FINAL REPORT

SOFTWARE TESTING QUALITY ASSURANCE

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# LIST OF CONTENT

[TITLE PAGE 1](#_Toc201219094)

[LIST OF CONTENT 2](#_Toc201219095)

[LIST OF TABLE 3](#_Toc201219096)

[LIST OF FIGURE 4](#_Toc201219097)

[**TEST PLAN** 5](#_Toc201219098)

[**1. Introduction** 6](#_Toc201219099)

[1.1 Scope 6](#_Toc201219100)

[1.1.1 In Scope 6](#_Toc201219101)

[1.1.2 Out of Scope 6](#_Toc201219102)

[1.2 Quality Objective 7](#_Toc201219103)

[1.3 Roles and Responsibilities 7](#_Toc201219104)

[**2. Test Methodology** 8](#_Toc201219105)

[2.1 Overview 8](#_Toc201219106)

[2.2 Test Levels 8](#_Toc201219107)

[2.3 Bug Triage 8](#_Toc201219108)

[2.4 Suspension Criteria and Resumption Requirements 8](#_Toc201219109)

[2.5 Test Completeness 8](#_Toc201219110)

[2.6 Project task and estimation and schedule 8](#_Toc201219111)

[**3. Test Deliverables** 9](#_Toc201219112)

[**4. Resource & Environment Needs** 10](#_Toc201219113)

[4.1 Testing Tools 10](#_Toc201219114)

[4.2 Test Environment 10](#_Toc201219115)

[**REQUIREMENT TRACEABILITY MATRIX** 11](#_Toc201219116)

[**BUG REPORT** 13](#_Toc201219117)

[REFERENCE 15](#_Toc201219118)

# LIST OF TABLES

# LIST OF FIGURES

# **TEST PLAN**

# **1. Introduction**

Brief about your system. Example: The Test Plan is designed to prescribe the scope, approach, resources, and schedule of all testing activities of the project UMY Bank. The plan identify 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 website UMY Bank which were defined in software requirement [specs](https://docs.google.com/document/d/1rPW5DV82VJT6vtA1VDSrfxaCBuAduxW0zb1yfTh_VMk/edit?pli=1) are need to bested

Table 1. Software Features for Testing

|  |  |  |
| --- | --- | --- |
| **Module Name** | **Applicable Roles** | **Description** |
| Balance Enquiry | Customer | A customer can have multiple bank accounts. He can view balance of his accounts only |
| Manager | A manager can view the balance of all the customers who come under his supervision |
| Fund Transfer | 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 |
| Edit Account | Manager | A manager can add a edit account details for an existing account |

### 1.1.2 Out of Scope

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

* Hardware Interfaces
* Database logical
* Website Security and Performance

## 1.2 Quality Objective

The test objectives are to verify the Functionality of website UMY Bank, the project should focus on testing the banking operation such as Account Management, Withdrawal, and Balance…etc. to guarantee all these operations 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.

Table 2. Team Role and Responsibilities

|  |  |  |
| --- | --- | --- |
| No. | Member | Tasks |
| 1. | Test Manager (Puji) | Manage the whole project. Define project directions. Acquire appropriate resources |
| 2. | Tester (Fatania) | Identifying and describing appropriate test techniques/tools/automation architecture Verify and assessing the Test Approach Execute the tests, Log results, Report the defects. Outsourced members |
| 3. | Developer in Test | Implement 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 UMY Bank, there're types of testing should be conducted.

* Unit Testing
* 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
* User Acceptance Testing

## 2.3 Bug Triage

## 2.4 Suspension Criteria and Resumption Requirements

If the team members report that 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-hours |

**Schedule to complete these tasks**

# **3. Test Deliverables**

Test deliverables are provided as below

1. **Before testing phase**

* Test plans document.
* Test cases documents
* Test Design specifications.

1. **During the testing**

* Test Tool Simulators.
* Test Data
* Test Trace-ability Matrix - Error logs and execution logs.

1. **After the testing cycles is over**

* Test Results/reports
* Defect Report
* 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 server Web server which installs 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 computers run Windows 7, Ram 2GB, CPU 3.4GHZ |

## 4.2 Test Environment

Test Environment to be setup as per figure below

# **REQUIREMENT TRACEABILITY MATRIX**

This section requires the inclusion of a compiled Requirement Traceability Matrix (RTM). This RTM is a fundamental tool to verify that each project requirement has been thoroughly mapped, implemented and tested.

Students are required to attach the RTM table from the Excel spreadsheet into the Word document of this report. Ensure that the table is presented in a neat, detailed, and easy-to-read format. Don't forget to attach your full excel document in the form of a sharing link.

# **BUG REPORT**

This section aims to demonstrate your ability to identify, document, and manage bugs found during the testing process. Students are required to attach at least one example of a Bug Report that you have created based on the results of your project testing to the final report in Word format. Each Bug Report must be presented in a tidy, complete, and informative standard format, covering all important details so that developers can efficiently reproduce and fix the defects. **Include the execution report within Jira Software & don't forget to attach your complete Excel document in a shareable link format.**

Table 3. Detail Bug

|  |  |
| --- | --- |
| ID |  |
| Role |  |
| Module |  |
| Indate |  |
| Severity |  |
| Priority |  |
| Defect Note |  |
| Expected Result |  |
| Attachment |  |
| Status Dev |  |
| Tester Name |  |
| Status Test |  |
| Notes (optional) |  |

# REFERENCE