

SOFTWARE QUALITY ASSURANCE

Online Banking System



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Introduction



The importance of testing in guaranteeing the dependability, security, and usability of online banking systems cannot be overstated. Online banking systems are sophisticated software applications that process sensitive financial transactions and user information. Thorough testing of these systems is required to discover and correct any flaws or vulnerabilities that might jeopardize the system's integrity or jeopardize user data.

The main purpose of testing an online banking system is to guarantee that it works properly and satisfies the standards. This includes ensuring that all features and operations, such as user identification, account management, fund transfers, bill payments, and transaction history, perform as intended. It also contains scenarios like valid and incorrect inputs, error handling, and system performance under various loads.

Requirement

REQUIREMENT AND TEST MANAGEMENT FOR JIRA

DashboardRequirementsTest CasesTest PlansTest ExecutionsDefectsReports

MB-1 Admin Homepage

MB-2 Admin Logout

MB-3 Navigation

MB-4 Secure Experience

MB-5 Valid Credentials

MB-6 Add Customer

MB-7 Add Staff

MB-8 Add Beneficiaries

MB-9 Beneficiaries Process

MB-10 Customer Login/Logout

MB / Requirements / MB-1 Admin Homepage

MB-1 Admin Homepage

DetailsTest CasesRelations

Status	TO DO	Fix versio...	None	Epic Link	None	Last upd...	13/Jun/23 7:11 PM
Issue Type	Functional Requirement	Assignee	Unassigned	Sprint	None		
Compon...	None	Priority	High	RTM Envi...	None		
Reporter	Dana	Labels	ACCESSIBILITYACCOUNTSAMPLE RTM	Created	27/May/23 2:48 AM		

REQUIREMENT AND TEST MANAGEMENT FOR JIRA

DashboardRequirementsTest CasesTest PlansTest ExecutionsDefectsReports

MB-11 Customer Account

MB-12 ATM Process

MB-13 ATM Card Issuance

MB-14 Mini Account Statement

MB-15 Password

MB-16 Beneficiaries Approval By S

MB-17 ATM Card Issuance Approv

MB-18 Cheque Request Approval

MB-19 Staff Login/Logout

MB-20 FAQ

MB / Requirements / MB-1 Admin Homepage

MB-1 Admin Homepage

DetailsTest CasesRelations

Status	TO DO	Fix versio...	None	Epic Link	None	Last upd...	13/Jun/23 7:11 PM
Issue Type	Functional Requirement	Assignee	Unassigned	Sprint	None		
Compon...	None	Priority	High	RTM Envi...	None		
Reporter	Dana	Labels	ACCESSIBILITYACCOUNTSAMPLE RTMPASSWORDS	Created	27/May/23 2:48 AM		

Test Case

REQUIREMENT AND TEST MANAGEMENT FOR JIRA

DashboardRequirementsTest CasesTest PlansTest ExecutionsDefectsReports

MB-21 Admin Accesses Admin Ho

MB-22 Admin Logs Out

MB-23 Admin Navigation Bar

MB-24 Secure Online Banking Exp

MB-25 Admin Login with Valid Cre

MB-26 Addition of Customer

MB-27 Addition of Staff Member

MB-28 Addition of Beneficiary By

MB-29 Customer Login

MB-30 Customer Logout

MB / Test Cases / MB-23 Admin Navigation Bar

MB-23 Admin Navigation Bar

DetailsStepsRequirementsRelations

Status	TO DO	Fix versio...	None	Labels	ACCESSIBILITY	RTM Envi...	None
Compon...	None	Assignee	Unassigned	Epic Link	NONE	Created	13/Jun/23 3:47 PM
Reporter	Dana	Priority	Medium	Sprint	None	Last upd...	13/Jun/23 4:59 PM

REQUIREMENT AND TEST MANAGEMENT FOR JIRA

DashboardRequirementsTest CasesTest PlansTest ExecutionsDefectsReports

MB-31 View Account Summary

MB-32 ATM Card Issuance Reques

MB-33 View Mini Account Statem

MB-34 Customer Password Chang

MB-35 Beneficiary Approval By Sta

MB-36 ATM Card Issuance Approv

MB-37 Cheque Request Approval

MB-38 Staff Login

MB-39 Staff Logout

MB-41 Frequently Asked Question

MB / Test Cases / MB-23 Admin Navigation Bar

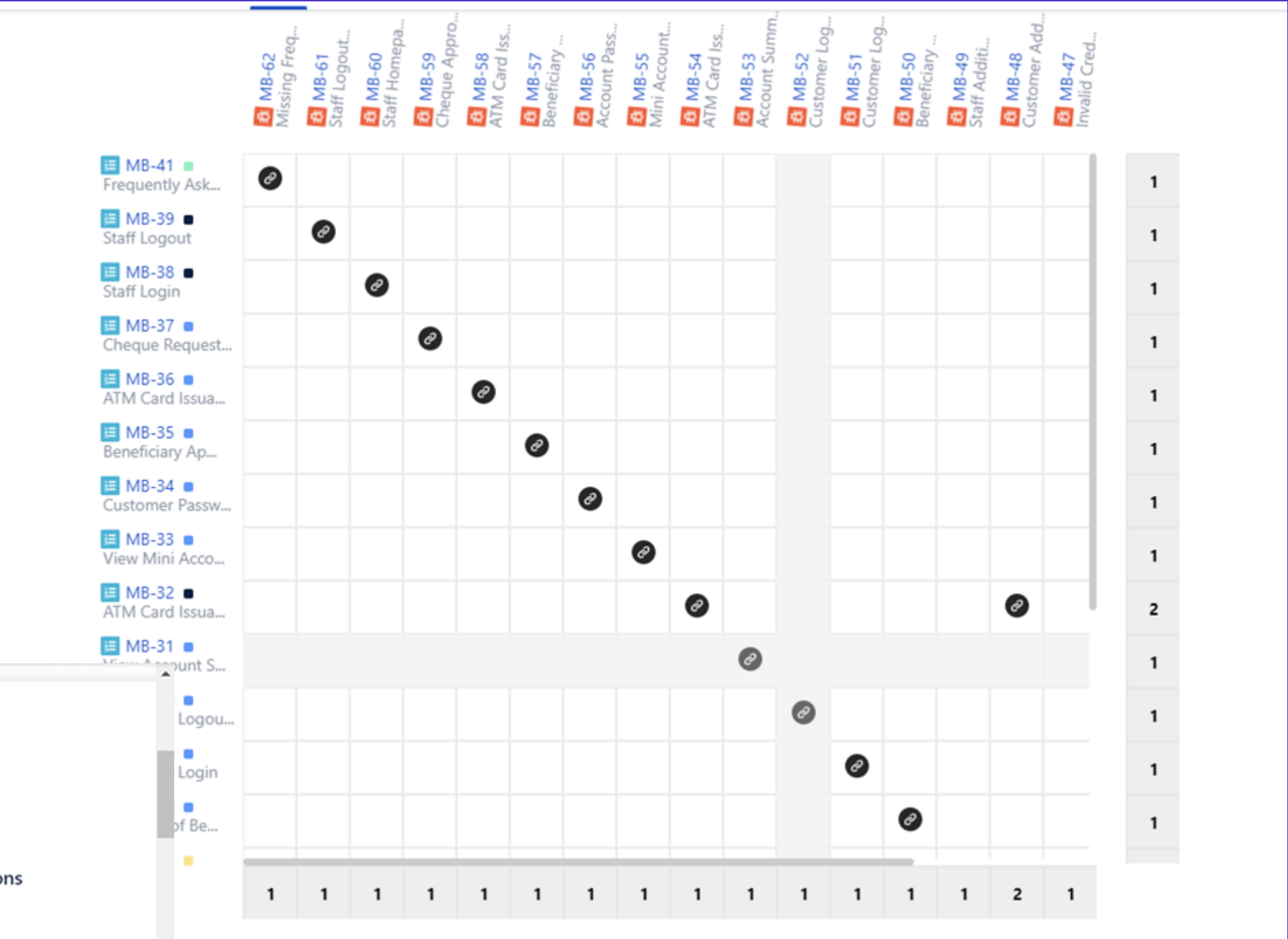
MB-23 Admin Navigation Bar

DetailsStepsRequirementsRelations

Status	TO DO	Fix versio...	None	Labels	ACCESSIBILITY	RTM Envi...	None
Compon...	None	Assignee	Unassigned	Epic Link	NONE	Created	13/Jun/23 3:47 PM
Reporter	Dana	Priority	Medium	Sprint	None	Last upd...	13/Jun/23 4:59 PM

Report of Testing

Coverage Report



Traceability Report

Export

Coverage for MB 14-06-2023

Requirements

MB-19

To Do

Summary: Staff Login/Logout
Assignee: Unassigned
Fix Versions: Unset
Components: Unset
RTM Environment: Unset
Labels: Accessibility, Account, Sample_RTM

Test Cases

MB-38

To Do

Summary: Staff Login
Assignee: Unassigned
Fix Versions: Unset
Components: Unset
RTM Environment: Unset
Labels: Accessibility, Account, Sample_RTM, passwords

Test Plans

MB-40

To Do

Summary: Test Plan For Online Banking System
Assignee: Unassigned
Fix Versions: Unset
Components: Unset
RTM Environment: Unset
Labels: Sample_RTM

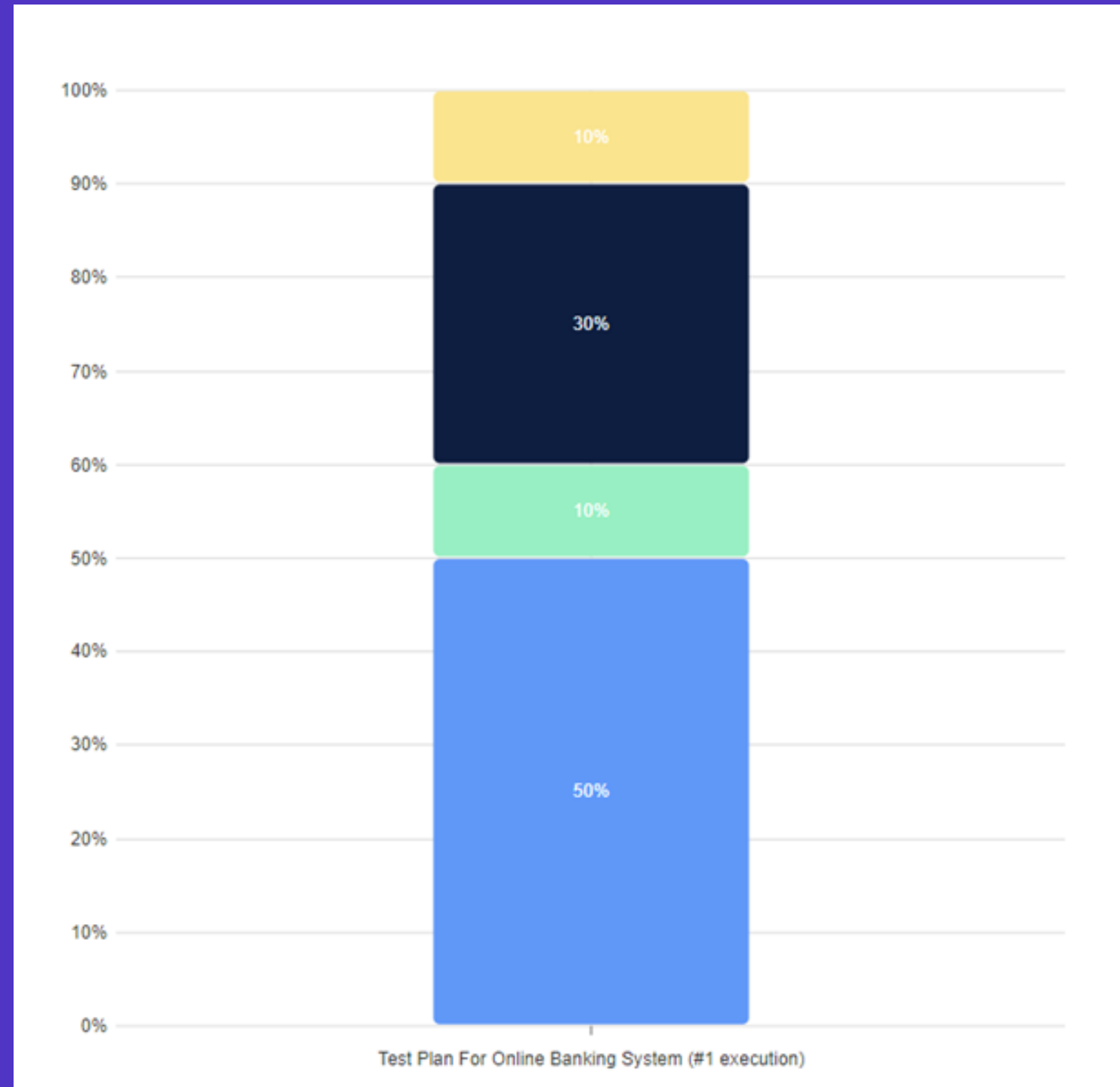
Test Executions

MB-42

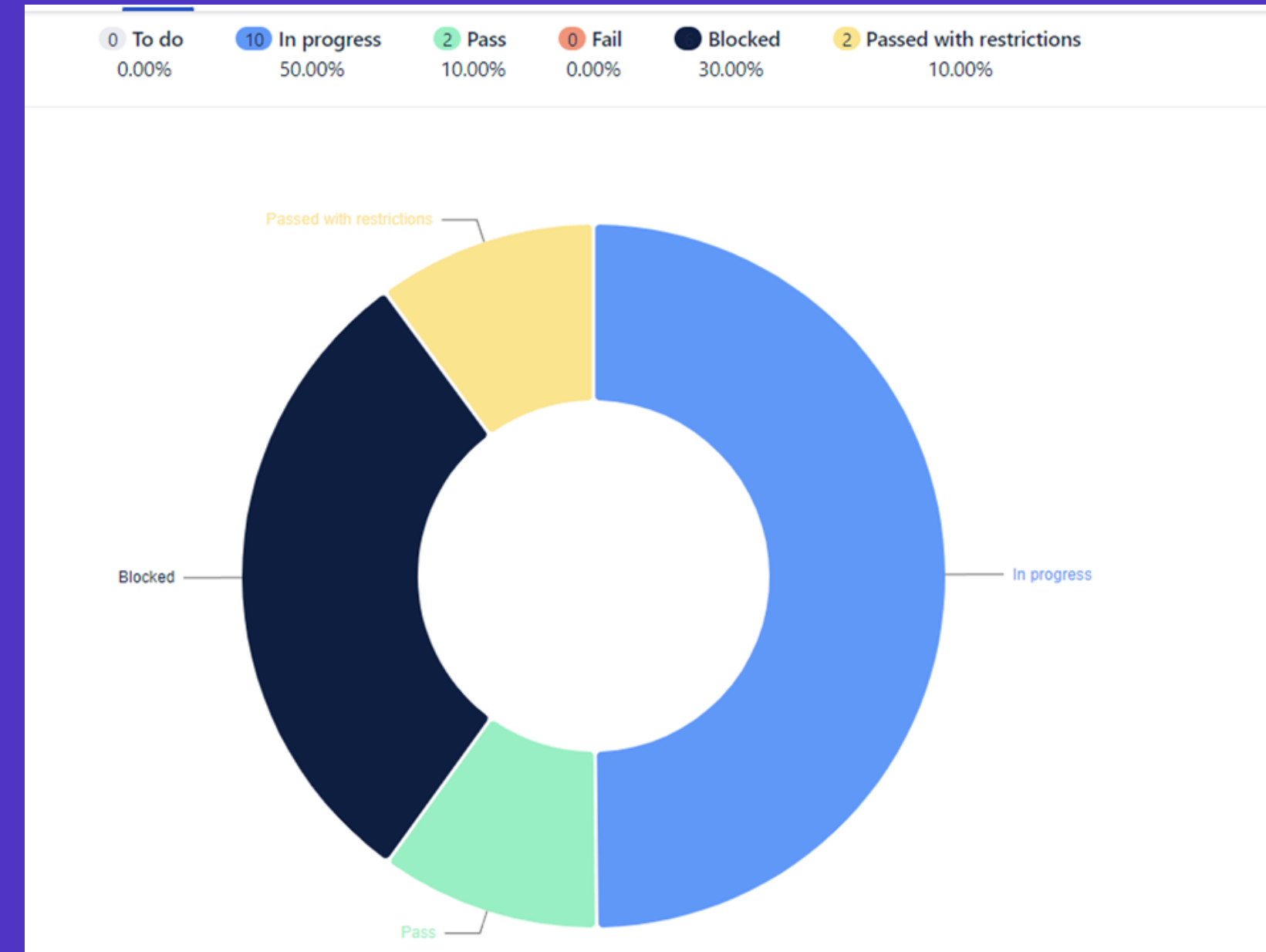
To Do

Summary: Test Plan For Online Banking System (#1 execution)
Assignee: Unassigned
Fix Versions: Unset
Components: Unset
RTM Environment: Unset
Result: To do
Labels: Unset

Report of Testing



Test Execution



Test Case Execution

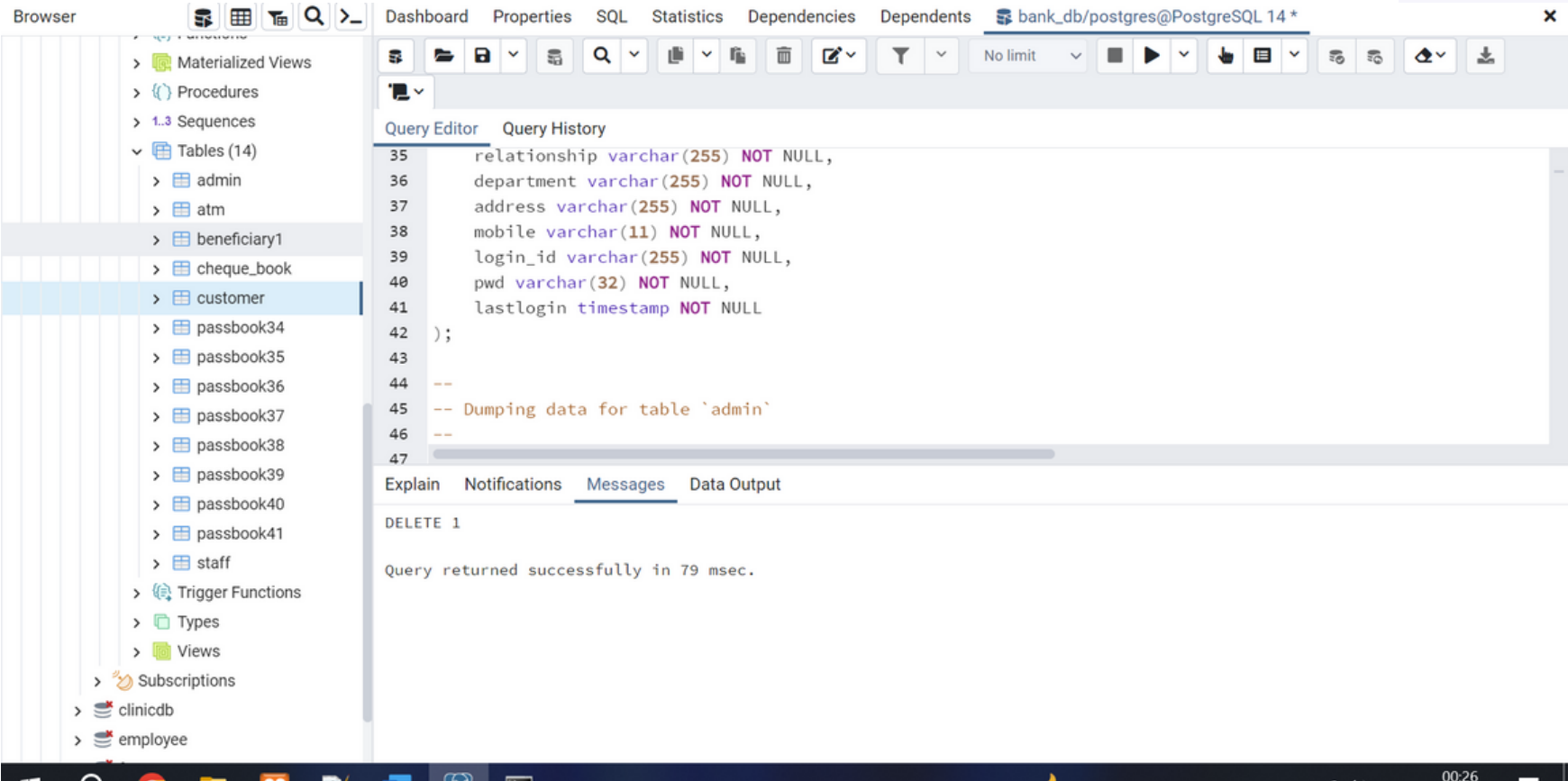
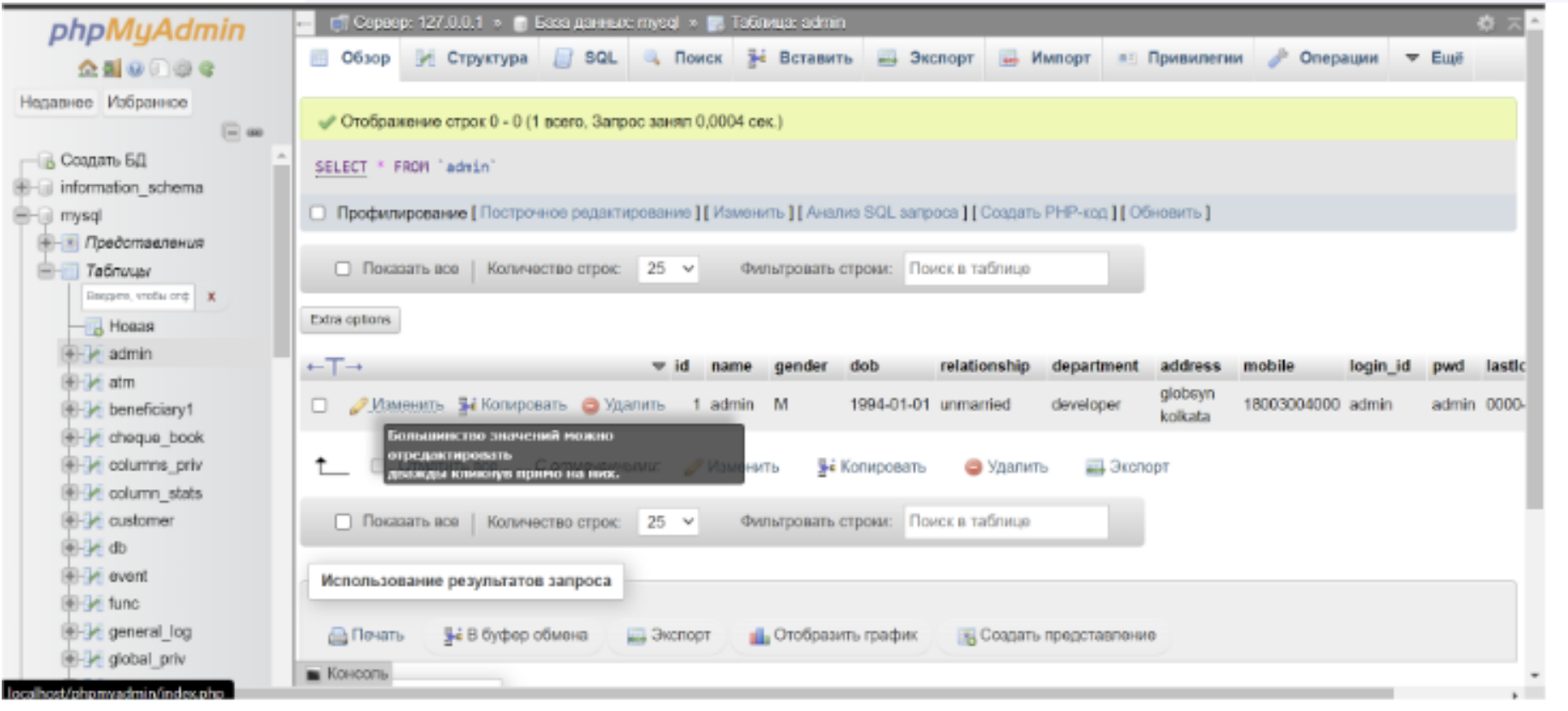
Roadmap

The screenshot displays a Trello workspace with a board titled "Roadmap". The interface includes a top navigation bar with "Workspaces", "Recent", "Starred", "Templates", and a "Create" button. A search bar and user profile icon are also present. The board is organized into five columns: "Roadmap", "Software", "Responsibilities", "Ideas", and "Database".

- Roadmap Column:** Contains six cards with colored progress bars and labels: "Yellow for requirement", "Blue for test case", "Sky for test plan", "Purple for test execution", "Red for defect", and "Green for report". Each card has a "+ Add a card" button at the bottom.
- Software Column:** Contains two cards: "Admin login" and "Staff login". Each card features a screenshot of a login form and a "+ Add a card" button at the bottom.
- Responsibilities Column:** Contains two cards: "Dana" and "Arukhan". Each card has a "+ Add a card" button at the bottom.
- Ideas Column:** Contains four cards: "Creating requirement in Jira", "Creating test case in Jira", "Creating test plan in Jira", and "Creating test execution in Jira". Each card has a "+ Add a card" button at the bottom.
- Database Column:** Contains one card: "Testing queries requirements a". It has a "+ Add a card" button at the bottom.

Database

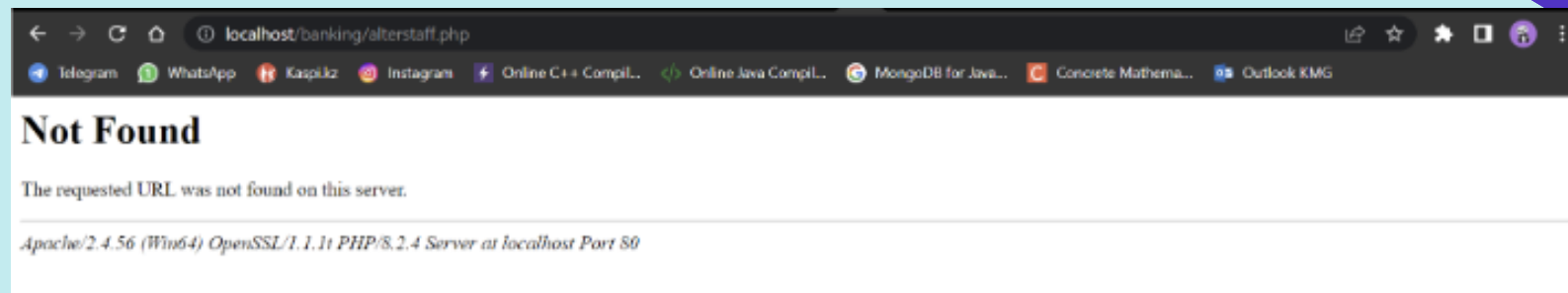
phpMyAdmin



PgAdmin 4

Testing

Functionality Testing

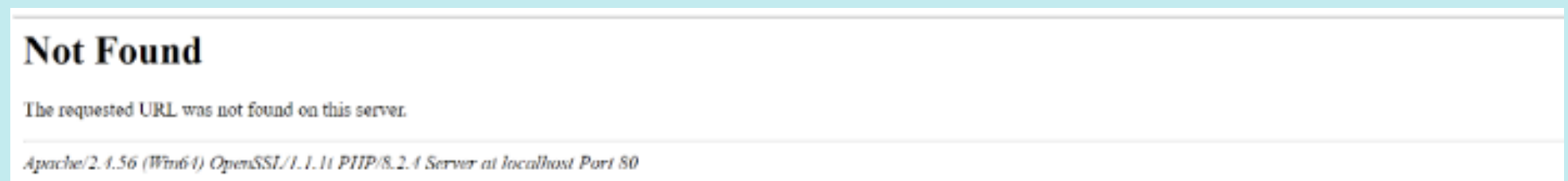


Security Testing

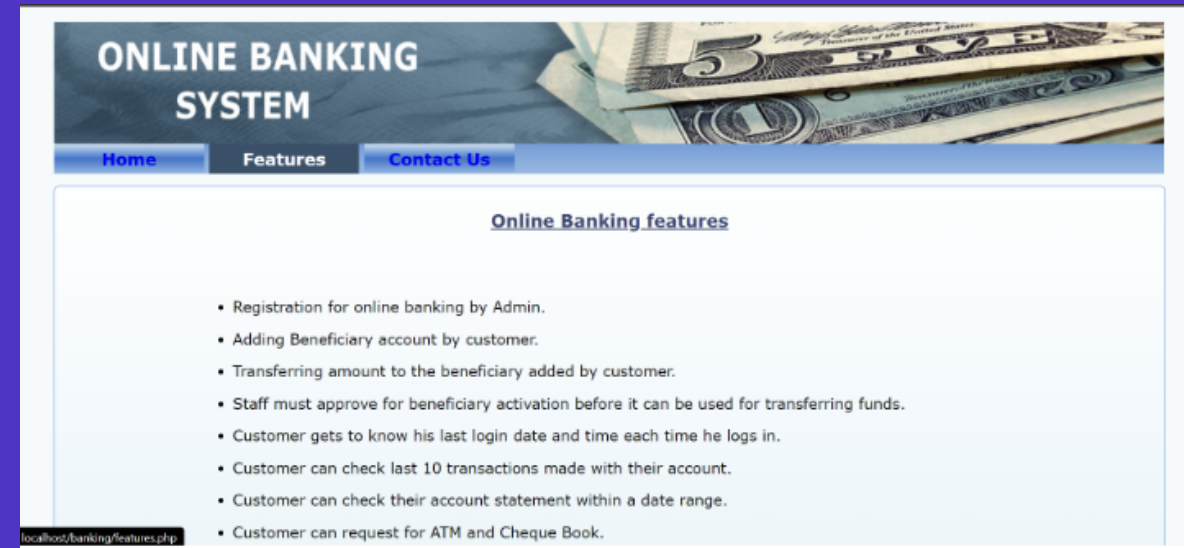
Username:

Password:

Performance Testing



Usability Testing



Findings



The identified defects pose challenges and hinder the smooth functioning of the system. The cheque approval failure prevents the proper processing of cheque approval requests, potentially causing delays in transactions. The staff homepage access denial restricts staff members from accessing essential information and performing their assigned tasks.

The staff logout failure results in an inability to properly terminate staff sessions, potentially compromising security. Lastly, the missing Frequently Asked Questions (FAQ) section deprives users of a valuable self-help resource, increasing their reliance on other support channels

Recommendation

List of recommendations for Improving Online Banking System

- 01** Enhance User Authentication: Implement multi-factor authentication (MFA) to add an extra layer of security for user logins.
- 02** Implement Robust Encryption: Ensure that all sensitive data transmitted between the user's device and the online banking system is encrypted using secure protocols such as SSL/TLS.
- 03** Implement Real-time Fraud Detection: Deploy advanced fraud detection systems that can analyze user behavior patterns, transaction history, and anomalies to identify potential fraudulent activities.
- 04** Regular Security Audits and Penetration Testing: Conduct regular security audits and penetration testing to identify vulnerabilities in the online banking system.

Conclusion

It is crucial to address these defects promptly to enhance the overall user experience, streamline administrative processes, and ensure the system's reliability and security. The assigned students, Arukhan and Dana, play vital roles in investigating and resolving these defects. By resolving these issues, the system can improve functionality, security, and user satisfaction, resulting in a more efficient and user-friendly application or website.

