### **1 Introduction**

The Test Plan is designed to prescribe the scope, approach, resources, and schedule of all testing activities of the project Bank.

The plan identifies the items to be tested, the features to be tested, the types of testing to be performed, the personnel responsible for testing, the resources and schedule required to complete testing, and the risks associated with the plan.

#### **1.1 Scope**

#### **1.1.1 In Scope**

All the feature of websiteGuru99 Bank which were defined in software requirement [specs](https://docs.google.com/document/d/1rPW5DV82VJT6vtA1VDSrfxaCBuAduxW0zb1yfTh_VMk/edit?pli=1) are need to be tested

| **Module Name** | **Applicable Roles** | **Description** |
| --- | --- | --- |
| Balance Enquiry | Manager Customer | **Customer**: A customer can have multiple bank accounts. He can  view balance of his accounts only  **Manager**: A manager can view balance of all the customers who  come under his supervision |
| Fund Transfer | Manager Customer | **Customer:** A customer can have transfer funds from his “own”  account to any destination account.  **Manager**: A manager can transfer funds from any source bank  account to destination account |
| Mini Statement | Manager Customer | A Mini statement will show last 5 transactions of an account  **Customer:** A customer can see mini-statement of only his “own”  accounts  **Manager:** A manager can see mini-statement of any account |
| Customized Statement | Manager Customer | A customized statement allows you to filter and display  transactions in an account based on date, transaction value  **Customer:** A customer can see Customized- statement of only  his “own” accounts  **Manager**: A manager can see Customized -statement of any  account |
| Change Password | Manager Customer | **Customer:** A customer can change password of only his account.  **Manager**: A manager can change password of only his account.  He cannot change passwords of his customers |
| New Customer | Manager | **Manager**: A manager can add a new customer. |
|  | Manager | **Manager:** A manager can edit details like address, email,  telephone of a customer. |
| New Account | Manager | Currently system provides 2 types of accounts  • Saving  • Current  A customer can have multiple saving accounts (one in his name,  other in a joint name etc).  He can have multiple current accounts for different companies  he owns.  Or he can have a multiple current and saving accounts.  **Manager:** A manager can add a new account for an existing  customer. |
| Edit Account | Manager | **Manager:** A manager can add a edit account details for an existing account |
| Delete Account | Manager | **Manager:** A manager can add a delete an account for a customer. |
| Delete Customer | Manager | A customer can be deleted only if he/she has no active current or saving accounts  **Manager:** A manager can delete a customer. |
| Deposit | Manager | **Manager:** A manager can deposit money into any account.  Usually done when cash is deposited at a bank branch. |
| Withdrawal | Manager | **Manager:** A manager can withdraw money from any account.  Usually done when cash is withdrawn at a bank branch. |

#### **1.1.2 Out of Scope**

These feature are not be tested because they are not included in the software requirement specs

* User Interfaces
* Hardware Interfaces
* Software Interfaces
* Database logical
* Communications Interfaces
* Website Security and Performance

### **1.2 Quality Objective**

The test objectives are to **verify** the Functionality of website Guru99 Bank, the project should focus on testing the **banking operation** such as Account Management, Withdrawal, and Balance…etc. to **guarantee** all these operation can work **normally** in real business environment.

### **1.3 Roles and Responsibilities**

The project should use **outsource** members as the tester to save the project cost.

| **No.** | **Member** | **Tasks** |
| --- | --- | --- |
| **1.** | Test Manager | Manage the whole project  Define project directions  Acquire appropriate resources |
| **2.** | Test | Identifying and describing appropriate test techniques/tools/automation architecture Verify and assess the Test Approach  Execute the tests, Log results, Report the defects.  Outsourced members |
| **3.** | Developer in Test | Implement the test cases, test program, test suite etc. |
| **4.** | Test Administrator | Builds up and ensures test environment and assets are managed and maintained  Support Tester to use the test environment for test execution |
| **5.** | SQA members | Take in charge of quality assurance  Check to confirm whether the testing process is meeting specified requirements |

### **2 Test Methodology**

### **2.1 Overview**

### **2.2 Test Levels**

In the project Guru99 Bank, there’re 3 types of testing should be conducted.

* **Integration** Testing (Individual software modules are combined and tested as a group)
* **System** Testing: Conducted on a **complete**, **integrated** system to evaluate the system’s compliance with its specified requirements
* [**API Testing**](https://www.guru99.com/api-testing.html)**:** Test all the APIs create for the software under tested

### **2.3 Bug Triage**

### **2.4 Suspension Criteria and Resumption Requirements**

If the team members report that there are **40%** of test cases **failed**, suspend testing until the development team fixes all the failed cases.

### **2.5 Test Completeness**

* Specifies the criteria that denote a **successful** completion of a test phase
* **Run** rate is mandatory to be **100%** unless a clear reason is given.
* **Pass** rate is **80%,** achieving the pass rate is **mandatory**

### **2.6 Project task and estimation and schedule**

| **Task** | **Members** | **Estimate effort** |
| --- | --- | --- |
| **Create the test specification** | Test Designer | 170 man-hour |
| **Perform Test Execution** | Tester, Test Administrator | 80 man-hour |
| **Test Report** | Tester | 10 man-hour |
| **Test Delivery** |  | 20 man-hour |
| **Total** |  | 280 man-hour |

**Schedule to complete these tasks**

### **3 Test Deliverables**

Test deliverables are provided as below

**Before testing phase**

* Test plans document.
* [Test cases](https://www.guru99.com/test-case.html) documents
* Test Design specifications.

**During the testing**

– Test Tool Simulators.

– [Test Data](https://www.guru99.com/software-testing-test-data.html)

– Test Trace-ability Matrix – Error logs and execution logs.

**After the testing cycles is over**

* Test Results/reports
* [Defect Report](https://www.guru99.com/defect-management-process.html)
* Installation/ Test procedures guidelines
* Release notes

### **4 Resource & Environment Needs**

### **4.1 Testing Tools**

| **No.** | **Resources** | **Descriptions** |
| --- | --- | --- |
| **1.** | Server | Need a Database server which install [MySQL](https://www.guru99.com/mysql-tutorial.html) server  Web server which install Apache Server |
| **2.** | Test tool | Develop a Test tool which can auto generate the test result to the predefined form and automated test execution |
| **3.** | Network | Setup a LAN Gigabit and 1 internet line with the speed at least 5 Mb/s |
| **4.** | Computer | At least 4 computer run Windows 7, Ram 2GB, CPU 3.4GHZ |

### **4.2 Test Environment**

It mentions the minimum hardware and software requirements that will be used to test the Application.

Following software’s are required in addition to client-specific software.

* Windows 11 and above
* Office 2021 and above
* MS Exchange, etc.