

EXP NO: 1

AZURE DEVOPS ENVIRONMENT SETUP

Aim:

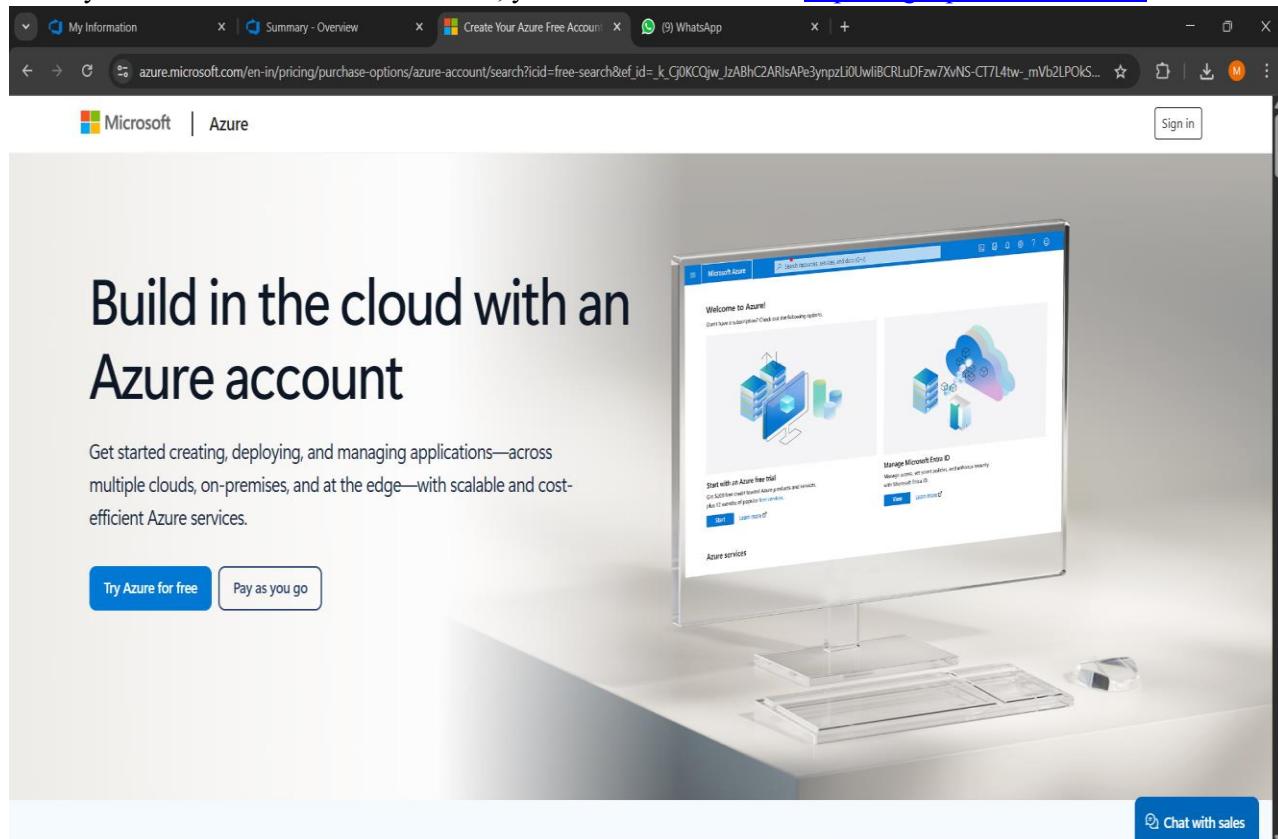
To set up and access the Azure DevOps environment by creating an organization through the Azure portal.

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 icons for back, forward, search, and user profile. Below the bar, the title "Microsoft Azure" is displayed, along with a search bar containing "Search resources, services, and docs (G+)" and a "Copilot" button. The main content area is titled "Azure services" and features a grid of icons for various services: Create a resource, Azure Load Testing, Free services, Storage accounts, Storage browser, Azure DevOps organizations, Dashboard hub, Subscriptions, Virtual machines, and More services. Below this is a section titled "Resources" with a table showing a single entry: "Azure for Students" (Subscription type) last viewed 3 months ago. There are "Recent" and "Favorite" tabs above the table. Further down are sections for "Navigate" (Subscriptions, Resource groups, All resources, Dashboard), "Tools" (Microsoft Learn, Azure Monitor, Microsoft Defender for Cloud, Cost Management), and "Last Viewed" (3 months ago).

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 includes a search query. In the search bar at the top, the text "azure dev" is typed. The search results are displayed below the search bar, under the "Services" and "Marketplace" tabs. Under "Services", "Azure DevOps organizations" is listed. Under "Marketplace", "Project", "Dev center", and "Build Agents for Azure DevOps" are listed. The rest of the page content is identical to the first screenshot, including the "Azure services" dashboard, "Resources" table, "Navigate" tools, and "Tools" section.

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.

Microsoft Azure Search resources, services, and docs (G+) Copilot Home > Azure DevOps ... 231801105@rajalakshmi... DEFAULT DIRECTORY

We've made it easier to manage Azure DevOps billing and subscriptions. You can [set up billing](#), change your subscription or pay for more users and resources within Azure DevOps. [Learn more](#)

Azure DevOps

Plan smarter, collaborate better, and ship faster with a set of modern dev services

[My Azure DevOps Organizations](#)

[Get started using Azure DevOps](#)
Billing management for Azure DevOps

[Give feedback](#)

[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.

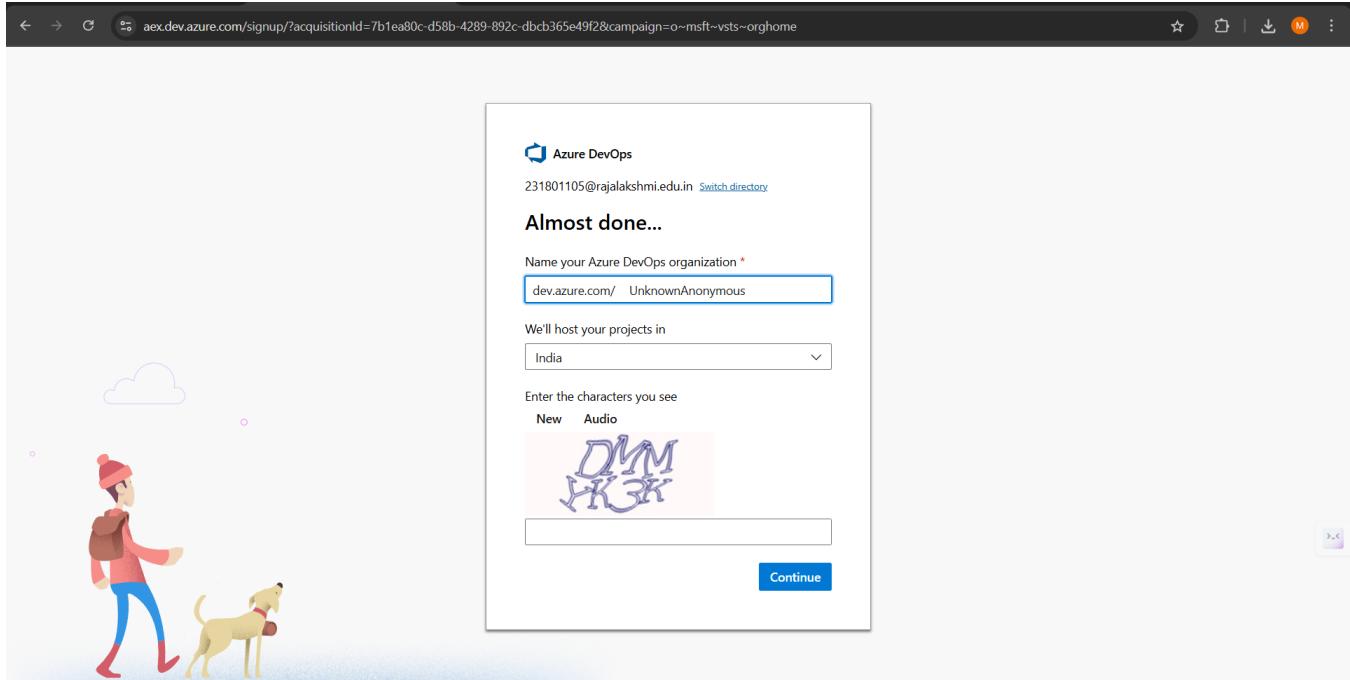
EXP NO: 2

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

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 *

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 [?](#)

Work item process [?](#)

[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 interface for the 'UnknownAnonymous' organization. On the left, there's a sidebar with user profiles: UnknownAnonymous (selected), FaisalDevOps1, and Anonymous1, along with links for 'New organization' and 'Organization settings'. The main area displays the 'UnknownAnonymous' project, which contains the 'E-Commerce' project. The 'E-Commerce' project card is visible, showing a progress bar with five dots. At the top right of the main area, there are search and filter options, along with a 'Filter projects' button.

4. Project dashboard

The screenshot shows the 'E-Commerce' project dashboard. The left sidebar includes links for Overview, Summary (selected), Dashboards, Wiki, Boards, Repos, Pipelines, Test Plans, and Artifacts. The main content area has a title 'E-Commerce' and a sub-section 'About this project' with a sub-sub-section 'Help others to get on board!'. It lists 'Boards' (Work items, Boards, Backlogs, Sprints, Queries, Delivery Plans, Analytics views) and a note: 'make it easier for other people to understand it.' To the right is a 'Project stats' section with metrics for Work items (1 created, 2 completed), Repos (0 pull requests opened, 6 commits by 3 authors), Pipelines (0 builds succeeded), and Members (5). A URL at the bottom left is https://dev.azure.com/UnknownAnonymous/E-Commerce/_workitems.

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 the new User Story.

Order	Work Item Type	Title	State	Story...	Value Area	Iteration Path	Tags
1	User Story	> need a sign up page	● Active		Business	E-Commerce\Sprint 1	
2	User Story	> User Dashboard UI	● New		Business	E-Commerce\Sprint 1	
3	User Story	> Deploy the Application	● New	3	Business	E-Commerce\Sprint 1	
4	User Story	> Product Listing UI	● New		Business	E-Commerce\Sprint 1	
5	User Story	> Upload Product Information	● New		Business	E-Commerce\Sprint 1	
6	User Story	> User Login System	● New		Business	E-Commerce\Sprint 1	
7	User Story	> Write Unit Tests for Core Features	● New		Business	E-Commerce\Sprint 1	
8	User Story	> Edit Product Information	● New		Business	E-Commerce\Sprint 1	
9	User Story	> Delete Product Information	● New		Business	E-Commerce\Sprint 1	
10	User Story	> Upload Product Information	● New		Business	E-Commerce\Sprint 1	
11	User Story	> User Registration System	● New		Business	E-Commerce\Sprint 1	
12	User Story	> User Registration	● New		Business	E-Commerce\Sprint 1	
13	User Story	> User Login	● New		Business	E-Commerce\Sprint 1	
14	User Story	> File Upload Handling	● New		Business	E-Commerce\Sprint 1	

Order	Work Item Type	Title	State	Story...	Value Area	Iteration Path	Tags
1	User Story	> need a sign up page	● Active		Business	E-Commerce\Sprint 1	
2	User Story	> User Dashboard UI	● New		Business	E-Commerce\Sprint 1	
3	User Story	> Deploy the Application	● New	3	Business	E-Commerce\Sprint 1	
4	User Story	> Product Listing UI	● New		Business	E-Commerce\Sprint 1	
5	User Story	> Upload Product Information	● New		Business	E-Commerce\Sprint 1	
6	User Story	> User Login System	● New		Business	E-Commerce\Sprint 1	
7	User Story	> Write Unit Tests for Core Features	● New		Business	E-Commerce\Sprint 1	
8	User Story	> Edit Product Information	● New		Business	E-Commerce\Sprint 1	
9	User Story	> Delete Product Information	● New		Business	E-Commerce\Sprint 1	
10	User Story	> Upload Product Information	● New		Business	E-Commerce\Sprint 1	
11	User Story	> User Registration System	● New		Business	E-Commerce\Sprint 1	
12	User Story	> User Registration	● New		Business	E-Commerce\Sprint 1	
13	User Story	> User Login	● New		Business	E-Commerce\Sprint 1	
14	User Story	> File Upload Handling	● New		Business	E-Commerce\Sprint 1	

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.

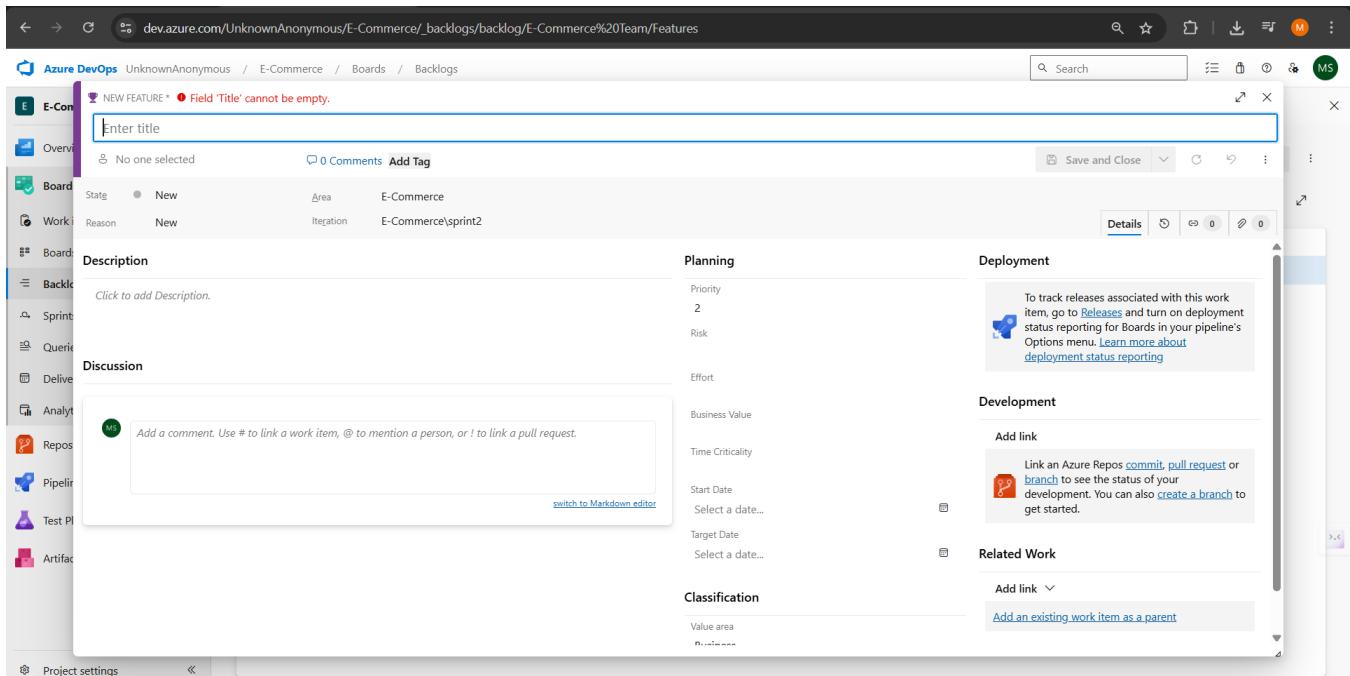
Create Epic, Features, User Stories, Task

The screenshot shows the Azure Boards Backlog view for the 'E-Commerce Team'. The backlog is organized into two main items: 'Product Management System' and 'User Authentication System'. Under 'Product Management System', there is a 'Feature' item with three 'User Story' children. Each 'User Story' has three 'Task' children. Under 'User Authentication System', there is also a 'Feature' item with one 'User Story' child, which in turn has three 'Task' children. The columns in the backlog table include Order, Work Item Type, Title, State, Effort, Business Area, and Tags. The backlog is currently filtered by 'Features'.

1. Fill in Epics

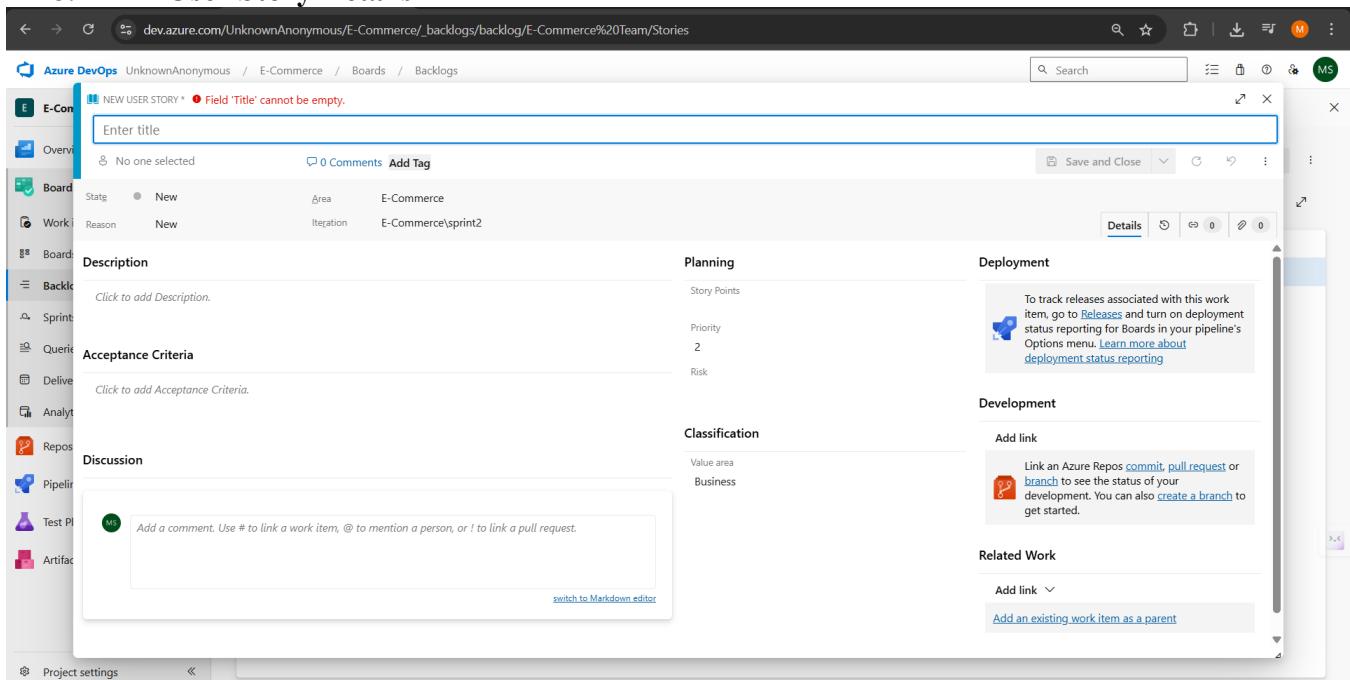
The screenshot shows the 'Create New Epic' dialog in Azure DevOps. The 'Title' field is highlighted in red with an error message: 'NEW EPIC * Field 'Title' cannot be empty.' Below the title input is a large text area labeled 'Description' with the placeholder 'Click to add Description.' To the right of the description area are three tabs: 'Planning', 'Deployment', and 'Development'. The 'Planning' tab is active, showing fields for Priority (set to 2), Risk, Effort, and Business Value. The 'Deployment' tab contains instructions for tracking releases. The 'Development' tab includes sections for 'Add link' (linking to Azure Repos) and 'Related Work' (adding existing work items). At the bottom of the dialog are buttons for 'Save and Close' and 'Cancel'.

2. Fill in Features



The screenshot shows the 'Features' section of the Azure DevOps Backlog. A red error message 'NEW FEATURE * Field 'Title' cannot be empty.' is displayed above the title input field. The 'Description' field contains placeholder text 'Click to add Description.' The 'Planning' section includes fields for Priority (set to 2), Risk, Business Value, Time Criticality, Start Date, and Target Date. The 'Deployment' section provides instructions for tracking releases via Releases and Options menu. The 'Development' section includes an 'Add link' button and a note about linking to Azure Repos. The 'Related Work' section has an 'Add link' button and a note about adding an existing work item as a parent.

3. Fill in User Story Details



The screenshot shows the 'User Stories' section of the Azure DevOps Backlog. A red error message 'NEW USER STORY * Field 'Title' cannot be empty.' is displayed above the title input field. The 'Description' field contains placeholder text 'Click to add Description.' The 'Acceptance Criteria' field contains placeholder text 'Click to add Acceptance Criteria.' The 'Planning' section includes fields for Story Points (set to 2), Priority, Risk, and Business Value. The 'Deployment' section provides instructions for tracking releases via Releases and Options menu. The 'Development' section includes an 'Add link' button and a note about linking to Azure Repos. The 'Related Work' section has an 'Add link' button and a note about adding an existing work item as a parent.

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 E-Commerce product uploaded Project.

Sprint Planning

Sprint 1

The screenshot shows the Azure DevOps interface for the 'Music Playlist Batch Creator' project. The left sidebar is open with 'Boards' selected. The main area displays a backlog board for the 'Music Playlist Batch Creator Team'. Two user stories are visible: '19 As a user I want to sign up and log in securely so that I can access my playlists' and '21 Implement JWT-based authentication'. The '21' story is highlighted, showing its status as 'New' and assigned to 'Karthikayen Senthil'. The top right corner of the board indicates the sprint duration: '21 March - 4 April' and '4 work days remaining'.

Sprint 2

The screenshot shows the Azure DevOps interface for the 'Music Playlist Batch Creator' project. The left sidebar is open with 'Boards' selected. The main area displays a backlog board for the 'Music Playlist Batch Creator Team'. Three user stories are visible: '46 As a user I should be able to add many songs at once into my playlist', '47 As a user I should be able to create audio playlist as I need', and '53 Data needed to be collected'. The '46' and '47' stories are selected, showing they are new items assigned to 'Unassigned' and 'Karthick S' respectively. The '53' story is listed with its status as 'Resolved'. The top right corner of the board indicates the sprint duration: '5 April - 15 April' and '7 work days'.

Sprint 3

The screenshot shows the Azure DevOps Boards backlog for the 'Music Playlist Batch Creator Team'. The backlog is organized into four columns: New, Active, Resolved, and Closed. The 'New' column contains four work items:

- 48 As a user, I can Connect with my music apps (New, assigned to Mallu karthick Balaji R.)
- 20 As a user, I want to link my Spotify account or any more platforms so that I can import my music preferences (New, assigned to Mallu karthick Balaji R.)
- 49 As a user i need to have real time meta data (New, assigned to Mallu karthick Balaji R.)
- 58 As a user i need see my playlist in one place (New, assigned to Mallu karthick Balaji R.)

Sprint 4

The screenshot shows the Azure DevOps Boards backlog for the 'Music Playlist Batch Creator Team'. The backlog is organized into four columns: New, Active, Resolved, and Closed. The 'New' column contains three work items:

- 23 As a user i able to customize my playlist (New, assigned to Karthick S)
- 50 As a user i should be able to rename record and change the playlist (New, Unassigned)
- 51 As a user i should be able to access a friendly and Modern UI (New, assigned to Keerthna S)

Result:

The Sprints are created for the E-Commerce product uploaded Project.

EXP NO: 5

POKER ESTIMATION

Aim:

Create Poker Estimation for the user stories - E-Commerce product uploaded Creator Project.

Poker Estimation

As a seller, I want to upload new products with details and images so that customers can view and buy them.

No one selected 0 Comments Add Tag

Save and Close

Description
Sellers using the platform should be able to upload product information such as the name, description, price, category, and product images. The uploaded product should be stored in the database and images should be uploaded to cloud storage. It should also be visible to customers instantly after successful validation.

Acceptance Criteria

1. The seller should be able to fill in all product fields (name, price, description, category).
2. The product image should be uploaded to cloud storage (e.g., Cloudinary/AWS S3).
3. Form should validate that all required fields are filled.
4. On success, the product should be saved to the database and appear in the product list.
5. If there is an error (e.g., invalid price or empty field), an error message should be shown.
6. The system should confirm upload success with a message and a preview of the product.

Planning

Story Points: 5
Priority: 1
Risk: 0

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.

Classification

Value area: Business

Related Work

Add link
Add an existing work item as a parent

Result:

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

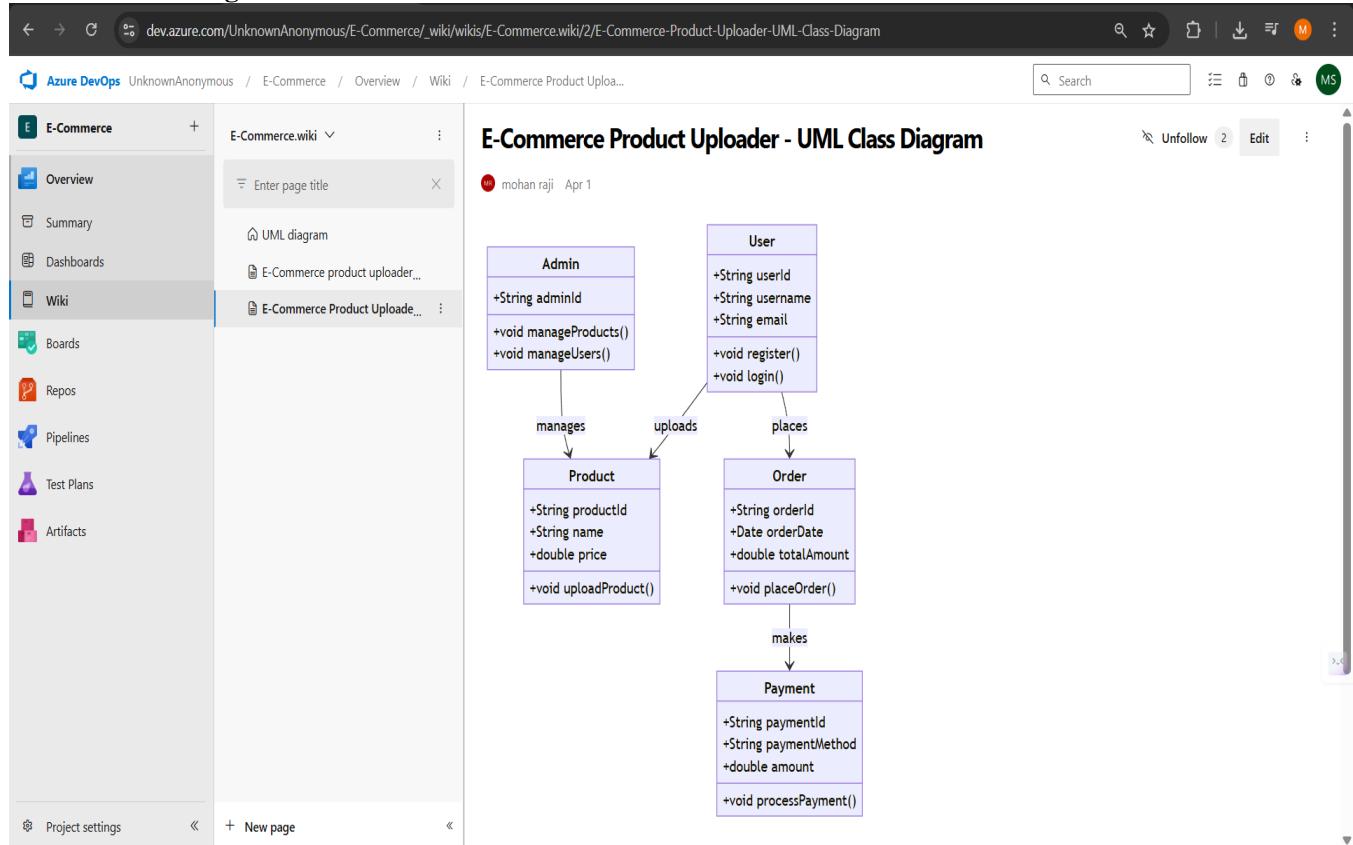
EXP NO: 6

DESIGNING CLASS AND SEQUENCE DIAGRAMS FOR PROJECT ARCHITECTURE

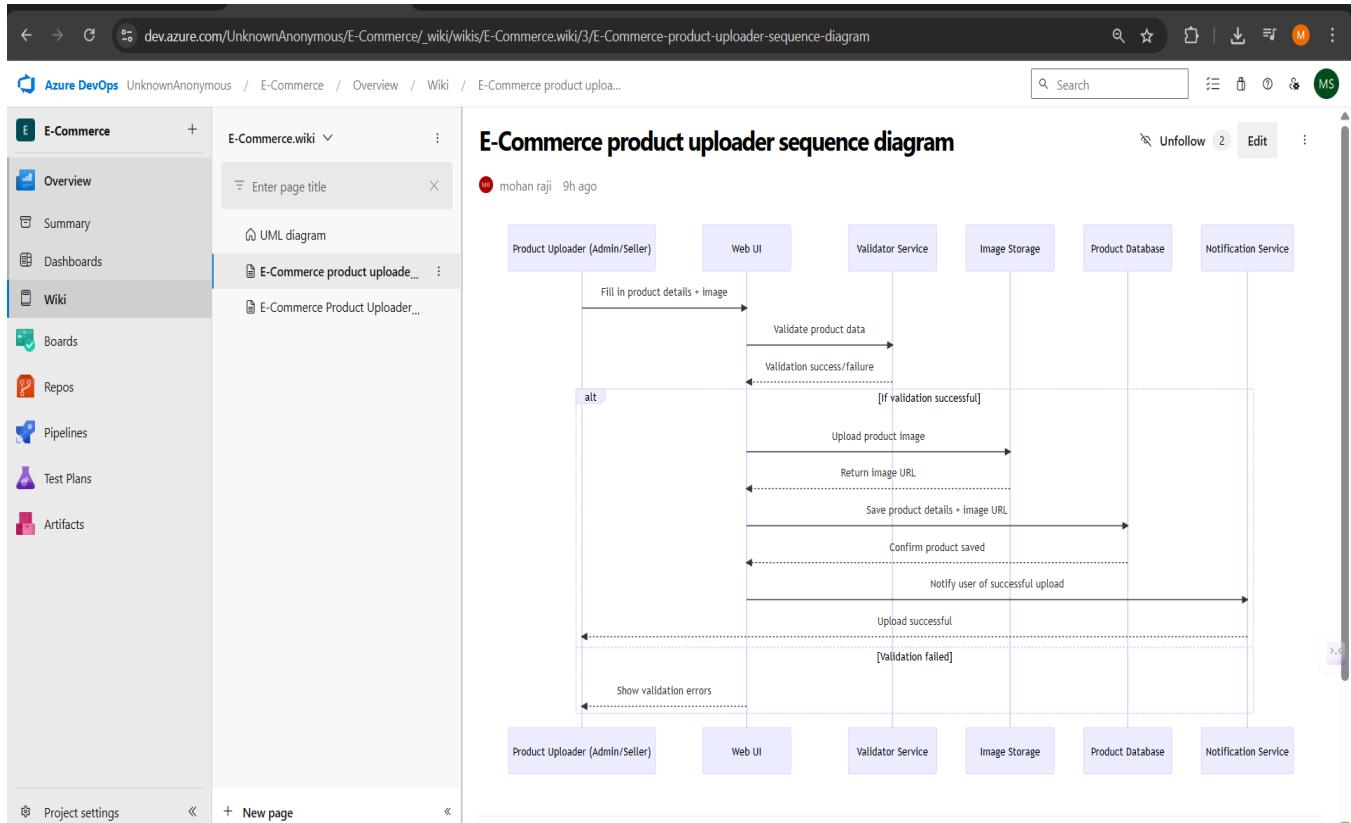
Aim:

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 E-Commerce product uploaded.

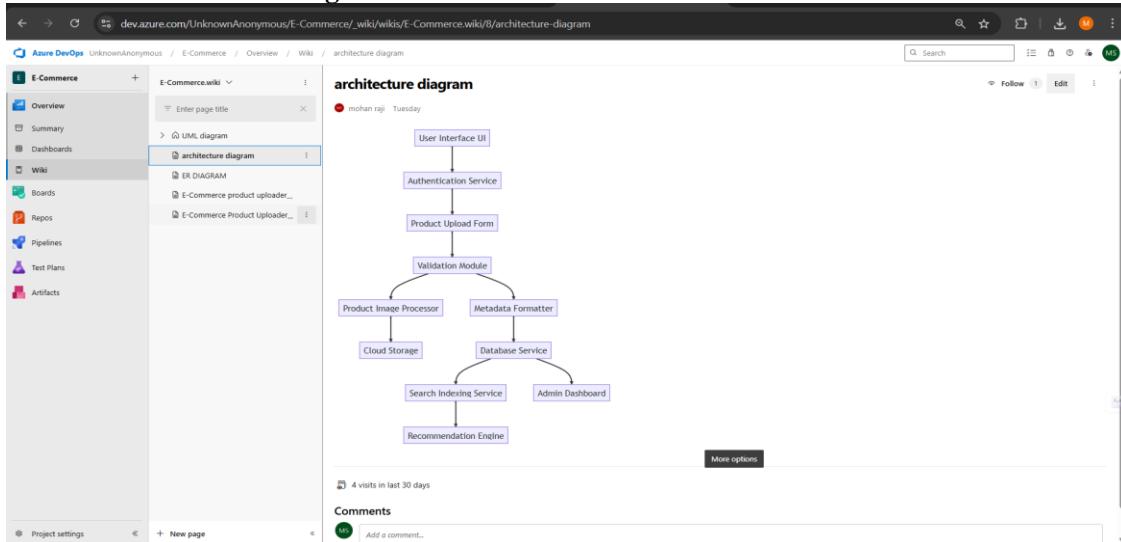
EXP NO: 7

DESIGNING ARCHITECTURAL AND ER DIAGRAMS FOR PROJECT STRUCTURE

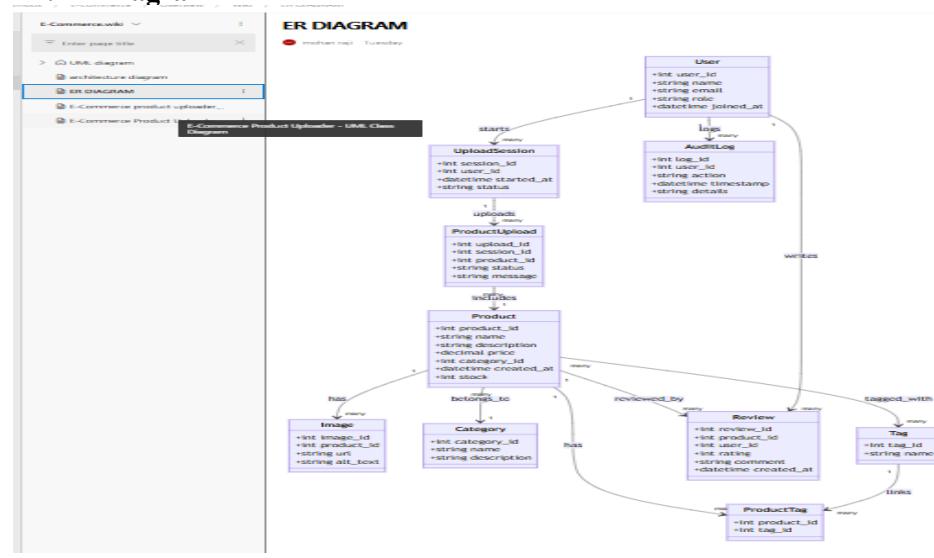
Aim:

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

7A. Architectural Diagram



7B. ER Diagram



m

Result:

The Architecture Diagram and ER Diagram is designed Successfully for the E-Commerce product uploaded.

EXP NO: 8	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
- Viewing and Managing Playlists
- Fetching Real-time Metadata
- Editing playlists (rename, reorder, record)
- Creating smart audio playlists based on categories (mood, genre, artist, etc.)

2. Define User Interactions

- Each test case simulates a real user behaviour (e.g., logging in, renaming a playlist, adding a song).

3. Design Happy Path Test Cases

- Focused on validating that all features function as expected under normal conditions.
- Example: User logs in successfully, adds item to playlist, or creates a category-based playlist.

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 Login, TC10 – Save Playlist Fails).
- Helps in quick identification and linking to user stories or features.

7. Separate Test Suites

- Grouped test cases based on functionality (e.g., Login, Playlist Editing, Recommendation System).

- 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

New Test Plan

Name *

Area Path *

Iteration *

Create **Cancel**

2. Test suite

	Order	Test Case Id	Assigned To	Status
Tel	1	78	Karthikayen Se...	Design
TC01 - Successful Sign Up	2	80	Karthikayen Se...	Design
Static suite	3	81	Karthikayen Se...	Design
Requirement based suite	4	82	Karthikayen Se...	Design
Query based suite				

New Test Case

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 titled "77. TC06 – Playlist Loading Failure" is displayed. The test case details are as follows:

- Tags:** Karthick S
- Comments:** 0 Comments
- Add Tag:** Add Tag
- Status:** Design
- Area:** Music Playlist Batch Creator
- Reason:** Now
- Iteration:** Music Playlist Batch Creator/Integration

The **Steps** section contains two steps:

1. Action: Disconnect from internet. Expected result: Network is offline.
2. Action: Navigate to "My Playlists". Expected result: Error message "Unable to load playlists" is shown.

The **Custom** section includes:

- Type:** Error Path
- Status:**
 - Priority:** 2
 - Automation status:** Not Automated

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

- State:** Design
- Reason:** New
- Area:** Music Playlist Batch Creator
- Iteration:** Music Playlist Batch Creator\Integration

The **Steps** section contains two steps:

1. Log in successfully. Expected result: User is redirected to dashboard.
2. Navigate to "My Playlists" section. Expected result: All created playlists are displayed clearly.

The **Custom** tab is selected, showing the following details:

- Type:** Happy Path
- Status:** Priority 2
- Automation status:** Not Automated

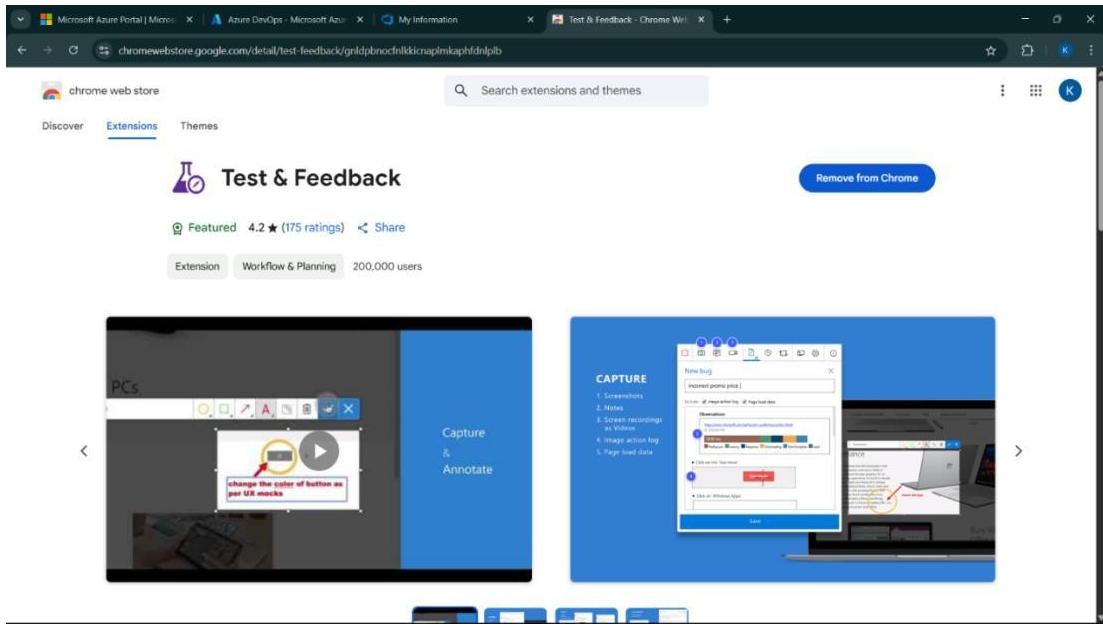
At the bottom, there is a **Parameter values:** section and a **Project settings:** button.

4. Installation of test

The screenshot shows the Chrome Web Store page for the 'Test & Feedback' extension. The extension details are as follows:

- Featured**: 4.2 ★ (175 ratings)
- Share**
- Extension**
- Workflow & Planning**
- 200,000 users**

The extension is described as a tool for capturing screenshots, notes, screen recordings, and image action logs. It includes features like 'Capture & Annotate' and 'Bug Reporter'. A large preview image shows a user interface for capturing a screenshot of a web page with annotations.



Test and feedback

Showing it as an extension

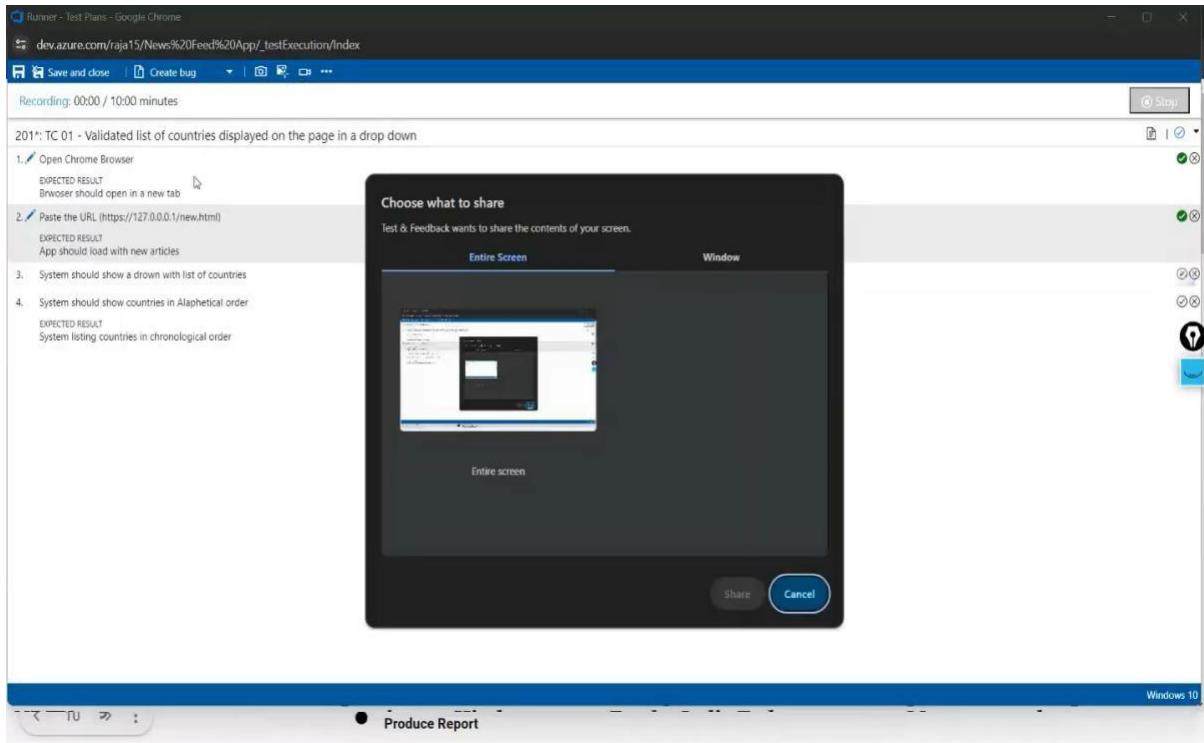
A screenshot of the Azure DevOps interface, specifically the Test Plans section. On the left, there's a sidebar with options like Overview, Boards, Repos, Pipelines, Test Plans, Test plans, Progress report, Parameters, Configurations, Runs, and Artifacts. The "Test Plans" option is selected. In the main area, a test plan titled "TS01 - User Login (ID: 86)" is displayed, showing a list of test cases: Title, TC01 - Successful Sign Up, TC02 - Secure Login, TC03 - Sign Up with Existing Email, and TC04 - Login with Wrong Password. A floating sidebar on the right is titled "Extensions" and lists "Full access" extensions: Copy Text from Picture, Dark Reader, Monica: ChatGPT AI Assist..., Selected: Copy Text from V..., and Test & Feedback. The "Test & Feedback" extension is highlighted with a blue border.

5. Running the test cases

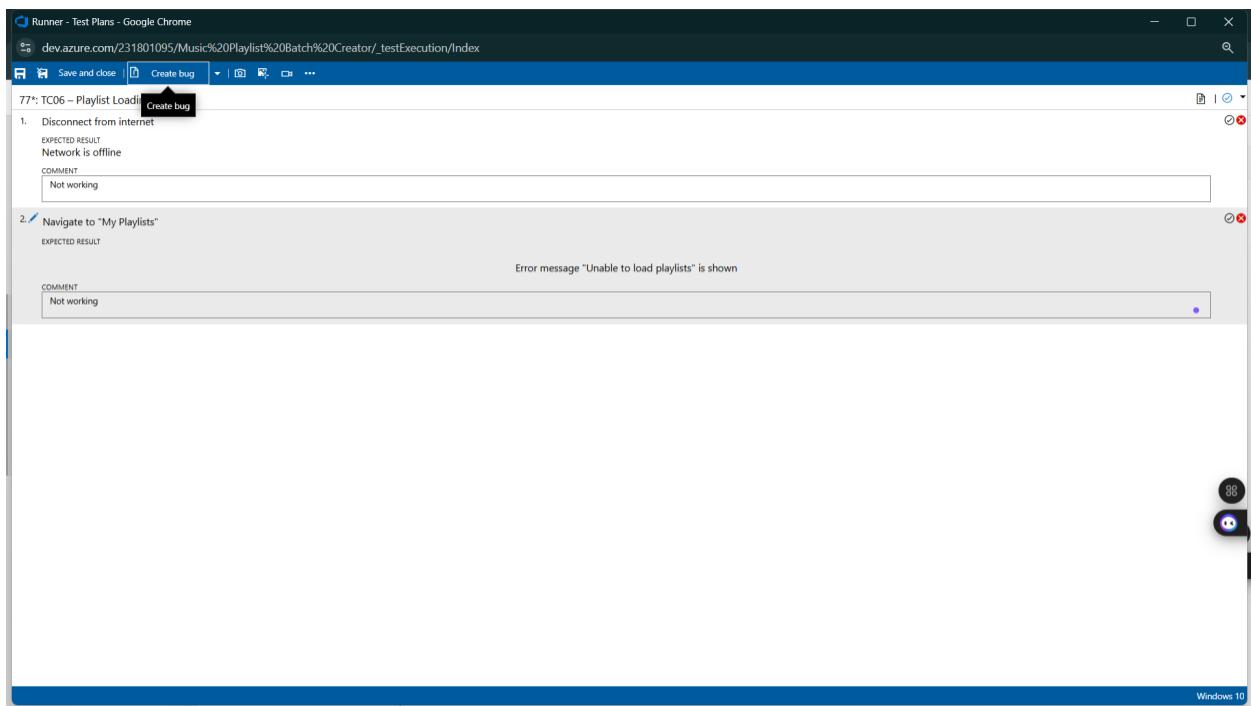
The screenshot shows the Azure DevOps Test Plans interface. On the left, the navigation bar includes 'Overview', 'Boards', 'Repos', 'Pipelines', 'Test Plans' (selected), 'Test plans', 'Progress report', 'Parameters', 'Configurations', 'Runs', and 'Artifacts'. Under 'Test Plans', there's a 'Project settings' link. The main area displays 'TS02 - View Playlists (ID: 87)' with tabs for 'Define', 'Execute' (selected), and 'Chart'. The 'Test Suites' section shows 'TS01 - User Login (4)', 'TS02 - View Playlists (2)', 'TS03 - Real-Time Met...', 'TS04 - Playlist Editing (4)', and 'TS05 - Smart Playlist ...'. The 'Test Points (2 items)' table lists 'TC05 - View Playlist Page' (Passed) and 'TC06 - Playlist Loading Failure' (Passed). A context menu is open over 'TC05 - View Playlist Page' with options: 'View execution history', 'Mark Outcome', 'Run', '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 the 'Runner - Test Plans - Google Chrome' window. The URL is 'dev.azure.com/231801095/Music%20Playlist%20Batch%20Creator/_testExecution/Index'. The page displays a test step for '75: TC05 - View Playlist Page': '1. Log in successfully' (EXPECTED RESULT: User is redirected to dashboard). Below it is another step: '2. Navigate to "My Playlists" section' (EXPECTED RESULT: 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

TB01 - Playlist loading spinner keeps spinning indefinitely on poor network

Unassigned 0 comments Add tag TB01 - Playlist loading spinner keeps spinning indefinitely on poor network Save & Close ...

2. Navigate to "My Playlists"

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

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

Test Configuration: Windows 10

Planning Deployment

Resolved Reason 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

Story Points Priority 2
Severity 3 - Medium
Activity

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) Related Work
Original Estimate Remaining Completed
+ Add link Add an existing work item as a parent
Tested By 77 TC06 - Playlist Loading Failure Updated 10-04-2025, 8: Design

System Info Found in Build

Windows 10

Microsoft Azure Pipelines - Pipeline 1 | 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

Search

Music Playlist Batch Creator + Enter Run ID... Go Run 48 - TS02 - View Playlists (Manual) / TC06 - Playlist Loading Failure

BUG 92 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	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.

Recent attachments

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. On the left, the navigation bar includes 'Test Plans' and 'Test plans'. The main area displays a test suite named 'TS02 - View Playlists (ID: 87)'. Under 'Test Suites', there are two items: 'Title' and 'TC05 – View Playlist Page'. A table titled 'Test Case Results' lists outcomes for various test points, including 'Passed' and 'Not Applicable' status with timestamps and run details.

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

9. Test report summary

The screenshot shows the Azure DevOps interface for a work item. The left sidebar includes 'Work items' and 'Test Plans'. The main area displays a bug report titled 'BUG 203: 203 - Countries Drop down Not Available on the page'. The work item details include the state (New), reason (New), repro step (Active), and steps with results (Passed, Failed). The right side shows planning, deployment, development, and related work sections.

- Assigning bug to the developer and changing state

Bug 92*

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

Karthick S · Enter Run ID... · Go · Run 48 - TS02 - View Playlists (Manual) / TC06 - Playlist Loading Failure

Repro Steps

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

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

- Failed** Disconnect from internet
- Failed** Expected Result
Network is offline
- Failed** 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
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
Add an existing work item as a parent

System Info

Tested By ?? TC06 - Playlist Loading Failure Updated 10-04-2025. ● Design

10. Progress report

Progress report

Music Playlist Batch Creator - Test Plan

Summary

- 1 Test plans
- 14 Test points
- 14 (14 / 14) Test points run (100% Run)
- 100% Pass rate

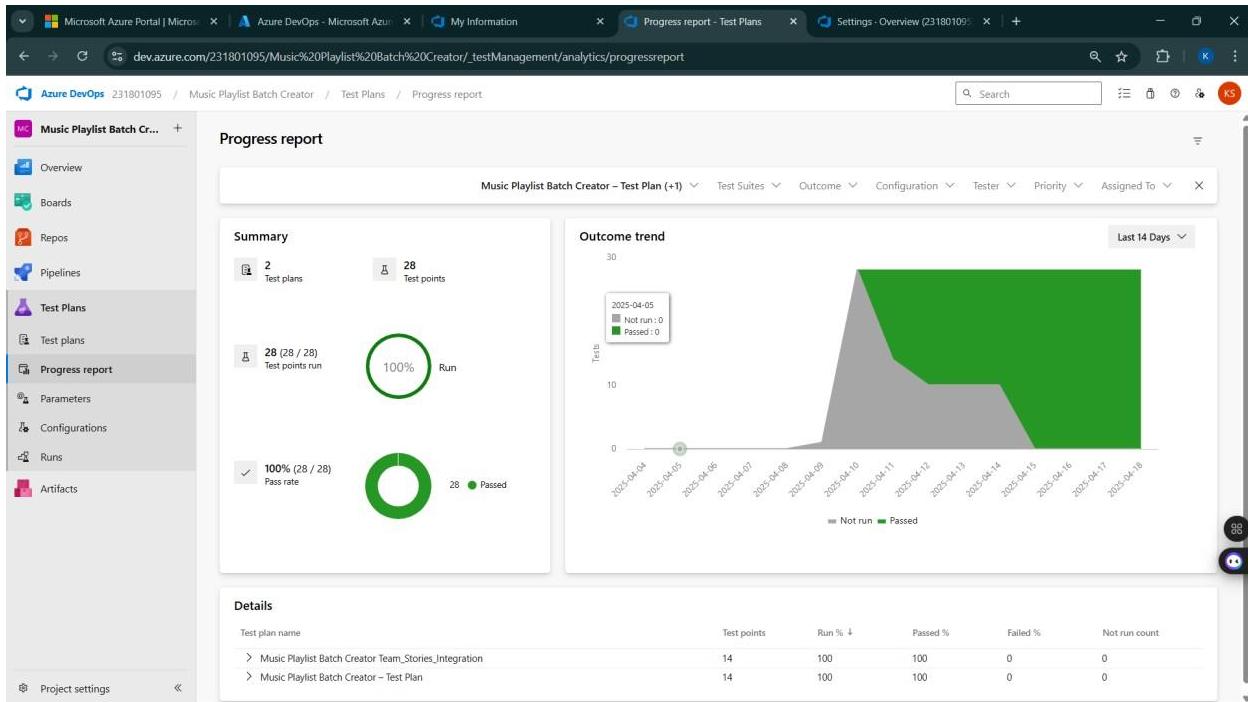
Outcome trend

Last 14 Days

Date	Not run	Passed
2025-04-01	14	0
2025-04-02	12	2
2025-04-03	10	4
2025-04-04	8	6
2025-04-05	6	8
2025-04-06	4	10
2025-04-07	2	12
2025-04-08	0	14
2025-04-09	0	14
2025-04-10	0	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

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' list in the Azure DevOps Settings - Process page. The 'Processes' tab is selected. The list includes:

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 left sidebar shows the 'Process' section under 'Boards'.

The screenshot shows the 'All processes' list in the Azure DevOps Settings - Process page. The 'Processes' tab is selected. The list includes:

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

The left sidebar shows the 'Process' section under 'Boards'.

12. View the new test case template

The screenshot shows the 'Add a field to Test Case' dialog box overlaid on the Azure DevOps interface. The dialog has a 'Definition' tab selected, showing options to 'Create a field' or 'Use an existing field'. Under 'Create a field', the 'Name' is set to 'Type' and the 'Type' is set to 'Text (single line)'. There is a 'Description' field with the placeholder 'Optionally provide a description for the field'. At the bottom are 'Add field' and 'Cancel' buttons.

The screenshot shows the 'All processes' page in Azure DevOps. The 'Projects' tab is selected. A new project named 'Music Playlist Batch Creator' is listed under 'Work item types'. The description for the project is: 'The Azure Music Playlist Batch Creator is a cloud-based solution designed for bulk playlist creation and management. Levera...'. The left sidebar shows the 'Process' section is currently selected.

The screenshot shows the Azure DevOps Settings - Process page. The URL in the address bar is dev.azure.com/231801095/_settings/process?type-id=231801095Agile.TestCase&process-name=231801095%20Agile&a=layout. The page title is "All processes > 231801095 Agile > Test Case". On the left, there is a sidebar with sections like General, Security, Boards, and Process (which is selected). The main area has tabs for Layout, States, Rules, and Fields. Under Fields, there is a "Steps" section with a "Text (multiple lines)" input field. To the right, there are sections for Custom fields (Recent test results, Deployment, Development, Related Work, Status), and a "Add a field ..." button.

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
-----------	---

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:

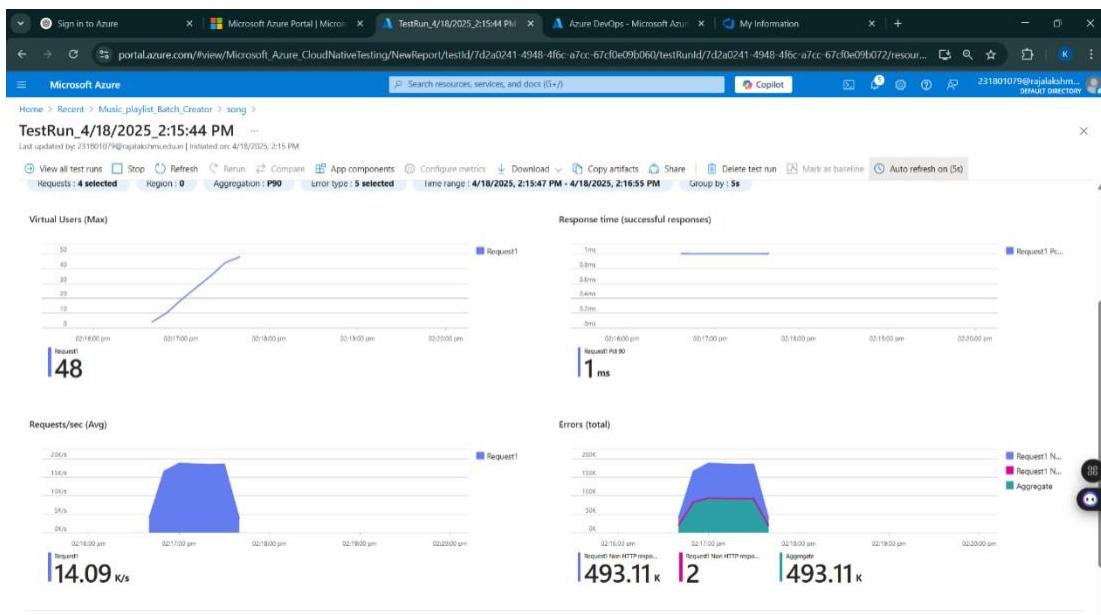
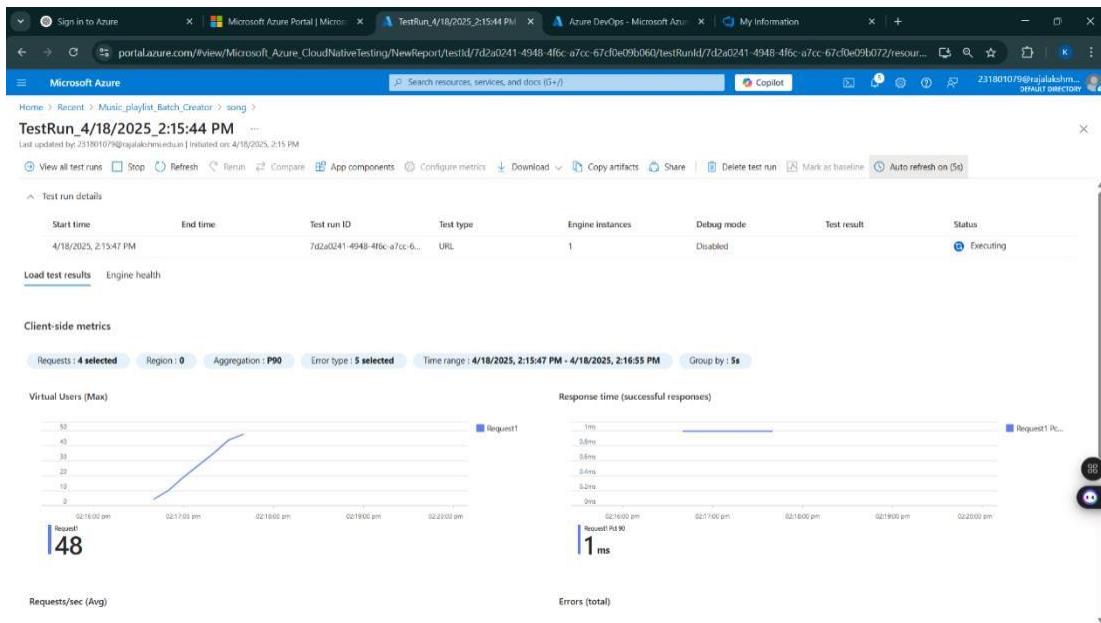
1. Sign in to Azure Portal
Go to <https://portal.azure.com> and log in.
2. Create the Resource
 - o Go to *Create a resource* → Search for “Azure Load Testing”.
 - o Select Azure Load Testing and click Create.
3. Fill in the Configuration Details
 - o *Subscription*: Choose your Azure subscription.
 - 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 page for 'E-Commerce_product_uploader'. The repository is public and has 1 branch and 0 tags. The main branch has 57 commits. The commit history includes updates to README.md, deletion of azureBoards/i, azureDashboard/i, ecom, poker Estimation, screen_shots_diagrams, and sprint, and additions like Add files via upload. The repository has 0 stars, 1 watching, and 0 forks. The 'About' section describes it as a web-based Product Upload and Management System built with Django and PostgreSQL. The 'Releases' section indicates no releases have been published, with a link to 'Create a new release'. The 'Packages' section is empty. The footer features the GitHub logo and links to 'Help' and 'Privacy'.

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.