**Para Bank & Restful Booker Project**

**Software Requirements Specification**

**1.1**

**3/7/2025**

**Prepared for**

parabank.com

restful-booker.com

1. **Introduction**This document serves as the Software Requirements Specification (SRS) for the testing of Para Bank and Restful Booker. It defines the scope, objectives, and features to be tested.
   1. **Purpose**The purpose of this document is to outline the testing plan for

**Para Bank** and **Restful Booker** to ensure their functionality, reliability, and security.

* **Para Bank** will be tested for its customer-related features, including account management, transactions, and fund transfers.
* **Restful Booker** will be tested exclusively through its **API**, focusing on endpoints for booking creation, modification, deletion, and authentication.
  1. **Scope  
     This testing project covers:  
     1.2.1 Para Bank Functional Testing:**
* Customer login and authentication
* Account creation, balance inquiry, and fund transfers
* Transaction history validation
* Error handling and UI responsiveness

**1.2.2 Restful Booker API Testing:**

* Endpoint validation for booking management (Create, Read, Update, Delete)
* Authentication testing with API tokens
* Negative testing for invalid requests
* Performance and security checks

1. **Specific Requirements**

The Para Bank has 2 roles

1. Admin
2. Customer

Following features / modules will be available to these 2 different roles:

|  |  |
| --- | --- |
| **Admin** | **Customer** |
| Database | Open New Account |
| Data Access Mode | Accounts Overview |
| Web Service | Transfer Funds |
| Application Settings | Bill Pay |
| Accounts Overview | Find Transactions |
|  | Update Contact Info |
|  | Request Loan |
|  | Log in / Log out |

Description of the modules

|  |  |  |
| --- | --- | --- |
| **Module Name** | **Applicable Roles** | **Description** |
| Database | Admin | **Admin:** Admin caninitialize and clear database. |
| JMS Service | Admin | **Admin:** Admin can start or stop the service. |
| Data Access Mode | Admin | **Admin:** Admin can select connection mode (SOAP, REST (XML/JSON), JDBC). |
| Web Service | Admin | **Admin:** Admin can select the website service [WSDL | WADL | OpenAPI], set the SOAP Endpoint and REST Endpoint. Also can set an Endpoint to the LoanProcessor Service. |
| Application Settings “Configure account and loan settings” | Admin | **Admin:** Admin can set the initial and minimum balance amount.  Also, admin can change:   * the Loan Provider (Web Service, JMS, Local). * Loan Processor (Available Funds, Down Payment, Combined).   And set the Threshold percentage. |
| Accounts Overview | Customer | **Customer:** Customer can see his information |
| Open New Account | Customer | **Customer:** Customer can open new account |
| Transfer Funds | Customer | **Customer:** Customer can transfer funds |
| Bill Pay | Customer | **Customer:** Customer can bill pay |
| Update Contact Info | Customer | **Customer:** Customer can update his contact information |
| Request Loan | Customer | **Customer:** Customer can request loan |
| Log in / Log out | Customer | **Customer:** Customer can log in and log out |

* 1. **Front End Details**This section describes the Front end of **Para Bank**.

It also lists a few use cases to describe the functioning of the system.  
 Following is a list of module wise fields  
  
  
**Open New Account**

* Account type
* Deposited amount

**Transfer Funds**

* Amount of money
* From account no
* To account no

**Bill Pay**

* Payee name
* Address
* City
* State
* Zip code
* Phone
* Account no
* Verify Account
* Amount
* From account no

**Find Transactions**

* Account no
* Transaction ID
* Date
* Date Range
* Between
* And
* Amount

**Update Contact Info**

* First name
* Last name
* Address
* City
* State
* Zip code
* Phone

**Request Loan**

* Loan amount
* Down payment
* From account no

**3.2 Technical Requirements:**

**Personal Information**

**First Name**:

**T1.** Numbers are not allowed.

**T2.** Special characters are not allowed.

**T3.** Must not be blank.

**T4.** First character cannot have space.

**Last Name**:

**T5.** Numbers are not allowed.

**T6.** Special characters are not allowed.

**T7.** Must not be blank.

**T8.** First character cannot have space.

**Address**:

**T9.** Must not be blank.

**T10.** First character cannot have space.

**T11.** Special characters are not allowed.

**City**:

**T12.** Special characters are not allowed.

**T13.** Must not be blank.

**State**:

**T14.** Numbers are not allowed.

**T15.** Must not be blank.

**T16.** Special characters are not allowed.

**Zip Code**:

**T17.** Must be a 5-digit number (e.g., 12345).

**T18.** Must not be blank.

**T19.** Must not contain letters or special characters.

**Phone #**:

**T20.** Characters are not allowed.

**T21.** Must not contain special characters (except hyphens).

**T22.** Must not be blank.

**SSN**:

**T23.** Must be in the format: XXX-XX-XXXX (e.g., 123-45-6789).

**T24.** Must not contain letters or special characters (except hyphens).

**T25.** Must not be blank.

**Open New Account**

**Transfer Funds**

**Amount of Money**:

**T26.** Must be a numeric value.

**T27.** Must be greater than zero.

**From Account No**:

**T28.** Must be selected.

**T29.** Must be an exist account number.

**To Account No**:

**T30.** Must be selected.

**T31.** Must be an exist account number.

**Bill Pay**

**Payee Name**:

**T36.** Numbers are not allowed.

**T37.** Special characters are not allowed.

**T38.** Must not be blank.

**Address**:

**T39.** Must not be blank.

**T40.** First character cannot have space.

**T41.** Special characters are not allowed.

**City**:

**T42.** Special characters are not allowed.

**T43.** Must not be blank.

**State**:

**T44.** Numbers are not allowed.

**T45.** Must not be blank.

**T46.** Special characters are not allowed.

**Zip Code**:

**T47.** Must be a 5-digit number (e.g., 12345).

**T48.** Must not contain letters or special characters.

**Phone**:

**T49.** Characters are not allowed.

**T50.** Must not contain special characters (except hyphens).

**T51.** Must not be blank.

**Account No**:

**T52.** Must not be blank.

**T53.** Must be a valid account number.

**Verify Account**:

**T54.** Must match the account number provided.

**Amount**:

**T55.** Must be a numeric value.

**T56.** Must be greater than zero.

**From Account No**:

**T57.** Must not be blank.

**T58.** Must be a valid account number.

**Find Transactions**

**Account No**:

**T59.** Must not be blank.

**T60.** Must be a valid account number.

**Transaction ID**:

**T61.** Must not be blank.

**T62.** Must be a valid transaction ID.

**T63.** Must not contain characters or special characters.

**Date**:

**T64.** Must be in the format: MM/DD/YYYY.

**T65.** Must be a valid date.

**Date Range**:

**Between**:

**T66.** Must be in the format: MM/DD/YYYY.

**T67.** Must be a valid date.

**And**

**T68.** Must be in the format: MM/DD/YYYY.

**T69.** Must be a valid date.

**Amount**:

**T70.** Must be a numeric value.

**T71.** Must be greater than zero.

**Update Contact Info**

**First Name**:

**T72.** Numbers are not allowed.

**T73.** Special characters are not allowed.

**T74.** Must not be blank.

**T75.** First character cannot have space.

**Last Name**:

**T76.** Numbers are not allowed.

**T77.** Special characters are not allowed.

**T78.** Must not be blank.

**T79.** First character cannot have space.

**Address**:

**T80.** Must not be blank.

**T81.** First character cannot have space.

**T82.** Special characters are not allowed.

**City**:

**T83.** Special characters are not allowed.

**T84.** Must not be blank.

**T85.** First character cannot have space.

**State**:

**T86.** Numbers are not allowed.

**T87.** Must not be blank.

**T88.** Special characters are not allowed.

**T89.** First character cannot have space.

**Zip Code**:

**T90.** Must be a 5-digit number (e.g., 12345).

**T91.** Must not contain letters or special characters.

**Phone**:

**T92.** Characters are not allowed.

**T93.** Must not contain special characters (except hyphens).

**T94.** Must not be blank.

**Request Loan**

**Loan Amount**:

**T95.** Must be a numeric value.

**T96.** Must be greater than zero.

**Down Payment**:

**T97.** Must be a numeric value.

**T98.** Must be greater than or equal to zero.

**From Account No**:

**T99.** Must not be blank.

**T100.** Must be a valid account number.