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Department of Computer Science  
Faculty of Science &Technology (FST)  
Fall 21 22

Section: A  
Software Quality Assurance and Testing

PROJECT TITLE: FINDING DOC

A Report submitted

By

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Software Test Plan

for

Finding Doc

Version 1.0 approved

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# Revision History

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| --- | --- | --- | --- |
| Revision | Date | Updated by | Update Comments |
| 0.1 | 13/12/21 | Tanvir Shofiul Alam | First Update |
| 0.2 | 15/12/21 | Nur Hossain | Second Update |
| 0.3 | 17/12/21 | Dash Sagor | Third Update |
| 0.4 | 18/12/21 | Talukder Wasimul Islam | Fourth Update |

# TEST PLAN IDENTIFIER: FINDING DOC

# REFERENCES

* Shimul, Md, Abdullah Al Mamur, Md Badhon, and Hasibul Malek. "Doctor Finder." (2019).
* Kannan RJ, Tamakuwala H, Kale S, Bhowmick HR. Doctor Finder: Find doctors on the Go. InIOP Conference Series: Materials Science and Engineering 2020 Sep 1 (Vol. 925, No. 1, p. 012038). IOP Publishing.
* Vaswani, Naveen, Vandana Patel, Ashish Saheta, Smit Shah, and Sumit Shah. "Al., Modified and Advanced System for Health Care Application." *International Research Journal of Engineering and Technology (IRJET)* 5, no. 03 (2018): 2395-0072
* D. Pandey, U. Suman, and A. K. Ramani, “An effective requirement engineering process model for software development and requirements management,” *Proc. - 2nd Int. Conf. Adv. Recent Technol. Commun. Comput. ARTCom 2010*, pp. 287–291, 2010, doi: 10.1109/ARTCom.2010.24.

# INTRODUCTION

## Background to the Problem

Doctors are one of the most important members of our society, as they play a critical part in our existence. For all of us, a medical system is more crucial than anything else in our country's current pandemic scenario. In these circumstances, going to the hospital for treatment is much riskier than many people who have suffered as a result of consulting with the wrong doctor for their health problems.

The fact that the majority of our country's residents are illiterate, and those who are educated are not adequately concerned about the threat, is one of the main reasons of this problem. Every doctor, they believe, is a specialist in every discipline. As a result, people obtain treatment from a variety of experts without fully understanding their specialty. As a result, many patients are in discomfort. If the problem is not addressed, the unhappiness will only get worse.

## Solution to the Problem

To address this issue, we attempted to create a program called "Finding Doc." The user will know about the best suitable doctor for him or her based on his or her own problems by using the software. So, it can be said that the solution can be feasible to meet the business objectives.

**User Index:**

There are 3-types of Users here. They are:

* Patient
* Doctor
* Admin

After registration 3 types of users can log in to the application

If a patient logs in, he can enter his issues and needs, and the best doctor for his treatment will be displayed. Patients can select the best doctor, appointment time, costs, and speak with the doctor from the list of doctors. He or she will also be able to schedule appointments based on their areas of interest.

If the doctor logs in, he will be able to see which patients want to contact him and who wants to schedule an appointment with him. If any questions occur, the doctor is the best person to ask.

If the admin logs in, he will be able to see and update the status of the patient and the doctor, such as when the patient was admitted, released, the cost of medical care, the income of the doctor, and so on.

This software is really easy to use. It will not present any issues to the user when working on it. The user's time is also saved by using this software. This program will assist a patient in locating the most appropriate physician. This idea will save time for patients because they will be able to contact with the doctor via email. As the schedule and fees are displayed, the patient will not face any difficulties, such as his or her current physical condition.

The software's purpose is to assist individuals in reducing their misery and perplexity, as well as to assist people all around the country.

# REQUEIREMNT SPECIFICATION

## System Features

Requirement Analysis:

**1. User Category:**

There are 3-types of Users here. They are:

* Patient
* Doctor
* Admin

**2. Feature List:**

In this project the Patient has the following features:

* Registration
* Profile
* Ask a question
* Available Doctors
* Book an Appointment

In this project the Doctor has the following features:

* Registration
* Profile

In this project the Admin has the following features:

* Profile
* Check doctor and patient data

For example,

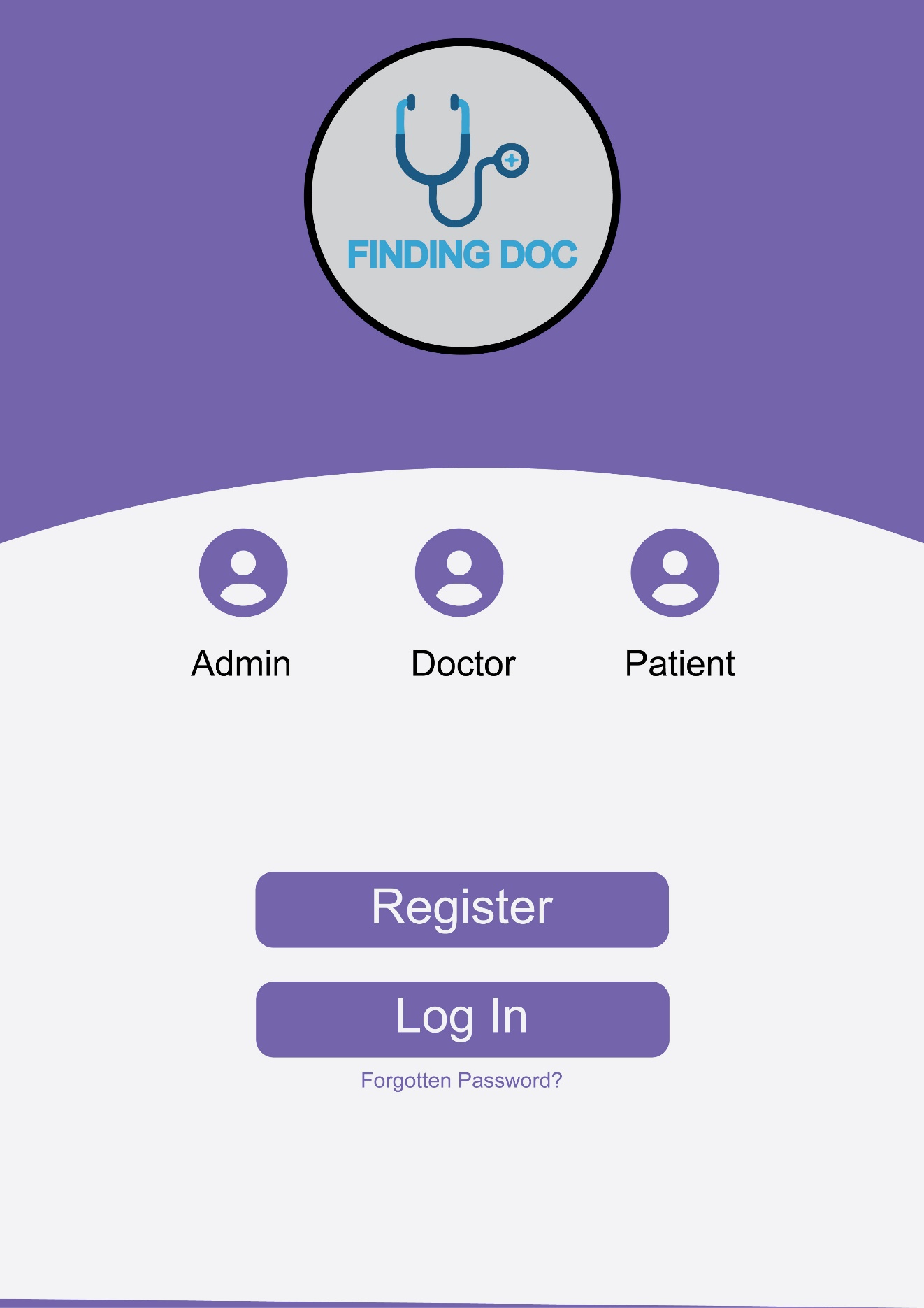
1. System Login Functional Requirements
   1. The software shall allow users to login with their given username and password
   2. If the username and/or password has been inserted wrong for more than three times, the random verification code will be generated by the system to retry login.
   3. If the number of login attempt exceed its limit (5 times), the system shall block the user account login for one hour *[optional function]*

Priority Level: High   
Precondition: user have valid user id and password

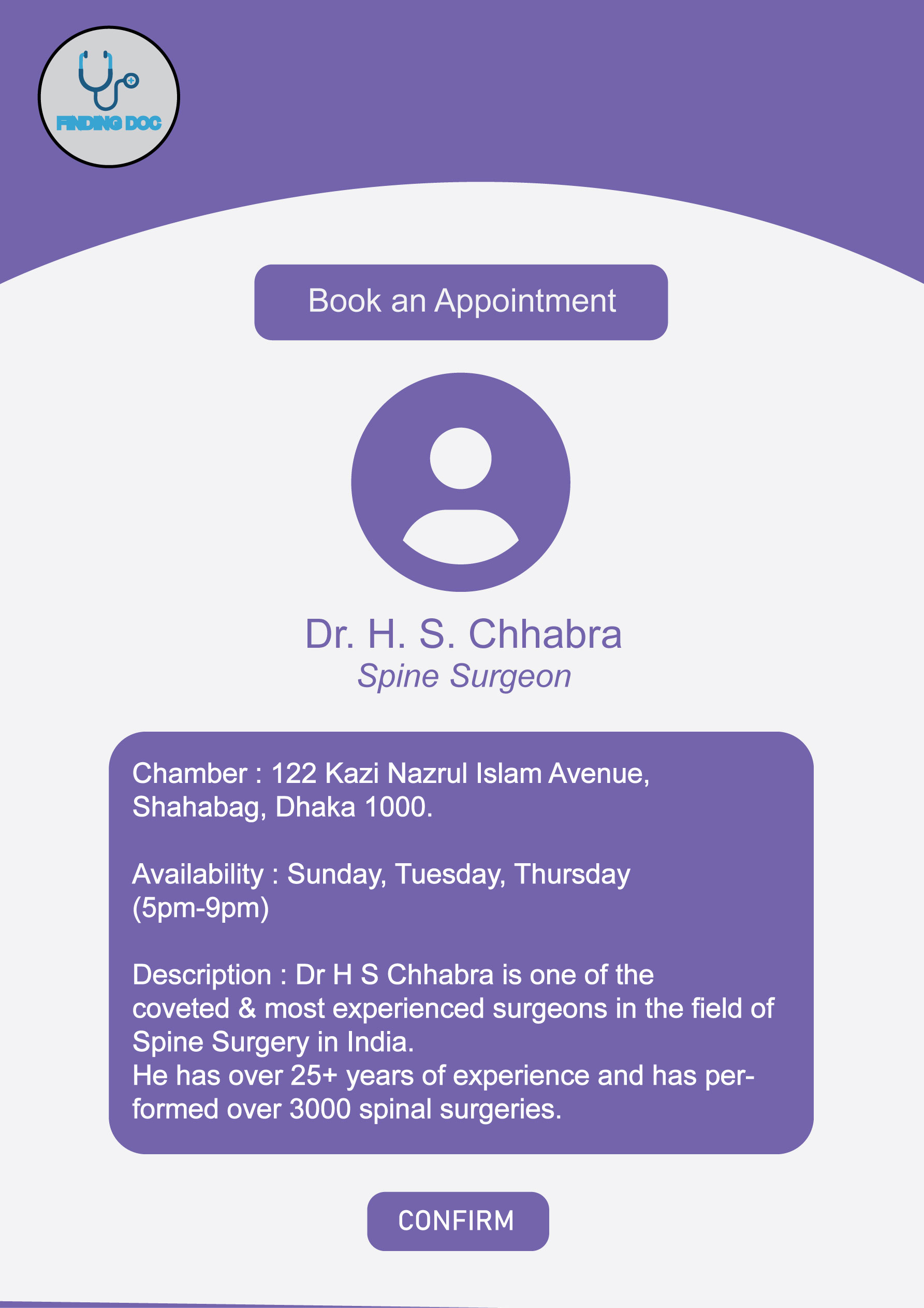
## System Quality Attributes

* Efficiency: The ability of a software system to fulfill its goal while utilizing all available resources as efficiently as possible. (e.g., time, storage)
* Portability: The ease with which a software system can be converted to run on platforms different than those for which it was designed.
* Reliability: A software system can be regarded reliable if it passes this test with a low error rate.
* Maintainability: How well a piece of software can be debugged in order to make changes and extensions to its functionality.

## System Interface







## Project Requirements

We must play a greater role in the development of this project due to our limited workforce and resources. As a professional tester is required for project testing, and we don't have one at the moment, we'll have to employ one. For us, it's a bonus budget. Some of our members are also untrained. As a result, they must be adequately trained, which will save money. We will incur some additional costs because our team is restricted and we must work on projects over time owing to scheduling constraints.

We require a unique work atmosphere in which we are free to work, which is also included in our budget. We'll also need some tools for testing, which will be included in our budget but will be an additional cost.

Budget:

Environment: 40,000bdt

Training: 15,000bdt

Testing: 50,000bdt

Tools: 20,000bdt

Few stuffs for 3 months: 1,00,000bdt

Extra Expense: 25,000bdt

Total Budget: 2,50,000bdt

Total Time: 4 Months.

# FEATURES NOT TO BE TESTED

The list of the features which is not tested are given below:

* There are some aspects that are connected to or similar to each other, and it is not required to test all of them.
* We will not verify the patient's and doctor's identities. Because both the patient and the doctor can switch from one to the other at any time.
* We won't check to see if a doctor is taking advantage of the system or doing something wrong.
* We will not investigate if the patient receives any personal benefits from the doctor.

# TESTING APPROACH

## Testing Levels

## We will be using Unit testing, Integration testing, System testing and Acceptance testing for our project “Finding Doc”. A full-time individual tester will be employed for the Integration and system testing. There will be a fixed amount of funds as well as a timetable established for this testing. Most of the test will be done by the test manager and the development team will help to finish the testing.

## Developers will perform the unit testing and a development team leader will look after the whole process. During the testing the main focus will be to determine if the components are fully functional or not. Before the unit testing is done, the programmer must submit test cases, an output, printed data and defect list. Before providing software to testers for formal testing, developers should perform unit tests. After That test person will receive all the information for formal testing.

## System testing and Integration testing will be performed by the test manager and development team leader. Developers will help them to complete the test. In this level the complete application will be tested as a whole. This project uses only standard AS/400 particular testing tools.

## After solving all the major defects, the application will go for Integration and System testing. Integration testing main task will be identify the interface flaws between modules/functions. System testing is critical since it ensures that the application complies with the customer's technical, functional, and business requirements. If it doesn’t affect the system application can contain up to two major defects.

* After completing the System and Integration testing, Acceptance testing will be conducted by the test manager and development test leader. The main task will be determined whether the system is ready for release. The Acceptance test will be run parallelly with the current ZIP OR FAX process for at least one month.

## Test Tools

## The only testing tools we are going to use is standard AS/400 programming languages and application development tools. It is the easiest, most productive, and most cost-effective tools for creating client and server applications. Which provides us with utilities and commands that we are going to use.

## The program development manager will use a control utility which is in house check-in and check-out as the main source version of layout management tools. For each of the developer’s there will be a standard AS/400 entrance check-in and check-out function on their main surface.

## The AS/400 will be used to create the prototypes that we are going to need for the testing. ADTS CS application tools help us to provide edit, compile, and debug facilities. It facilitates application development for hosts and clients. The original layout and general information of the displays will be delivered by the sales administration members.

## Meetings

## The testing team will meet Every day to look after the progress on this project. Every day, the testing team can evaluate the project and solve the possible defects that are found. The testing team leader will meet the project manager and development manager three times in a week. But team meetings will be held on different days. If an emergency situation occurs the manager/leader can call a meeting any time. Developers will be always in contact with the development manager.

|  |  |
| --- | --- |
| Project Name: Finding Doc | Test Designed by: Tanvir |
| Test Case ID: FR\_1 | Test Designed date: 12/12/21 |
| Test Priority (Low, Medium, High): Medium | Test Executed by: Wasimul, Sagor |
| Module Name: Complete project on Finding Doc | Test Execution date: 18/21/21 |
| Test Title: Verify whole project Design |  |
| Description: Patients search with their diseases and find the doctor. |  |
| Precondition (If any): User must give their name, address and phone number, problem to sign up. | |

# TEST CASES/TEST ITEMS

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Name** | **Test Data** | **Expected Results** | **Actual Results** | **Pass or Fails** | **Comments** |
| **Test case-1**  User click on the application and open it | Open for Everyone | A page will be appeared with tittle name “Welcome to the finding Doctor”Login and exit | As Expected | Passed | This test case is passed without any change. |
| **Test case-2**  Different types of user will enter the application | Doctors, Patients & Admin | Four types of user interface will appear. | As Expected 4 users appeared | Passed | This test case is passed without any change. |
| **Test case-3**  User log in to the system | Login, Signup(Username: TanvirPassword:7890) | After fill up the login page with necessary name and password “click next” will appear then application will ask “Don’t have an account?” “Please signup” | As Expected | Passed | This test case is passed without any intervene. |
| **Test case-4**  Register  Enter Email, Full Name, Address, Password,  Confirm password.  Submit. | [Sd27586@gmail.com](mailto:Sd27586@gmail.com)  Sagor Dash  Mohamodpur, Dhaka.  12345678,  12345678. | Go to a page with  “successful” message | A page with “Successful”  message | Passed | This action is passed with no  Requirements comprised. |
| **Test case-5**  Login  1.Enter user name  2.Enter password.  3.Click submit | Username: Sagor Dash  Password:12345678 | User will Successfully login | User Successfully login | Passed | This action is passed with no  Requirements comprised. |
| **Test Case-6**  Search:  1.fillup the problem type.  2.fillup the area.  3.click search | Problem  type: Lung cancer  Area: Mohamodpur, Dhaka. | Users will see a page containing Many doctors & chambers  around Mohamodpur, Dhaka. | Opens a page containing Many doctors  & chambers around Mohamodpur, Dhaka. | Passed | This action is passed with no  Requirements comprised. |
| **Test Case-7** Doctor’s  Profile:  1. Click on  Doctor’s picture | Doctor Picture: abc.jpg | It will Bring a page titled “Doctor’s Profile.” | It Bring a page titled “Doctor’s Profile.” | Passed | This action is passed with no  Requirements comprised. |
| **Test Case-8**  Doctor’s personal  Information:  1. click on Doctor’s profile.  2.click on about.  3.click on personal information. | Profile:  About:  Personal  information: | It will Bring a page that contains Doctor’s personal information | It Bring a page that contains Doctor’s personal information | Passed | This action is passed with no  Requirements comprised. |
| **Test Case-9**  Our Service:  1. scroll down  2.click on Right bottom of the Home.  3.click “Us  Services” | Home  Our service. | it will Bring a page that contains information about the service, | Open a page that contains information Not exactly as expected | Failed | This test case is failed. Because it doesn’t fulfill the requirement as expected. |
| **Test Case-10** Emergency Service: 1. click on our services. | 1. Online service  2. Medicine service.  3. Ambulance service. | It will bring an interface that contains ambulance service, Medicine service, Online service. | Not exactly as expected | Failed | The requirement isn’t totally fulfilled. |
| **Test Case-11** Appointment  1.input problem 2. input area. 3.search doctor. 4.click the appropriate doctor. 5.click the appointment section. | Problem  Area  Doctor  Appointment | It will Bring a page that contains the schedule, fees, chamber, address. | As expected | Passed | This action is passed with no requirements comprised. |
| **Test Case-12** Doctor’s List 1. Go to the Home.  2. Click on the top left button.  3. Click on the Doctor’s List | All the available Doctor’s List | It will bring a page that contain all the Doctor’s list | As expected | Passed | This action is passed with no requirements comprised. |
| **Test Case-13** Contact (patient to doctor)  1.Go to the doctors list. 2.Choose the doctor. 3. Go to the contact.  4. Compose email.  5. Send. | Doctor  email address.  Patient address Compose email.  Sent. | It will bring an email interface that patient can contact with doctor via email | As expected | Passed | This action is passed with no requirements comprised |
| **Test Case-13**  About Us 1. click on the right bottom of the corner. 2.click on the about us button. | Contact information. 1.address.  2.phone No.  3.email add.  4.website. | It will bring a page that contains all the information of the doctor finder community. | As expected | Passed | This action is passed with no requirements comprised. |

# ITEM PASS/FAIL CRITERIA

Once the beginning bunch of wholesalers has effectively turned in reallocated monetary reports for a month and the unused electronic information equalizations with the ancient ZIP/FAX information gotten in parallel, the test method will be wrapped up. When the deals organization group is fulfilled that the information is substantial, the primary set of wholesalers will be actuated, and all parallel preparing for those accounts will be impaired.

# 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

# STAFFING AND TRAINING NEEDS

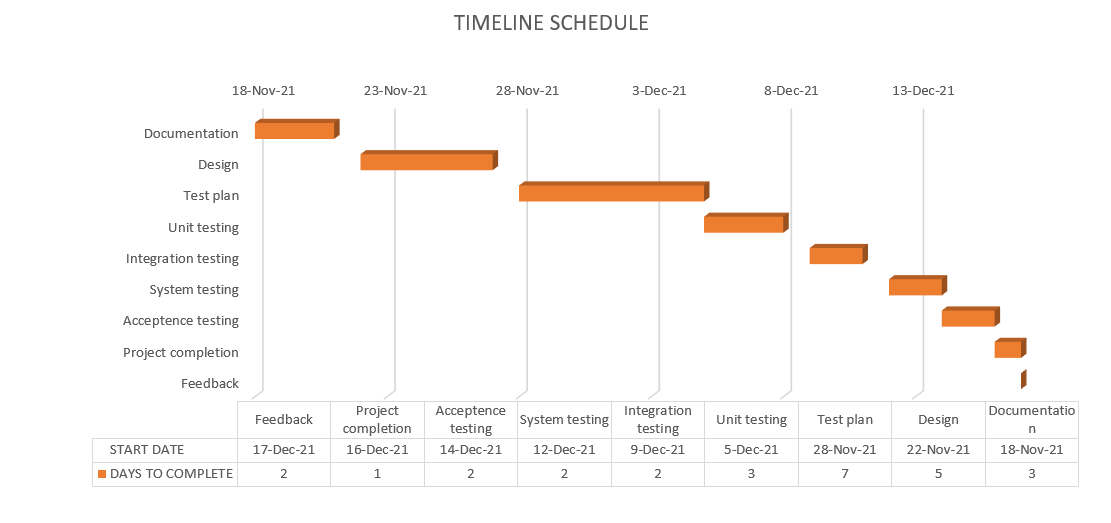
We understand one complete testing who could be allocated to the system/integration testing process stage of the project. We have to do tests instruction between ourselves because we have a tiny workforce, so he may support the testing site complete. Our project leader fulfills both duties in the project, being completed expert testing after getting training. As a consequence, we would have to increase the amount of pressure we put on this project. The EDI interface's foundations must be learned by developers. Alternatively, in the instance of sales administration, additional training was necessary to cover the new program and results.

# RESPONSIBILITIES

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | TM | PM | Dev  Team | Test  Team | Client |
| Documentation & execution |  |  | x | x | x |
| System Design Review | x |  | x | x | x |
| Unit Testing | x |  | x | x | x |
| Identify business requirements. | *  |  | x | x | x |
| Test procedures & rules | x | x | x |  | x |
| System Testing | x | x | x |  | x |
| Acceptance Testing | x | x | x |  | x |
| Monitor applications and software systems |  |  | x | x | x |
| Feedback |  |  | x | x |  |

# TESTING SCHEDULE

Time has been allocated within the project plan for the following testing activities. The specific dates and times for each activity are defined in the project plan timeline. The persons required for each process are detailed in the project timeline and plan as well. Coordination of the personnel required for each task, test team, development team, management and customer will be handled by the project manager in conjunction with the development and test team leaders.



# PLANNING RISKS AND CONTINGENCIES

Limited Reassigned Sales staff. The Reassigned Sales administration staff currently has two positions unfilled. As a result of this staff shortage there may be delays in getting staff to review appropriate documents and to participate in the Acceptance test process. Should client staff become a problem, the appropriate dates for reviews and acceptance testing will slip accordingly. No attempt will be made to bypass any part of the review and testing processes.

|  |  |
| --- | --- |
| Project Sponsor |  |
| Development Manager: Tanvir Shofiul Alam | Tanvir |
| Project Manager: Talukder, Wasimul Islam | Wasimul |
| Test Manager: Nur Hossain | Nur |
| Team Manager: Das Sagor | Sagor |

# APROVALS