**TESTING**

**Overview**

The philosophy behind testing is to find errors. The common view of testing is that it is performed to prove that there are no errors in a program. However, this is virtually impossible since no program will be free and clear of errors. Therefore the useful and practical approach for tracing the errors was employed.

Testing is a process of executing the program with the explicit intension of finding errors, which makes the program fail. Hence a successful test is one, which finds an error. Testing is an activity, however, is not restricted to being performed after the development phase is complete, but is to be carried parallel with all stages of system development, starting with requirement specification.

Test cases were developed with this purpose in mind. A test case is a set of data that a system will process as normal input. The software units developed in the system are modules and routines that are assembled and integrated to perform the required function of the system.

The Test results once gathered and evaluated provide a qualitative indication of software quality and reliability and serve as a basis for design modification if required. In this phase, testing is done at different levels.

**Validation Testing**

Validation checks are performed on the following fields.

**I. Text Field:**

The text field can contain only the number of characters lesser than or equal to its size. The text fields are alphanumeric in some tables and alphabetic in other tables. Incorrect entry always flashes and error message.

**II. Numeric Field:**

The numeric field can contain only numbers from 0 to 9. An entry of any character flashes an error messages. The individual modules are checked for accuracy and what it has to perform. Each module is subjected to test run along with sample data. The individually tested modules are integrated into a single system. Testing involves executing the real data information is used in the program the existence of any program defect is inferred from the output. The testing should be planned so that all the requirements are individually tested.

**8.1 Test Plan**

Test plan consist of following points:

1. **Title of the Project**: **“**Space Customization and Non proprietary code sharing among the organization**”.**
2. **Objective of the document**: - In this test plan we are covering the activities and functionality of different modules and their sub modules. In this document we covering what kind of test cases should described.
3. **Scope of the document**: in this document, in each phase, what are going to do and how are going to do. In this section we are mentioning which requirements are testing. Take one module i.e. user login module.

For user module the client requirements are:

* + User name must be not less than 4 character and not greater than 10.
  + Username must start with character, not with digits.
  + Username should not contain any special character.
  + Password field should fill with at lest 4character.

The above requirements are only for login module and other functional requirements can declared in this section. The requirements which are declared in this section it may depend on other requirements on different module.

1. **Objective of Testing**: the main objective of testing in this application is to chances of preventing the defects on the client environment.
2. **Critical Functionalities**: - In this section we are discussing Key roles & Causes for success of application.
3. **Test Data Requirements and Collection**:-

In this section we are collecting the requirements for the application from different resources such as

* Collecting from the client.
* Referring the existing applications which are similar to current one’s

**8)** **Training Requirements**:-

Training requirements are focused in 2 areas

1. Technology – the new technology in the market and scope of that technology in the future.
2. Domain- the Existing personal Training knowledge.

**9)** **Resource Requirements: -** Here the required resources for the application are

* + Employees
  + Software Licenses
  + Bridge Number

**10)** **Scheduling: -** it specifies about Start Date and End Date of the application.

**11)** **Input Criteria: -** there are different criteria i.e. Unit Testing, Release Note & Installation.

**12)** **Exit Criteria: -** In this only evaluation documents only accepted.

**13)** **Risk Analysis: -** In this we are converse about Risk Analysis such as

* + - * 1. Risk on Resources.
        2. Risk on TimeLine.

Risks are identified by preparing solution plan.

**8.2 Test Cases**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Test No.** | **Advance Mode** | **Expected Result** | **Actual Result** | **Status** | **Remark** |
| **1** | Domain Name  (www.xyz.com) | No error | No error message display | Test Success | Nil |
| **2** | Domain Name  (www.gmail.com) | Error message:  Please Enter the new domain name | No error message display | Test failed | Because the domain name already exist. |
| **3** | E-Mail = abc@gmail.com | No Error | No error message display | Test failed | Nil |
| **4.** | E-Mail = abcde | Error message:  Please enter valid email id | No error message display | Test Success | Because you have to enter valid email id. |
| **5** | Phone Number = 9886098860 | No error | No error message display | Test Success | Nil |
| **6** | Phone Number = abcdefgh | Error message:  Please Enter Valid Phone number | No error message display | Test failed | Because you have to Enter only numerical values. |
| **7** | Phone Number = 9883433434 | No Error | No error message display | Test Success | Nil |
| **8** | Phone Number = 9883433434361231 | Error message:  Please Enter Valid Phone number | No error message display | Test failed | Because you have to Enter only 10 numerical values. |