



WIPRO

Capstone Project Presentation

PROJECT ON:

Banking Loan & Financial Transaction Automation Testing

*Batch No : 03
Guide : Mr. Vishal Gupta*

*Presented By :
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What We Developed :

- ParaBank Web Application Automation Testing
- URL USED :
<https://parabank.parasoft.com/parabank/index.htm>

Technical Stack Learned & Used:

- Programming Language: Java
- Automation Tool: Selenium WebDriver
- Testing Framework: BDD by using Cucumber, JUnit, TestNG.
- Reporting Tools: HTML Reporting
- Project Management Tool : JIRA integrated with Zephyr

ParaBank Web Application

- ParaBank is an online banking system for managing accounts and loans.
- Users can create accounts, transfer money, pay bills, and check transaction history.
- It allows users to apply for loans and manage their finances easily.
- The website is used for automation testing practice in banking scenarios.



Types of Testing & Tools Used

Types of Testing:

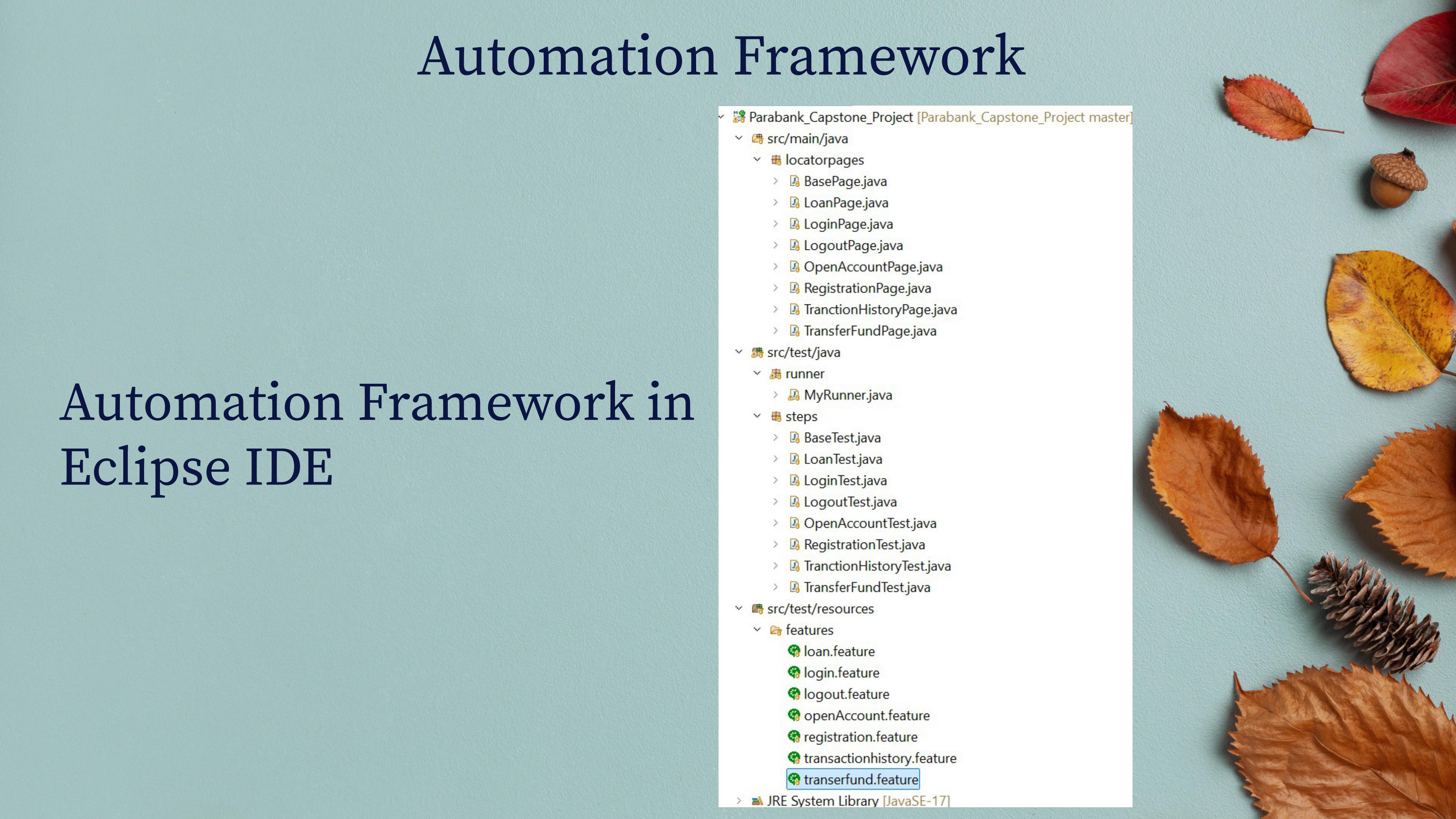
- Manual Testing of all functionalities.
- Automation Testing using Selenium WebDriver ,BDD & TestNG.

Tools & Frameworks Used:

- Maven for build management.
- Page Object Model (POM) for organized automation framework.
- Developed and executed in Eclipse IDE.
- GitLab for version control (code pushed to repository).
- ExtentReports for detailed test reporting.

Automation Framework

Automation Framework in Eclipse IDE



```
✓ Parabank_Capstone_Project [Parabank_Capstone_Project master]
  ✓ src/main/java
    ✓ locatorpages
      > BasePage.java
      > LoanPage.java
      > LoginPage.java
      > LogoutPage.java
      > OpenAccountPage.java
      > RegistrationPage.java
      > TractionHistoryPage.java
      > TransferFundPage.java
    ✓ src/test/java
      ✓ runner
        > MyRunner.java
      ✓ steps
        > BaseTest.java
        > LoanTest.java
        > LoginTest.java
        > LogoutTest.java
        > OpenAccountTest.java
        > RegistrationTest.java
        > TractionHistoryTest.java
        > TransferFundTest.java
    ✓ src/test/resources
      ✓ features
        loan.feature
        login.feature
        logout.feature
        openAccount.feature
        registration.feature
        transactionhistory.feature
        transferfund.feature
  > JRE System Library [JavaSE-17]
```

GitHub Repository

AnandReddy5-05 / Parabank_Capstone_Project Public

Code Issues Pull requests Actions Projects Security Insights

master 1 Branch 0 Tags Go to file Code

Nithya "First Commit" a08b19d · 5 hours ago 1 Commit

.mvn	"First Commit"	5 hours ago
.settings	"First Commit"	5 hours ago
src	"First Commit"	5 hours ago
test-output	"First Commit"	5 hours ago
.classpath	"First Commit"	5 hours ago
.gitignore	"First Commit"	5 hours ago
.project	"First Commit"	5 hours ago
pom.xml	"First Commit"	5 hours ago

About

No description, website, or topics provided.

Activity 0 stars 0 watching 0 forks Report repository

Releases

No releases published

Packages

No packages published

Languages



Automation Approach

- Executed test cases for Banking Loan & Financial Transactions using Selenium WebDriver and JUnit.
- Implemented Page Object Model (POM) to separate web element locators and test logic, improving code reusability and maintenance.
- Used Maven for build management, handling dependencies, and running feature files efficiently.
- Developed and executed automation scripts in Eclipse IDE, integrating with Junit for test execution and reporting.
- Maintained all project code in GitHub repository for version control, tracking changes, and collaboration.
- Generated detailed execution reports using HTMLReports, including screenshots and logs for better test analysis.
- Focused on functional automation of core banking features like account creation, fund transfer, and loan applications.



HTML Report

  cucumber-jvm@7.27.2 with OpenJDK 64-Bit Server VM@22.0.1+8 on Windows 11 

 100% passed  3 minutes ago *in* 1 minute 57 seconds

 Search with text or @tags

- >  file:///C:/Users/Admin/eclipse-workspace/wipro/Parabank_Capstone_Project/src/test/resources/features/loan.feature
- >  file:///C:/Users/Admin/eclipse-workspace/wipro/Parabank_Capstone_Project/src/test/resources/features/login.feature
- >  file:///C:/Users/Admin/eclipse-workspace/wipro/Parabank_Capstone_Project/src/test/resources/features/logout.feature
- >  file:///C:/Users/Admin/eclipse-workspace/wipro/Parabank_Capstone_Project/src/test/resources/features/openAccount.feature
- >  file:///C:/Users/Admin/eclipse-workspace/wipro/Parabank_Capstone_Project/src/test/resources/features/registration.feature
- >  file:///C:/Users/Admin/eclipse-workspace/wipro/Parabank_Capstone_Project/src/test/resources/features/transactionhistory.feature
- >  file:///C:/Users/Admin/eclipse-workspace/wipro/Parabank_Capstone_Project/src/test/resources/features/transerfund.feature



Manual Testing with Zephyr & Jira

- Conducted manual testing of ParaBank features using Zephyr in JIRA.
- Created test cases for functionalities like login, registration, fund transfer, account opening, and transaction history.
- Linked all test cases to user stories in JIRA to ensure complete traceability.
- Executed tests sprint by sprint following the Scrum process.
- Organized test cases into test cycles in Zephyr for each sprint.
- Logged any defects found during testing in JIRA, linking them to the related stories and test cases.

JIRA Backlog and Sprint

- All user stories and tasks for the project were maintained in JIRA.
- Stories were prioritized and added to sprints for execution.
- The backlog helped in tracking progress and planning work for each sprint.

Zephyr - Test Cases

- Test cases were managed in Zephyr Board.
- Created three folders: Sanity, Smoke, Regression.



JIRA Backlog and Sprint

Projects

Parabank Banking Loan & Financial Transaction  ...

[Summary](#) [Backlog](#) [Board](#) [Code](#) [Timeline](#) [Pages](#) [Forms](#) [Zephyr](#) +

[Filter](#)

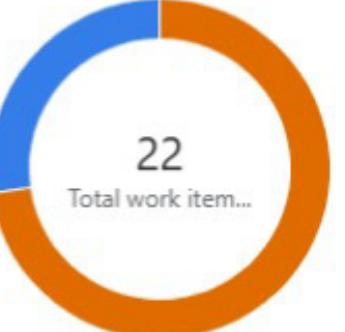
16 completed in the last 7 days

22 updated in the last 7 days

22 created in the last 7 days

1 due soon in the next 7 days

Status overview
Get a snapshot of the status of your work items. [View all work items](#)



22 Total work item...

Done: 16
To Do: 6

Recent activity
Stay up to date with what's happening across the project.

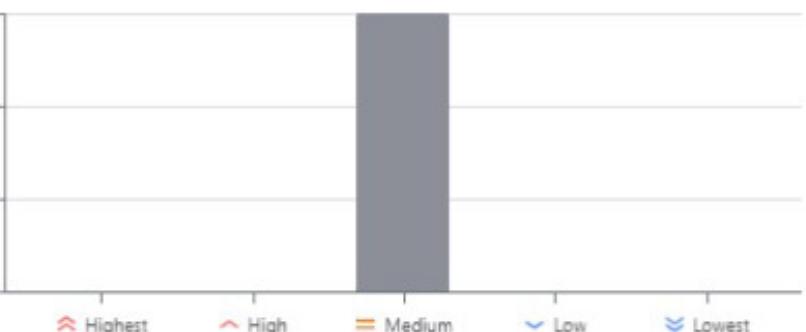
Today

Nithyananda Reddy updated field "duedate" on SCRUM-12: User should be automatically logged out after inactivity so that user account remains secure. **DONE**
about 6 hours ago

Nithyananda Reddy updated field "Start date" on SCRUM-6: Transactions & History **TO DO**
about 6 hours ago

Nithyananda Reddy updated field "Start date" on SCRUM-5: Tran

Priority breakdown
Get a holistic view of how work is being prioritized. [See what your team's been focusing on](#)



Highest High Medium Low Lowest

Types of work
Get a breakdown of work items by their types. [View all items](#)

Type	Distribution
Epic	100%
Task	
Story	
Subtask	

Team workload
Monitor the capacity of your team. [Reassign work items to get the right balance](#)

Assignee	Work distribution
Unassigned	100%

Epic progress
See how your epics are progressing at a glance. [View all epics](#)

Epic	Progress
SCRUM-1 User Registration	100%
SCRUM-4 Applying for Loan	100%
SCRUM-5 Transfer funds	



Projects

 Parabank Banking Loan & Financial Transaction

...



Share



Summary

... Backlog

Board

Code

Timeline

Pages

Forms

Zephyr



Search backlog

NR



Epic ▾

Type ▾



Epic

 No epic

> User Registration ...

> User login ...

> User Opening New Account ...

> Applying for Loan ...

> Transfer funds ...

> Transactions & History ...

+ Create epic

 SCRUM Sprint 11 5 Sep - 12 Sep (6 work items)

0

0

0

Complete sprint

 SCRUM-7 User want to register with valid details so that User can create a ...

USER REGISTRATION

DONE ▾

Sep 4

NR

 SCRUM-8 User should not be able to register with an existing username so...

USER REGISTRATION

DONE ▾

Sep 4

NR

SCRUM-9 User should not be able to register with blank/invalid fields so th...

USER REGISTRATION

DONE ▾

Sep 5

NR

SCRUM-12 User should be automatically logged out after inactivity so that ...

USER LOGIN

DONE ▾

Sep 5

NR

SCRUM-21 As a user, I want to view all my past transactions so that I can t...

TRANSACTIONS & HI...

DONE ▾

NR

SCRUM-22 As a user, I want to view details of each transaction so that I c...

TRANSACTIONS & HI...

DONE ▾

NR

+ Create

 Backlog (0 work items)

0

0

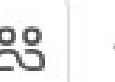
0

Create sprint

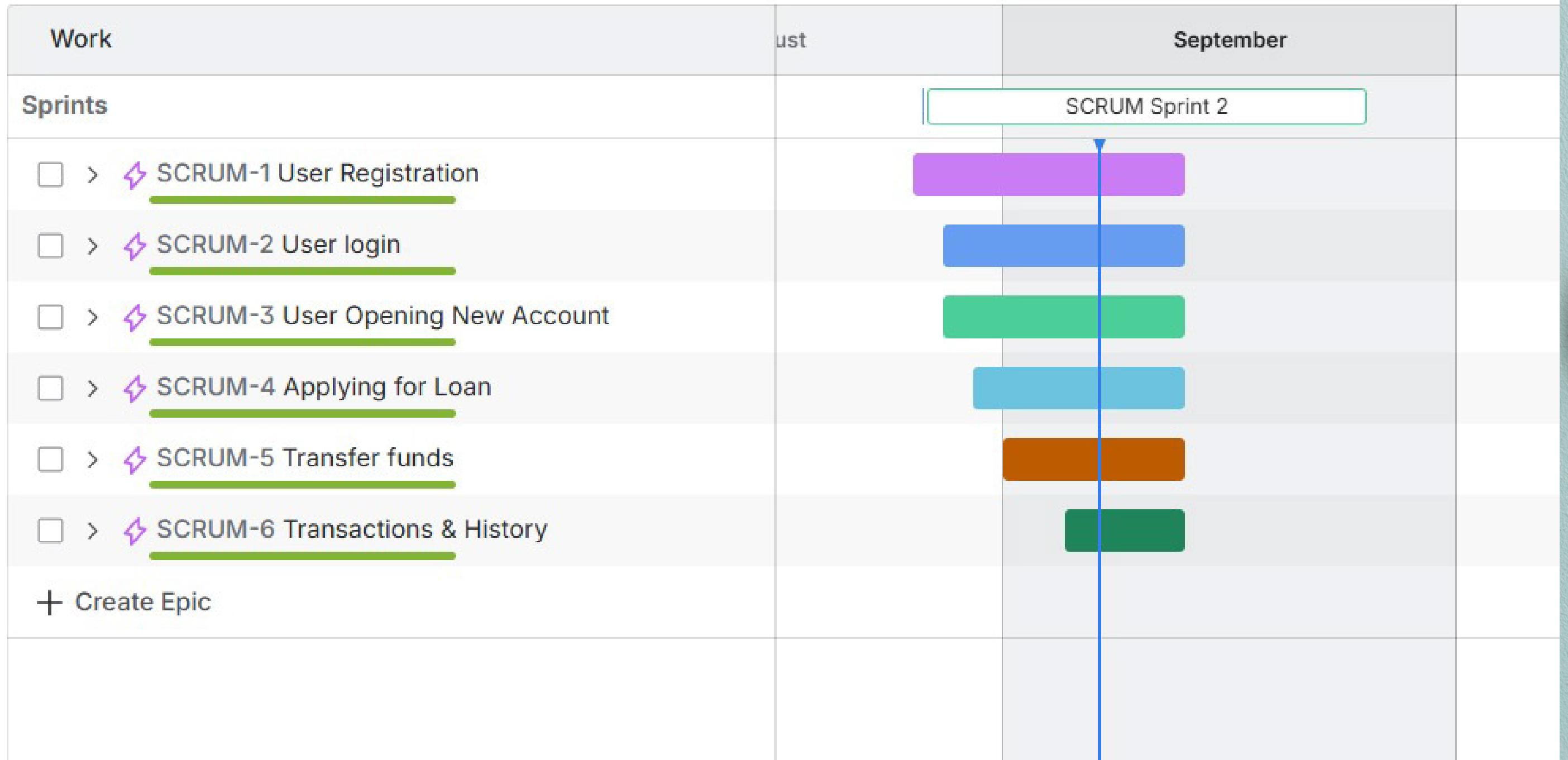
Your backlog is empty.

+ Create

Projects

 Parabank Banking Loan & Financial Transaction

...

[Summary](#) [Backlog](#) [Board](#) [Code](#) [Timeline](#) [Pages](#) [Forms](#) [Zephyr](#) [+](#) NR [Epic](#) [Type](#) [Status category](#)

Zephyr Board - Test Cases

Projects

Parabank Banking Loan & Financial Transaction   

 Summary  Backlog  Board  Code  Timeline  Pages  Forms  Zephyr 

 SMARTBEAR Zephyr Configuration

Test Cases Test Cycles Test Plans Reports

+ New Folder   + New Test Case Archive Clone More Search... Filters

All test cases (16)

- Sanity (7)
 - SCRUM-T9 1.0 Login with empty fields APPROVED
 - SCRUM-T12 1.0 Apply for Loan APPROVED
 - SCRUM-T13 1.0 Loan rejection for insufficient funds APPROVED
 - SCRUM-T8 1.0 Login with invalid credentials APPROVED
 - SCRUM-T7 1.0 Login with valid credentials APPROVED
 - SCRUM-T10 1.0 Open new checking account APPROVED
 - SCRUM-T11 1.0 Open new savings account APPROVED
- Regression (4)
 - SCRUM-T5 1.0 Register with existing username APPROVED
 - SCRUM-T4 1.0 Register with valid details APPROVED
 - SCRUM-T6 1.0 Registration with blank fields APPROVED
 - SCRUM-T17 1.0 Transfer between same accounts APPROVED
- Smoke (4)
 - SCRUM-T15 1.0 Transfer funds between valid accounts APPROVED
 - SCRUM-T16 1.0 Transfer with insufficient balance APPROVED
 - SCRUM-T19 1.0 View details of a transaction APPROVED
 - SCRUM-T14 1.0 View loan history APPROVED

Archived test cases 1 - 16 of 16

Zephyr Test Execution Result(Summary)

Projects

Parabank Banking Loan & Financial Transaction ...

Summary Backlog Board Code Timeline Pages Forms Zephyr

Back

Test execution results (summary)

Overall Progress

Status	Count
Completed	18
Remaining	1

Completed Remaining

Test Execution Results

Status	Count
Pass	18
Not Executed	1

Pass Not Executed

Test Execution Effort

Status	Count
Estimated	1s
Actual	1s

Estimated Actual

Issues Reported During Testing

No results
Try modifying the filter criteria to display some information.

Test execution completion over time by status (accumulated)

Thank You

