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<Yekatit Care >

Test Plan Document

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# Introduction

Software testing is an investigation conducted to provide stakeholders with information about the quality of the product or service under test. Testing evaluates a software product to ensure that it satisfies its planned purpose. A test that is modified to and consistent with development methodologies provides an observable and structured approach for verifying requirements and quantifiable performance.

## Purpose

The purpose of our test plan is to uncover and report as many bugs as possible to increase our system reliability and to ensure the right product is developed.

# Features to be tested/not to tested

## Features to be tested

### Functional requirements to be tested

* **User Registration:** the level of risk for this feature is high because if all the fields of the registration form are not valid, registration will not be done.
* **Login:** the level of risk for this feature is high because once a user logged in to the system, if that user is not an authorized, the data will get accessed by unauthorized person.
* **Register Patient:** level of risk of this feature is medium because an employee can add unnecessary data.
* **Database Connection**: has high level risk because the entire system relies on the database functionality.

### Nonfunctional requirements to be tested

* **Performance:** this feature has a medium risk because the desired search results should be available at a required time.
* **Security:** the level of risk of this feature is high because if unregistered user access the data of the system data will get modified by unauthorized user.

# Pass/Fail criteria

The pass criteria at: - Unit Level

* If all test cases are completed
* A specified percentage of cases are completed with minor defects.

Integration level

* All test cases completed
* A specified percentage of cases are completed with minor defects.
* Integrated units communicate and interact smoothly and properly.

In general, the test will fail when the above-mentioned pass criteria have not reached an acceptable level.

# Approach/Strategy

The system will be tested using Unit testing which involves breaking programs into pieces, and subjecting each piece to a series of tests.

Performing unit tests is designed to be simple, generally the tests are written in the form of functions that will determine whether a returned value equals the value expected when a function (or the value you will expect when you eventually write it) is written. We used this approach because it becomes easier to detect bugs early on.

The software is developed in an organized way so as to make it easier for testing. The data fields of software features are managed carefully, thoroughly and attentively during the entire project and product life cycle. Since Configuration management determines clearly about the items that make up the software or system. These items include add record, registration, login and attach receipt and database connection.

# Test cases with specifications

### Test case specification for Patient Registration

*Table 1 Test case specification for Patient Registration*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name =** Register Patient | | | | |
| **Purpose =** To add patients to the system | | | | |
| **Test Data** = Name (invalid name, valid name, empty)  Age (valid age, empty)  Address (valid address, empty)  Phone (invalid phone, valid phone, empty)  Gender (not selected, selected)  Assign Doctor (not selected, selected) | | | | |
| **Input** | **Expected result** | **Data** | **Actual output** | **Pass/fail** |
| Empty Name and all other fields are valid | “Please provide your name” | Empty First Name and Any valid data for other fields | “Please provide your name” | Fail |
| Invalid Name and all other fields are valid | “Name must be greater than 3 characters” | If Name<3 characters  Any valid data for other fields | “Name must be greater than 3 characters” | Fail |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Empty Age and  Other fields are valid | “Age must be provided” | Empty Age and Any valid data for other fields | “Age must be provided” | Fail |
| Empty Address and all other fields are valid | “Please provide your address” | Empty Address and Any valid data for other fields | “Please provide your address” | Fail |
| Invalid Phone and all other fields are valid | “Phone number must be 10 digits” | Invalid Phone and Any valid data for other fields | “Phone number must be 10 digits” | Fail |
| Empty Phone and all other fields are valid | “Phone must be provided” | Empty Phone and all other fields are valid | “Phone must be provided” | Fail |
| Gender not selected and all other fields are valid | “Gender must be selected” | Gender not selected and all other fields are valid | “Gender must be selected” | Fail |
| Assign Doctor not selected and all other fields are valid | “A doctor must be assigned” | Assign Doctor not selected and all other fields are valid | “A doctor must be assigned” | Fail |
| All valid fields | “Patient registered successfully” | Any valid data for all fields | “Patient registered successfully” | Pass |

### Test case specification for Sign In

*Table 2 Test case specification for Sign In*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name =** Sign in | | | | |
| **Purpose =** To give account access to the user | | | | |
| **Test Data** = Email (invalid email, Valid email, empty)  Password (invalid password, valid password, empty) | | | | |
| **Input** | **Expected result** | **Data** | **Actual output** | **Pass/fail** |
| Empty Email and all other fields are valid | “Email or Password is invalid. please verify” | Empty Email and Any valid data for  other fields | “Email or Password is invalid. please verify” | Fail |
| Invalid Email and all other fields are valid | “Email or Password is invalid. please verify” | Invalid email and Any valid data for  Password | “Email or Password is invalid. please verify” | Fail |
| Empty Password And all other fields are valid | “Email or Password is invalid. please verify” | Empty Password And any valid data for other fields | “Email or Password is invalid. please verify” | Fail |
| Invalid Password And all other fields are valid | “Email or Password is invalid. please verify” | Invalid Password and  Any valid data for Email | “Email or Password is invalid. please verify” | Fail |
| All valid fields | “Signed in  successfully” | Any valid data for the  two fields | “Signed in  successfully” | Pass |

### Test case specification for Register Users

*Table 3 Test case specification for Register Users*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name =** Register Users | | | | |
| **Purpose =** To register users into the database | | | | |
| **Test Data** = First Name (invalid first name, valid first name, empty)  Last Name (invalid last name, valid last name, empty)  Email (invalid email number, valid email number, empty)  Role (invalid role, valid role, empty)  Password (invalid password, valid password, empty) | | | | |
| **Input** | **Expected result** | **Data** | **Actual output** | **Pass/fail** |
| Empty First Name and all other fields are  valid | “Please provide your first name” | Empty First Name and Any valid data for other fields | “Please provide your first name” | Fail |
| Invalid First Name and all other fields are valid | “First Name must be greater than 3 characters” | If First Name<3 characters  Any valid data for other fields | “First Name must be greater than 3 characters” | Fail |
| Empty Last Name and all other fields are  valid | “Please provide your last name” | Empty Last Name and Any valid data for other fields | “Please provide your last name” | Fail |
| Invalid Last Name and all other fields are valid | “Last Name must be greater than 3 characters” | If Last Name<3 characters  Any valid data for other fields | “Last Name must be greater than 3 characters” | Fail |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Empty Email and all other fields are  valid | “Please provide an email” | Empty Email and Any valid data for other fields | “Please provide an email” | Fail |
| Invalid Email and all other fields are valid | “Please provide a valid email” | If Email is of incorrect type  Any valid data for other fields | “Please provide a valid email” | Fail |
| Empty Role and all other fields are  valid | “Please provide your role” | Empty Role and Any valid data for other fields | “Please provide your role” | Fail |
| Invalid Role and all other fields are valid | “Please provide a valid role” | If Role is of incorrect type  Any valid data for other fields | “Please provide a valid role” | Fail |
| Empty Password and all other fields are  valid | “Please provide your password” | Empty Password and Any valid data for other fields | “Please provide your password” | Fail |
| Invalid Password and all other fields are valid | “Your password must at least 5 characters” | If Password <3 characters and Any valid data for other fields | “Your password must at least 5 characters” | Fail |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| All valid fields | “User has been registered successfully” | Any valid data for the two fields | “User has been registered successfully” | Pass |

# Reference

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