# TEST PLAN (Sparks Crypto Currency and Bank)

## Abstract

This document provides an overview of the project and the product test strategy, a list of testing deliverables, and a development plan. The Sparks Crypto Currency and Bank Project is committed to delivering world-class new cryptos and financial services for everyday B2B clients' needs.

Ricky Sparks
rickysparks@sparks_crypto.com

# VERSION HISTORY

| Version # | Written By | Revision Date | Approved By | Approval Date | Outline |
|---|---|---|---|---|---|
| 1.0 | Ricky J. Sparks | 2021/06/29 | Sophia Delgado | 2021/07/27 | Draft - Sparks Crypto Currency and Bank |
| | | | | | |
| | | | | | |
| | | | | | |

# TABLE OF CONTENTS

# INTRODUCTION

The Test Plan is designed to prescribe the scope, approach, resources, and schedule of all testing activities of the project: Sparks Crypto Currency and 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. **Test Strategy**
2. **1.1 Scope of Testing**
3. **1.1.1 Feature to be tested**

All the feature of Sparks Crypto Currency and Bank were defined in software requirement specs are needed to be tested.

| Module Name | Applicable Roles | Description |
|---|---|---|
| Balance Enquiry | Manager<br>Customer | **Customer:** A customer can have multiple bank accounts. The user can view the balance of their accounts only.<br>**Manager:** A manager can view balances of all the customers who come under their supervision. |
| Fund Transfer | Manager<br>Customer | **Customer:** A customer can have transfer funds from their "own" account to any destination account.<br>**Manager:** A manager can transfer funds from any source bank account to destination account. |
| Mini Statement | Manager<br>Customer | A mini statement will show the last 5 transactions of an account<br>**Customer:** A customer can see mini-statement of only their "own" accounts<br>**Manager:** A manager can see mini-statement of any account |

| Module Name | Applicable Roles | Description |
|---|---|---|
| Customized Statement | Manager<br>Customer | A customized statement allows you to filter and display transactions in an account based on date, transaction value<br>**Customer:** A customer can see Customized-statement of only their "own" accounts<br>**Manager:** A manager can see Customized-statement of any account |
| Change Password | Manager<br>Customer | **Customer:** A customer can change password of only their account.<br>**Manager:** A manager can change password of only their account. They cannot change passwords of their customers |
| 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<br>• Saving<br>• Checking (Current)<br><br>A customer can have multiple saving accounts (one in their name, other in a joint name etc).<br>Individuals can have multiple current accounts for different companies a person owns. Or a person 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 the individual has no active current or saving accounts<br>**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 Feature not to be tested

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 Test Type

In the project Sparks Crypto Currency and Bank, there are 3 types of testing that 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: Test all the APIs create for the software under tested

## 1.3 Risk and Issues

| Risk | Mitigation |
| --- | --- |
| Team member lack the required skills for website testing. | Plan training course to skill up your members |
| The project schedule is too tight; it's hard to complete this project on time | Set Test Priority for each of the test activity. |
| Test Manager has poor management skill | Plan leadership training for manager |
| A lack of cooperation negatively affects your employees' productivity | Encourage each team member in their task, and inspire them to greater efforts. |

| Risk | Mitigation |
| --- | --- |
| Wrong budget estimate and cost overruns | Establish the scope before beginning work, pay a lot of attention to project planning and constantly track and measure the progress |

### 1.4 Test Logistics

#### 1.4.1 Who will test?

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

#### 1.4.2 When will test occur?

The tester will start the test execution when all the following inputs are ready

- Software is available for testing
- Test Specification is created
- Test Environment is built
- Enough human resource for testing

## 2 TEST OBJECTIVE

The test objectives are to **verify** the Functionality of website Sparks Crypto Currency and 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 a real business environment.

## 3 TEST CRITERIA

### 3.1 Suspension Criteria

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

### 3.2 Exit Criteria

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**.

## 4 RESOURCE PLANNING

### 4.1 System Resource

| No. | Resources | Descriptions |
|---|---|---|
| 1 | Server | Need a Database server which install MySQL server<br>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 |

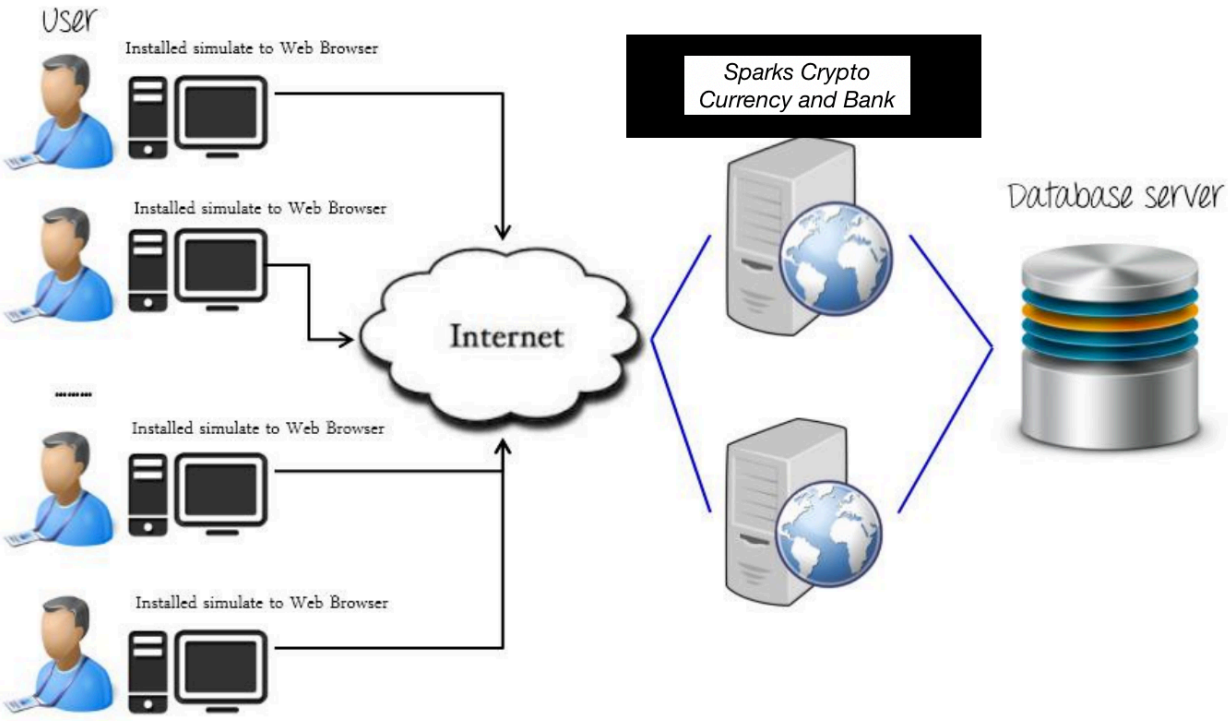
### 4.2 Human Resource

| No. | Member | Tasks |
|---|---|---|
| 1 | Test Manager | Manage the whole project<br>Define project directions<br>Acquire appropriate resources |
| 2 | Test | Identifying and describing appropriate test techniques/tools/ automation architecture<br>Verify and assess the Test Approach Execute the tests, Log results, Report the defects.<br>Outsourced members |

| No. | Member | Tasks |
|---|---|---|
| 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 |

## 5 TEST ENVIRONMENT

The Test Environment should be setup as figure below

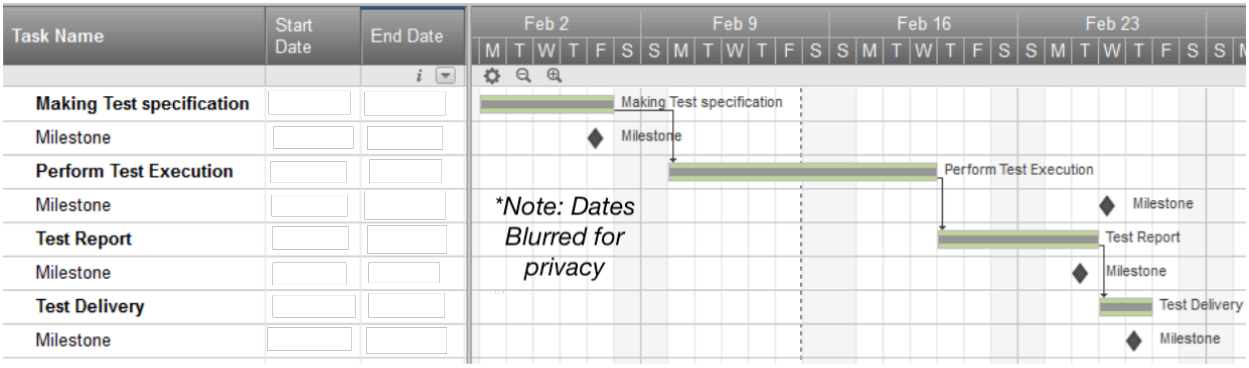


## 6 SCHEDULE & ESTIMATION

### 6.1 All project task and estimation

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

### 6.2 Schedule to complete these tasks




## 7 TEST DELIVERABLES

Test deliverables are provided as below

### 7.1 Before testing phase

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

### 7.2 During the testing

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

### 7.3 After the testing cycles is over

- **Test Results/reports**
- Defect Report
- Installation/ Test procedures guidelines
- **Release notes**