Test Plan for ParaBank Application

1. Introduction

This document outlines the testing strategy for the ParaBank application, based on the provided screenshots attached below. Since written requirements are unavailable, test cases are derived from observed functionalities.

Scope: The ParaBank application includes customer login, account overview, fund transfers, bill payments, and other banking services. Testing will cover functional, non-functional, performance, API, and security aspects across Google Chrome and Safari browsers.

Test Team: 3 Testers

Test Duration: 30 Days

2. Test Strategy

2.1 Functional Testing

- **Customer Login**

  - Verify valid user login with correct credentials
  - Verify login failure with incorrect credentials
  - Verify 'Forgot login info?' functionality
  - Verify new user registration
- **Account Services**

  - Open new account
  - View account overview (balance, available amount)
  - Transfer funds between accounts
  - Bill payment functionality
  - View transaction history
  - Update contact information
  - Loan request process

- ○ Log out functionality
- **Navigation & UI**

  - ○ Ensure all menu links work correctly
  - ○ Validate correct page redirections
  - ○ Verify text, buttons, and form fields display properly

2.2 Non-Functional Testing

- **Compatibility Testing**

  - ○ Verify application responsiveness on Chrome and Safari
  - ○ Check UI consistency across different screen resolutions
- **Usability Testing**

  - ○ Ensure intuitive navigation for users
  - ○ Verify error messages are user-friendly
  - ○ Ensure color contrast and font readability

2.3 Performance Testing

- **Load Testing**

  - ○ Simulate multiple concurrent logins
  - ○ Test account balance retrieval under high user load
- **Stress Testing**

  - ○ Push system beyond capacity to identify breaking points
  - ○ Monitor application response times under heavy traffic

2.4 API Testing

- **Authentication APIs**

  - ○ Verify login and session management APIs
  - ○ Check password recovery API responses
- **Account APIs**

- - Validate API calls for balance retrieval, fund transfers, and bill payments
    - Ensure correct data response formats (JSON/XML)
  - **Error Handling**

    - Test API responses for invalid requests
    - Ensure correct HTTP status codes are returned

2.5 Security Testing

- **Authentication & Authorization**

  - Test SQL injection and XSS vulnerabilities on login fields
  - Verify session expiration and logout behavior
  - Ensure password encryption
- **Data Protection**

  - Verify SSL/TLS security implementation
  - Test API request and response encryption

3. Test Environment

- **Browsers**: Chrome (latest), Safari (latest)
- **Operating Systems**: Windows 11, macOS Sonoma
- **Test Data**: Sample user accounts, valid and invalid credentials

4. Test Execution Plan

| Phase	Duration	Activities
Week 1	5 days	Test environment setup, smoke testing
Week 2	7 days	Functional and usability testing. Automation
Week 3	7 days	API, security, and performance testing. Automation
Week 4	7 days	Regression testing, bug verification, final reports

5. Test Deliverables

- Test cases
- Test execution reports
- Bug reports
- Performance and security assessment
- Automation tests for E2E and API
- Final test summary report

6. Risks & Mitigation

- **Unclear Requirements** → Regular communication with stakeholders to clarify functionalities
- **Limited Timeframe** → Prioritization of critical test cases first
- **Browser Compatibility Issues** → Early detection through parallel browser testing

7. Attachments
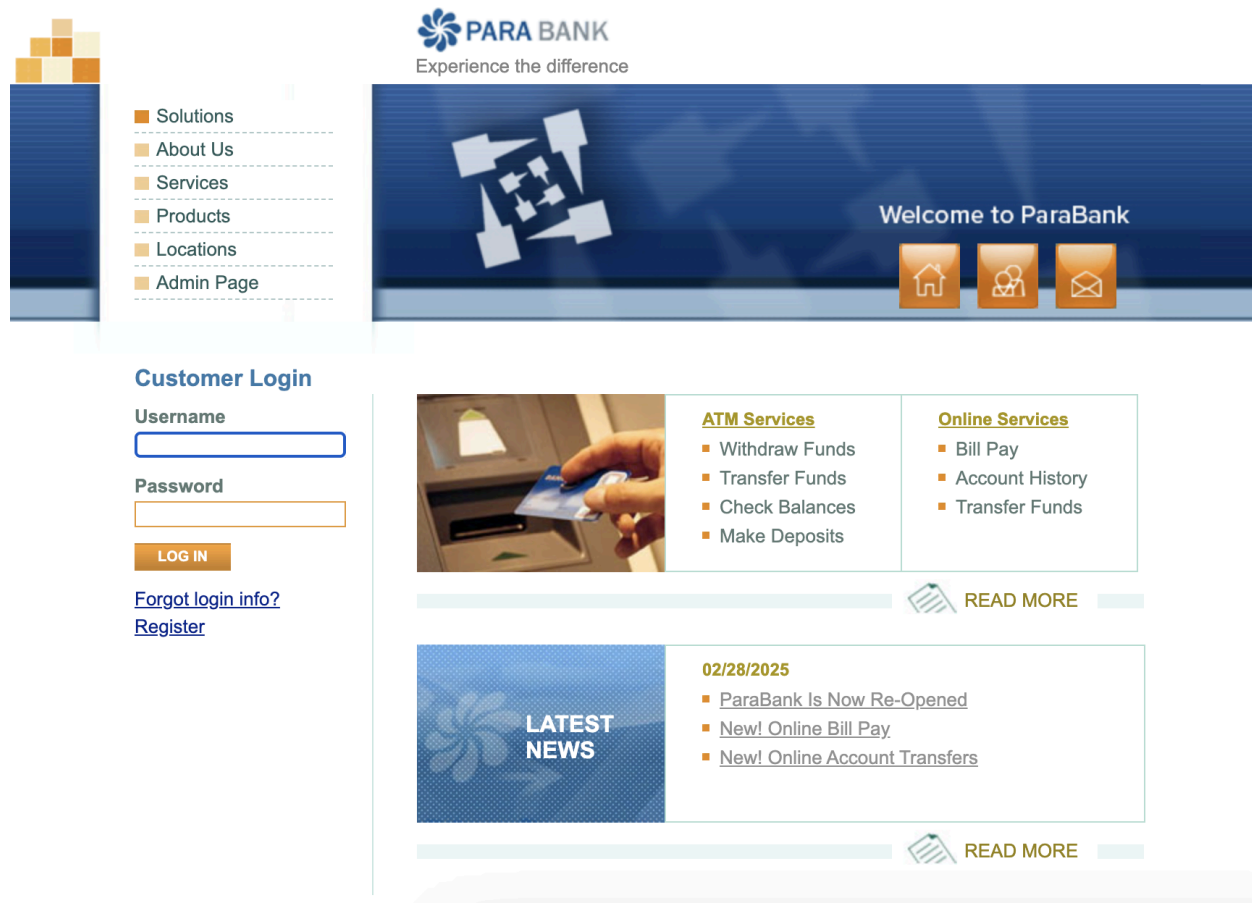
PARA BANK
Experience the difference

- Solutions
- About Us
- Services
- Products
- Locations
- Admin Page

Welcome to Account Services

Welcome maria popa

Account Services

- Open New Account
- Accounts Overview
- Transfer Funds
- Bill Pay
- Find Transactions
- Update Contact Info
- Request Loan
- Log Out

Accounts Overview

Account	Balance*	Available Amount
15786	$515.50	$515.50
Total	**$515.50**	

*Balance includes deposits that may be subject to holds

Home | About Us | Services | Products | Locations | Forum | Site Map | Contact Us

8. Approval

Prepared By: Johanna Calderon
Reviewed By: [Reviewer Name]
Approval Date: [Date]