments scheduling software. The Name of the software's are SAGENDA, SETMORE, JANEAPP, PRACTICEFUSION, QNOMY, GETTIMELY, NUMED, PERALMD, MEDIWARE, ADVANCEDMD etc.

The benefits of the software:

- Reduces operational costs
- Maximizes accessibility for all patients
- Personalizes your appointment schedule
- Provides effortless Reminders
- Is EMR Friendly
- Gives you Fast and easy access to all your data
- Eliminates double-booking
- Keep scheduling simple and organized with an intuitive interface
- Create new patients quickly and automatically scan for available appointments
- See schedule changes in real-time on your mobile device

4. REQUIREMENT SPECIFICATION

4.1 System Features

1. System Login

Functional Requirements

1.1 The software shall allow users to login with their mobile number.

1.2 If the mobile number has been inserted wrong for more than three times, the random verification code will be generated by the system to retry login.

1.3 If the number of login attempt exceed its limit (5 times), the system shall block the user

account login for one hour

Priority Level: High

Precondition: user have valid user id and password

2. User Registration

Functional Requirements

2.1 The software will allow user to register for the system.

2.2 User ID will be auto generated after registration and OTP and User ID will be sent to Email automatically.

Priority Level: Medium

Precondition: User will need passport size jpg photo, Mobile number must to register for the system.

Precondition: User current area

3. Find doctor & verify their profile's

Functional Requirements

3.1 The software will allow user to verify Doctors profile

3.2 User ID will be auto verified after registration and OTP and User ID will be sent to Email automatically.

Priority Level: Medium

Precondition: User must have valid email address, username , phone number and password

4. Make Doctor's Appointment

4.1 The software will allow user to make an appointment.

4.2 User ID will make an appointment if they need.

Priority Level: High

Precondition: Doctors have a valid profile

5. Doctor's Approve Appointment

5.1 The software will approve the appointment if the doctor's are available.

5.2 User Id approve the appointment.

Priority Level: High

Precondition: Doctors have a valid profile

4.2 System Quality Attributes

- **Usability:** A trained user shall be able to register into the system and login.
- **Readability:** Counting on appointment software to adequately and securely manage scheduling needs is important. Make sure the provider has a proven track record among other medical professionals.
- **Efficiency:** All functional purpose shall be fulfilled.
- **Portability:** Shall be able to run on every device correctly.
- **Correctness:** All features shall be done the way patients demanded.
- **Security.** Medical professionals and staff handle sensitive and confidential records and information. It is, therefore, important that the system chosen provides the necessary

security for both internal and external processes. Good security also includes proper implementation of Health Insurance Portability and Accountability Act (HIPAA) requirements.

- **Service Contracts.** No one likes long-term contracts. Luckily, many scheduling software providers offer month-to-month service.
- **Ease-of-use for staff.** Does it take a computer expert to effectively use the service? It shouldn't, and it's important that both the medical professional and his or her staff are comfortable using it.
- **Accessibility and Installation.** One important factor to consider is whether the software is Web-based or not. If it is, users will be able to access it from any Internet location. Additionally, there typically will not be any time-consuming downloads or installation.
- **Customer Support.** Don't be left in the dark when it comes to customer support. Considering the importance of accurate patient appointment scheduling to a medical practice, this is a crucial requirement. Make sure the service company offers live support by e-mail and/or telephone.
- **Service Contracts.** No one likes long-term contracts. Luckily, many scheduling software providers offer month-to-month service.

This system should be available for 24 hours a day, 7 days a week.

4.3 System Interface

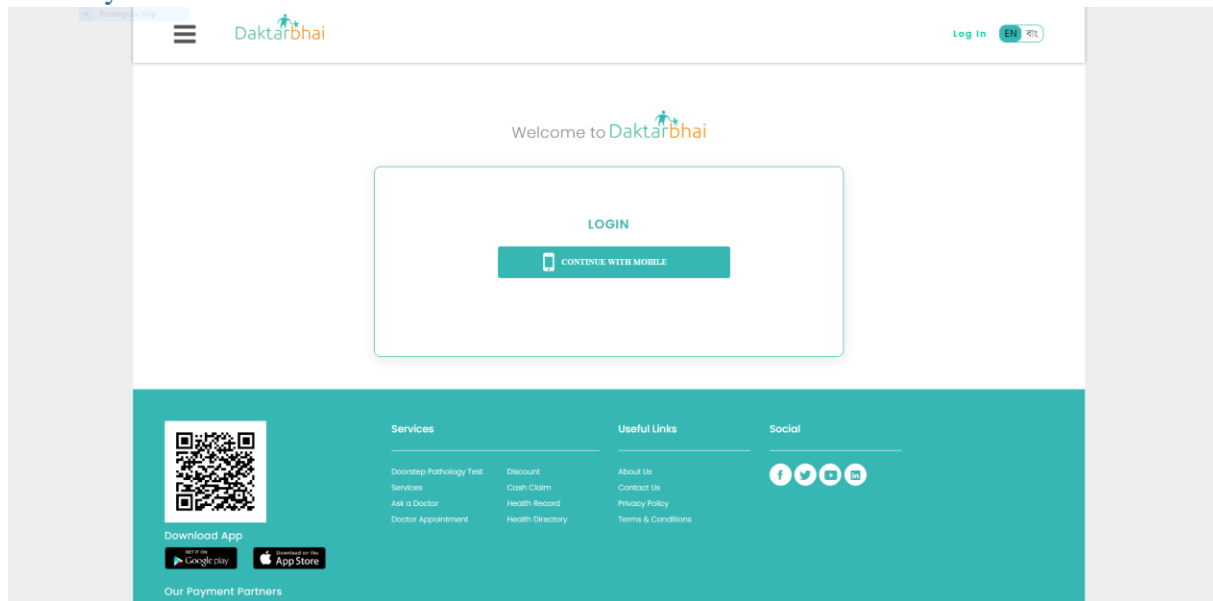


Figure 1: Login

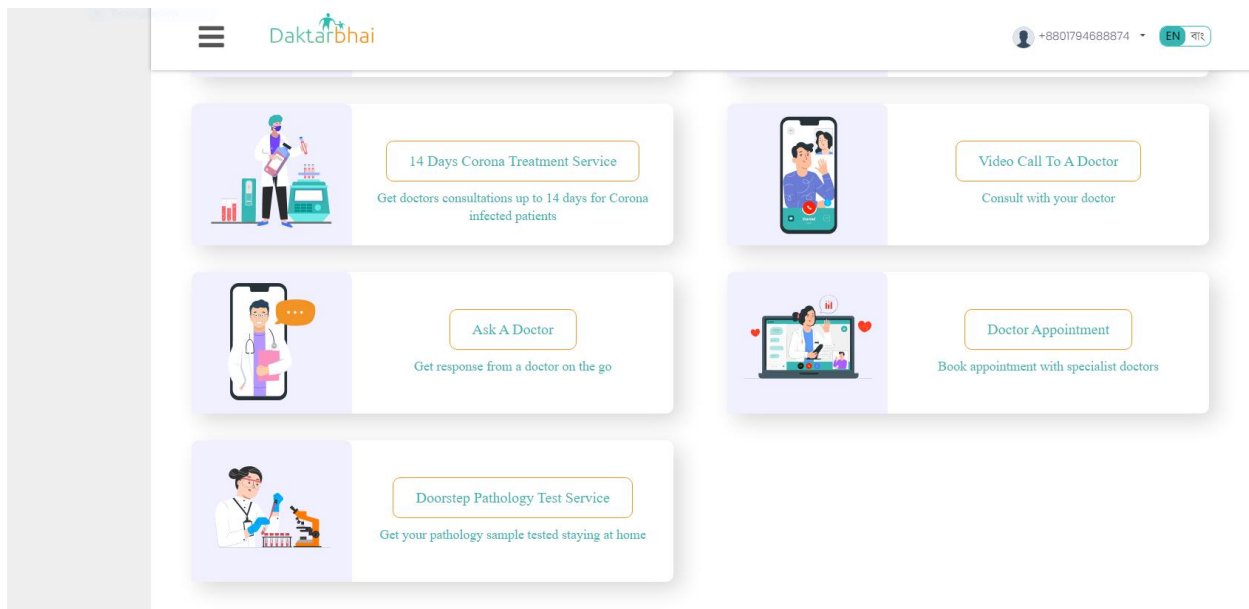


Figure 2: Home Page

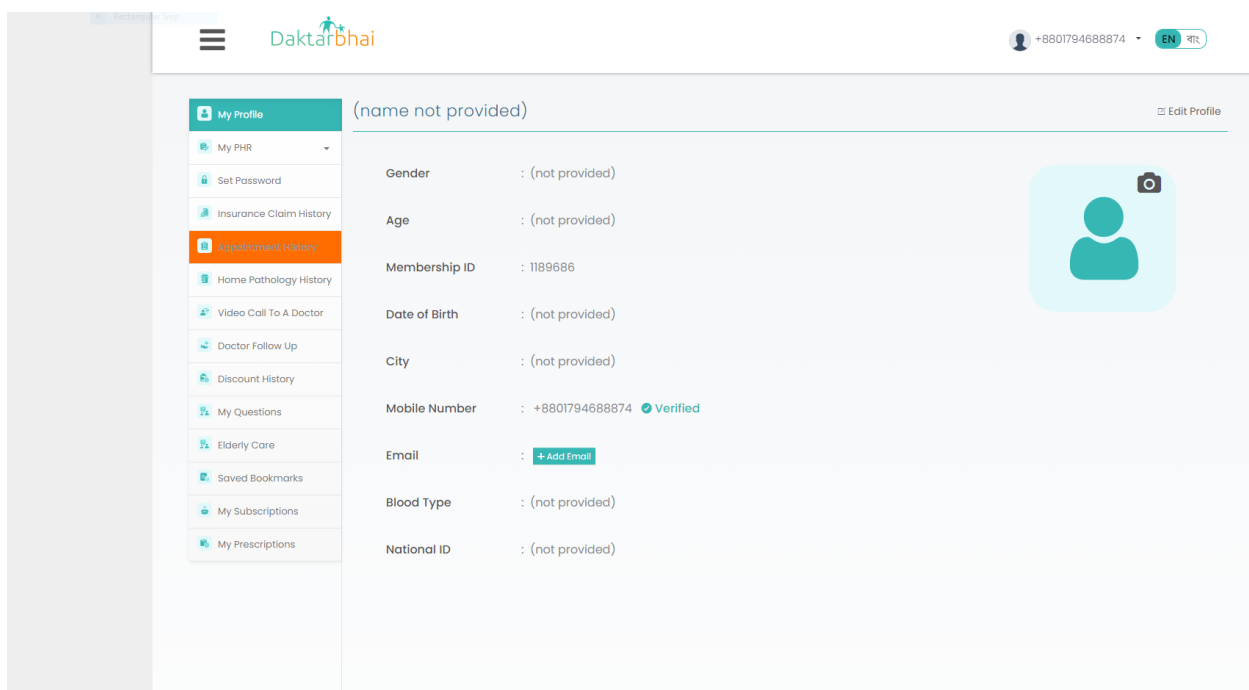


Figure 3: User Profile

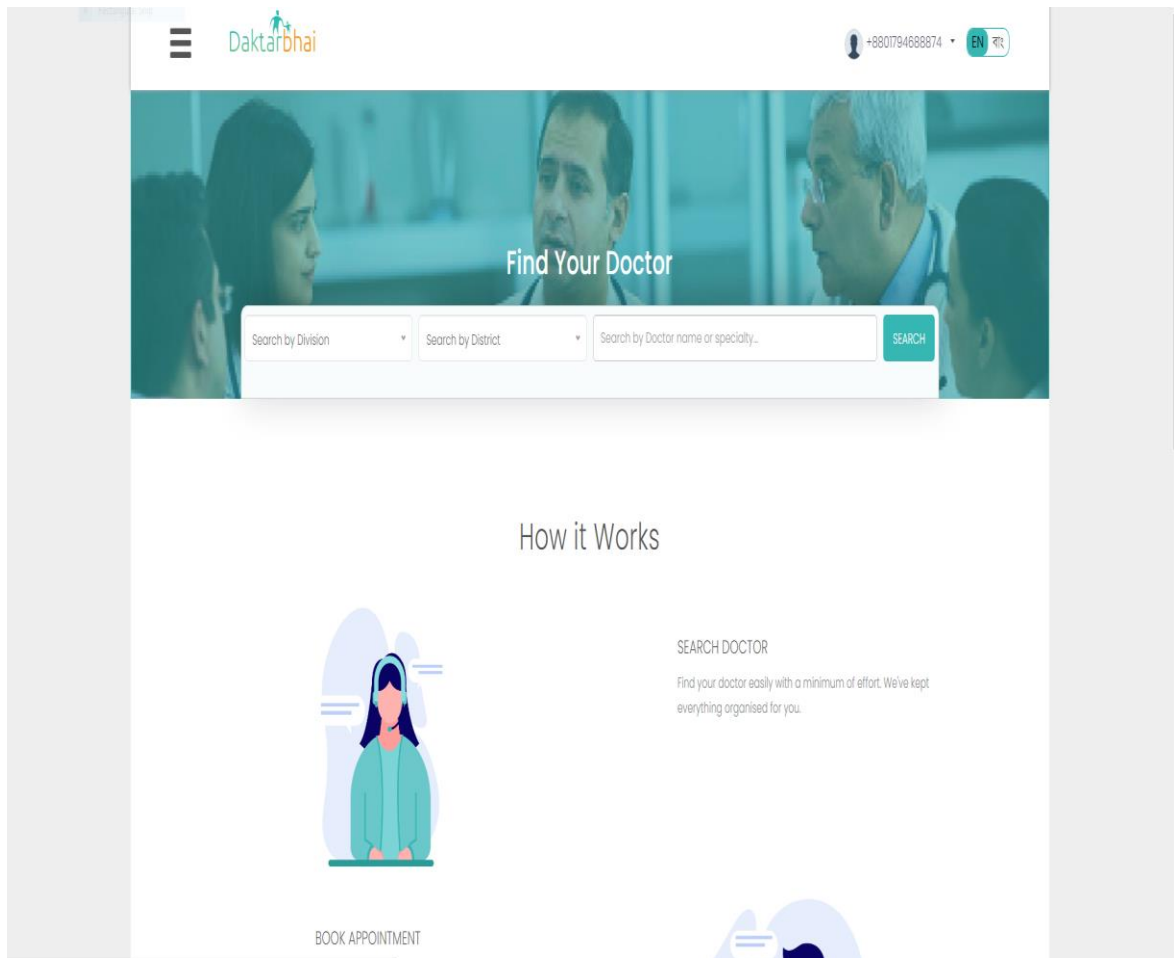


Figure 4: Doctor's Appointment Page

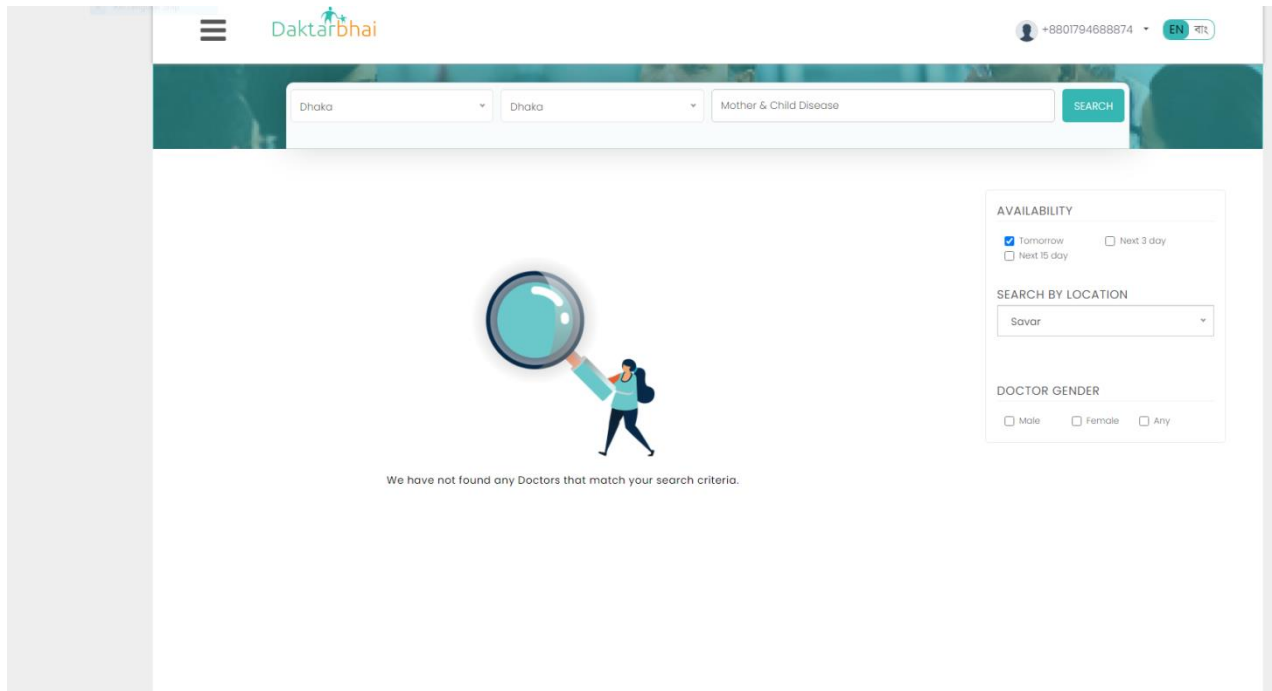


Figure 5: Doctor's Appointment Page

4.4 Project Requirements

- Time: Needs to completed within 3 months
- Budget: 360,000 BDT
- Environment: Should be worked correctly in all device
- Total Development Time 1 year 3 months

5. FEATURES NOT TO BE TESTED

- Network Security
- Hardware related issues
- Any personal information.
- Device testing
- User information
- Email
- Phone number
- User Address
- Marital Status

6. TESTING APPROACH

6.1 Testing Levels

- The testing for the SMS project will consist of Unit, System/Integration (combined) and Acceptance test levels. It is hoped that there will be at least one full time independent test person for system/integration testing. However, with the budget constraints and timeline established; most testing will be done by the test manager with the development teams' participation.
- UNIT Testing will be done by the developer and will be approved by the development team leader. Proof of unit testing (test case list, sample output, data printouts, and defect information) must be provided by the programmer to the team leader before unit testing will be accepted and passed on to the test person. All unit test information will also be provided to the test person.
- SYSTEM/INTEGRATION Testing will be performed by the test manager and development team leader with assistance from the individual developers as required. No specific test tools are available for this project. Programs will enter into System/Integration test after all critical defects have been corrected. A program may have up to two Major defects as long as they do not impede testing of the program (I.E. there is a work around for the error).
- ACCEPTANCE Testing will be performed by the actual end users with the assistance of the test manager and development team leader. The acceptance test will be done in parallel with the existing manual ZIP/FAX process for a period of one month after completion of the System/Integration test process.

6.2 Test Tools

The only test tools to be used are the standard AS/400 provided utilities and commands.

- The Program Development Manager (PDM) will be used as the source version configuration management tool in conjunction with the in-house check-in/check-out control utility. The check-in/out utility is part of each developer's standard AS/400 access menu.
- The initial prototypes for the new screens will be developed using the AS/400 Screen Design Aid (SDA). The initial layout and general content of the screens will be shown to the sales administration staff prior to proceeding with testing and development of the screens.

6.3 Meetings

The test team will meet once every two weeks 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

Project Name: Online Appoinment System		Test Designed by: Zobair		
Test Case ID: FR_1		Test Designed date: 23 April,2023		
Test Priority : Medium		Test Executed by: Zobair		
Module Name: Login Session		Test Execution date:23 April,2023		
Test Title: Verify login with valid mobile number				
Description: Test website for login page				
Precondition (If any): User must have valid username , phone number and password				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Go to the website 2.Click to Login 3.Enter phone number 4.Click Submit	Phone number:01794688874	User should Login into the application	As expected	Pass
Post Condition: An OTP code will sent to the user’s phonenumber. After that validated user data will stored in the database. Now User can login in to the system successfully.				

Project Name:		Test Designed by: Zobair		
Test Case ID: FR_2		Test Designed date:24 April,2023		
Test Priority : High		Test Executed by: Zobair		
Module Name: Edit Profile		Test Execution date:24 April,2023		
Test Title: Add Profile Picture and Email				
Description: Test website for user profile page				
Precondition (If any): FR_1				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1.Login as user 2.Go to profile 3.Go to Edit Profile 4.Add name 5.Select Gender 6.Select City 7.Select Blood Group 8.Enter DOB 9.Enter Email 10.Enter Password 11.Enter Confirm Password 12.Click Update profile	Name:Zobair Gender: Male City:Dhaka BG: O+ DOB:17-05-99 Email: zobairshafi06@gmail.com il.com Password: 1234 Confirm Password: 1234	Profile updated successfully	As expected	Pass
Post Condition: User is validated with database and successfully edited the profile. The account session details are logged in the database.				

Project Name:		Test Designed by: Abid		
Test Case ID: FR_3		Test Designed date:24 April,2023		
Test Priority : High		Test Executed by: Abid		
Module Name: Make an appointment		Test Execution date:24 April,2023		
Test Title: Search doctors and make an appointment				
Description: Test website for doctor’s appointment page				
Precondition (If any): Doctors have a valid profile				
Dependency: FR_3				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Go to home page. 2. Select Doctor Appointment 3. Add Division 4. Add District 5. Search by Doctor name or speciality 6. Click search	Division: Dhaka District:Dhaka Speciality:Gastro liver	Doctor’s list will be displayed if there is any	As expected	Pass
Post Condition: Doctor’s information will be updated.				

Project Name:		Test Designed by: Abid		
Test Case ID: FR_4		Test Designed date:24 April,2023		
Test Priority : High		Test Executed by: Abid		
Module Name: Appointment History		Test Execution date:24 April,2023		
Test Title: Check Appointment History				
Description: Test website for checking appointment history				
Precondition (If any): User should have a valid profile				
Dependency: FR_1				
Test Steps	Test Data	Expected Results	Actual Results	Status (Pass/Fail)
1. Login as user 2. Go to profile 3. Select Appointment History	Username: zobair	Appointment list displayed successfully	As expected	Pass
Post Condition: If user doesn't made any appointment then the user can book an appointment from here				

8. ITEM PASS/FAIL CRITERIA

To test every criteria of the system some test cases are written, and item test fail criteria depend on the pass/ fail of those test cases.

If the required criteria are fulfilled or it may show some minor error, then this item will be listed as passed item. But if the criteria are not fulfilled then those types of items are listed as failed

So, item pass fail criteria are depending on the test case pass fail process. Some modules may misbehave during the module testing, but same module could be worked after integrated with another module. So, we cannot just declare a module as failed if it's not behaved properly. In that cases, we will make dummy code or stub to run and test the module to check it is working or not, on every suspected situations and act as our desire. If so, we declare the module as passed. But if a test case is unable to run because of some environmental factor or input specification that cannot be properly set this should be noted during the pass of the test case.

Such a case should be reevaluated once the initial problems have been resolved.

9. TEST DELIVERABLES

- Acceptance test plan
- System/Integration test plan
- Unit test plans/turnover documentation
- Screen Prototypes
- Report mock-ups
- Defect/Incident reports and summaries
- Test logs and turnover reports

10.STAFFING AND TRAINING NEEDS

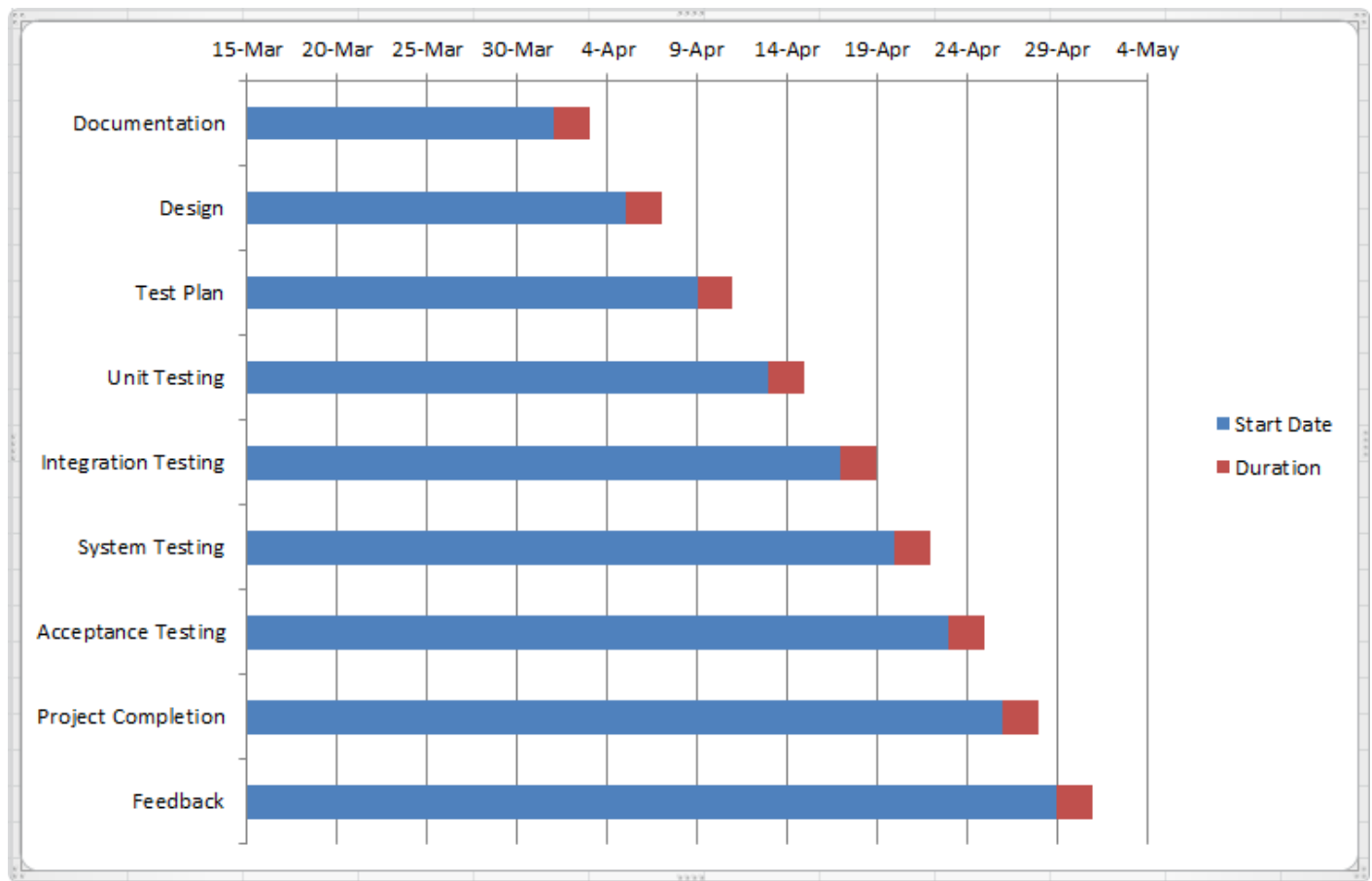
It is preferred that there will be at least one (1) full time tester assigned to the project for the system/integration and acceptance testing phases of the project. This will require assignment of a person part time at the beginning of the project to participate in reviews etc... and approximately four months into the project they would be assigned full time. If a separate test person is not available the project manager/test manager will assume this role. In order to provide complete and proper testing the following areas need to be addressed in terms of training.

- The developers and tester(s) will need to be trained on the basic operations of the EDI interface. Prior to final acceptance of the project the operations staff will also require complete training on the EDI communications process.
- The sales administration staff will require training on the new screens and reports.

11.RESPONSIBILITIES

	TM	PM	Dev Team	Test Team
Acceptance test Documentation & Execution	X	X		X
System/Integration test Documentation & Exec.	X		X	X
Unit test documentation & execution	X		X	X
System Design Reviews	X	X	X	X
Detail Design Reviews	X	X	X	X
Test procedures and rules		X	X	X

12. TESTING SCHEDULE



13. PLANNING RISKS AND CONTINGENCIES

A contingency plan is a plan devised for an outcome other than in the usual plan. It is often used for risk management for an exceptional risk that, though unlikely, would have catastrophic consequences. Contingency plans are often devised by governments or businesses. For example, suppose many employees of a company are traveling together on an aircraft which crashes, killing all aboard. The company could be severely strained or even ruined by such a loss.

Accordingly, many companies have procedures to follow in the event of such a disaster. The plan may also include standing policies to mitigate a disaster's potential impact, such as requiring employees to travel separately or limiting the number of employees on any one aircraft.

14.APROVALS

Project Sponsor	Sadman Sakib
Development Manager	Md.Arafat Hossain
Project Manager	Billah Hasan
Test Manager	Kuhaly Nasrin
Development Team Manager	Sifat Salehin