



RAJALAKSHMI
ENGINEERING COLLEGE
An AUTONOMOUS Institution
Affiliated to ANNA UNIVERSITY, Chennai

DEPARTMENT OF INFORMATION TECHNOLOGY
LAB MANUAL

CS23432 – Software Construction

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Exp.No: 1	AZURE DEVOPS ENVIRONMENT SETUP
Date:22/01/2025	

AIM: To set up and access the Azure DevOps environment by creating an organization through the Azure Portal.

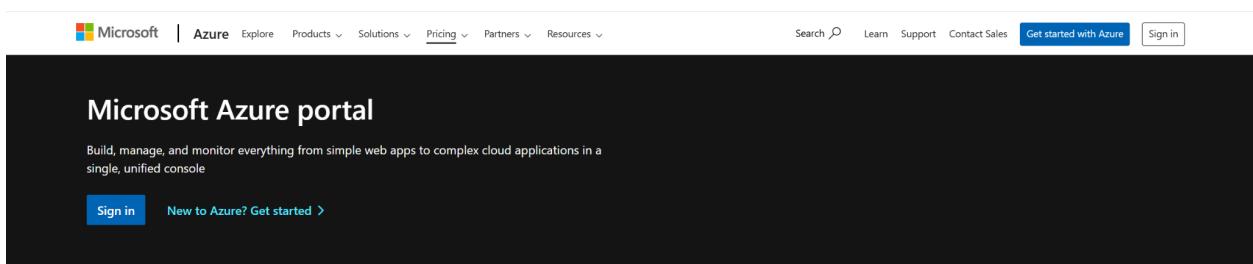
INSTALLATION

1. Open your web browser and go to the Azure website:

<https://azure.microsoft.com/en-us/getstarted/azure-portal>.

Sign in using your Microsoft account credentials.

If you don't have a Microsoft account, you can create one here: <https://signup.live.com/?lic=1>



Azure mobile app

Stay connected to your Azure resources—anytime, anywhere. Now available for iOS and Android.

[Learn more >](#)



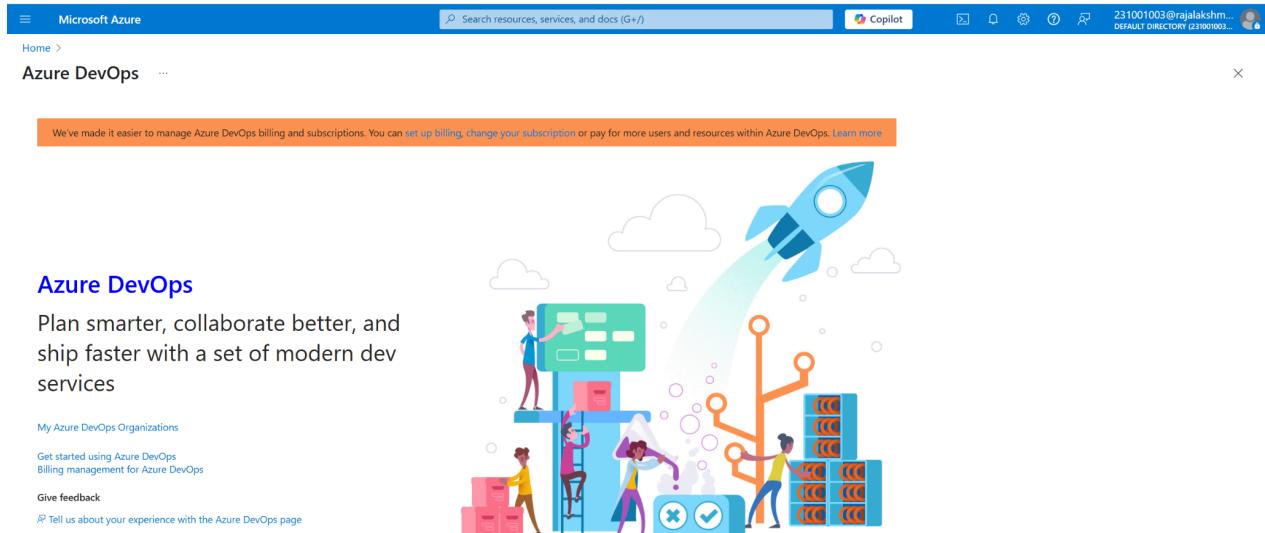
2. Azure home page

The screenshot shows the Microsoft Azure home page. At the top, there's a search bar and a Copilot button. Below the search bar, there's a section for 'Azure services' with links to 'Create a resource', 'Subscriptions', 'All resources', 'Azure DevOps organizations', 'Quickstart Center', 'Azure AI services', 'Kubernetes services', 'Virtual machines', 'App Services', and 'More services'. The 'Resources' section shows recent resources: 'MYBANKAPP' (Azure Load Testing) and 'BankProject' (Resource group), both last viewed 2 weeks ago. The 'Navigate' section includes links for 'Subscriptions', 'Resource groups', 'All resources', and 'Dashboard'. The 'Tools' section features 'Microsoft Learn', 'Azure Monitor', 'Microsoft Defender for Cloud', and 'Cost Management'. The 'Useful links' section has links to 'Technical Documentation', 'Azure Services', 'Recent Azure Updates', and 'Azure mobile app' (available on App Store and Google Play). The 'Last Viewed' section lists 'MYBANKAPP' and 'BankProject' again.

3. Open DevOps environment in the Azure platform by typing **Azure DevOps Organizations** in the search bar.

This screenshot is similar to the previous one but with a search bar at the top containing the text 'devops'. The search results are displayed below the search bar, showing 'Services' (Azure Native New Relic Service, Managed DevOps Pools, Azure DevOps organizations, Azure Native Dynatrace Service) and 'Marketplace' (Static Web App, Rocky Linux 9, Build Agents for Azure DevOps). The rest of the page layout remains the same, including the 'Azure services', 'Resources', 'Tools', 'Useful links', and 'Last Viewed' sections.

4. Click on the ***My Azure DevOps Organization*** link and create an organization and you should be taken to the Azure DevOps Organization Home page.



RESULT: Successfully accessed the Azure DevOps environment and created a new organization through the Azure portal.

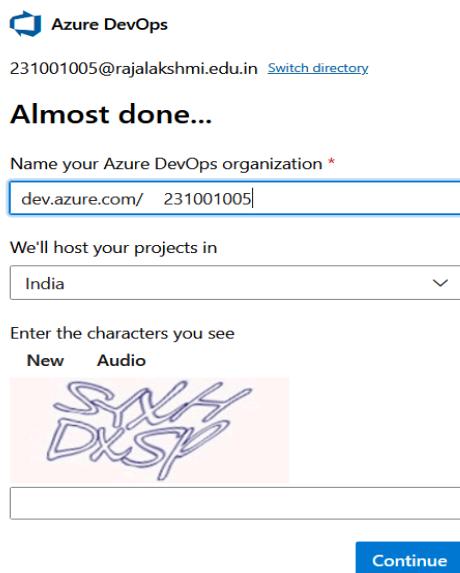
Exp.No: 2
Date: 07/02/2025

AZURE DEVOPS PROJECT SET UP AND USER STORY MANAGEMENT

AIM: To set up an Azure DevOps project for efficient collaboration and agile work management.

STEPS:

- 1.Create An Azure Account



The screenshot shows the first step of creating an Azure DevOps organization. The title 'Almost done...' is displayed above a form field where the organization name 'dev.azure.com/ 231001005' is entered. Below this, a dropdown menu shows 'India' selected for hosting location. A CAPTCHA image with the text 'SNH DXSP' is shown for verification. A 'Continue' button is at the bottom right.

Azure DevOps
231001005@rajalakshmi.edu.in [Switch directory](#)

Almost done...

Name your Azure DevOps organization *

dev.azure.com/ 231001005

We'll host your projects in

India

Enter the characters you see

New Audio

SNH DXSP

Continue

2.Create the First Project in Your Organization

- a. After the organization is set up, you'll need to create your first **project**. This is where you'll begin to manage code, pipelines, work items, and more.
- b. On the organization's **Home page**, click on the **New Project** button.
- c. Enter the project name, description, and visibility options:
Name: Choose a name for the project (e.g., LMS).
Description: Optionally, add a description to provide more context about the project.
Visibility: Choose whether you want the project to be **Private** (accessible only to those invited) or **Public** (accessible to anyone).
- d. Once you've filled out the details, click **Create** to set up your first project.

Create new project ×

Project name *
Online-BankingSystem

Description

Visibility

Public
Anyone on the internet can view the project. Certain features like TFVC are not supported.

Private
Only people you give access to will be able to view this project.

Public projects are disabled for your organization. You can turn on public visibility with [organization policies](#).

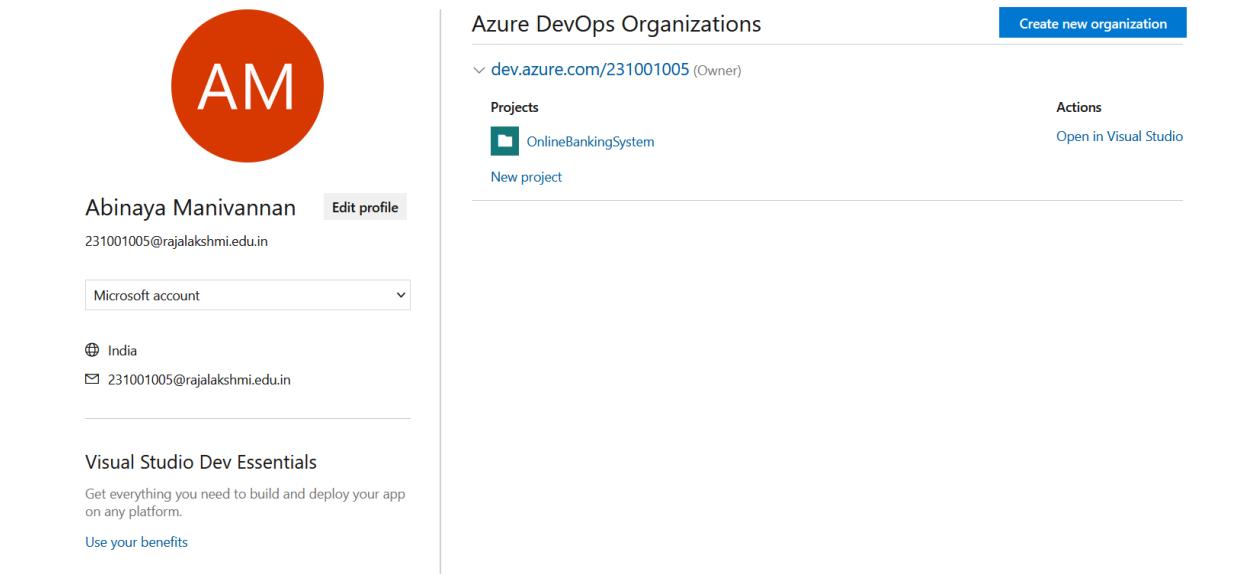
Advanced

Version control [?](#)
Git

Work item process [?](#)
Agile

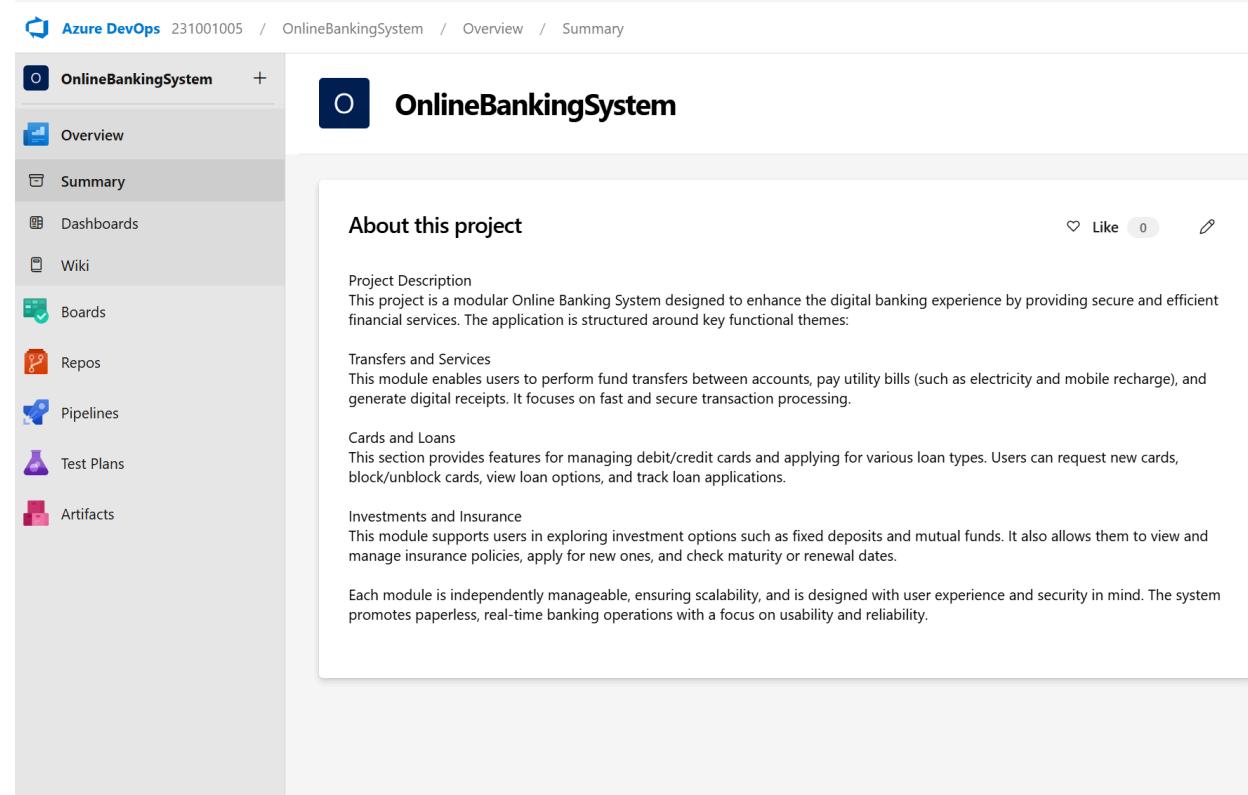
Cancel Create

3. Once logged in, ensure you are in the correct organization. If you're part of multiple organizations, you can switch between them from the top left corner (next to your user profile). Click on the Organization name, and you should be taken to the Azure DevOps Organization Home page.



The screenshot shows the Azure DevOps Organizations home page. On the left, there's a user profile card for 'Abinaya Manivannan' with a red circular icon containing 'AM'. Below it, there's contact information: '231001005@rajalakshmi.edu.in' and a dropdown menu set to 'Microsoft account'. To the right, the main dashboard displays the 'Azure DevOps Organizations' header with a 'Create new organization' button. It shows one project, 'OnlineBankingSystem', under the 'Projects' section. Under 'Actions', there's a link to 'Open in Visual Studio'. Below the projects, there's a 'New project' button. The 'Actions' section also includes a 'New project' button. At the bottom left, there's a 'Visual Studio Dev Essentials' section with a link to 'Use your benefits'.

4. Project dashboard



The screenshot shows the Azure DevOps project dashboard for 'OnlineBankingSystem'. The left sidebar has a navigation menu with items like 'Overview', 'Summary', 'Dashboards', 'Wiki', 'Boards', 'Repos', 'Pipelines', 'Test Plans', and 'Artifacts'. The 'Summary' item is currently selected. The main content area is titled 'OnlineBankingSystem' and contains a 'About this project' section. This section includes a 'Project Description' which states: 'This project is a modular Online Banking System designed to enhance the digital banking experience by providing secure and efficient financial services. The application is structured around key functional themes: Transfers and Services, Cards and Loans, Investments and Insurance.' It also mentions: 'Transfers and Services: This module enables users to perform fund transfers between accounts, pay utility bills (such as electricity and mobile recharge), and generate digital receipts. It focuses on fast and secure transaction processing.' 'Cards and Loans: This section provides features for managing debit/credit cards and applying for various loan types. Users can request new cards, block/unblock cards, view loan options, and track loan applications.' 'Investments and Insurance: This module supports users in exploring investment options such as fixed deposits and mutual funds. It also allows them to view and manage insurance policies, apply for new ones, and check maturity or renewal dates.' There are 'Like' and edit icons at the top of the 'About this project' section.

5. To manage user stories:

- a. From the **left-hand navigation menu**, click on **Boards**. This will take you to the main **Boards** page, where you can manage work items, backlogs, and sprints.
- b. On the **work items** page, you'll see the option to **Add a work item** at the top. Alternatively, you can find a + button or **Add New Work Item** depending on the view you're in. From the **Add a work item** dropdown, select **User Story**. This will open a form to enter details for this user story.

The screenshot shows the Azure Boards interface for the 'OnlineBankingSystem' project. The left sidebar contains navigation links for Overview, Boards, Work items, Backlogs, Sprints, Queries, Delivery Plans, Analytics views, Repos, Pipelines, Test Plans, and Artifacts. The 'Backlogs' link is currently selected. The main area displays the 'OnlineBankingSystem Team' backlog. At the top right are buttons for '+ New Work Item' and 'View'. Below is a table titled 'Backlog' with columns: Order, Work Item Type, Title, State, Effort, Business, Value Area, and Tags. The backlog contains 9 items, all of which are 'Epic' type and labeled 'New' in the State column. The titles are: Account Management & Transactions, User Authentication & Account Access, Fund Transfers & Receipt Management, Bill Payments & Recharges, Debit Card, Credit Card, Loans, Insurance Services, and Investment Management.

Order	Work Item Type	Title	State	Effort	Business	Value Area	Tags
1	Epic	> Account Management & Transactions	New		Business		
2	Epic	> User Authentication & Account Access	New		Business		
3	Epic	> Fund Transfers & Receipt Management	New		Business		
4	Epic	> Bill Payments & Recharges	New		Business		
5	Epic	> Debit Card	New		Business		
6	Epic	> Credit Card	New		Business		
7	Epic	> Loans	New		Business		
8	Epic	> Insurance Services	New		Business		
9	Epic	> Investment Management	New		Business		

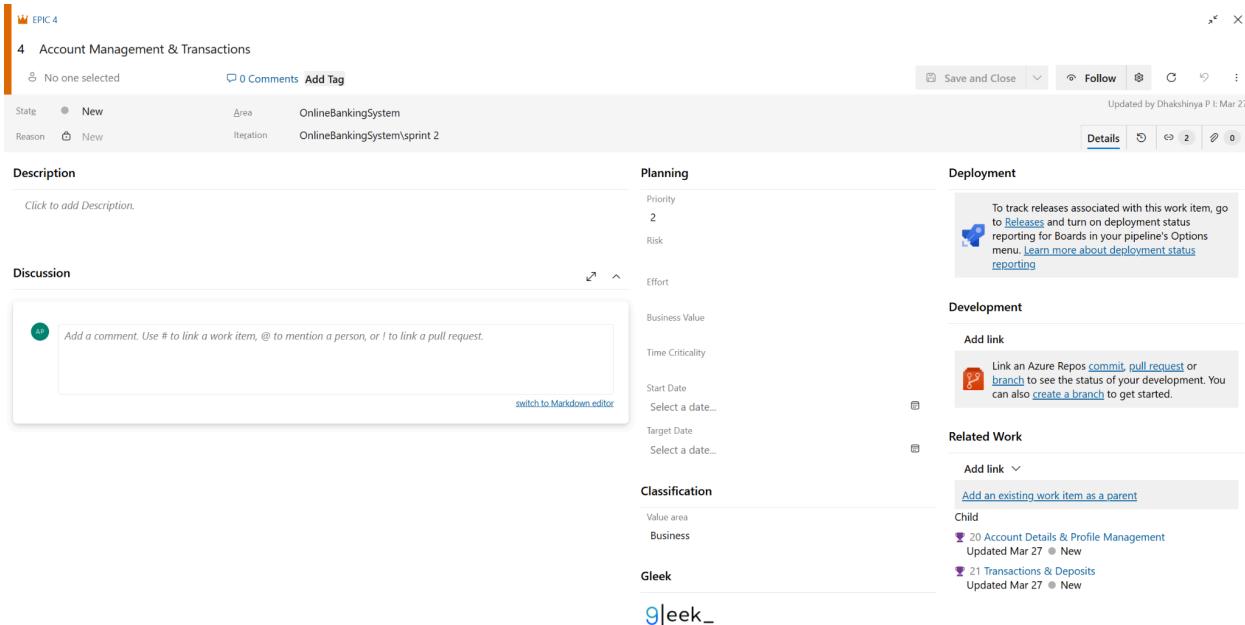
RESULT: Successfully created an Azure DevOps project with user story management and agile workflow setup.

Exp.No: 3
Date: 14/02/2025

SETTING UP EPICS FEATURES AND USER STORIES FOR PROJECT PLANNING

AIM: To learn about how to create epics, user story, features, backlogs for your assigned project.

1.Fill in Epics



EPIC 4

4 Account Management & Transactions

No one selected 0 Comments Add Tag

State: New Area: OnlineBankingSystem
Reason: New Iteration: OnlineBankingSystem\sprint 2

Save and Close Follow Details

Description

Click to add Description.

Planning

Priority: 2
Risk
Effort
Business Value
Time Criticality
Start Date
Select a date...
Target Date
Select a date...

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Related Work

Add link

Add an existing work item as a parent

Child

20 Account Details & Profile Management Updated Mar 27 • New
21 Transactions & Deposits Updated Mar 27 • New

9|eek_

2.Fill in Features

FEATURE 20

20 Account Details & Profile Management

No one selected 0 Comments Add Tag

State: New Area: OnlineBankingSystem
Reason: New Iteration: OnlineBankingSystem\sprint 2

Planning

Priority: 2
Risk:
Effort:

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Related Work

Add link Parent: 4 Account Management & Transactions (Updated Mar 27, New)
Child: 50 As a user, I want to be able to edit my acc... (Updated 58m ago, New)
Child: 48 As a user, I want to view my account detail... (Updated 1h ago, New)

Classification

Value area: Business

Gleek

@geek_

Description

Click to add Description.

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

3.Fill in User Story Details

USER STORY 48

48 As a user, I want to view my account details (name, address, etc.) so that I can check my personal information.

Dhakshinya P 0 Comments Add Tag

State: New Area: OnlineBankingSystem
Reason: New Iteration: OnlineBankingSystem\sprint 2

Planning

Story Points:
Priority: 2
Risk:

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Related Work

Add link Parent: 20 Account Details & Profile Management (Updated Mar 27, New)
Child: 177 Create a profile page to display the user's... (Updated 54m ago, New)
Child: 178 Create a profile page to display the user's... (Updated 54m ago, New)

Classification

Value area: Business

Gleek

@geek_

Description

Click to add Description.

Acceptance Criteria

1. The account details page should display the user's name, email, address, and phone number.
2. The page should allow the user to update their profile information

Discussion

Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.

switch to Markdown editor

4.Fill in Task Details

The screenshot shows the task details page for item 177. The task title is "Create a profile page to display the user's personal information." The task is assigned to "Dhakshinya P I" and has 0 comments. The task is in the "New" state, belongs to the "OnlineBankingSystem" area, and is part of the "OnlineBankingSystem\sprint 2" iteration. The task was updated by Aarthi A P 55 ago.

Description: Click to add Description.

Planning: Priority: 2, Activity.

Deployment: To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#).

Discussion: Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request. [switch to Markdown editor](#)

Effort (Hours): Original Estimate, Remaining, Completed.

Development: Add link, Parent. Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Implementation: Integrated in Build.

Related Work: Add link, Parent. [48 As a user, I want to view my account detail...](#) Updated 1h ago. [New](#)

Gleek: 9|eek_-

RESULT: Thus, the creation of epics, features, user story and task has been created successfully.

Exp.No: 4
Date: 20/03/2025

SPRINT PLANNING

AIM: To assign user story to specific sprint for the Online Banking Project.

SPRINT PLANNING

Sprint 1

The screenshot shows the Microsoft Azure Boards interface for the "OnlineBankingSystem" project. The left sidebar navigation includes: Overview, Boards, Work items, Boards, Backlogs, Sprints (selected), Queries, Delivery Plans, Analytics views, Repos, Pipelines, Test Plans, and Artifacts. The main area displays the "Sprint 1" backlog under the "OnlineBankingSystem Team". The backlog table has columns: New, Active, Resolved, and Closed. There are four user stories listed:

- User Story 39: As a user, I want to buy health insurance so that I can cover my medical expenses. Assigned to Anu N.
- User Story 37: As a user, I want to view my insurance policies so that I can keep track of my coverage. Assigned to Anu N.
- User Story 36: As a user, I want to purchase life insurance so that I can protect my family's future. Assigned to Anu N.
- User Story 35: As a user, I want to view and manage my fixed deposits so that I can track my investments. Assigned to Anu N.

At the top right, there are buttons for "New Work Item" and "Column Options". A status bar at the bottom indicates "May 3 - June 3" and "22 work days remaining".

Sprint 2

The screenshot shows the Azure Boards Taskboard for the OnlineBankingSystem Team. The backlog is organized into four columns: New, Active, Resolved, and Closed. The 'New' column contains the following items:

- #32 As a user, I want to transfer funds between my own accounts so that I can manage my money efficiently.
● New
Aarthi A P
- #34 As a user, I want to reset my password if I forget it so that I can regain access to my account.
● New
Dhakshinya P I
- #38 As a user, I want to generate a debit card PIN so that I can activate and use my card securely.
● New
Abinaya Manivannan
- #40 As a user, I want to send money to another user's account so that I can make payments easily.
● New
- #163 Implement a backend API for internal account transfers.
● New
Aarthi A P
- #175 Create a "Forgot Password?" option on the login page.
● New
Dhakshinya P I
- #168 Design PIN generation interface
● New
Abinaya Maniv...
- #165 Implement validation for recipient account details.
● New

The sidebar on the left provides navigation links for Overview, Boards, Work items, Sprints, Queries, Delivery Plans, Analytics views, Repos, Pipelines, Test Plans, and Artifacts. The bottom of the screen shows project settings.

Sprint 3

The screenshot shows the Azure Boards Backlog for the OnlineBankingSystem Team. The backlog is organized into a table with columns: Order, Title, State, Assigned To, and Rema... . The items listed are:

Order	Title	State	Assigned To	Rema...
1	> As a user, I want to be able to edit my account details so th...	● New	Dhakshinya P I	
2	> As a user, I want to deposit money into my bank account so...	● New	Aarthi A P	
3	> As a user, I want to view a detailed list of my transactions so...	● New	Aarthi A P	
4	> As a user, I want to view the receipt after transferring funds ...	● New	Aarthi A P	
5	> As a user, I want to recharge my mobile balance so that I ca...	● New	Aarthi A P	
6	> As a user, I want to block my debit card so that I can stop u...	● New	Abinaya Maniv...	
7	> As a user, I want to unblock my card if found so that I can r...	● New	Abinaya Maniv...	
8	> As a user, I want to pay my electricity bill online so that I do...	● New	Aarthi A P	

The top navigation bar includes Taskboard, Backlog, Capacity, Analytics, and a New Work Item button. The timeline at the top right indicates the sprint duration from July 15 to August 10, covering 19 work days.

Sprint 4

The screenshot shows the Microsoft Azure DevOps Backlog board for the 'OnlineBankingSystem Team'. The board is set to 'sprint 4' and displays 11 user stories. The columns are Order, Title, State, Assigned To, and Remaining. The user stories are as follows:

Order	Title	State	Assigned To	Remaining
1	> As a user, I want to view my credit card details so that I can ... ● New	New	Abinaya Maniv...	
2	> As a user, I want to see recent transactions so that I can mo... ● New	New	Aarthi A P	
3	> As a user, I want to pay my credit card bill so that I can avoi... ● New	New	Abinaya Maniv...	
4	> As a user, I want to get a confirmation after payment so tha... ● New	New	Aarthi A P	
5	> As a user, I want to save my frequently used mobile number... ● New	New	Dhakshinya P I	
6	> As a user, I want to apply for a credit card so that I can mak... ● New	New	Abinaya Maniv...	
7	> As a user, I want to get eligibility suggestions so that I apply... ● New	New	Abinaya Maniv...	
8	> As a user, I want to view my loan accounts so that I can che... ● New	New	Abinaya Maniv...	
9	> As a user, I want to see loan repayment schedules so that I ... ● New	New	Abinaya Maniv...	
10	> As a user, I want to apply for a loan so that I can meet finan... ● New	New	Abinaya Maniv...	
11	> As a user, I want to check eligibility before applying so that ... ● New	New	Abinaya Maniv...	

RESULT: The Sprints are created for the Online Banking Project.

Exp.No: 5
Date: 28/03/2025

POKER ESTIMATION

AIM: Create Poker Estimation for the user stories - Online Banking System Project.

POKER ESTIMATION

User Story 29*

29 As a user, I want to log in to my account using my credentials so that I can access my account.

Details

State	New	Area	OnlineBankingSystem	Updated by Abinaya Manivannan: 58m ago	
Reason	New	Iteration	OnlineBankingSystem\sprint 1		
Description		Planning		Deployment	
Click to add Description.		Story Points 25	Priority 1	Risk	To track releases associated with this work item, go to Releases and turn on deployment status reporting for Boards in your pipeline's Options menu. Learn more about deployment status reporting
Acceptance Criteria		Classification		Development	
1. The login page should prompt users for their email/username and password. 2. The system should validate the credentials and redirect the user to the dashboard upon successful login.		Value area Business	Gleek	Add link Link an Azure Repos commit , pull request or branch to see the status of your development. You can also create a branch to get started.	
Discussion					

RESULT: The Estimation/Story Points is created for the project using Poker Estimation.

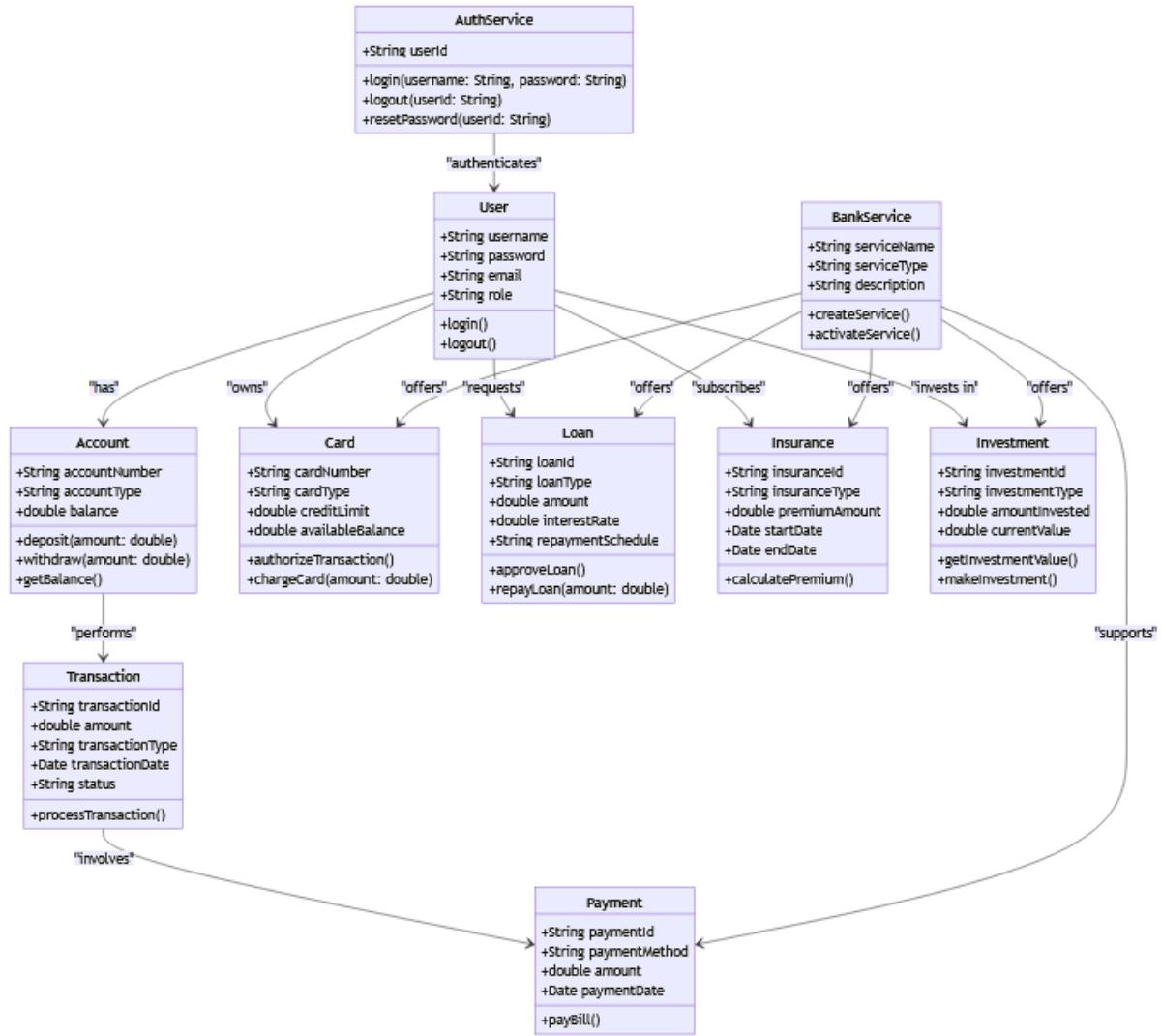
Exp.No: 6

Date: 04/04/2025

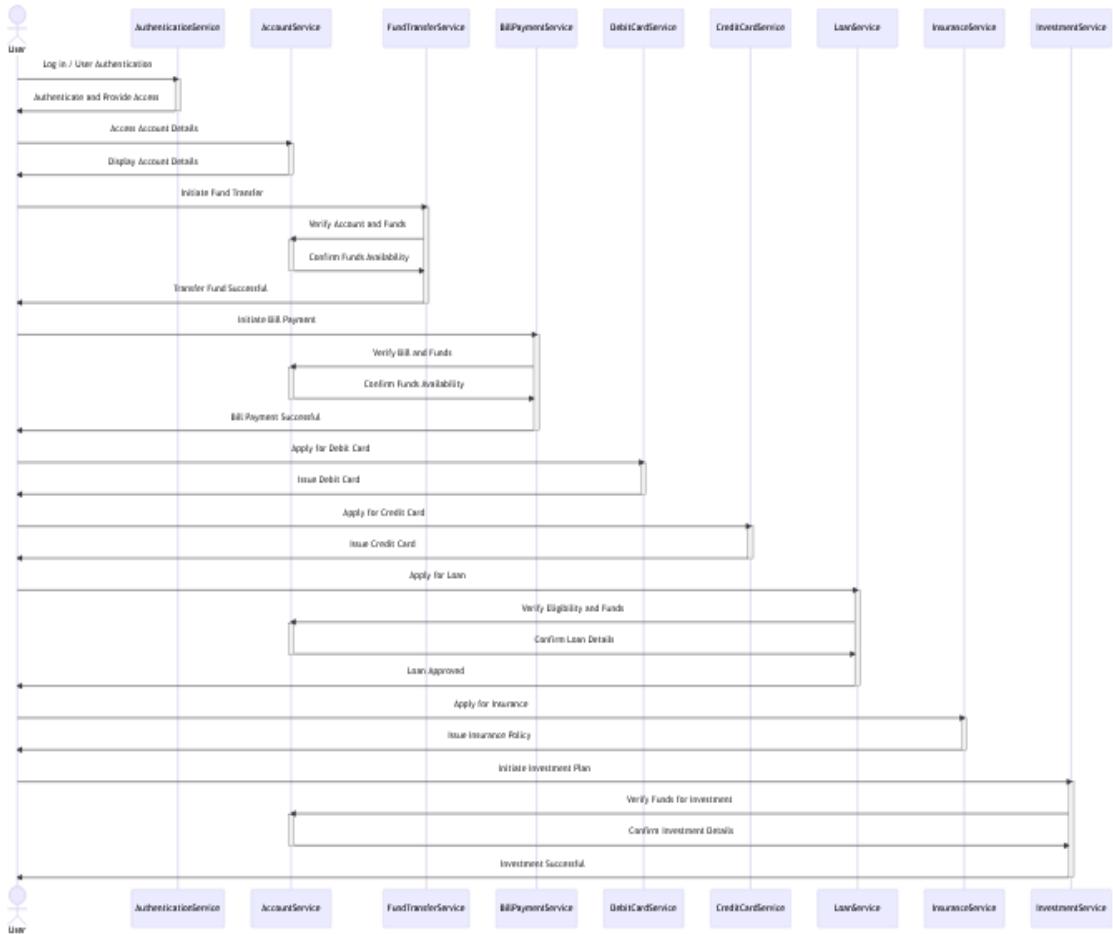
DESIGNING CLASS DIAGRAM AND SEQUENCE DIAGRAMS FOR PROJECT ARCHITECTURE

AIM: To Design a Class Diagram and Sequence Diagram for the given Project.

6A. CLASS DIAGRAM



6B. SEQUENCE DIAGRAM



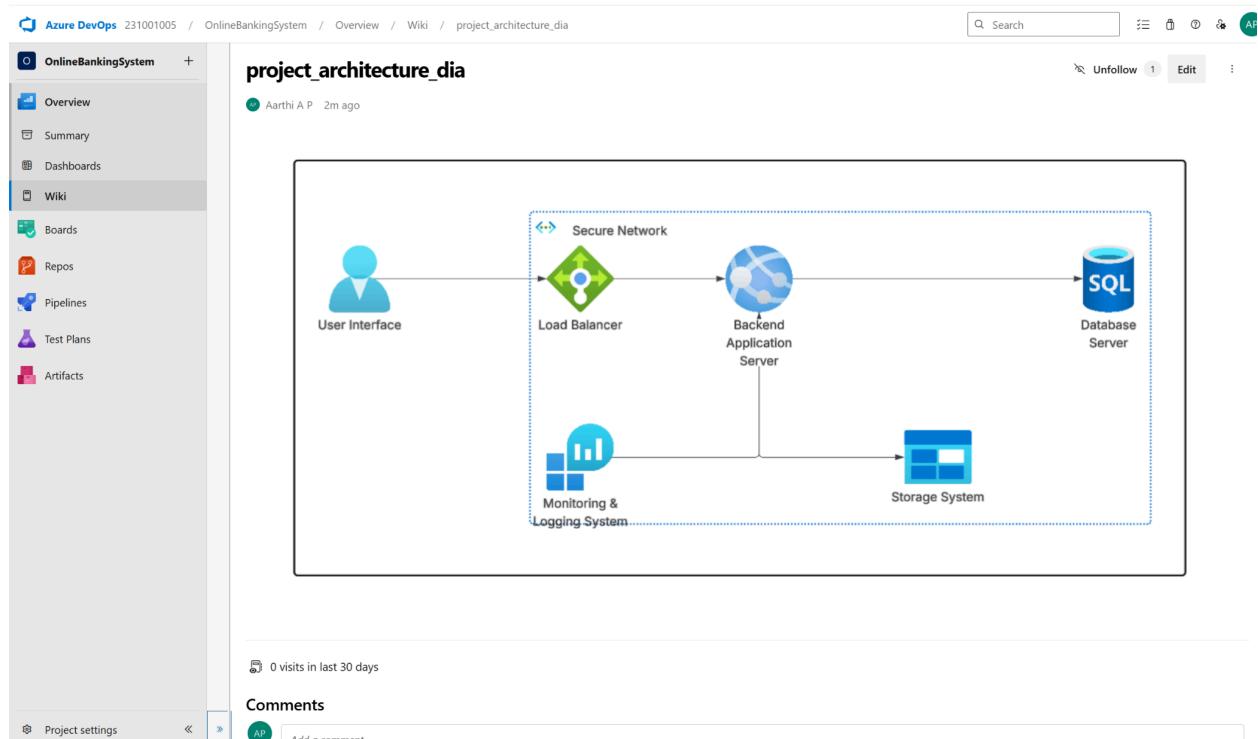
RESULT: The Class Diagram and Sequence Diagram is designed Successfully for the Online Banking System.

Exp.No: 7

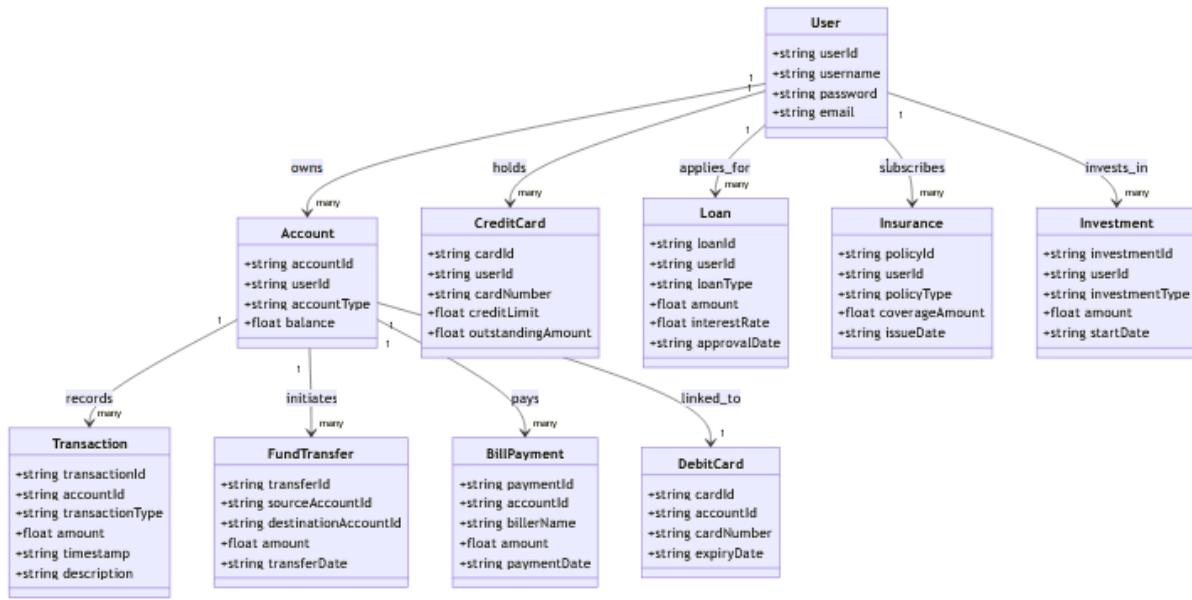
DESIGNING ARCHITECTURAL AND ER DIAGRAMS FOR PROJECT STRUCTURE

AIM: To Design an Architectural Diagram and ER Diagram for the given Project.

7A. ARCHITECTURAL DIAGRAM



7B. ER DIAGRAM



RESULT: The Architecture Diagram and ER Diagram is designed Successfully for the Online Banking System.

Exp.No: 8	TESTING-TEST PLANS AND TEST CASES
Date: 18/04/2025	

AIM: Test Plans and Test Case and write two test cases for at least five user stories showcasing the happy path and error scenarios in azure DevOps platform.

TEST PLANNING AND TEST CASE

Test Case Design Procedure

1. Understand Core Features of the Application

- User Authentication (Login, Forgot Password, MFA)
- Internal & External Fund Transfers
- Mobile Recharge and Bill Payments
- Debit/Credit Card Management (PIN generation, block/unblock, view)
- Loan and Insurance Services
- Investment Options (Mutual Funds, FDs)
- Account Dashboard (Balance, Transactions)

2. Define User Interactions

Each test case reflects realistic user actions:

- Logging in securely
- Transferring funds to own or others' accounts
- Paying bills or recharging mobiles
- Blocking cards when lost
- Applying for loans or insurance

3. Design Happy Path Test Cases

- Focused on successful flows where inputs are valid and systems behave as expected.
- Examples:
 - User logs in with valid credentials
 - Transfers funds successfully
 - Views loan schedule or maturity details

4. Design Error Path Test Cases

- Focused on handling invalid, missing, or unexpected inputs.
- Examples:
 - Login fails due to incorrect password
 - Fund transfer fails due to insufficient balance
 - Card unblock denied without authentication

5. Break Down Steps and Expected Results

Each test case includes:

- Clear step-by-step actions
- Specific expected results for each step
This ensures reproducibility and easy automation later.

6. Use Clear Naming and IDs

- Example:
 - TC01 – Login with Valid Credentials
 - TC05 – Fund Transfer Blocked (Insufficient Balance)
 - TC11 – Credit Card Bill Payment Successful
- Helps trace test cases to user stories and features in Azure DevOps

7. Separate Test Suites

Organize test cases based on functional modules:

- TS01 – User Authentication
- TS02 – Fund Transfers & Recharges
- TS03 – Cards & Loans
- TS04 – Investments & Insurance
- TS05 – Account Management & Security

1. New test plan

 New Test Plan

Name *

Area Path *

Iteration *

Create Cancel

2.Test suite

The screenshot shows the Azure DevOps Test Plans interface. The left sidebar has 'Test Plans' selected. The main area shows a 'Test Suites' list with one item: 'Online Banking System-Functional Validation Plan (ID: 191)'. A context menu is open over this item, showing options: 'New Suite', 'Assign configurations', 'Export', 'Assign testers to run all tests', and 'Import test suites'. The 'Define' tab is active. To the right, there's a section titled 'Add a test case' with a 'New Test Case' button.

3.Test case

Give two test cases for at least five user stories showcasing the happy path and error scenarios in azure DevOps platform.

Online Banking System– Test Plans

User Stories – Banking Application

- **US199:** As a user, I want to securely log in to my bank account so I can view and manage my finances.
- **US200:** As a user, I want to transfer funds between my own accounts so that I can manage my money efficiently.
- **US196:** As a user, I want to generate a debit card PIN so that I can activate and use my card securely.
- **US198:** As a user, I want to open a fixed deposit so that I can earn guaranteed returns.
- **US201:** As a user, I want to pay my credit card bill so that I can avoid penalties.

TEST SUITE: TS01 – USER LOGIN (ID: 199)

Test Case: TC01 – Login with Valid Credentials

User Story: As a user, I want to securely log in to my bank account so I can view and manage my finances.

Test Type: Happy Path

Steps and Expected Results:

- **Action:** Navigate to the login page
Expected Result: Login page is displayed with username and password fields
- **Action:** Enter valid username and password
Expected Result: Input is accepted with no errors
- **Action:** Click the "Login" button
Expected Result: User is redirected to the account dashboard

Notes:

Ensure the test user has an active bank account. This test simulates a successful login.

Test Case: TC02 – Login with Invalid Password

User Story: As a user, I want to securely log in to my bank account so I can view and manage my finances.

Test Type: Error Path

Steps and Expected Results:

- **Action:** Navigate to the login page
Expected Result: Login page is displayed
- **Action:** Enter valid username and incorrect password
Expected Result: Password is rejected
- **Action:** Click the "Login" button
Expected Result: Error message “Incorrect password” is shown

Notes:

Ensures failed login attempts are handled gracefully with proper error messages.

TEST SUITE: TS02 – FUND TRANSFER (ID: 200)

Test Case: TC01 – Fund Transfer with Valid Inputs

User Story: As a user, I want to transfer funds between my own accounts so that I can manage my money efficiently.

Test Type: Happy Path

Steps and Expected Results:

- **Action:** Log in and go to the "Fund Transfer" section
Expected Result: Fund Transfer page is displayed
- **Action:** Select source and destination accounts, enter valid amount
Expected Result: Amount is accepted; no validation error
- **Action:** Click "Transfer" and confirm the transaction
Expected Result: Success message is shown and balances are updated

Test Case: TC02 – Fund Transfer with Insufficient Balance

User Story: As a user, I want to transfer funds between my own accounts so that I can manage my money efficiently.

Test Type: Error Path

Steps and Expected Results:

- **Action:** Log in and go to the "Fund Transfer" section
Expected Result: Fund Transfer page is displayed
- **Action:** Select source account with low balance, enter transfer amount greater than available balance
Expected Result: Validation error or warning message is shown (e.g., "Insufficient balance")
- **Action:** Click "Transfer" and try to proceed
Expected Result: Transaction is blocked, no funds are deducted

TEST SUITE: TS03 – GENERATE DEBIT CARD PIN (ID: 196)

Test Case: TC01 – Generate Debit Card PIN Successfully

User Story: As a user, I want to generate a debit card PIN so that I can activate and use my card securely.

Test Type: Happy Path

Steps and Expected Results:

- **Action:** Log in to the system and navigate to the "Generate Debit Card PIN" section
Expected Result: The user is successfully logged in, and the "Generate Debit Card PIN" page or section is displayed
- **Action:** Enter the required card details (e.g., card number, expiry date), a new 4-digit PIN, and re-enter the same PIN for confirmation
Expected Result: The system accepts the card details and both PIN entries without immediate error. The new and confirmation PIN entries should match
- **Action:** Click on "Generate PIN" and observe the system feedback
Expected Result: The system initiates PIN generation and displays a success message: "Debit card PIN generated successfully."

Test Case: TC02 – Generate Debit Card PIN with Mismatched Entries

User Story: As a user, I want to generate a debit card PIN so that I can activate and use my card securely.

Test Type: Error Path

Steps and Expected Results:

- **Action:** Log in to the system and navigate to the "Generate Debit Card PIN" section
Expected Result: The user is successfully logged in, and the "Generate Debit Card PIN" page or section is displayed
- **Action:** Enter the required card details, a new 4-digit PIN, and re-enter a different 4-digit PIN for confirmation
Expected Result: The system accepts the card details and both PIN entries without immediate error. The new PIN entered in the first instance is different from the confirmation PIN
- **Action:** Click on "Generate PIN" and observe the system feedback
Expected Result: An error message is displayed indicating that the PINs do not match and the debit card PIN is not generated

TEST SUITE: TS04 – OPEN FIXED DEPOSIT (ID: 198)

Test Case: TC01 – Open Fixed Deposit with Valid Details

User Story: As a user, I want to open a fixed deposit so that I can earn guaranteed returns.

Test Type: Happy Path

Steps and Expected Results:

- **Action:** Log in to the system and navigate to the "Open Fixed Deposit" section
Expected Result: The user is successfully logged in, and the "Open Fixed Deposit" page or section is displayed, showing options for deposit type and tenure
- **Action:** Select a deposit type and tenure, enter a valid deposit amount within the allowed range, and select the funding account
Expected Result: The system accepts the selections and the entered deposit amount without immediate errors. The available funding accounts are displayed for selection
- **Action:** Review the terms and conditions and confirm the fixed deposit creation
Expected Result: Upon confirmation, a success message is displayed and the details of the newly created fixed deposit are shown or accessible to the user

Test Case: TC02 – Open Fixed Deposit with Invalid Amount

User Story: As a user, I want to open a fixed deposit so that I can earn guaranteed returns.

Test Type: Error Path

Steps and Expected Results:

- **Action:** Log in to the system and navigate to the "Open Fixed Deposit" section
Expected Result: The user is successfully logged in, and the "Open Fixed Deposit" page or section is displayed, showing options for deposit type and tenure
- **Action:** Select a deposit type and tenure, and enter a deposit amount that is below the minimum allowed limit
Expected Result: The system accepts the deposit type and tenure selections and allows the user to enter the deposit amount
- **Action:** Attempt to proceed with the fixed deposit creation
Expected Result: The system prevents the creation of the fixed deposit. An error message is displayed to the user indicating that the entered amount is below the minimum allowed limit

TEST SUITE: TS05 – CREDIT CARD BILL PAYMENT (ID: 201)

Test Case: TC01 – Pay Credit Card Bill Successfully

User Story: As a user, I want to pay my credit card bill so that I can avoid penalties.

Test Type: Happy Path

Steps and Expected Results:

- **Action:** Log in, go to "Credit Card Payment," and select the card
Expected Result: The user logs in successfully, and the "Credit Card Payment" section displays the user's credit card(s) for selection
- **Action:** Enter a valid payment amount and choose a payment method (e.g., bank account)
Expected Result: The system accepts the payment amount (within the limit) and displays available payment methods for the user to choose from
- **Action:** Confirm the payment details and click "Pay Now"
Expected Result: A success message appears ("Credit card bill payment successful."), and the credit card balance is updated to reflect the payment

Test Case: TC02 – Pay Credit Card Bill with Excess Amount

User Story: As a user, I want to pay my credit card bill so that I can avoid penalties.

Test Type: Error Path

Steps and Expected Results:

- **Action:** Log in, go to "Credit Card Payment," and select the card
Expected Result: The user logs in successfully, and the "Credit Card Payment" section displays the user's credit card(s) for selection
- **Action:** Enter a payment amount that is greater than the displayed outstanding balance
Expected Result: The system accepts the entered amount. It might immediately show a warning or allow proceeding to the next step
- **Action:** Attempt to proceed with the payment
Expected Result: The system prevents processing the payment. An error or warning message is shown

Test Cases

TEST CASE 202*

202 Successful Pin Generation

Abinaya Manivannan 0 Comments Add Tag

State: Design Area: OnlineBankingSystem
Reason: New Iteration: OnlineBankingSystem\sprint 1

Save and Close Follow Associated Automation

Updated by Abinaya Manivannan: 24m ago

Steps Summary Associated Automation

Custom Test Type Happy Path

Deployment To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Click or type here to add a step

Parameter values

Steps	Action	Expected result	Attach
1.	Log in to the system and navigate to the "Generate Debit Card PIN" section.	The user is successfully logged in, and the "Generate Debit Card PIN" page or section is displayed.	
2.	Enter the required card details (e.g., card number, expiry date), a new 4-digit PIN, and re-enter the same PIN for confirmation.	The system accepts the card details and both PIN entries without immediate error. The new and confirmation PIN entries should match.	
3.	Click on "Generate PIN" and observe the system feedback.	The system initiates PIN generation and displays a success message: "Debit card PIN generated successfully."	

NEW TEST CASE *

Fund Transfer

Aarthi A P 0 Comments Add Tag

State: Design Area: OnlineBankingSystem
Reason: New Iteration: OnlineBankingSystem\sprint 1

Save and Close Associated Automation

Steps Summary Associated Automation

Deployment To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Click or type here to add a step

Parameter values

Steps	Action	Expected result	At
1.	Log in and go to the "Fund Transfer" section	Fund Transfer page is displayed	
2.	Select source and destination accounts, enter valid amount	Amount is accepted; no validation error	
3.	Click "Transfer" and confirm the transaction	Success message is shown and balances are updated	

NEW TEST CASE *

Fund Transfer – Insufficient Balance

Aarthi A P 0 Comments Add Tag

Save and Close

State	Design	Area	OnlineBankingSystem
Reason	New	Iteration	OnlineBankingSystem\sprint 1

Steps

Steps	Action	Expected result	At
1.	Log in and go to the "Fund Transfer" section	Fund Transfer page is displayed	
2.	Select source account with low balance, enter transfer amount greater than available balance	Validation error or warning message is shown (e.g., "Insufficient balance")	
3.	Click "Transfer" and try to proceed	Transaction is blocked, no funds are deducted	

Click or type here to add a step

Custom

Test Type: Error Path

Deployment

Development

Related Work

Status

Priority: 2
Automation status: Not Automated

Gleek

Parameter values: 9|eek_

TEST CASE 204*

204 Fund Transfer

Aarthi A P 0 Comments Add Tag

Save and Close

Follow

Updated by Aarthi A P: 5m ago

State	Design	Area	OnlineBankingSystem
Reason	New	Iteration	OnlineBankingSystem\sprint 1

Steps

Steps	Action	Expected result	At
1.	Log in and go to the "Fund Transfer" section	Fund Transfer page is displayed	
2.	Select source and destination accounts, enter valid amount	Amount is accepted; no validation error	
3.	Click "Transfer" and confirm the transaction	Success message is shown and balances are updated	

Click or type here to add a step

Custom

Test Type: Happy Path

Deployment

Development

Related Work

Status

Priority: 2
Automation status: Not Automated

Gleek

Parameter values: 9|eek_

NEW TEST CASE *

PIN mismatch during generation

Abinaya Manivannan 0 Comments Add Tag

State Design Area OnlineBankingSystem
Reason New Iteration OnlineBankingSystem\sprint 1

Save and Close

Steps Summary Associated Automation

Steps

Steps Action Expected result Attach

1. Log in to the system and navigate to the "Generate Debit Card PIN" section.
2. Enter the required card details, a new 4-digit PIN, and re-enter a *different* 4-digit PIN for confirmation.
3. Click on "Generate PIN" and observe the system feedback.

The user is successfully logged in, and the "Generate Debit Card PIN" page or section is displayed.

The system accepts the card details and both PIN entries without immediate error. The new PIN entered in the first instance is different from the confirmation PIN entered in the second instance.

An error message is displayed to the user indicating that the PIN do not match and the debit card PIN is *not generated*.

Parameter values

Custom

Test Type Error Path

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

4. Installation of test

Test and feedback

chrome web store

Discover Extensions Themes

Search extensions and themes

Test & Feedback

Featured 4.2 ★ (175 ratings) Share

Add to Chrome

Extension Workflow & Planning 200,000 users

Capture & Annotate

CAPTURE

- 1. Screenshots
- 2. Notes
- 3. Screen recordings & Videos
- 4. Image action log
- 5. Page load data

New bug

Incorrect phone price

Observations

PCs

Overview

Showing it as an extension

The screenshot shows the Azure DevOps Test Plans interface for the 'OnlineBankingSystem' project. The left sidebar is visible with options like Overview, Boards, Repos, Pipelines, Test Plans, Test plans, Progress report, Parameters, Configurations, Runs, and Artifacts. The 'Test plans' option is selected. The main area displays a test plan named 'Online Banking Sy...' with a status of 'May 3 - Jun 3 Current' and '100% run, 60% passed'. A 'View report' link is present. Below this is a 'Test Suites' section with a dropdown menu and a 'Filter suites by name' input field. Under 'Test Suites', there are entries for 'Online Banking System-Functional Val...' and 'TS01 : As a user, I want to log ...'. A tooltip for 'TS01' indicates it is the current suite. To the right of the test suites is a 'Test Cases (2 items)' section listing 'Login with Valid Credentials' (Test Case Id 208) and 'Login with Incorrect Password (Error Path)' (Test Case Id 210). On the far right, an 'Extensions' sidebar is open, showing 'Full access' with 'McAfee® WebAdvisor' and 'Test & Feedback' listed, along with a 'Manage extensions' link.

5. Running the test cases

The screenshot shows the Azure DevOps Test Plans interface. On the left, the navigation bar is visible with options like Overview, Boards, Repos, Pipelines, Test Plans, Test plans, Progress report, Parameters, Configurations, Runs, and Artifacts. The 'Test Plans' option is selected. In the center, a test suite titled 'Online Banking System-Fun...' is selected, showing a progress of 30% run, 66% passed, and a link to 'View report'. Below this, the 'Test Suites' section lists several suites, with 'TS02 : As a user, I want to transfer funds between my own accounts so that I can manage my money efficiently. (ID: 200)' currently selected. The 'Test Points (2 items)' table shows two entries:

Title	Outcome	Order	Test Case Id
Fund Transfer-Valid Balance	Passed	1	204
Fund Transfer – Insufficient Balance	Failed	2	205

The screenshot shows a browser window titled 'Runner - Test Plans — Mozilla Firefox' with the URL 'https://dev.azure.com/231001005/OnlineBankingSystem/_testExecution/Index'. The page displays a test step for '211: Successful credit card bill payment'. The step details are as follows:

211: Successful credit card bill payment

1. Log in, go to "Credit Card Payment," and select the card.
EXPECTED RESULT
The user logs in successfully, and the "Credit Card Payment" section displays the user's credit card(s) for selection.
2. Enter a valid payment amount and choose a payment method (e.g., bank account).
EXPECTED RESULT
The system accepts the payment amount (within the limit) and displays available payment methods for the user to choose from.
3. Confirm the payment details and click "Pay Now".
EXPECTED RESULT
A success message appears ("Credit card bill payment successful."), and the credit card balance is updated to reflect the payment.

6.Recording the test case

The screenshot shows the Azure Test Execution interface. On the left, a test step is recorded:

204: Fund Transfer-Valid Balance

- Log in and go to the "Fund Transfer" section
EXPECTED RESULT
Fund Transfer page is displayed
- Select source and destination accounts, enter valid amount
EXPECTED RESULT
Amount is accepted; no validation error
- Click "Transfer" and confirm the transaction
EXPECTED RESULT
Success message is shown and balances are updated

A central modal window titled "Choose what to share with Test & Feedback" offers options: "Chrome Tab", "Window", and "Entire Screen". The "Entire Screen" option is selected. At the bottom of the modal are "Share" and "Cancel" buttons.

7.Creating the bug

The screenshot shows the Azure DevOps Bug creation interface for a new bug titled "BUG_NO_1".

NEW BUG *

BUG_NO_1

Unassigned

0 comments **Add tag**

Save & Close

State: New **Reason**: New **Area**: OnlineBankingSystem **Iteration**: OnlineBankingSystem\sprint 1

Severity: 3 - Medium **Activity**

Effort (Hours)

Related Work

Gleek

Test Configuration: Windows 10

System Info

Browser - Name	Google Chrome 136
Browser - Language	en-US
Browser - Height	1062
Browser - Width	1664
Browser - User Agent	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/136.0.0.0 Safari/537.36
Operating system - Name	Windows NT 10.0; Win64; x64
Operating system - Architecture	x86_64
Operating system - Processor model	12th Gen Intel(R) Core(TM) i7-1255U
Operating system - Number of processors	12
Memory - Available	638291968
Memory - Capacity	8405794816
Display - Pixels per inch (X axis)	144
Display - Pixels per inch (Y axis)	144

Repro Steps

Step no. **Result** **Title**

1. Failed Navigate to the login page
Expected Result Login page is displayed
2. Failed Enter valid email/username and **incorrect** password
Expected Result Input is accepted, but error is expected
3. Failed Click the "Login" button
Expected Result Login fails, and error message is shown (e.g., "Incorrect password")

Planning

Resolved Reason
Story Points
Priority 2
Severity 3 - Medium
Activity

Deployment

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development

+ Add link
Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Related Work

+ Add link
Parent
29 As a user, I want to log in to my account ... Updated 7 hours ago, New

210 Login with Incorrect Password (Error Path...) Updated 30 minutes ago, Design

Gleek

System Info

8. Test case results

Test Plan 190 Online Banking S...

Test Suites

TS03 : As a user, I want to generate

Test Points (2 items)

Test Point	Outcome	TimeSta...	Configuration	Run by	Tester	Test
Successful Pin Generation	Passed	Just now	Windows 10	Abinaya Maniv...	Abinaya Maniv...	Online
PIN mismatch during generation	Failed	Just now	Windows 10	Abinaya Maniv...	Abinaya Maniv...	Online
Successful Pin Generation	Passed	21m ago	Windows 10	Abinaya Maniv...	Abinaya Maniv...	Online
Successful Pin Generation	Passed	26m ago	Windows 10	Abinaya Maniv...	Abinaya Maniv...	Online

[Open execution history for current test point](#)

9. Test report summary

The screenshot shows the Azure DevOps interface for the 'OnlineBankingSystem' project. The left sidebar is collapsed, and the main area displays a work item titled 'BUG_213'. The work item details are as follows:

- Title:** BUG_213*
- State:** New
- Area:** OnlineBankingSystem
- Reason:** New
- Iteration:** OnlineBankingSystem\sprint 1

Repro Steps:

Step	Result	Title
1.	Passed	Log in and go to the "Fund Transfer" section Expected Result Fund Transfer page is displayed
2.	Failed	Select source account with low balance, enter transfer amount greater than available balance Expected Result Validation error or warning message is shown (e.g., "Insufficient balance")
3.	Failed	Click "Transfer" and try to proceed

Planning:

- Resolved Reason
- Story Points
- Priority: 2
- Severity: 3 - Medium
- Activity

Deployment:

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development:

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Effort (Hours):

- Original Estimate
- Remaining
- Completed

Related Work:

- Assigning bug to the developer and changing state

The screenshot shows the same Azure DevOps interface after changes have been made to the work item. The work item details are now:

- Title:** BUG_213
- State:** New
- Area:** OnlineBankingSystem
- Reason:** Aarthi A P
- Iteration:** OnlineBankingSystem\sprint 1

Repro Steps:

Step	Result	Title
1.	Passed	Log in and go to the "Fund Transfer" section Expected Result Fund Transfer page is displayed
2.	Failed	Select source account with low balance, enter transfer amount greater than available balance Expected Result Validation error or warning message is shown (e.g., "Insufficient balance")
3.	Failed	Click "Transfer" and try to proceed

Planning:

- Resolved Reason
- Story Points
- Priority: 2
- Severity: 3 - Medium
- Activity

Deployment:

To track releases associated with this work item, go to [Releases](#) and turn on deployment status reporting for Boards in your pipeline's Options menu. [Learn more about deployment status reporting](#)

Development:

Add link

Link an Azure Repos [commit](#), [pull request](#) or [branch](#) to see the status of your development. You can also [create a branch](#) to get started.

Effort (Hours):

- Original Estimate
- Remaining
- Completed

Related Work:

10. Progress report

Azure DevOps 231001005 / OnlineBankingSystem / Test Plans / Progress report

Progress report

Online Banking System-Functional Validation Plan ▾ Test Suites ▾ Outcome ▾ Configuration ▾ Tester ▾ Priority ▾ Assigned To ▾ X

Summary

1 Test plans 10 Test points

10 (10 / 10) Test points run 100% Run

✓ 60% (6 / 10) Pass rate 6 Passed 4 Failed

Outcome trend Last 14 Days

Details

Test plan name	Test points	Run %	Passed %	Failed %	Not run count
Online Banking System-Functional Validation Plan	10	100	60	40	0

Project settings <

Progress report

Online Banking System-Functional Validation Plan ▾ Test Suites ▾ Outcome ▾ Configuration ▾ Tester ▾ Priority ▾ Abinaya Manivannan ▾ X

Summary

1 Test plans 4 Test points

4 (4 / 4) Test points run 100% Run

✓ 50% (2 / 4) Pass rate 2 Passed 2 Failed

Outcome trend Last 14 Days

Last 14 Days

11.Changing the test template

The screenshot shows the Azure DevOps Organization Settings interface. On the left, there's a sidebar with sections like General, Security, and Boards. The main area is titled 'All processes' and lists several process templates:

Name	Description	Team projects
Basic (default)	This template is flexible for any process and great for teams getting started with Az...	0
Agile	This template is flexible and will work great for most teams using Agile planning me...	0
231001005 Agile	...	1
Scrum	This template is for teams who follow the Scrum framework.	0
CMMI	This template is for more formal projects requiring a framework for process improv...	0

12.View the new test case template

The screenshot shows the 'Add a field to Test Case' dialog. On the left, there's a sidebar with tabs for Definition, Options, and Layout. The main area has a heading 'Add a field to store custom, queryable data about your work items.' and two options:

- Use an existing field
Field: Acceptance Criteria
- Create a field
Name: Test Type
Type: Text (single line)
Description: Optionally provide a description for the field

At the bottom, there are 'Learn more' and 'Add field' buttons.

The screenshot shows the Azure DevOps Organization Settings page for process configuration. The left sidebar lists categories like General, Security, Boards, and Process. The main area shows the 'Test Case' field configuration under the 'All processes > 231001005 Agile > Test Case' section. The 'Layout' tab is selected. A 'Steps' field is defined as 'Text (multiple lines)'. To its right, a 'Custom' field named 'Test Type' is defined as 'Text (single line)'. Other sections include 'Recent test results', 'Deployment', 'Development', and 'Related Work', each with their respective descriptions. A 'Add a field ...' button is visible on the right.

RESULT: The test plans and test cases for the user stories is created in Azure DevOps with Happy Path and Error Path

Exp.No: 9	LOAD TESTING AND PERFORMANCE TESTING
Date: 25/04/2025	

AIM: To create an Azure Load Testing resource and run a load test to evaluate the performance of a target endpoint.

LOAD TESTING

Steps to Create an Azure Load Testing Resource:

Before you run your first test, you need to create the Azure Load Testing resource:

1. Sign in to Azure Portal
Go to <https://portal.azure.com> and log in.
2. Create the Resource
 - o Go to *Create a resource* → Search for “Azure Load Testing”.
 - o Select Azure Load Testing and click Create.
3. Fill in the Configuration Details
 - o *Subscription*: Choose your Azure subscription
 - o *Resource Group*: Create new or select an existing one.
 - o *Name*: Provide a unique name (no special characters).
 - o *Location*: Choose the region for hosting the resource.
4. (Optional) Configure tags for categorization and billing.
5. Click Review + Create, then Create.
6. Once deployment is complete, click Go to resource.

Microsoft Azure

Home > Create a resource > Marketplace > Azure Load Testing >

Create a load testing resource

Basics Encryption Tags Review + create

Azure Load Testing is a fully managed load-testing service that makes it easy to generate high-scale load and identify performance bottlenecks. [Learn more](#)

Project details
Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription: Azure for Students
Resource group: (New) BankProject

Instance details
Name: MYBANKAPP
Region: East Asia

Previous Next Review + create

Microsoft Azure

Home > Create a resource > Marketplace > Azure Load Testing >

Create a load testing resource

Validation passed.

Basics Encryption Tags Review + create

Basics
Subscription: Azure for Students
Resource group: BankProject
Name: MYBANKAPP
Region: East Asia

Encryption
Encryption type: MMK

Microsoft Azure

Microsoft.CloudNativeTesting1746461401491 | Overview

Deployment

Search Delete Cancel Redeploy Download Refresh

Overview

Your deployment is complete

Deployment name: Microsoft.CloudNativeTesting1746461401491
Subscription: Azure for Students
Resource group: BankProject

Deployment details

Start time: 5/5/2025, 9:40:23 PM
Correlation ID: ab036e0a-0f70-4d67-9550-f59c511ecd62

Next steps

Go to resource

Give feedback
Tell us about your experience with deployment

Cost management
Get notified to stay within your budget and prevent unexpected charges on your bill.
[Set up cost alerts >](#)

Microsoft Defender for Cloud
Secure your apps and infrastructure
[Go to Microsoft Defender for Cloud >](#)

Free Microsoft tutorials
[Start learning today >](#)

Work with an expert
Azure experts are service provider partners who can help manage your assets on Azure and be your first line of support.
[Find an Azure expert >](#)

Steps to Create and Run a Load Test:

Once your resource is ready:

1. Go to your Azure Load Testing resource and click Add HTTP requests > Create.
2. Basics Tab o *Test Name*: Provide a unique name.
 - o *Description*: (Optional) Add test purpose.
 - o *Run After Creation*: Keep checked.
3. Load Settings o *Test URL*: Enter the target endpoint (e.g., <https://yourapi.com/products>).
4. Click Review + Create → Create to start the test.

Microsoft Azure

Search resources, services, and docs (G+/)

Home > Microsoft.CloudNativeTesting1746461401491 | Overview > MYBANKAPP

Create a URL-based test ...

Basics Test plan Parameters Load Monitoring Test criteria Review + create

Get started by creating a test for a URL, or configure an advanced load test for multiple URLs with additional options. [Learn more](#)

Test details

Provide a test name and a description. Test name and description will help you identify a test in the list of tests created in this resource.

Test name *

Test description

Run test after creation

Debug mode
If this is enabled, the first test run will run in debug mode providing debug logs along with request and response data for failed requests. The test run in debug mode will run with only one engine and up to 10 minutes duration. [Learn more](#)

Enable advanced settings

Configure a test with multiple requests in the 'Test plan' tab.

Previous Next Review + create

Create a URL-based test ...

Validation passed.

Basics Test plan Parameters Load Monitoring Test criteria Review + create

Basics

Test tool JMeter

Test name Test_5/5/2025,9:41:40 PM

Test description

Debug mode Disabled

Test plan

Test method URL

Requests Request1

Input data files

Load

Engine instances 1

Load pattern Linear

Concurrent users per engine 50

Test duration (minutes) 20

Ramp-up time (minutes) 1

Load distribution

East Asia 1

Resources

Resources 0

Previous Next Create

Load Testing

Home > MYBANKAPP | Tests > Test_5/5/2025_9:41:40 PM >

TestRun_5/5/2025_10:06:05 PM ...

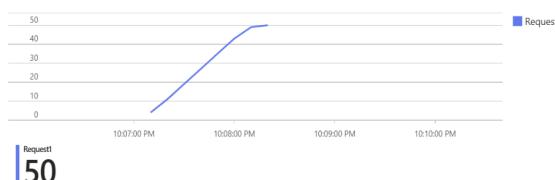
Last updated by: 231001003@rajalakshmi.edu.in | Initiated on: 5/5/2025, 10:06 PM

[View all test runs](#) [Stop](#) [Refresh](#) [Rerun](#) [Compare](#) [App components](#) [Configure metrics](#) [Download](#) [Copy artifacts](#) [Share](#) | [Delete test run](#) [Mark as baseline](#) [Auto refresh off](#)

Client-side metrics

Requests : All Region : 0 Aggregation : P90 Error type : All Time range : 5/5/2025, 10:06:08 PM - 5/5/2025, 10:07:15 PM Group by : 10s

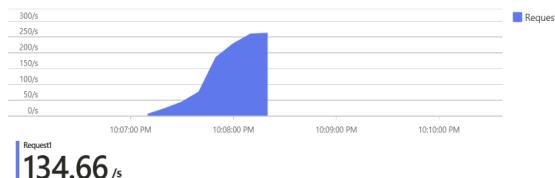
Virtual Users (Max)



Response time (successful responses)



Requests/sec (Avg)



Errors (total)



Server-side metrics

Home > MYBANKAPP | Tests > Test_5/5/2025_9:41:40 PM >

TestRun_5/5/2025_10:06:05 PM ...

Last updated by: 231001003@rajalakshmi.edu.in | Initiated on: 5/5/2025, 10:06 PM

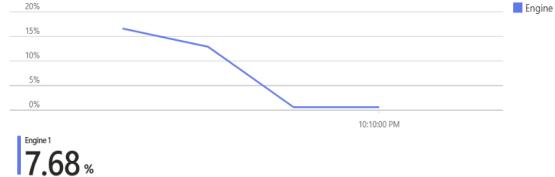
[View all test runs](#) [Stop](#) [Refresh](#) [Rerun](#) [Compare](#) [App components](#) [Configure metrics](#) [Download](#) [Copy artifacts](#) [Share](#) | [Delete test run](#) [Mark as baseline](#) [Auto refresh on \(10s\)](#)

Load engine nearn metrics

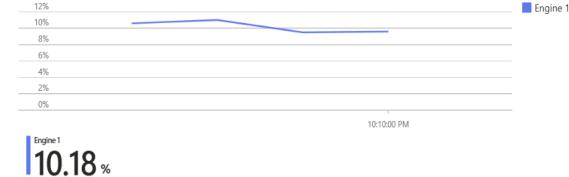
Monitor and troubleshoot the performance of the load test engines. [Learn more](#)

EEngines : All Time range : 5/5/2025, 10:06:08 PM - 5/5/2025, 10:10:12 PM Group by : 1m Regions : 0

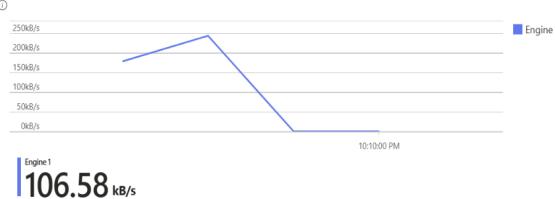
CPU percentage (Avg)



Memory percentage (Avg)

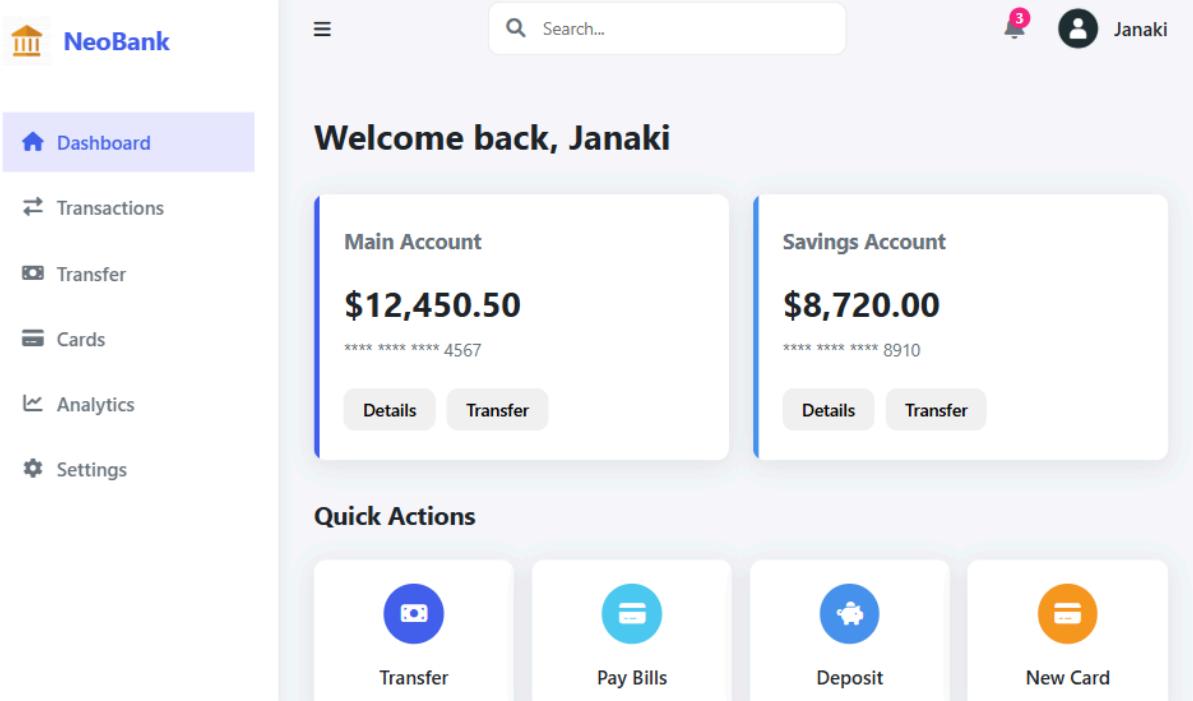


Network bytes/sec (Avg)



Virtual users (Max)





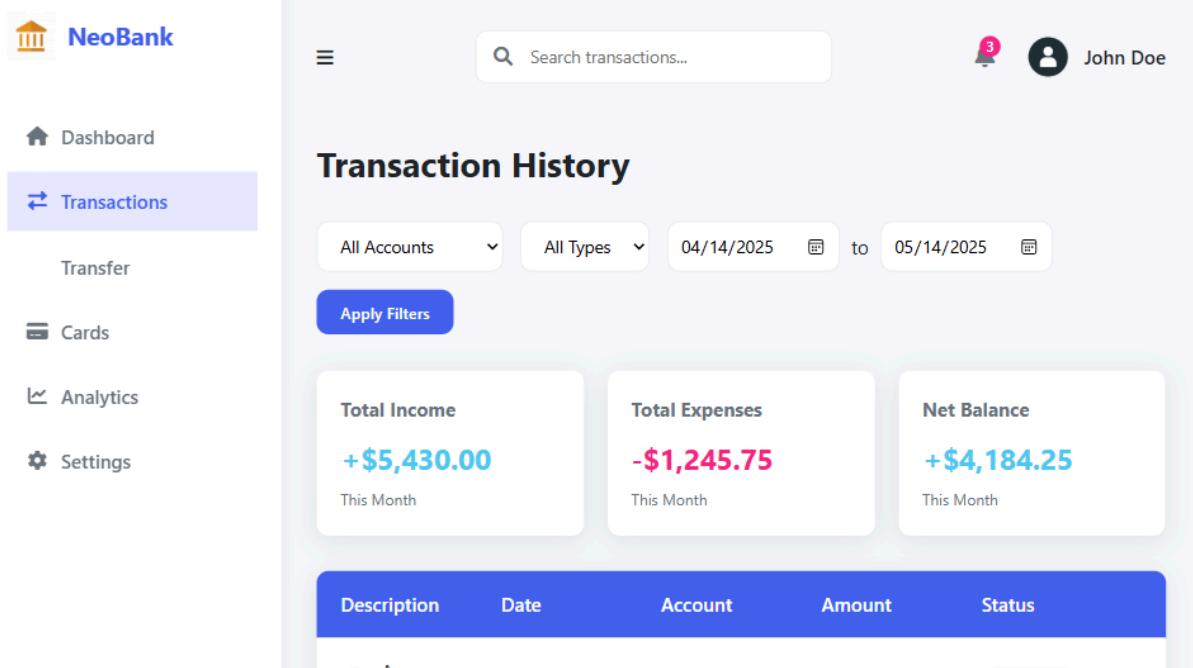
Welcome back, Janaki

Main Account
\$12,450.50
***** * * * * 4567
[Details](#) [Transfer](#)

Savings Account
\$8,720.00
***** * * * * 8910
[Details](#) [Transfer](#)

Quick Actions

-  Transfer
-  Pay Bills
-  Deposit
-  New Card



Transaction History

All Accounts [▼](#) All Types [▼](#) 04/14/2025 [🕒](#) to 05/14/2025 [🕒](#)

[Apply Filters](#)

Description	Date	Account	Amount	Status
Amazon	2025-05-14	Checking	+\$1,245.75	Completed

Total Income
+\$5,430.00
This Month

Total Expenses
-\$1,245.75
This Month

Net Balance
+\$4,184.25
This Month

The screenshot shows the NeoBank mobile application interface. On the left is a vertical navigation bar with icons and labels: Home (Dashboard), Transaction History (Transactions), Transfer (selected), Cards, Analytics, and Settings. The main area is titled "Transfer Money" and displays a three-step process: "Transfer Details" (Step 1, highlighted in blue), "Confirmation" (Step 2), and "Complete" (Step 3). Under "Transfer Details", there are fields for "From Account" (labeled "Select account") and "To Account" (with options "Internal" (selected, highlighted in blue), "External", and "Mobile"). Below "To Account" is a field labeled "Select recipient".

Transfer Money

- 1 Transfer Details
Enter amount and recipient
- 2 Confirmation
Review your transfer
- 3 Complete
Transfer successful

Transfer Details

From Account
Select account

To Account

Internal
External
Mobile

Select recipient

RESULT: Successfully created the Azure Load Testing resource and executed a load test to assess the performance of the specified endpoint.

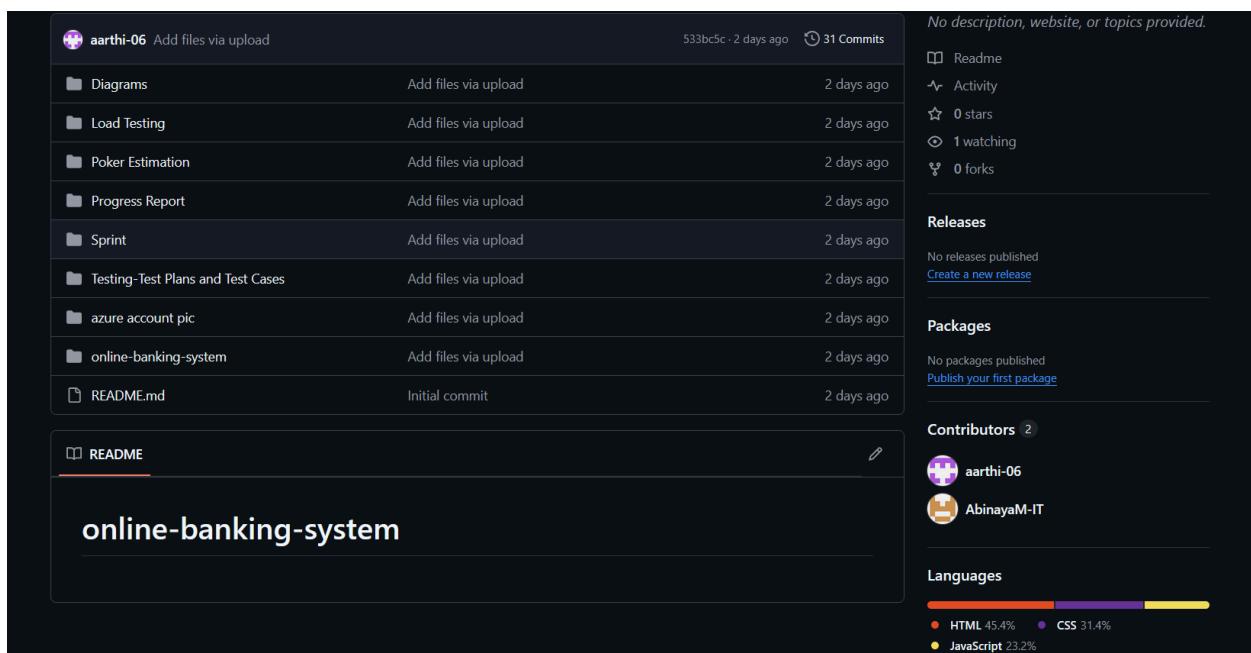
Exp.No: 10

Date: 02/05/2025

GITHUB PROJECT STRUCTURE & NAMING CONVENTIONS

AIM: To provide a clear and organized view of the project's folder structure and file naming conventions, helping contributors and users easily understand, navigate, and extend the Online Banking System project.

GITHUB PROJECT STRUCTURE



RESULT: The GitHub repository clearly displays the organized project structure and consistent naming conventions, making it easy for users and contributors to understand and navigate the codebase.