**Chapter 6: TESTING AND VALIDATION**

* 1. **Introduction**

Testing is a critical aspect of software development that ensures the quality and reliability of the software. It is a process of verifying that the software meets its requirements and specifications and performs as expected. Testing helps to identify defects, errors, and inconsistencies in the software and ensures that the software is free from bugs and meets the user's expectations.

This report aims to provide an introduction to testing and its importance in software development. It covers the basic concepts of testing, the different types of testing, and the benefits of testing.

**6.2 Design of Test Cases and scenarios**

**1.Login Page**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Test Case Objective** | **Input Data** | **Expected Output** | **Actual Output** | **Status** |
| TC1 | Checking the Email Format | abc.com | Email Address Badly Formatted | Email Address Badly Formatted | Pass |
| TC2 | Checking the Password field | 123 | The Password is Invalid | The Password is Invlid | Pass |
| TC3 | Putting Unregistered Email Address | abc@gamil.com | There is no User with this Email Address | There is no User with this Email Address | Pass |
| TC4 | Username Field is Left Blank | **-** | Email connot be empty | Email connot be empty | Pass |
| TC5 | Password Field is Left Blank | **-** | Password cannot be empty | Password cannot be empty | Pass |

Table 1

**2.Register Page**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Test Case Objective** | **Input Data** | **Expected Output** | **Actual Output** | **Status** |
| TC1 | Keeping Name field empty | - | Name connot be empty | Name connot be empty | Pass |
| TC2 | Keeping Email field empty | - | Email connot be empty | Email connot be empty | Pass |
| TC3 | Keeping Password field empty | - | Password cannot be empty | Password cannot be empty | Pass |
| TC4 | Keeping Confirm Password field empty | - | Confirm Password doesn’t match Password | Confirm Password doesn’t match Password | Pass |
| TC5 | Keeping Phone Number field empty | - | Phone Number cannot be empty | Phone Number cannot be empty | Pass |
| TC6 | Checking Length of Phone Number | 987654321 | Enter Correct Phone Number | Enter Correct Phone Number | Pass |
| TC7 | Giving Worng email Format | abc@gmail | Email Badly Foramtted | Email badly Formatted | Pass |

Table 2

**3.Book Appointment Page**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Test Case Objective** | **Input Data** | **Expected Output** | **Actual Output** | **Status** |
| TC1 | Keeping Name field empty | - | Name connot be empty | Name connot be empty | Pass |
| TC2 | Keeping Reason field empty | - | Reason connot be empty | Reason connot be empty | Pass |
| TC3 | Keeping Mobile No field empty | - | Mobile cannot be empty | Mobile cannot be empty | Pass |
| TC4 | Keeping Date field empty | - | Select a Date | Select a Date | Pass |
| TC5 | Not selecting a Doctor | - | Select a Doctor | Select a Doctor | Pass |

Table 3

**4.Doctor Login Page**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test Case ID** | **Test Case Objective** | **Input Data** | **Expected Output** | **Actual Output** | **Status** |
| TC1 | Checking Email Field | abc@gmail.com | Worng Email | Wrong Email | Pass |
| TC2 | Checking Email Field | Abc123 | Wrong Password | Wrong Password | Pass |
| TC3 | Checking Mobile Field | 987654321 | Enter Correct Number | Enter Correct Number | Pass |
| TC4 | Cheking OTP Field | 654321 | Enter Correct OTP | Enter Correct OTP | Pass |

Table 4

* 1. **Future Scope**

The future of doctor appointment systems is promising, as the healthcare industry continues to embrace technology and digital solutions. Here are some potential developments that could shape the future of doctor appointment systems:

1. Artificial Intelligence: The use of artificial intelligence (AI) could revolutionize the doctor appointment system, as it could help to automate various aspects of the appointment process, such as appointment scheduling, patient triage, and reminder notifications. AI-powered chatbots could also be used to handle patient inquiries and provide assistance.

2. Blockchain Technology: Blockchain technology could be used to enhance the security and privacy of doctor appointment systems, as it provides a decentralized and secure method of storing and sharing patient data.

3. Predictive Analytics: Predictive analytics could be used to anticipate patient needs and preferences, making it easier for doctors to schedule appointments and provide personalized care.

Overall, the future of doctor appointment systems looks bright, as technology continues to advance and transform the healthcare industry. With the right tools and strategies, doctor appointment systems can help to improve patient outcomes, reduce healthcare costs, and enhance the patient experience.