



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

DEPARTMENT OF INFORMATION TECHNOLOGY
LAB MANUAL

CS23432 – Software Construction

(REGULATION 2023)

RAJALAKSHMI ENGINEERING COLLEGE
Thandalam, Chennai-602015

Name: Prasanna Venkatesh V

Register No: 231001149

Year / Branch / Section: 2nd/IT/ FB Semester: IV

Academic Year: 2024 - 2025

EXP NO: 1**AZURE DEVOPS ENVIRONMENT SETUP****Aim:**

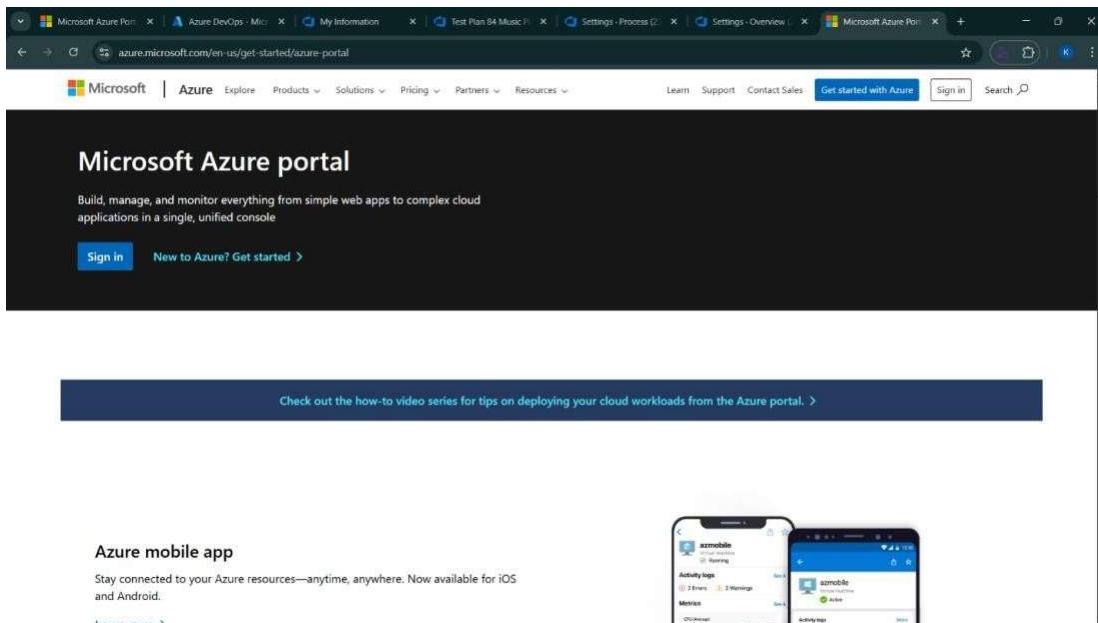
To set up and access the Azure DevOps environment by creating an organization through the Azure portal.

INSTALLATION

1. Open your web browser and go to the Azure website: <https://azure.microsoft.com/en-us/get-started/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>



2. Azure home page

The screenshot shows the Microsoft Azure home page. At the top, there's a navigation bar with tabs for 'Home - Microsoft Azure', 'My Information', and 'Summary - Overview'. Below the navigation bar, the main content area starts with a 'Welcome to Azure!' message and a note about not having a subscription. It features three main promotional cards: 'Start with an Azure free trial' (blue key icon), 'Manage Microsoft Entra ID' (shield and server icon), and 'Azure for Students' (pen and paper icon). Below these are sections for 'Azure services' (with icons for Create a resource, Azure DevOps organizations, Quickstart Center, Azure AI foundry, Kubernetes services, Virtual machines, App Services, Storage accounts, SQL databases, and More services) and 'Resources'.

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

4.

The screenshot shows the Microsoft Azure search results for the query 'DevOps'. The search bar at the top has 'DevOps' typed into it. The results are categorized under 'All', 'Services (7)', and 'Resources'. Under 'Services', items include 'Azure Native New Relic Service', 'Managed DevOps Pools', 'Azure DevOps organizations', and 'Azure Native Dynatrace Service'. Under 'Marketplace', items include 'Static Web App', 'Rocky Linux 9', 'Build Agents for Azure DevOps', and 'Azure Native New Relic Service : New Relic Azure Cloud Monitoring - Start f...'. Under 'Documentation', items include 'Introduction to DevOps - Training' and 'Course AZ-400T00-A: Designing and Implementing Microsoft DevOps solutions...'. A large, stylized rocket and server icon is prominently displayed on the right side of the search results page.

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

The screenshot shows the Microsoft Azure portal with the Azure DevOps extension open. The main heading is "Azure DevOps". Below it, a sub-section titled "My Azure DevOps Organizations" is visible. A large, colorful illustration in the center depicts a team of people working together on various tasks: one person stands on a stack of pink boxes, another climbs a ladder, a third uses a magnifying glass, and others handle blue and orange components. A rocket ship is shown launching from behind them, symbolizing progress and success. At the bottom of the page, there are links for "Give feedback" and "Tell us about your experience with the Azure DevOps page".

Result:

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

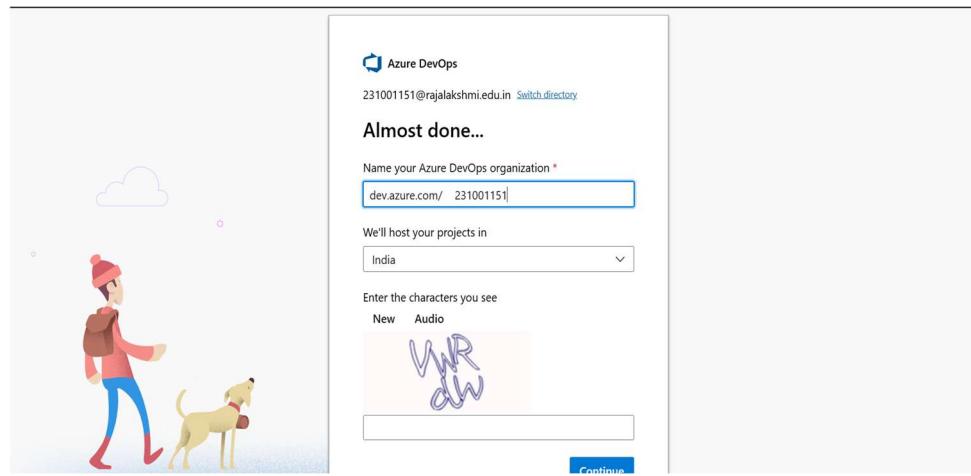
EXP NO: 2

AZURE DEVOPS PROJECT SETUP AND USER STORY MANAGEMENT

Aim:

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

1. Create An Azure Account



2. Create the First Project in Your Organization

- 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.
- On the organization's **Home page**, click on the **New Project** button.
- 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).
- Once you've filled out the details, click **Create** to set up your first project.

Create new project

X

Project name *

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.

Advanced

Version control

Work item process

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.

Microsoft PRASHAANT V Sign out

PV

PRASHAANT V Edit profile
231001151@rajalakshmi.edu.in

Microsoft account ▾ India

Azure DevOps Organizations Create new organization

dev.azure.com/231001143 (Owner)

Projects Actions

- sample Open in Visual Studio
- Task Management System
- ToDoListManagement System
- Task Management
- To Do List2

New project

3. Project dashboard

Azure DevOps 231001143 / Task Management System / Overview / Summary

Search

Task Management Syst... +

- Overview
- Summary
- Dashboards
- Wiki
- Boards
- Repos
- Pipelines
- Test Plans
- Artifacts

+ Add Project Description

Task Management System Public Invite PV

About this project

Help others to get on board!
Describe your project and make it easier for other people to understand it.

Project stats Period: Last 7 days

Boards

	34	0
Work items created	34	0
Work items completed		0

Members 1

PV

4. 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 the new User Story.

Order	Work Item Type	Title	State	Story...	Value Area
1	User Story	As a new user, I want to create an account so that I can access...	New	Business	Task
2	User Story	As a registered user, I want to log in using my credentials s...	New	Business	Task
3	User Story	As a newly registered user, I want to receive an OTP via ema...	New	Business	Task
4	User Story	As a user with an unverified account, I want to verify my em...	New	Business	Task
5	User Story	As a logged-in user, I want to create a new task so that I ca...	New	Business	Task
6	User Story	As a task owner, I want to edit my existing tasks so that I ca...	New	Business	Task
7	User Story	As a user, I want to view all my tasks in a dashboard so that ...	New	Business	Task
8	User Story	As a user, I want to filter tasks based on status (pending/co...	New	Business	Task
9	User Story	As a user, I want to mark tasks as completed so that I can tr...	New	Business	Task
10	User Story	As a user, I want to delete tasks that are no longer relevant ...	New	Business	Task
11	User Story	As a user, I want to set due dates and times for my tasks so ...	New	Business	Task

Order	Work Item Type	Title	State	Story...	Value Area
1	User Story	TASK MANAGEMENT SYSTEM	New	Business	
2	User Story	REMINDER SYSTEM	New	Business	
3	User Story	USER ACCOUNT & CROSS-PLATFORM SYNC	New	Business	
4	User Story	UI/UX & CUSTOMIZATION	New	Business	

Result:

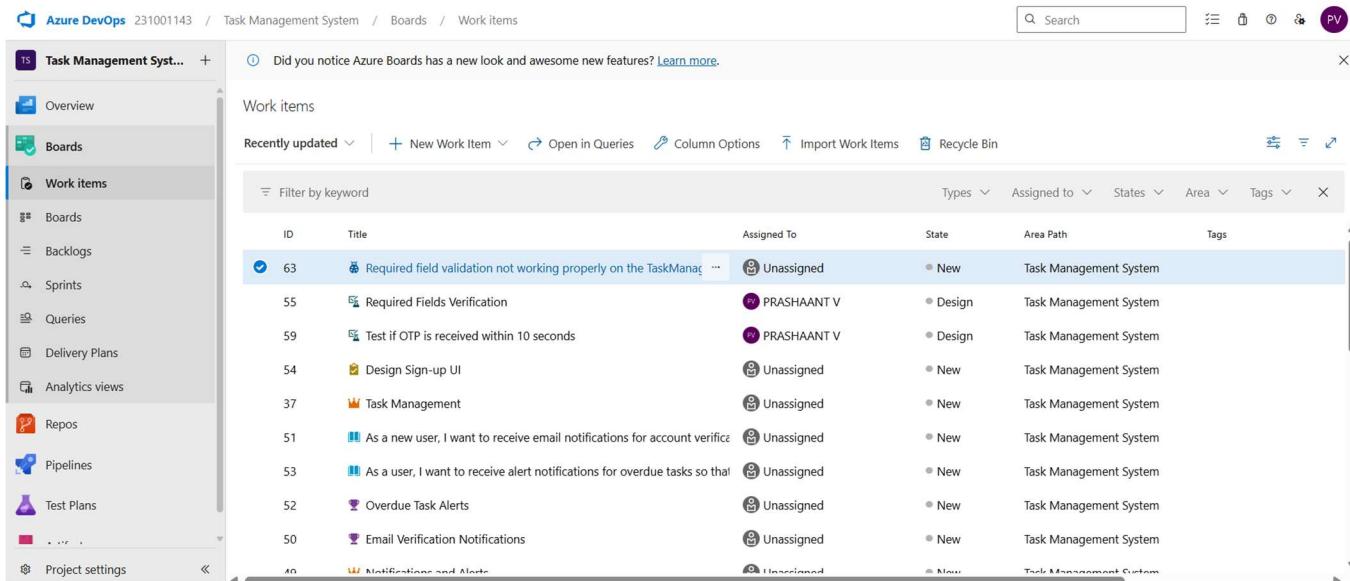
Successfully created an Azure DevOps project with user story management and agile workflow setup.

EXP NO: 3

SETTING UP EPICS, FEATURES, AND USER STORIES FOR PROJECT PLANNING

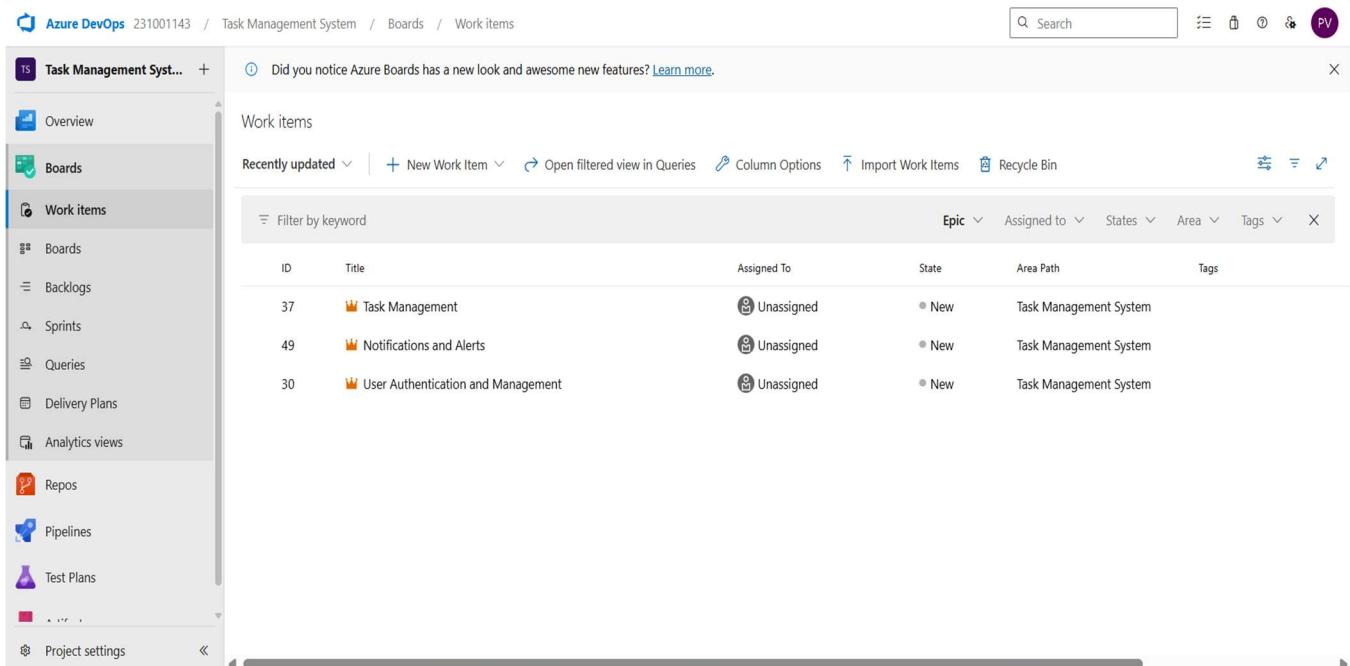
Aim:

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

Create Epic, Features, User Stories, Task


The screenshot shows the Azure DevOps interface for the 'Task Management System' project. The left sidebar is collapsed, and the main area displays a table of work items under the heading 'Work items'. The table has columns for ID, Title, Assigned To, State, Area Path, and Tags. There are 10 rows of data, each representing a task. The first task is selected, showing its details in the preview pane on the right.

ID	Title	Assigned To	State	Area Path	Tags
63	Required field validation not working properly on the TaskManagementSystem	Unassigned	New	Task Management System	
55	Required Fields Verification	PRASHANT V	Design	Task Management System	
59	Test if OTP is received within 10 seconds	PRASHANT V	Design	Task Management System	
54	Design Sign-up UI	Unassigned	New	Task Management System	
37	Task Management	Unassigned	New	Task Management System	
51	As a new user, I want to receive email notifications for account verification	Unassigned	New	Task Management System	
53	As a user, I want to receive alert notifications for overdue tasks so that I can take action	Unassigned	New	Task Management System	
52	Overdue Task Alerts	Unassigned	New	Task Management System	
50	Email Verification Notifications	Unassigned	New	Task Management System	

1. Fill in Epics


The screenshot shows the Azure DevOps interface for the 'Task Management System' project. The left sidebar is collapsed, and the main area displays a table of work items under the heading 'Work items'. The table has columns for ID, Title, Assigned To, State, Area Path, and Tags. There are 3 rows of data, each representing an epic. The first epic is selected, showing its details in the preview pane on the right.

ID	Title	Assigned To	State	Area Path	Tags
37	Task Management	Unassigned	New	Task Management System	
49	Notifications and Alerts	Unassigned	New	Task Management System	
30	User Authentication and Management	Unassigned	New	Task Management System	

2. Fill in Features

Azure DevOps Task Management System - Boards - Work items

Work items

Recently updated | + New Work Item | Open filtered view in Queries | Column Options | Import Work Items | Recycle Bin

Filter by keyword | Epic (+1) | Assigned to | States | Area | Tags

ID	Title	Assigned To	State	Area Path	Tags
37	Task Management	Unassigned	New	Task Management System	
52	Overdue Task Alerts	Unassigned	New	Task Management System	
50	Email Verification Notifications	Unassigned	New	Task Management System	
49	Notifications and Alerts	Unassigned	New	Task Management System	
47	Task Due Date Management	Unassigned	New	Task Management System	
44	Task Status Management	Unassigned	New	Task Management System	
41	Task Viewing and Organization	Unassigned	New	Task Management System	
38	Task Creation and Editing	Unassigned	New	Task Management System	
34	Email Verification	Unassigned	New	Task Management System	

3. Fill in User Story Details

Azure DevOps Task Management System - Boards - Work items

Work items

Recently updated | + New Work Item | Open filtered view in Queries | Column Options | Import Work Items | Recycle Bin

Filter by keyword | Epic (+2) | Assigned to | States | Area | Tags

ID	Title	Assigned To	State	Area Path	Tags
37	Task Management	Unassigned	New	Task Management System	
51	As a new user, I want to receive email notifications for account verification so that I can verify my account.	Unassigned	New	Task Management System	
53	As a user, I want to receive alert notifications for overdue tasks so that I can take action.	Unassigned	New	Task Management System	
52	Overdue Task Alerts	Unassigned	New	Task Management System	
50	Email Verification Notifications	Unassigned	New	Task Management System	
49	Notifications and Alerts	Unassigned	New	Task Management System	
48	As a user, I want to set due dates and times for my tasks so that I can manage my workload effectively.	Unassigned	New	Task Management System	
47	Task Due Date Management	Unassigned	New	Task Management System	
46	As a user, I want to delete tasks that are no longer relevant so that I can keep my backlog organized.	Unassigned	New	Task Management System	
45	As a user, I want to mark tasks as completed so that I can track my progress.	Unassigned	New	Task Management System	

Result:

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

EXP NO: 4

SPRINT PLANNING

Aim:

To assign user story to specific sprint for the to-Do List App with Reminders Project.

Sprint Planning**Sprint 1**
Sprint 2

Sprint 3

Azure DevOps 231001143 / Task Management System / Boards / Sprints

Task Management System Team

Taskboard Backlog Capacity Analytics

Iteration 3 Person: All

13 June - 26 June 10 work days

	New	Active	Resolved	Closed
S1	As a user, I want to receive alert notifications for overdue tasks so that I can address delayed work. <input type="radio"/> New <input checked="" type="radio"/> Unassigned			
S2	As a user, I want to receive email notifications for account verification so that I can complete the registration process. <input type="radio"/> New <input checked="" type="radio"/> Unassigned			
S3	As a user, I want to set due dates and times for my tasks so that I can prioritize my work. <input type="radio"/> New <input checked="" type="radio"/> Unassigned			

Sprint 4

Azure DevOps 231001143 / Task Management System / Boards / Sprints

Task Management System Team

Taskboard Backlog Capacity Analytics

Iteration 4 Person: All

27 June - 11 July 11 work days

	New	Active	Resolved	Closed
S1	As a user, I want to receive email notifications for account verification so that I can complete the registration process. <input type="radio"/> New <input checked="" type="radio"/> Unassigned			
S2	As a user, I want to set due dates and times for my tasks so that I can prioritize my work. <input type="radio"/> New <input checked="" type="radio"/> Unassigned			
S3	As a user, I want to receive alert notifications for overdue tasks so that I can address delayed work. <input type="radio"/> New <input checked="" type="radio"/> Unassigned			

Result:

The Sprints are created for the TASK MANAGEMENT SYSTEM Project.

EXP NO: 5

POKER ESTIMATION

Aim:

Create Poker Estimation for the user stories – TASK MANAGEMENT SYSTEM PROJECT.

Poker Estimation :

The screenshot shows the Azure DevOps interface for a project titled "Task Management System". The left sidebar is open, showing options like Overview, Boards, Work items, Backlogs, Sprints, Queries, Delivery Plans, Analytics views, Rename, and Project settings. The "Work items" option is selected. The main area displays a list of work items under the heading "Recently updated". One work item is highlighted: "USER STORY 35". The description of the story is: "35 As a newly registered user, I want to receive an OTP via email so that I can verify my account." Below the description, there are fields for State (New), Reason (New), Area (Task Management System), Iteration (Task Management System), and a "Save" button. In the "Planning" section, the "Story Points" field contains the value "8". To the right of the planning section, there is a "Deployment" panel with a message about tracking releases. The status bar at the bottom indicates "19 of 24" work items.

Result:

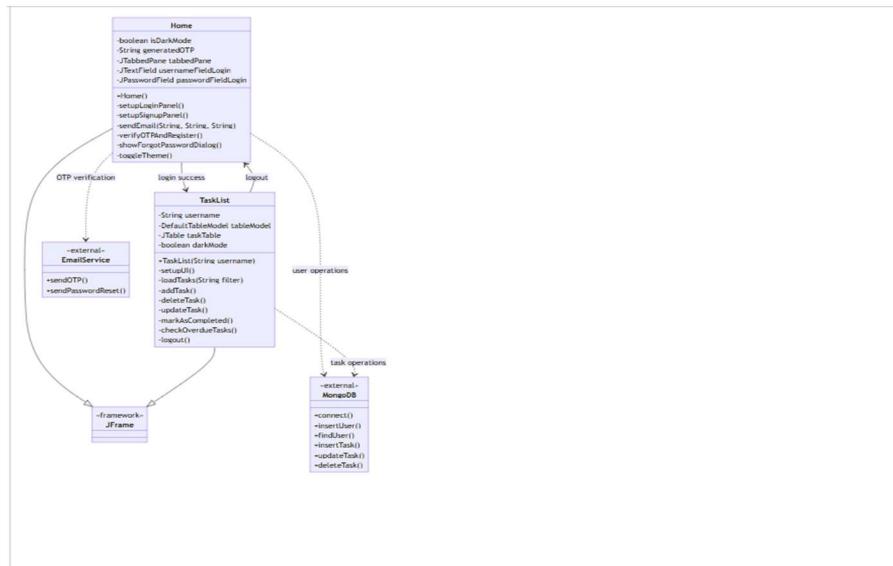
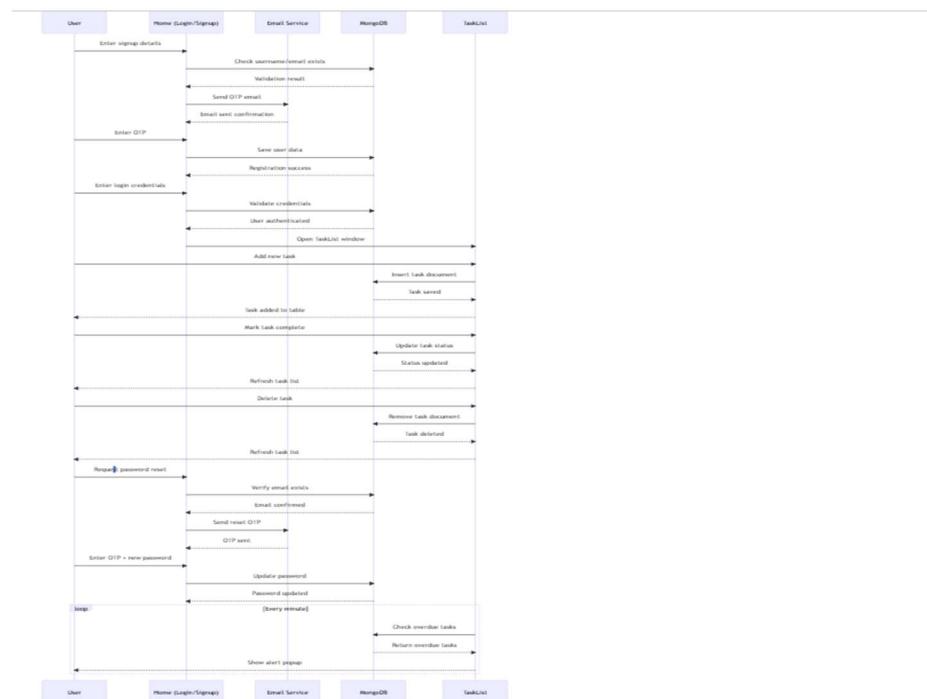
The Estimation/Story Points is created for the project using Poker Estimation.

EXP NO: 6

DESIGNING CLASS 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 TASK MANAGEMENT SYSTEM

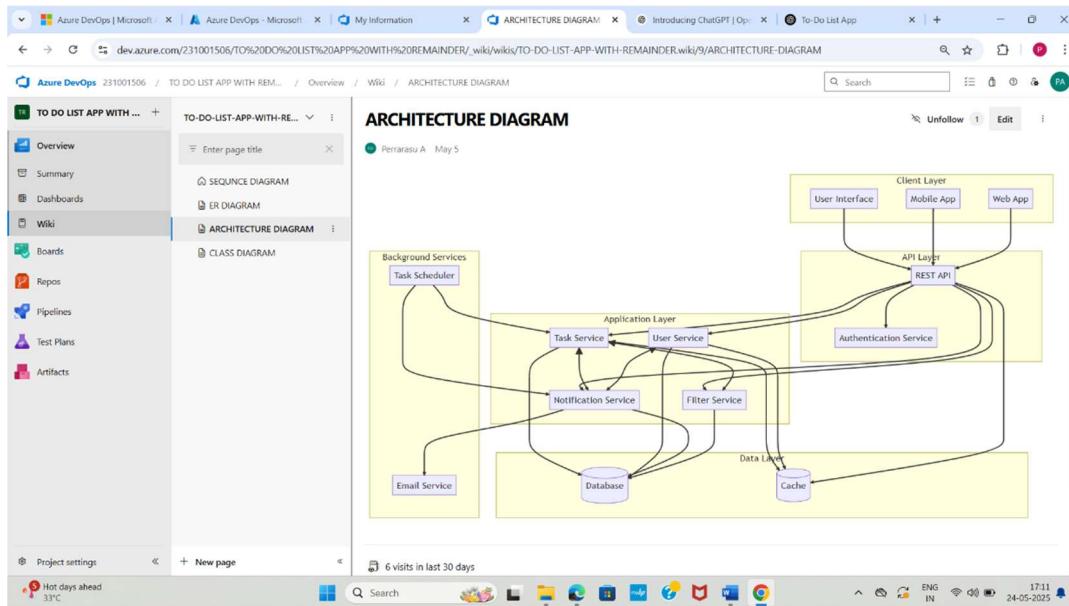
EXP NO: 7

DESIGNING ARCHITECTURAL AND ER DIAGRAMS FOR PROJECT STRUCTURE

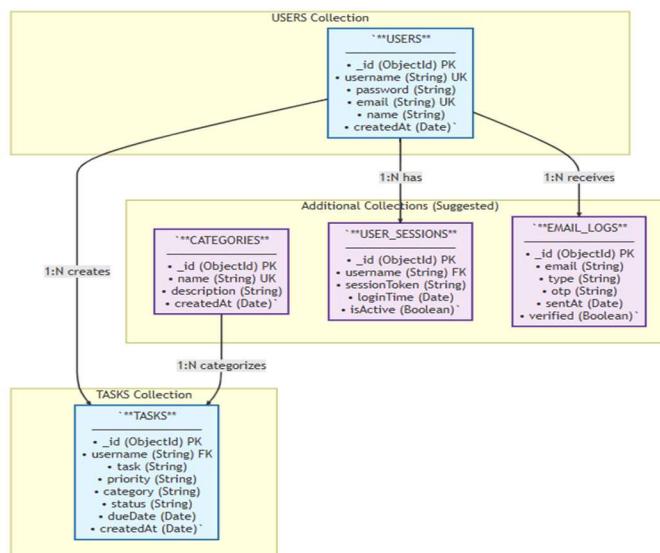
Aim:

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 TASK MANAGEMENT SYSTEM

EXP NO: 8	TESTING – TEST PLANS AND TEST CASES
------------------	--

TESTING – TEST PLANS AND TEST CASES

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 Signup & Login
- Creating, Editing and Deleting Tasks
- Setting Task priorities and due dates
- Marking Tasks as complete or incomplete
- Viewing tasks by filters
- Setting reminders and notifications

2. Define User Interactions

- Each test case simulates real user behaviors such as signing up, adding a task, editing task details, completing tasks, or setting reminders.

3. Design Happy Path Test Cases

- Validate all core features work correctly under normal conditions.
- Example: User logs in successfully, creates a new task with a due date, marks it complete, and views it under the “Completed” filter.

4. Design Error Path Test Cases

- Simulate negative or unexpected scenarios to test robustness and error handling.
- Example: Login fails with invalid credentials, save fails when offline, no recommendations found.

5. Break Down Steps and Expected Results

- Each test case contains step-by-step actions and a corresponding expected outcome.
- Ensures clarity for both testers and automation scripts.

6. Use Clear Naming and IDs

- Test cases are named clearly (e.g., TC01-Successful User login).
- Helps in quick identification and linking to user stories or features.

7. Separate Test Suites

- Grouped test cases based on functionality (e.g., Login, Task Management, Notifications).

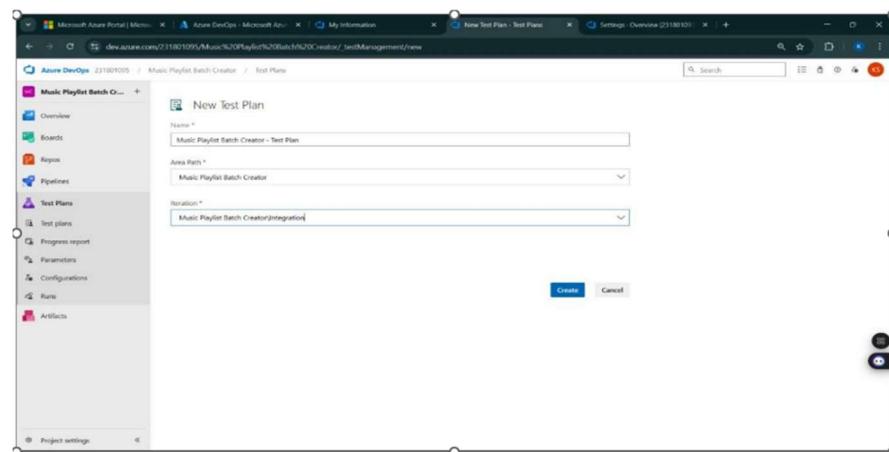
- Improves organization and test execution flow in Azure DevOps.

8. Prioritize and Review

- Critical user actions are marked high-priority.
- Reviewed for completeness and traceability against feature requirements.

1. New test plan

2. Test suite



3. Test case

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

Music Playlist Batch Creator – Test Plans

USER STORIES

- As a user, I want to sign up and log in securely so that I can access my playlists (ID: 79).
- As a user, I need to see my playlist in one place (ID: 76).
- As a user, I should be able to create an audio playlist as needed (ID: 73).
- As a user, I should be able to rename, record, and change the playlist (ID: 68).
- As a user, I need to have real-time metadata (ID: 65).

Test Suites

Test Suit: TS01 - User Login (ID: 86)

1. TC01 – Successful Sign Up

- **Action:**
 - Go to the Sign-Up page.
 - Enter valid name, email, and password.
 - Click "Sign Up".
- **Expected Results:**
 - Sign-Up form is displayed.
 - Fields accept values without error.
 - Account is created, and the user is redirected to the dashboard.
- **Type:** Happy Path

2. TC02 – Secure Login

- **Action:**
 - Go to the Login page.
 - Enter valid email and password.
 - Click on "Login".
- **Expected Results:**
 - Login form is displayed.
 - Fields accept data without error.
 - User is logged in and redirected to the dashboard.
- **Type:** Happy Path

3. TC03 – Sign Up with Existing Email

- **Action:**
 - Go to the Sign-Up page.
 - Enter a name and an already registered email.
 - Click on "Sign Up".
- **Expected Results:**

- Fields accept data.
- Error message "Email already registered" is displayed.
- **Type:** Error Path

4. TC04 – Login with Wrong Password

- **Action:**
 - Go to the Login page.
 - Enter valid email and incorrect password.
 - Click on "Login".
- **Expected Results:**
 - Input is accepted.
 - Error message "Invalid username or password" is shown.
- **Type:** Error Path

Test Suit: TS02 - View Playlists (ID: 87)

1. TC05 – View Playlist Page

- **Action:**
 - Log in successfully.
 - Navigate to "My Playlists" section.
- **Expected Results:**
 - All created playlists are displayed clearly.
- **Type:** Happy Path

2. TC06 – Playlist Loading Failure

- **Action:**
 - Disconnect from the internet.
 - Navigate to "My Playlists".
- **Expected Results:**
 - Network is offline.
 - Error message "Unable to load playlists" is shown.
- **Type:** Error Path

Test Suit: TS03 - Real-Time Metadata (ID: 88)

1. TC07 – Real-Time Metadata Display

- **Action:**
 - Play a song.
 - Observe the metadata panel.
- **Expected Results:**
 - Metadata (title, artist, album, duration) is displayed and updates in real time.
- **Type:** Happy Path

2. TC08 – Metadata Not Updating

- **Action:**

- Play a different song.
- Observe the metadata panel.
- **Expected Results:**
 - Metadata remains static or shows default/fallback message.
- **Type:** Error Path

Test Suit: TS04 - Playlist Editing (ID: 89)

1. TC09 – Rename Playlist Successfully

- **Action:**
 - Navigate to "My Playlists".
 - Click "Rename" next to a playlist.
 - Enter a new name and click "Save".
- **Expected Results:**
 - Playlist name updates successfully.
- **Type:** Happy Path

2. TC10 – Rename with Blank Name

- **Action:**
 - Click "Rename" on a playlist.
 - Leave the field blank.
 - Click "Save".
- **Expected Results:**
 - Error message "Playlist name cannot be empty" is shown.
- **Type:** Error Path

3. TC11 – Change Playlist Order

- **Action:**
 - Open a playlist.
 - Drag and drop songs to reorder.
 - Click "Save".
- **Expected Results:**
 - Playlist order is updated and saved.
- **Type:** Happy Path

4. TC12 – Change Playlist Order Fails

- **Action:**
 - Login and go to "My Playlists".
 - Select a playlist.
 - Go offline or simulate server error.
 - Reorder songs and click "Save Order".
- **Expected Results:**
 - Error message: "Failed to update order. Please check your connection".
- **Type:** Error Path

Test Suit: TS05 - Smart Playlist Creation (ID: 90)

1. TC13 – Generate Playlist Based on Various Categories

- **Action:**

- Login with valid credentials.
- Click on "Generate Playlist".
- Select categories.
- Click "Generate Playlist".

- **Expected Results:**

- Playlist is generated based on selected mood and categories.

- **Type:** Happy Path

2. TC14 – Fail to Generate Playlist Due to Missing Category Selection or Invalid Input

- **Action:**

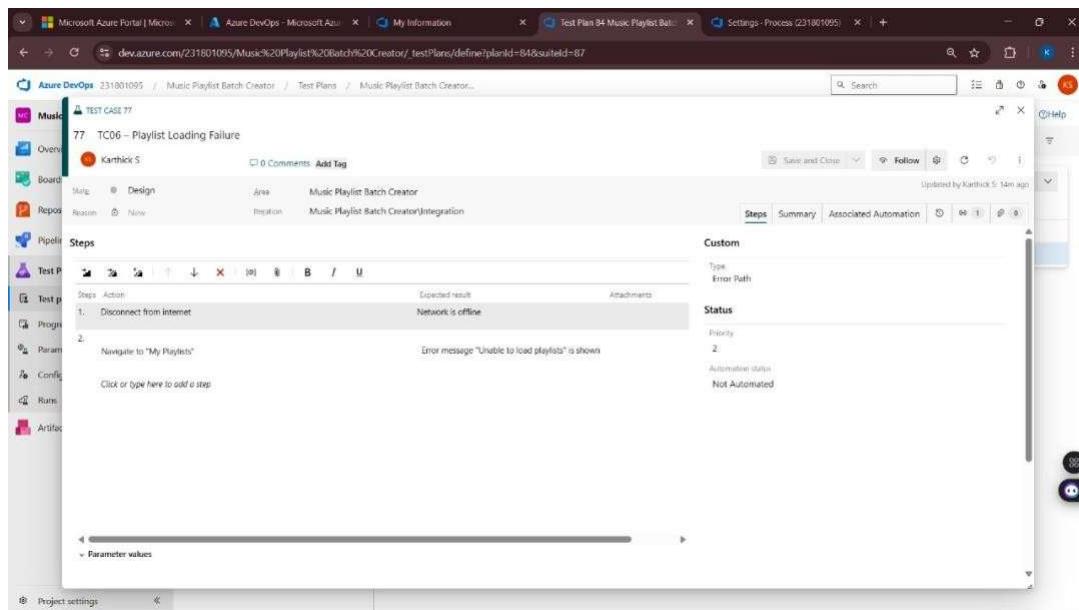
- Login with valid credentials.
- Click on "Generate Playlist".
- Select categories.
- Click "Generate Playlist".

- **Expected Results:**

- Error message: "Please select at least one valid category" or "No recommendations found for the selected filters".

- **Type:** Error Path

Test Cases



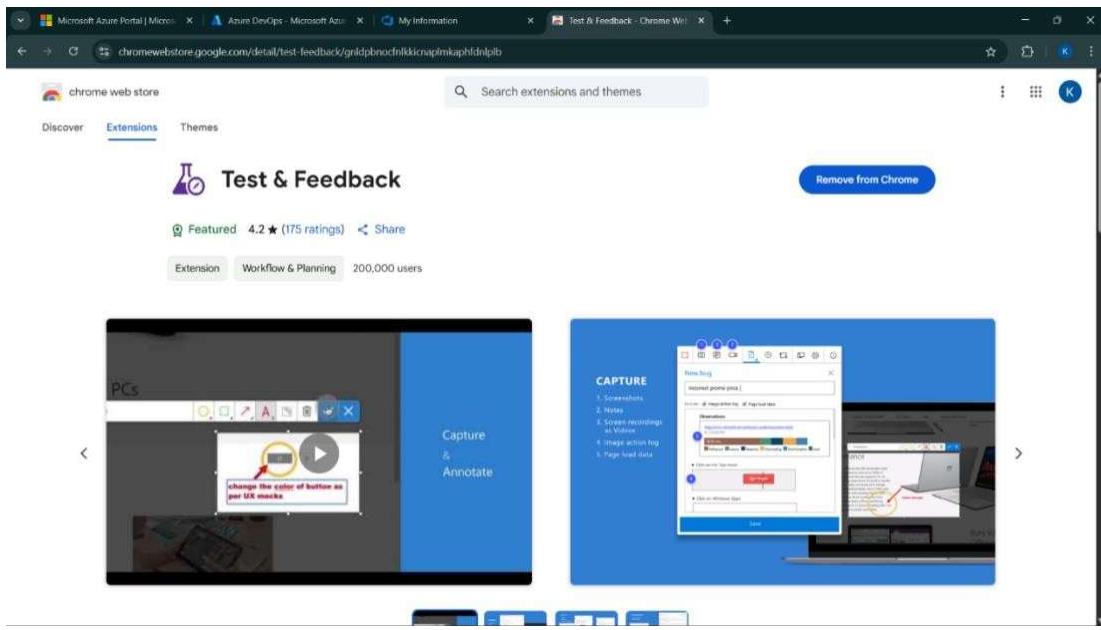
The screenshot shows the Azure DevOps Test Plan interface. A test case named 'TC05 – View Playlist Page' is selected. The test plan details include:

- Area:** Music Playlist Batch Creator
- Iteration:** Music Playlist Batch Creator/Integration
- Steps:**
 - Log in successfully
 - Navigate to "My Playlists" section
- Expected result:** User is redirected to dashboard; All created playlists are displayed clearly.
- Status:** Priority: 2, Automation status: Not Automated.

4. Installation of test

The screenshot shows the Chrome Web Store page for the 'Test & Feedback' extension. Key details include:

- Rating:** 4.2 stars (175 ratings)
- Category:** Workflow & Planning
- Users:** 200,000 users
- Description:** Capture & Annotate
- Screenshots:** Two screenshots are shown: one of a mobile device displaying a UI element with annotations, and another of a desktop application showing a capture and annotation interface.
- Add to Chrome button:** Present at the top right.



Test and feedback

Showing it as an extension

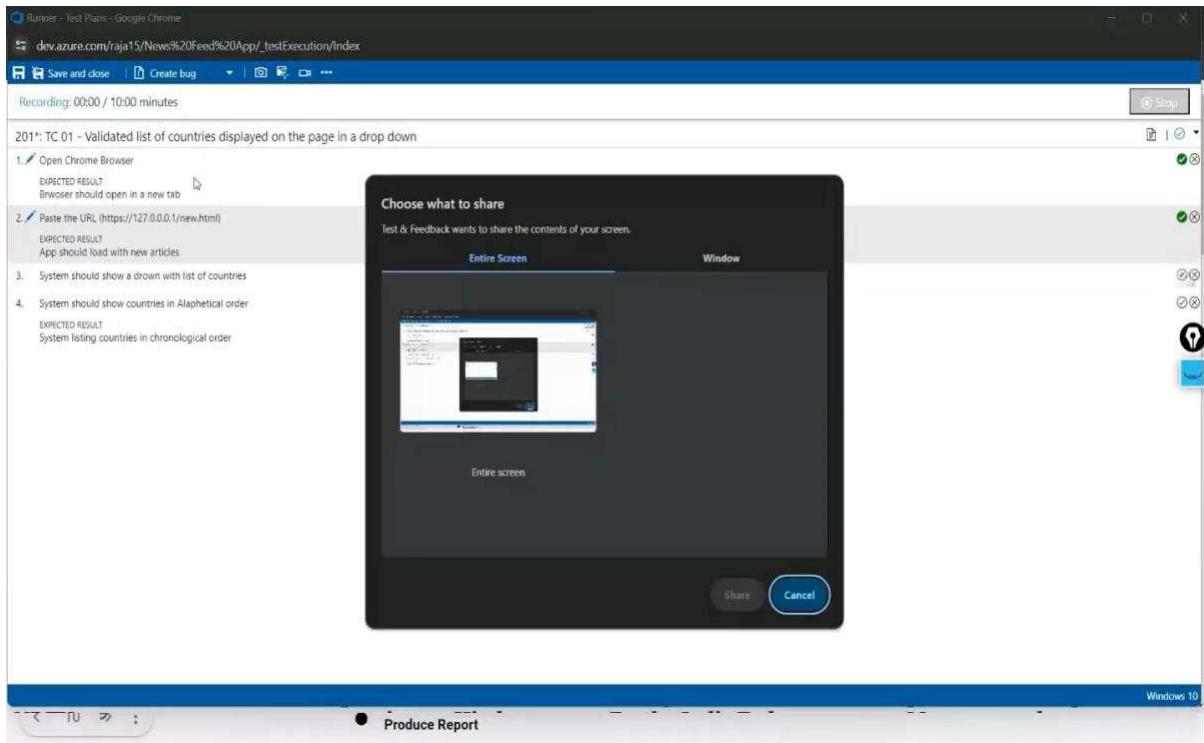
The screenshot shows the Azure DevOps Test Plan page for a project named 'Music Playlist Batch Creator'. The left sidebar is open, showing 'Test Plans' selected. In the main content area, a test suite named 'TS01 - User Login (ID: 86)' is displayed with four test cases: 'Title', 'TC01 - Successful Sign Up', 'TC02 - Secure Login', 'TC03 - Sign Up with Existing Email', and 'TC04 - Login with Wrong Password'. On the right side, a sidebar titled 'Extensions' is open, listing several extensions: 'Copy Text from Picture', 'Dark Reader', 'Monica: ChatGPT AI Assist...', 'Selectext: Copy Text from V...', and 'Test & Feedback'. The 'Test & Feedback' extension is highlighted with a blue border.

5. Running the test cases

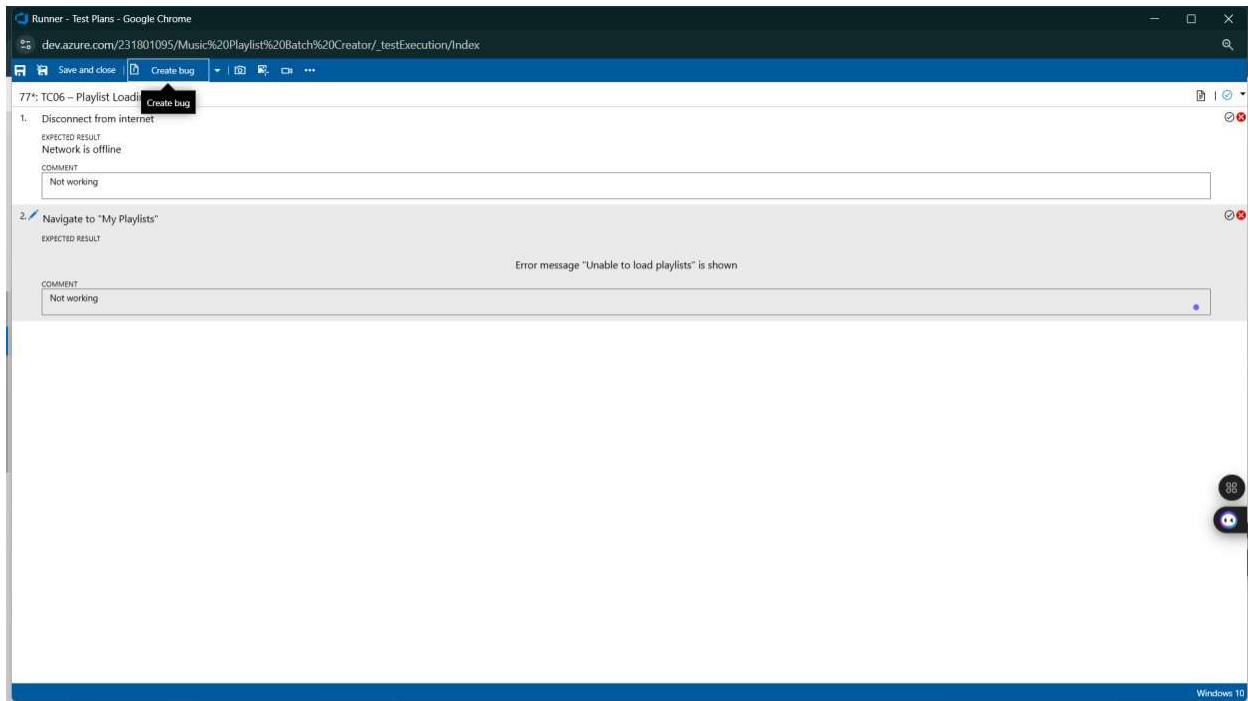
The screenshot shows the Azure DevOps Test Plans interface. On the left, the navigation bar includes 'Overview', 'Boards', 'Repos', 'Pipelines', 'Test Plans', 'Test plans' (selected), 'Progress report', 'Parameters', 'Configurations', 'Runs', and 'Artifacts'. Under 'Test plans', 'Music Playlist Batch Creator - T...' is expanded, showing 'TS01 - User Login (4)', 'TS02 - View Playlists (2)' (selected), 'TS03 - Real-Time Met...', 'TS04 - Playlist Editing (4)', and 'TS05 - Smart Playlist ...'. The main area displays 'TS02 - View Playlists (ID: 87)'. The 'Execute' tab is selected, showing 'Test Points (2 items)': 'TC05 - View Playlist Page' (Passed) and 'TC06 - Playlist Loading Failure' (Not run). A context menu is open over 'TC05 - View Playlist Page', listing options: 'View execution history', 'Mark Outcome' (checkbox checked), 'Run' (disabled), 'Reset test to active', 'Edit test case', 'Assign tester', and 'View test result'. The status bar at the bottom right shows 'Windows 10'.

The screenshot shows a browser window titled 'Runner - Test Plans - Google Chrome' with the URL 'dev.azure.com/231001095/Music%20Playlist%20Batch%20Creator/_testExecution/Index'. The page displays the steps and results for '75: TC05 - View Playlist Page'. Step 1: 'Log in successfully' has an 'EXPECTED RESULT' of 'User is redirected to dashboard'. Step 2: 'Navigate to "My Playlists" section' has an 'EXPECTED RESULT' of 'All created playlists are displayed clearly'. The status bar at the bottom right shows 'Windows 10'.

6. Recording the test case



7. Creating the bug



Runner - Test Plans - Google Chrome
dev.azure.com/231801095/Music%20Playlist%20Batch%20Creator/_testExecution/Index

77: TC06 – Playlist Loading Failure

1. Disconnect from internet
EXPECTED: Network is offline
ACTUAL: Playlist loading spinner keeps spinning indefinitely on poor network

2. Navigate to "My Playlists"
EXPECTED: Page Not loading
ACTUAL: Comments: Page Not loading
Navigate to "My Playlists"
Expected Result
Comments: Page Not loading
Expected Result
Error message "Unable to load playlists" is shown

Repro Steps
18-04-2025 03:23 Bug filed on "TC06 – Playlist Loading Failure"

Step no. Result Title
1. Failed Disconnect from internet
Expected Result
Network is offline

2. Failed Navigate to "My Playlists"
Expected Result
Comments: Page Not loading
Expected Result
Error message "Unable to load playlists" is shown

Test Configuration: Windows 10

Planning
Resolved Reason: Unassigned
Story Points: 0
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
Add an existing work item as a parent
Tested By: 77 TC06 – Playlist Loading Failure
Updated 10-04-2025. • Design

System Info
Found in Build

Windows 10

Microsoft Azure Portal | Azure DevOps - Microsoft | My Information | Test Plan 84 Music | Runs - Test Plans | Settings - Overview | Bug Report Playlist | +

dev.azure.com/231801095/Music%20Playlist%20Batch%20Creator/_testManagement/runs?a=resultSummary&runId=48&resultId=100000

Azure DevOps 231801095 / Music Playlist Batch Creator / Test Plans / Runs

Run 48 - TS02 - View Playlists (Manual) / TC06 – Playlist Loading Failure

92: TB01 - Playlist loading spinner keeps spinning indefinitely on poor network

Unassigned
0 comments Add tag

State: New Area: Music Playlist Batch Creator
Reason: New Iteration: Music Playlist Batch Creator

System Info
Updated by Karthick S 8m ago

Browser - Name	Google Chrome 135
Browser - Language	en-IN
Browser - Height	864
Browser - Width	1536
Browser - User agent	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/135.0.0.0 Safari/537.36
Operating system - Name	Windows NT 10.0: Win64: x64
Operating system - Architecture	x64_64
Operating system - Processor mode	11th Gen Intel(R) Core(TM) i3-1115G4 @ 3.00GHz
Operating system - Number of processors	4
Memory - Available	814784512
Memory - Capacity	8216240128
Display - Pixels per inch (X axis)	120
Display - Pixels per inch (Y axis)	120
Display - Device pixel ratio	1.25

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

Name: SystemInformation-2025-04-18T03-23-58.168Z.json
Size: 1K

Project settings

8. Test case results

The screenshot shows the Azure DevOps interface for a test plan named 'Music Playlist Batch Creator'. The left sidebar is open, showing 'Test Plans' selected. In the center, under 'Test Suites', 'TS02 - View Playlists (ID: 87)' is selected. On the right, the 'Test Case Results' section displays a table of test points. One test point, 'TC05 – View Playlist Page', is highlighted in blue. The table includes columns for Outcome, TimeStamp, Configuration, Run by, Tester, and Test Point. The 'Passed' outcome is represented by green dots.

Outcome	TimeStamp	Configuration	Run by	Tester	Test Point
Passed	4m ago	Windows 10	Karthick S	Malu karthick Balaji ... Music	
Passed	12m ago	Windows 10	Karthick S	Malu karthick Balaji ... Music	
Not Applicable	12m ago	Windows 10	Karthick S	Malu karthick Balaji ... Music	
Passed	14m ago	Windows 10	Karthick S	Malu karthick Balaji ... Music	
Passed	Tuesday	Windows 10	Karthikayen Senthil	Malu karthick Balaji ... Music	
Passed	Saturday	Windows 10	Malu karthick Balaji ...	Malu karthick Balaji ... Music	
Failed	Saturday	Windows 10	Malu karthick Balaji ...	Malu karthick Balaji ... Music	
Passed	Apr 11	Windows 10	Karthick S	Malu karthick Balaji ... Music	
Passed	Apr 11	Windows 10	Karthick S	Malu karthick Balaji ... Music	

9. Test report summary

The screenshot shows the Azure DevOps interface for a project named 'News Feed App'. The left sidebar is open, showing 'Work items' selected. A specific work item, 'BUG 203: 203 - BG 01 - Countries Drop down Not Available on the page', is displayed in the center. The work item details include the title, state (New), reason (New), repro steps, planning, deployment, development, and effort. The 'Repro Step' section shows three steps: 1. Passed (Open Chrome Browser, Expected Result: Browser should open in a new tab), 2. Passed (Paste the URL (https://127.0.0.1/new.html), Expected Result: App should load with new articles), and 3. Failed (System should show a dropdown with list of countries, Produce Report).

- Assigning bug to the developer and changing state

Bug Detail:

Title: 92 TB01 - Playlist loading spinner keeps spinning indefinitely on poor network

Step no. 1. **Result:** Failed **Title:** Disconnect from internet

Step no. 2. **Result:** Failed **Title:** Network is offline

Comments: Page Not loading
Navigate to "My Playlists"

Expected Result: Error message "Unable to load playlists" is shown

Test Configuration: Windows 10

Planning:

- Resolved Reason: BUG 32*
- Story Points: 1
- Priority: 2
- Severity: 3 - Medium
- Activity: 1

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
Add an existing work item as a parent
Tested By ?? TC06 – Playlist Loading Failure
Updated 10-04-2025. ● Design

System Info:

10. Progress report

Progress report

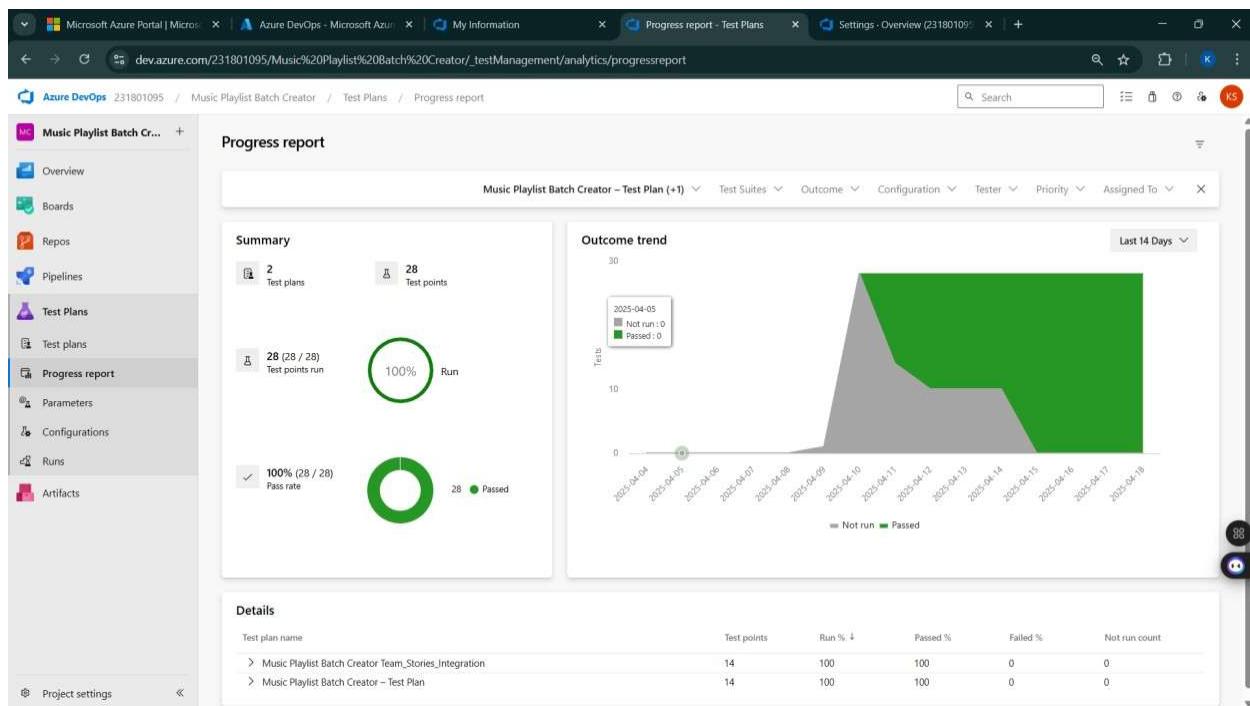
Summary: 1 test plans, 14 test points, 14 (14 / 14) Test points run, 100% Pass rate, 14 Passed.

Outcome trend: Last 14 Days

Date	Not run	Passed
2025-04-01	14	0
2025-04-02	14	0
2025-04-03	14	0
2025-04-04	14	0
2025-04-05	14	0
2025-04-06	14	0
2025-04-07	14	0
2025-04-08	14	0
2025-04-09	14	0
2025-04-10	14	14
2025-04-11	0	14
2025-04-12	0	14
2025-04-13	0	14
2025-04-14	0	14
2025-04-15	0	14

Details:

Test plan name	Test points	Run %	Passed %	Failed %	Not run count
Music Playlist Batch Creator – Test Plan	14	100	100	0	0
TS01 - User Login	4	100	100	0	0
TS02 - View Playlists	2	100	100	0	0
TS03 - Real-Time Metadata	2	100	100	0	0
TS04 - Playlist Editing	4	100	100	0	0
TS05 - Smart Playlist Creation	2	100	100	0	0



11. Changing the test template

Organization Settings

All processes

Name	Description	Team projects
Basic	This template is flexible for any process and great for teams getting started with Azure DevOps.	0
Agile	This template is flexible and will work great for most teams using Agile planning methods, including those pract...	0
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 improvement and an auditable reco...	0

The screenshot shows the 'All processes' section of the Azure DevOps Settings - Process page. The 'Processes' tab is selected. The table lists four templates:

Name	Description	Team projects
Basic	This template is flexible for any process and great for teams getting started with Azure DevOps.	0
Agile	This template is flexible and will work great for most teams using Agile planning methods, including those pract...	0
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 improvement and an auditable reco...	0

The screenshot shows the same 'All processes' section after a new template has been added. The 'Processes' tab is selected. The table now includes the newly added template:

Name	Description	Team projects
Basic	This template is flexible for any process and great for teams getting started with Azure DevOps.	0
Agile	This template is flexible and will work great for most teams using Agile planning methods, including those pract...	0
231801095 Agile (default)		1
Agile Plus		0
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 improvement and an auditable reco...	0

12. View the new test case template

The screenshot shows the 'Add a field to Test Case' dialog box overlaid on the Azure DevOps settings interface. The dialog has a 'Definition' tab selected, showing options to 'Create a field' or 'Use an existing field'. The 'Create a field' section includes fields for 'Name' (set to 'Type'), 'Type' (set to 'Text (single line)'), and 'Description'. At the bottom are 'Add field' and 'Cancel' buttons.

The screenshot shows the 'Projects' tab in the Azure DevOps settings interface. A single project named 'Music Playlist Batch Creator' is listed under 'Work item types'. The project description is: 'The Azure Music Playlist Batch Creator is a cloud-based solution designed for bulk playlist creation and management. Levera...'. The 'General' sidebar on the left is visible.

The screenshot shows the Azure DevOps Settings - Process page for a specific process. The left sidebar is titled 'Organization Settings' and includes sections for General, Security, Boards, Pipelines, and Process. The 'Process' section is currently selected. The main content area is titled 'All processes > 231801095 Agile > Test Case'. It displays a configuration interface with tabs for 'Steps', 'Summary', and 'Associated Aut...'. A 'Custom' section is visible, containing fields for 'Type' (Text (single line)) and 'Recent test results'. Other sections include 'Deployment', 'Development', 'Related Work', and 'Status'. A search bar and various navigation icons are at the top 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
-----------	---

LOAD TESTING AND PERFORMANCE TESTING

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:

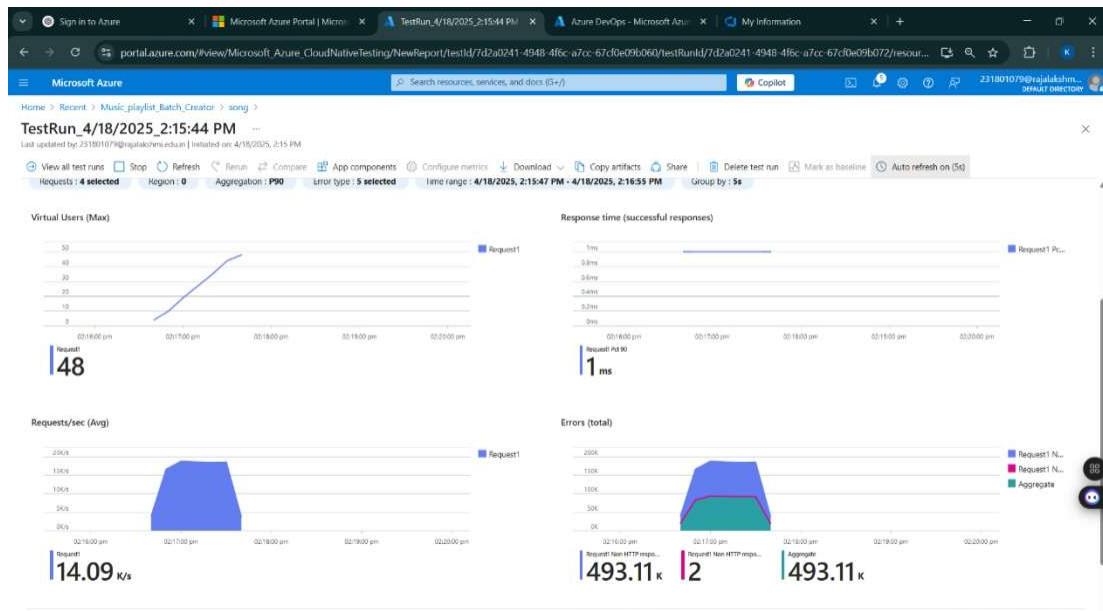
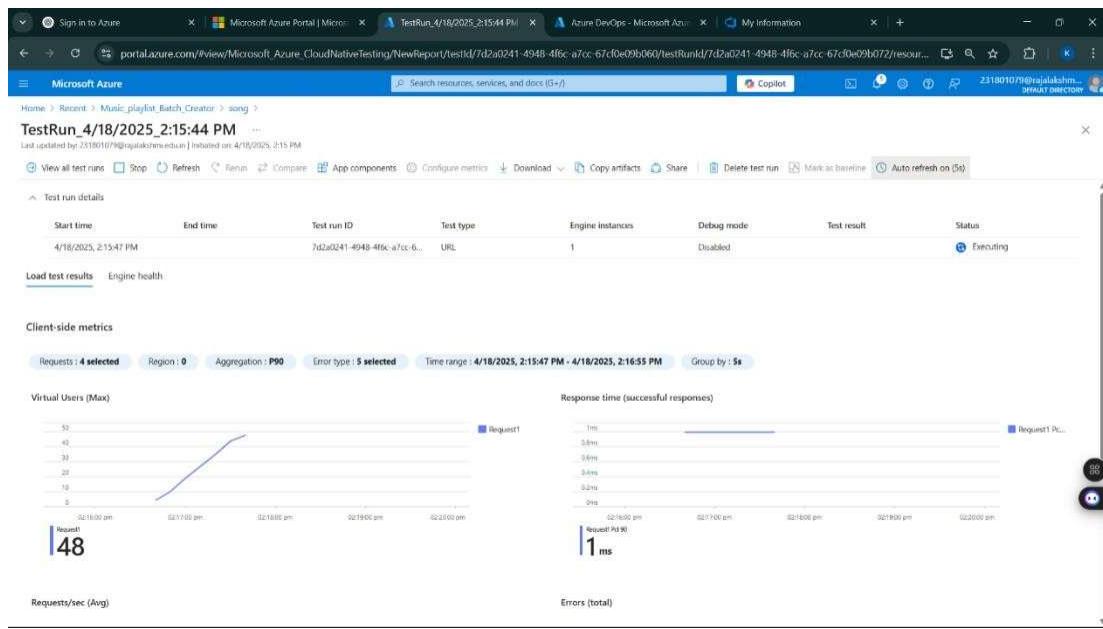
1. Sign in to Azure Portal
Go to <https://portal.azure.com> and log in.
2. Create the Resource
 - o Go to *Create a resource* → Search for “Azure Load Testing”.
 - o Select Azure Load Testing and click Create.
3. Fill in the Configuration Details
 - o *Subscription*: Choose your Azure subscription.
 - 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.

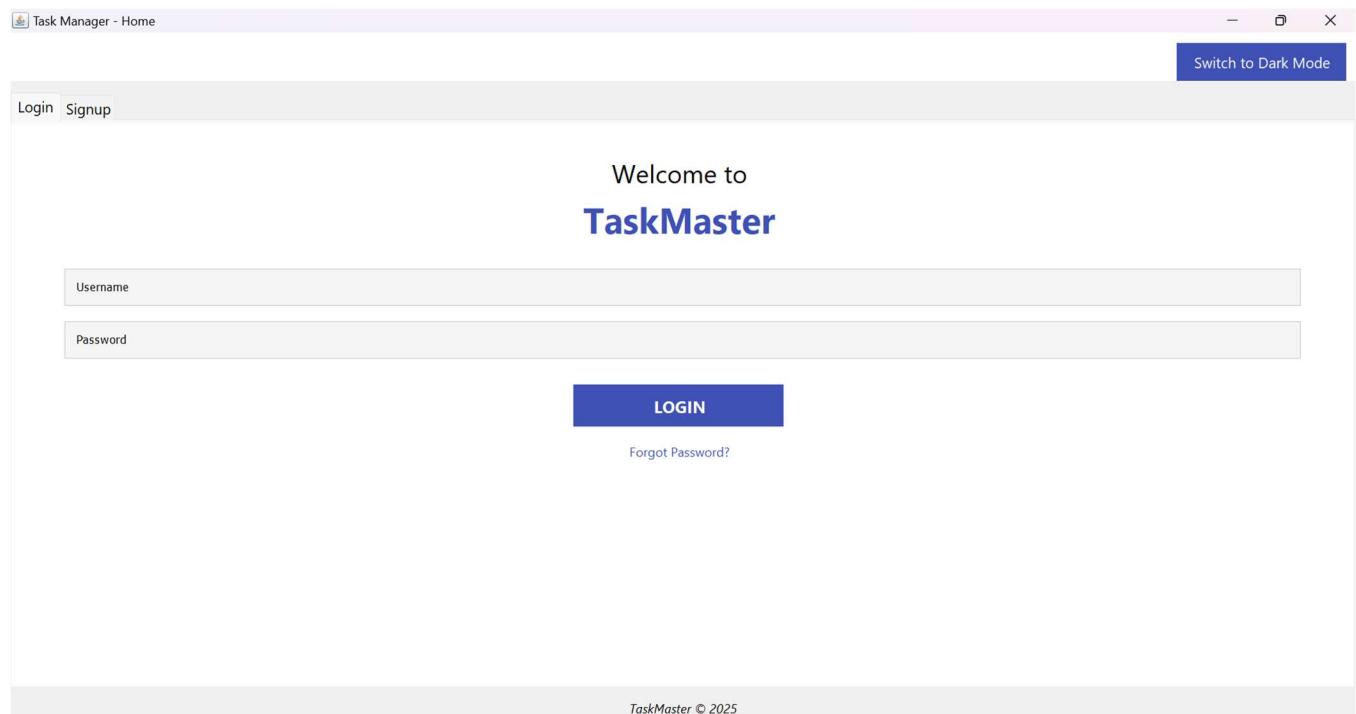
Steps to Create and Run a Load Test:

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.

Load Testing



**Result:**

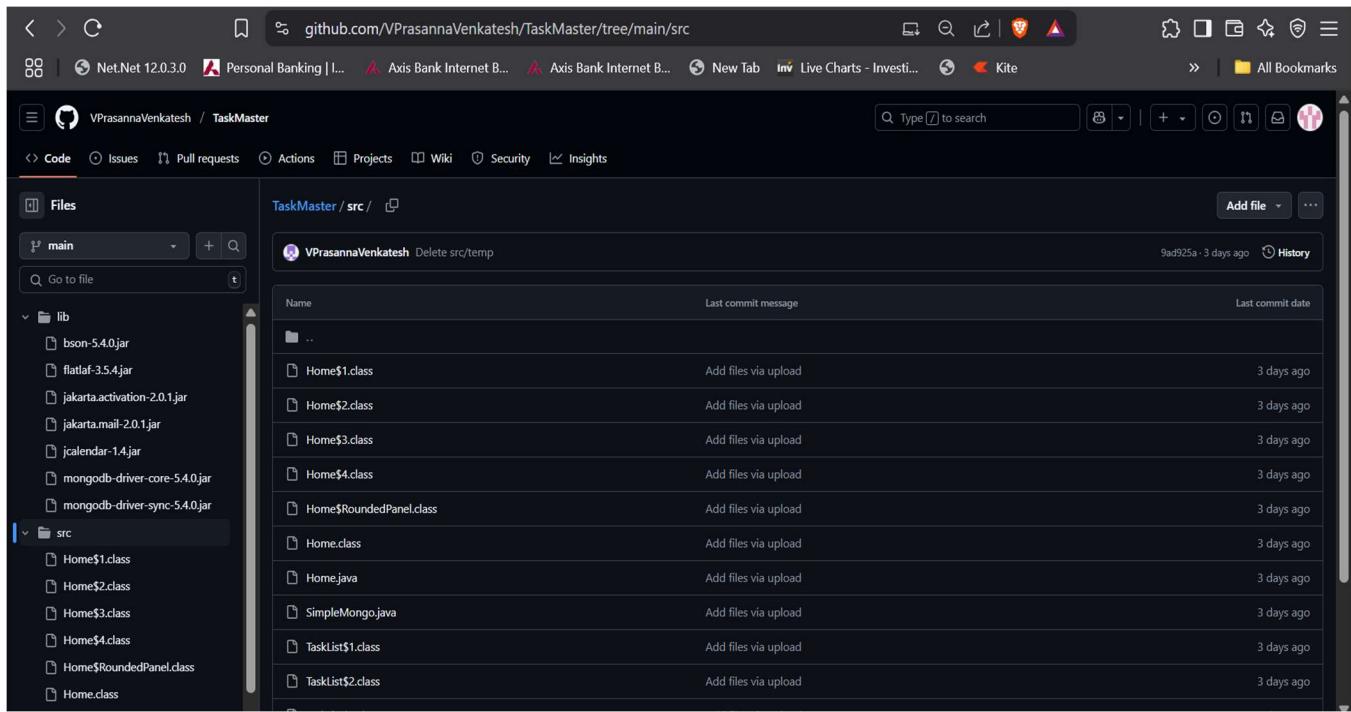
Successfully created the Azure Load Testing resource and executed a load test to assess the performance of the specified endpoint.

EXP NO: 10

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 Music Playlist Batch Creator project.

GitHub Project Structure:


The screenshot shows a GitHub repository interface for a project named 'TaskMaster'. The repository URL is github.com/VPrasannaVenkatesh/TaskMaster/tree/main/src. The repository has a dark theme.

Project Structure:

- Root directory: `main`
 - `lib` (contains: bson-5.4.0.jar, flatlat-3.5.4.jar, jakarta.activation-2.0.1.jar, jakarta.mail-2.0.1.jar, jcalendar-1.4.jar, mongodb-driver-core-5.4.0.jar, mongodb-driver-sync-5.4.0.jar)
 - `src` (contains: Home\$1.class, Home\$2.class, Home\$3.class, Home\$4.class, Home\$RoundedPanel.class, Home.class, Home.java, SimpleMongo.java, TaskList\$1.class, TaskList\$2.class)

Commit History:

Name	Last commit message	Last commit date
..		
Home\$1.class	Add files via upload	3 days ago
Home\$2.class	Add files via upload	3 days ago
Home\$3.class	Add files via upload	3 days ago
Home\$4.class	Add files via upload	3 days ago
Home\$RoundedPanel.class	Add files via upload	3 days ago
Home.class	Add files via upload	3 days ago
Home.java	Add files via upload	3 days ago
SimpleMongo.java	Add files via upload	3 days ago
TaskList\$1.class	Add files via upload	3 days ago
TaskList\$2.class	Add files via upload	3 days ago

A single commit message is visible at the top: "VPrasannaVenkatesh Delete src/temp" (9ad925a · 3 days ago).

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.