

EXP NO: 1

AZURE DEVOPS ENVIRONMENT SETUP

Aim:

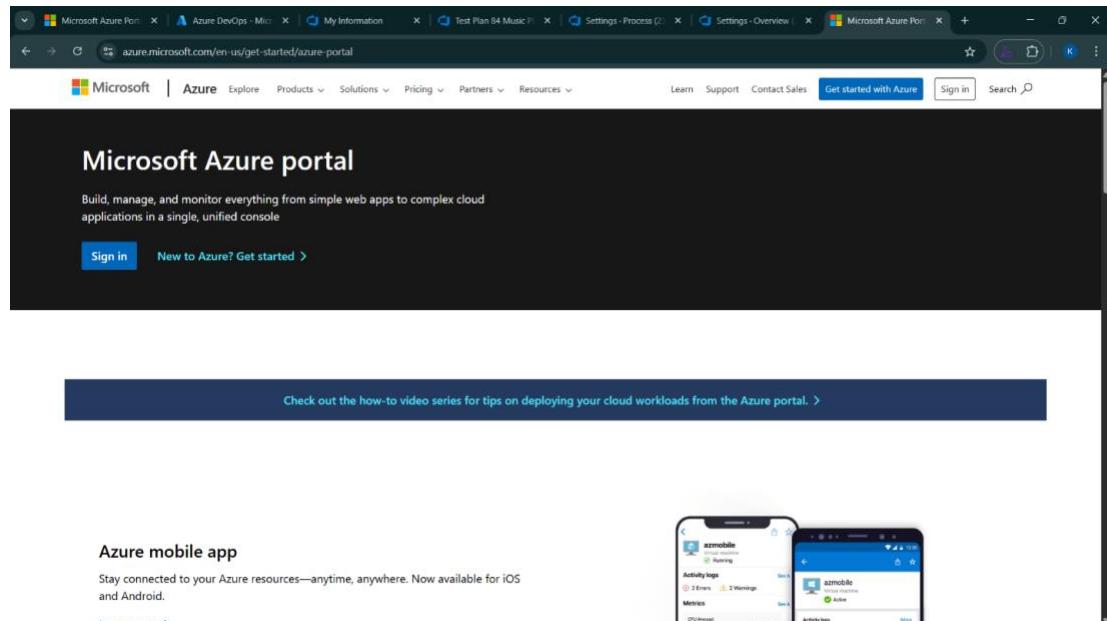
To set up and access the Azure DevOps environment by creating an organization through the Azure portal.

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>



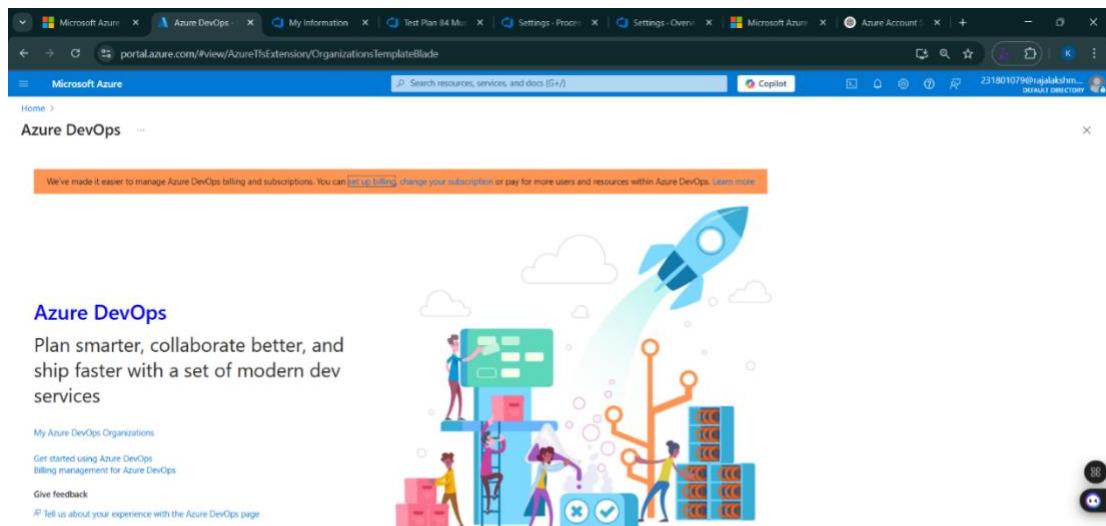
2. Azure home page

The screenshot shows the Microsoft Azure home page. At the top, there's a search bar and a Copilot button. Below the header, the "Azure services" section features a "Create a resource" button and icons for Azure DevOps organizations, Subscriptions, Dashboard hub, Resource groups, Azure Load Testing, Quickstart Center, Azure AI services, Kubernetes services, and More services. The "Resources" section displays recent resources: "Music" (Azure Load Testing) and "Music_playlist_Batch_Creator" (Resource group), both last viewed 3 days ago. The "Navigate" section includes links for Subscriptions, Resource groups, All resources, and Dashboard. The "Tools" section lists Microsoft Learn, Azure Monitor, Microsoft Defender for Cloud, and Cost Management. The "Useful links" section includes Azure mobile app and a link to https://portal.azure.com/#blade/AzureThiExtension/OrganizationsTemplateBlade.

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

The screenshot shows the Microsoft Azure home page with a search bar containing the text "is and I Azure DevOps". The search results are displayed under the "Services" and "Marketplace" tabs. Under "Services", results include Azure Native New Relic Service, Managed DevOps Pools, Azure DevOps organizations, and Azure Native Dynatrace Service. Under "Marketplace", results include Static Web App, Rocky Linux 9, Build Agents for Azure DevOps, and InfluxDB Cloud (Official Version). The "Documentation" section lists DevOps architecture design - Azure Architecture Center, Secure your Azure DevOps - Azure DevOps, Course AZ-400T00-A: Designing and Implementing Microsoft DevOps solutions - ..., and Managed DevOps Pools Overview - Managed DevOps Pools. The "Tools" section includes Microsoft Entra ID, Azure DevOps, and Cost Management. The "Useful links" section includes Azure mobile app and a link to https://portal.azure.com/#blade/AzureThiExtension/OrganizationsTemplateBlade.

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.

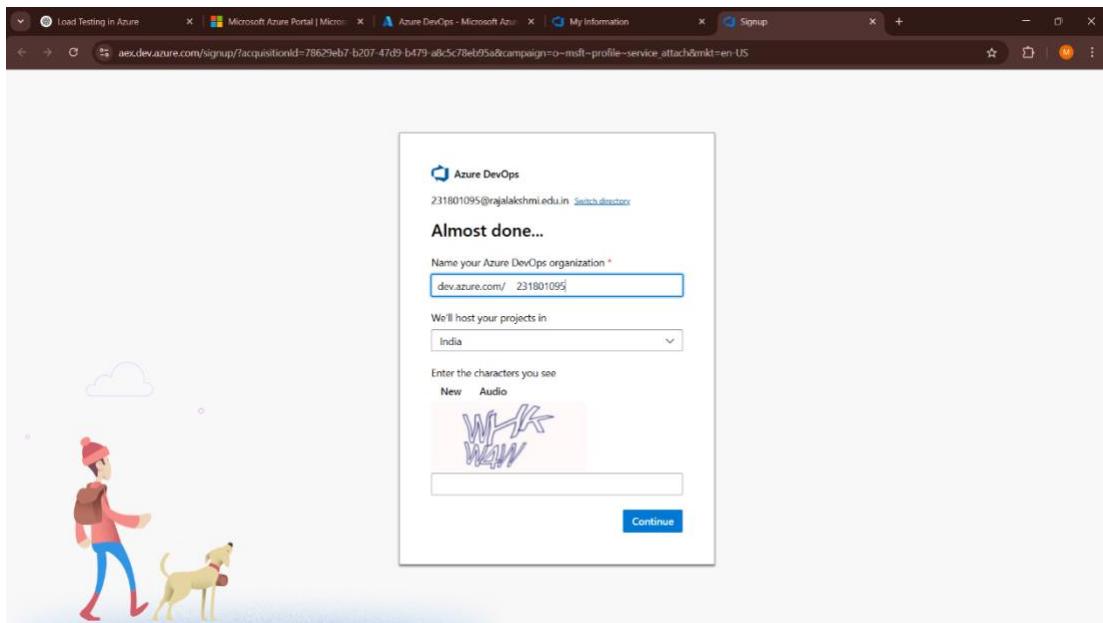
EXP NO: 2

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.

By creating this project, you agree to the Azure DevOps [code of conduct](#)

Advanced

Version control [?](#)

Git

Work item process [?](#)

231801095 Agile

Cancel Create

The screenshot shows the 'Create new project' dialog box. At the top, the title 'Create new project' is displayed. Below it, the 'Project name *' field contains 'Music Playlist Batch Creator'. The 'Description' field is empty. Under 'Visibility', the 'Public' option is selected, indicated by a blue border around its panel. The 'Private' option is also shown. Below the visibility section, a note states: 'By creating this project, you agree to the Azure DevOps [code of conduct](#)'. There is an 'Advanced' button above the 'Version control' and 'Work item process' dropdowns. The 'Version control' dropdown shows 'Git'. The 'Work item process' dropdown shows '231801095 Agile'. At the bottom right, there are 'Cancel' and 'Create' buttons.

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 dashboard. At the top right, it displays 'Karthick S' and a 'Sign out' button. On the left, there's a profile card for 'Karthick S' with a large orange circular icon containing 'KS'. Below the card are sections for 'Edit profile', email ('231801079@rajalakshmi.edu.in'), and location ('India'). To the right, the main area is titled 'Azure DevOps Organizations' and shows 'Create new organization'. It lists a single project: 'Music Playlist Batch Creator'. A sidebar on the right contains 'Actions' such as 'Open in Visual Studio', 'Manage security', 'Browse extensions', and 'Leave'. At the bottom right of the dashboard are two small circular icons.

4. Project dashboard

The screenshot shows the Azure DevOps project dashboard for 'Music Playlist Batch Creator'. The left sidebar includes links for Overview, Summary, Dashboards, Wiki, Boards, Repos, Pipelines, Test Plans, and Artifacts. The main content area has a title 'Music Playlist Batch Creator' with a 'Public' button and an 'Invite' button. The 'About this project' section contains a brief description of the tool's purpose and features like Bulk Playlist Creation, Custom Templates, Tagging & Filtering, Export & Sharing, User-Friendly Interface, Playlist Editing, and Search Functionality. The 'Project stats' section shows 1 Work item and 0 Work items. The 'Members' section lists 5 members, each represented by a colored circular icon. At the bottom left, there's a 'Project settings' link.

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 | Effort | Story Points | Business Value | Value Area | Tags |
|-------|----------------|---|-------|--------|--------------|----------------|------------|------|
| 1 | Epic | > User Authentication & Profile Management | New | | | | Business | |
| 2 | Epic | > Develop a system that allows users to create and manage m... | New | | | | Business | |
| 3 | Epic | > Fetch and integrate music data from external sources for pl... | New | | | | Business | |
| 4 | Epic | > Enable users to edit, customize, and share their playlists wit... | New | | | | Business | |
| 5 | Epic | > Improve system performance and enhance user experience | New | | | | Business | |
| 6 | Epic | > Test Epic | New | | | | Business | |

+ New Work Item

rajalakshmi.edu.in Sign out

Karthick S
231801079@rajalakshmi.edu.in
[View account](#)
[Switch directory](#)

KS

Sign in with a different account

Business

Business

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 a project titled "Music Playlist Batch Creator Team". The left sidebar is open, showing options like Overview, Boards, Work items, Backlogs, Sprints, Queries, Delivery Plans, Analytics views, Repos, Pipelines, Test Plans, and Artifacts. The "Backlogs" option is selected. The main area displays a backlog of work items. A table lists items with columns for Order, Work Item Type, Title, State, Effort, Story Points, Business Value, Value Area, and Tags. The backlog includes:

| Order | Work Item Type | Title | State | Effort | Story Points | Business Value | Value Area | Tags |
|-------|----------------|---|----------|--------|--------------|----------------|------------|------|
| 1 | Epic | User Authentication & Profile Management | New | | | | Business | |
| 2 | Epic | Develop a system that allows users to create and manage multiple playlists in batches | New | | | | Business | |
| | Feature | Auto-Playlist Creation Based on user preference | New | | | | Business | |
| | User Story | As a user, I should be able to create playlists based on... | Resolved | | 3 | | Business | |
| | Feature | Bulk Song Addition | New | | | | Business | |
| 3 | Epic | Fetch and Integrate music data from external sources for pl... | New | | | | Business | |
| 4 | Epic | Enable users to edit, customize, and share their playlists wit... | New | | | | Business | |
| 5 | Epic | Improve system performance and enhance user experience | New | | | | Business | |
| 6 | Epic | Test Epic | New | | | | Business | |

1.Fill in Epics

The screenshot shows the details of a work item titled "HTW EPIC". The left sidebar is open, showing options like Overview, Boards, Work items, Backlogs, Sprints, Queries, Delivery Plans, Analytics views, Repos, Pipelines, Test Plans, and Artifacts. The "Work items" option is selected. The main area displays the details of the work item. The "Description" field contains the text: "Develop a system that allows users to create and manage multiple playlists in batches". The "Planning" section includes fields for Priority (set to 2), Risk, Effort, and Business Value. The "Deployment" section provides instructions on tracking releases associated with the work item. The "Development" section includes links for Azure Repos and branches. The "Related Work" section allows adding links to existing work items. The "Classification" section indicates the value area is "Business".

2.Fill in Features

The screenshot shows the 'Details' view of a work item titled 'FEATURE 26'. The work item ID is 26, assigned to 'Karthick S' with a status of 'New'. The area is 'Music Playlist Batch Creator' and the iteration is 'Music Playlist Batch Creator\Model'. The 'Description' section contains the text: 'Auto-Playlist Creation Based on user preference'. The 'Planning' section shows priority 2 and risk 2. The 'Deployment' section includes a note about tracking releases. The 'Development' section provides instructions for linking to Azure Repos. The 'Related Work' section lists another work item: '25 Develop a system that allows users to creat...'.

3.Fill in User Story Details

The screenshot shows the 'Details' view of a work item titled 'USER STORY 47'. The work item ID is 47, assigned to 'Karthick S' with a status of 'Resolved'. The area is 'Music Playlist Batch Creator' and the iteration is 'Music Playlist Batch Creator\Model'. The 'Description' section contains the text: 'As a user, I should be able to create playlists based on various categories (like mood, genre, artist, popularity, lyrics) as I need'. The 'Acceptance Criteria' section has a placeholder: 'Click to add Acceptance Criteria.'. The 'Discussion' section contains the text: 'Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.' The 'Planning' section shows story points 3 and priority 2. The 'Deployment' section includes a note about tracking releases. The 'Development' section provides instructions for linking to Azure Repos. The 'Related Work' section lists another work item: '26 Auto-Playlist Creation Based on user prefer...'.

Result:

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

EXP NO: 4

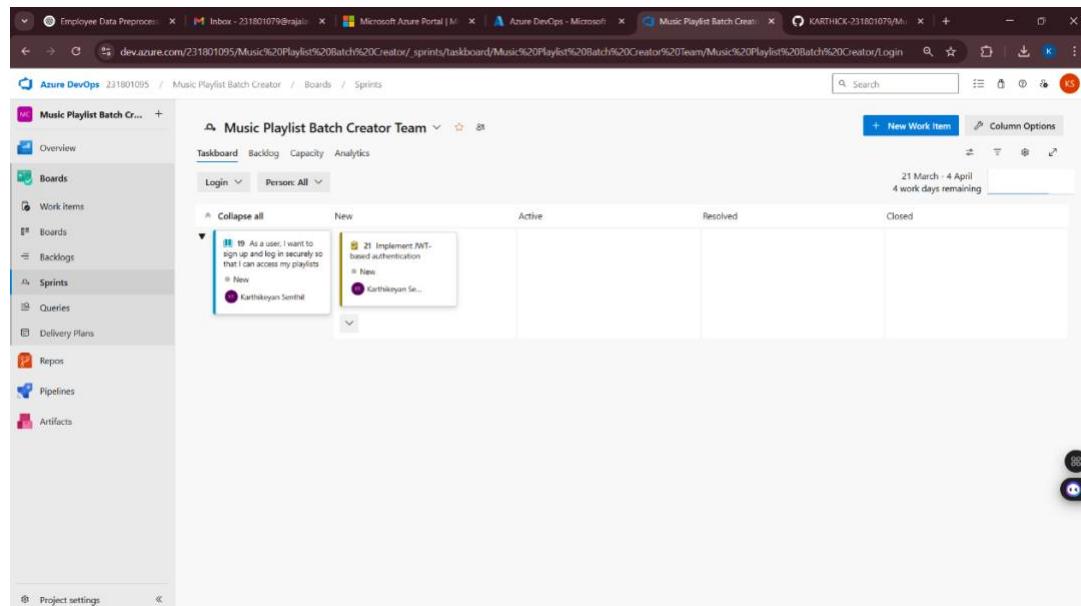
SPRINT PLANNING

Aim:

To assign user story to specific sprint for the Music Playlist Batch Creator Project.

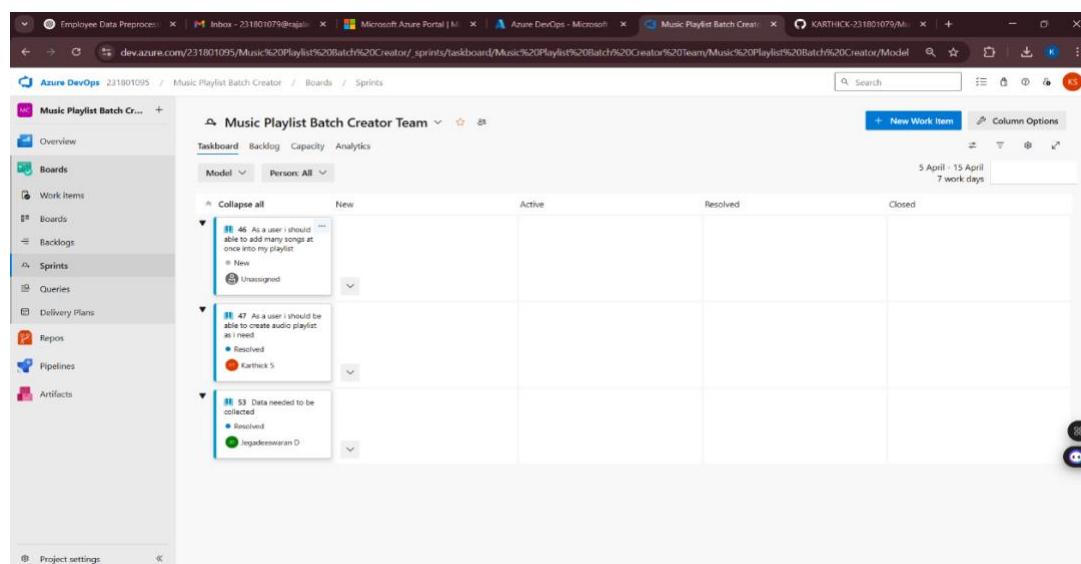
Sprint Planning

Sprint 1



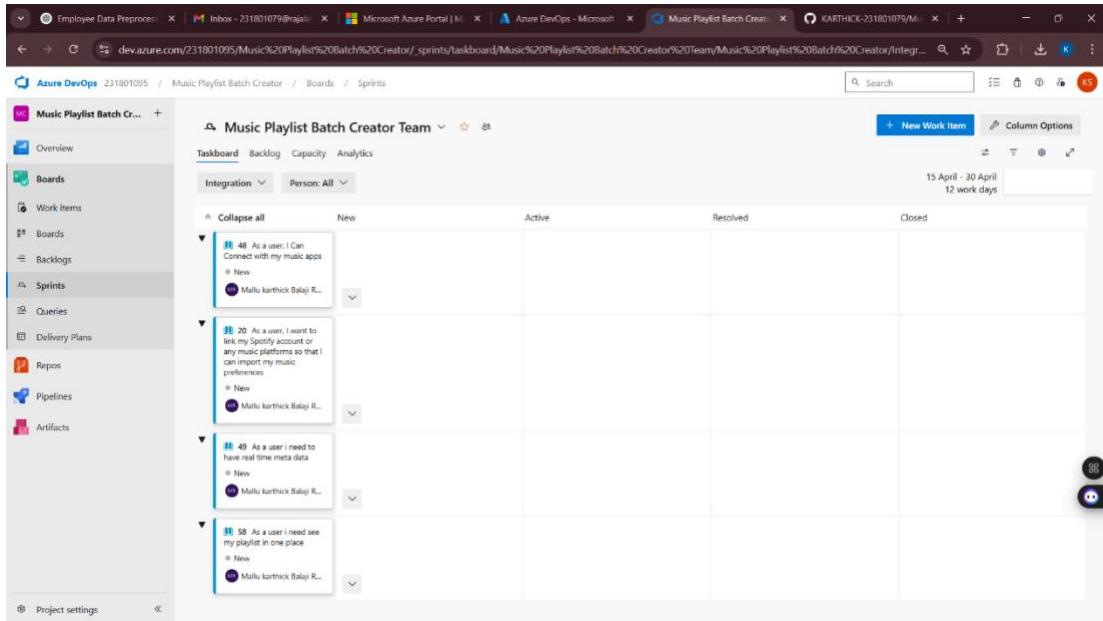
The screenshot shows the Azure DevOps Taskboard for the 'Music Playlist Batch Creator' project. The board is set up with columns for New, Active, Resolved, and Closed work items. In the New column, there are two user stories assigned to 'Karthikayen Senthil': 'As a user, I want to sign up and log in securely so that I can access my playlists' and 'As a user, I want to implement PNT-based authentication'. The Active column is empty. The Resolved column contains one item: 'As a user, I want to implement PNT-based authentication' by 'Karthikayen Senthil'. The Closed column is empty. The top navigation bar shows the project name and the current sprint period: '21 March - 4 April' with '4 work days remaining'.

Sprint 2



The screenshot shows the Azure DevOps Taskboard for the 'Music Playlist Batch Creator' project, specifically for the 'Model' sprint. The board has columns for Model, Person: All, Active, Resolved, and Closed. In the Model column, there are three user stories: 'As a user, I should be able to add many songs at once into my playlist' (status: New, assigned to 'Unassigned'), 'As a user, I should be able to create audio playlist as I need' (status: Resolved, assigned to 'Karthick S'), and 'Data needed to be collected' (status: Resolved, assigned to 'Ingaadeswaram D'). The Active, Resolved, and Closed columns are empty. The top navigation bar shows the project name and the current sprint period: '5 April - 15 April' with '7 work days'.

Sprint 3

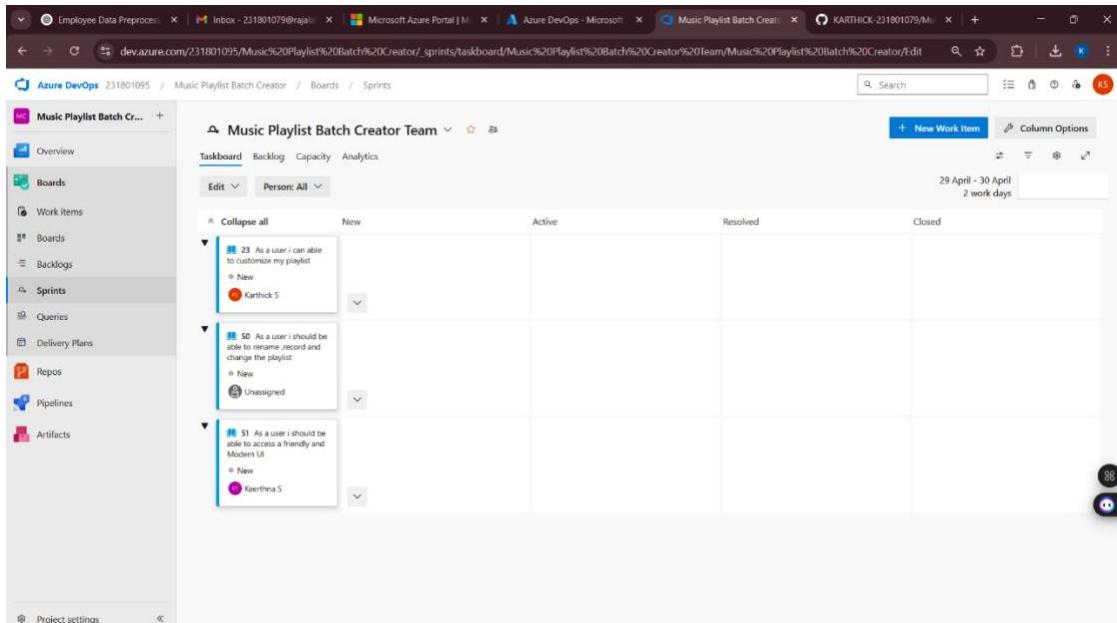


The screenshot shows the Azure DevOps Taskboard for the 'Music Playlist Batch Creator Team' in Sprint 3. The backlog is visible on the left, showing four user stories:

- 48 As a user, I can Connect with my music apps
- 20 As a user, I want to link my Spotify account or any music platforms so that I can change my music preferences
- 49 As a user i need to have real time meta data
- 58 As a user i need see my playlist in one place

The taskboard has columns for New, Active, Resolved, and Closed. The 'Active' column contains the first two user stories. The 'Resolved' column contains the third and fourth user stories. The 'Closed' column is empty. The date range is set to 15 April - 30 April, which is 12 work days.

Sprint 4



The screenshot shows the Azure DevOps Taskboard for the 'Music Playlist Batch Creator Team' in Sprint 4. The backlog is visible on the left, showing three user stories:

- 23 As a user i can able to customize my playlist
- 50 As a user i should be able to rename record and change the playlist
- 51 As a user i should be able to access a friendly and Modern UI

The taskboard has columns for New, Active, Resolved, and Closed. The 'Active' column contains the first two user stories. The 'Resolved' column contains the third user story. The date range is set to 29 April - 30 April, which is 2 work days.

Result:

The Sprints are created for the Music Playlist Batch Creator Project.

EXP NO: 5

POKER ESTIMATION

Aim:

Create Poker Estimation for the user stories - Music Playlist Batch Creator Project.

Poker Estimation

The screenshot shows a Microsoft Azure DevOps work item details page for a User Story. The URL in the browser is https://dev.azure.com/231801095/Music%20Playlist%20Batch%20Creator/_backlogs/backlog/Music%20Playlist%20Batch%20Creator%20Team/Epics?workitem=47. The work item type is 'USER STORY'. The title of the story is '47 As a user i should be able to create audio playlist as i need'. The status is 'Resolved' by 'Karthick S'. The area is 'Music Playlist Batch Creator' and the iteration is 'Music Playlist Batch Creator\Model'. The 'Planning' section shows Story Points as 3, Priority as 2, and Risk as 1. The 'Deployment' section provides instructions on tracking releases. The 'Development' section links to Azure Repos. The 'Classification' section shows the value area as 'Business'. The 'Discussion' section contains a comment placeholder and a link to the Markdown editor. The 'Related Work' section lists a parent work item: '26 Auto-Playlist Creation Based on user preference' (Updated Feb 18, New).

Result:

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

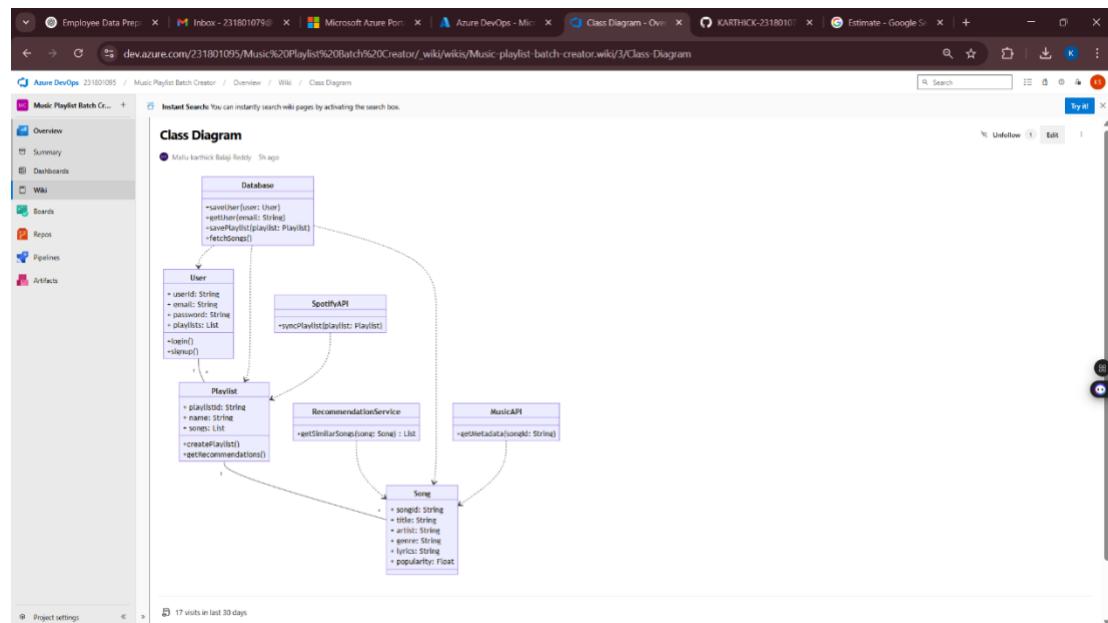
EXP NO: 6

DESIGNING CLASS AND SEQUENCE DIAGRAMS FOR PROJECT ARCHITECTURE

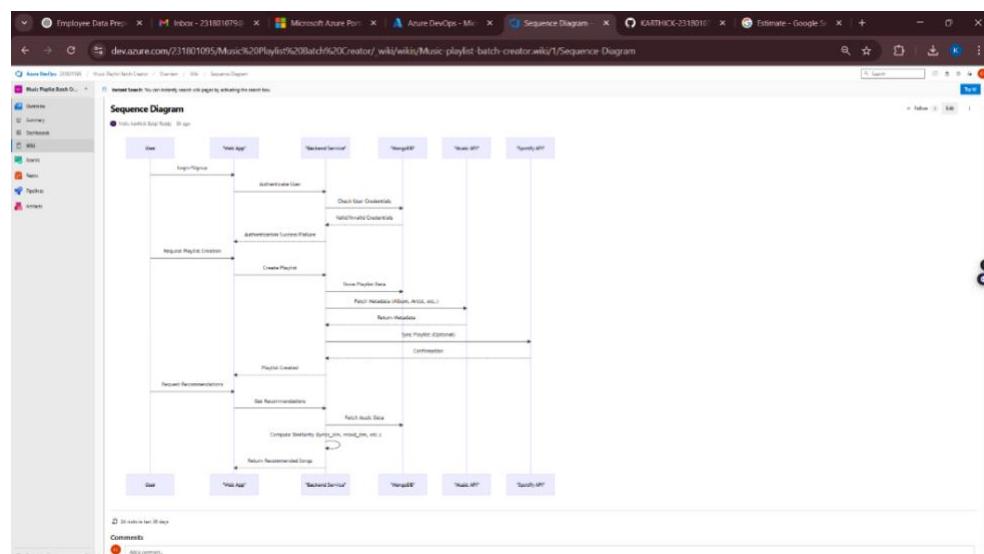
Aim:

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 Music Playlist Batch Creator.

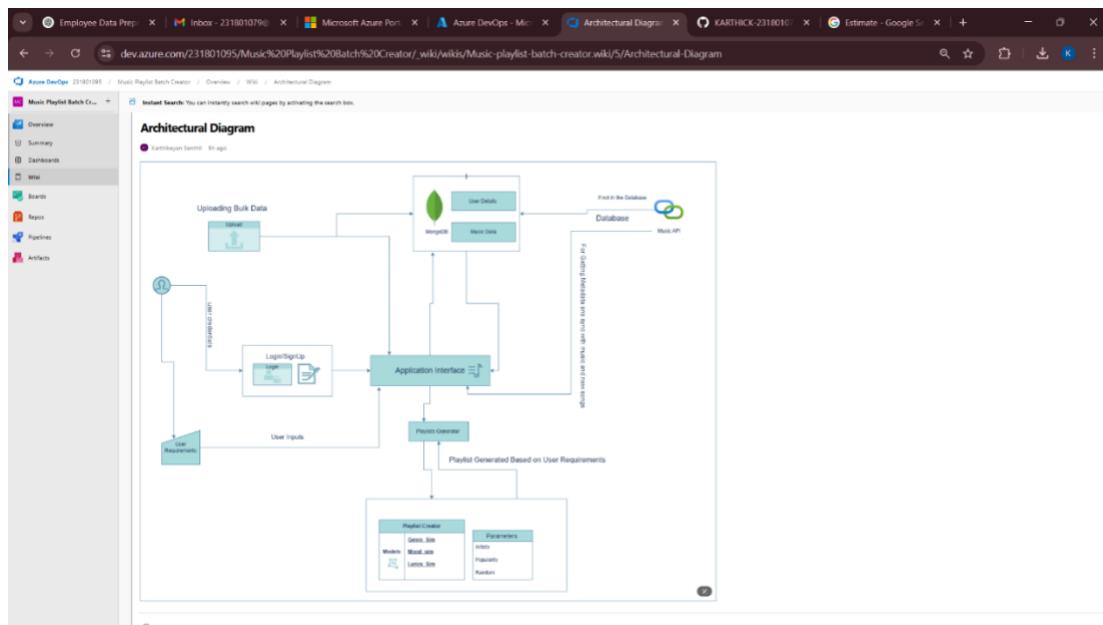
EXP NO: 7

DESIGNING ARCHITECTURAL AND ER DIAGRAMS FOR PROJECT STRUCTURE

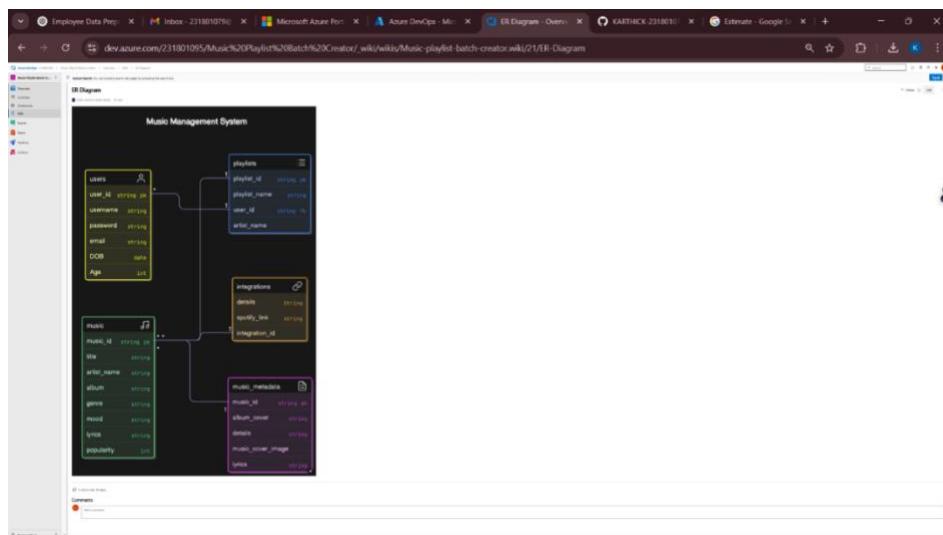
Aim:

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 Music Playlist Batch Creator

| | |
|------------------|--|
| 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 *
Music Playlist Batch Creator - Test Plan

Area Path *
Music Playlist Batch Creator

Iteration *
Music Playlist Batch Creator\Integration

Create Cancel

2. Test suite

| Title | Order | Test Case ID | Assigned To | State |
|---------------------------|-------|--------------|-------------------|--------|
| TC01 - Successful Sign Up | 1 | 78 | Karthikeyan Se... | Design |
| TC02 - Invalid Email | 2 | 80 | Karthikeyan Se... | Design |
| Requirement based suite | 3 | 81 | Karthikeyan Se... | Design |
| Query based suite | 4 | 82 | Karthikeyan Se... | Design |

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

- o Action:

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

- o Expected Results:

- Playlist is generated based on selected mood and categories.

- o Type: Happy Path

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

- o Action:

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

- o Expected Results:

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

- o Type: Error Path

Test Cases

The screenshot shows the Microsoft 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:** Add Tag
- Area:** Music Playlist Batch Creator
- Reason:** New
- Repetition:** Music Playlist Batch Creator/Integration

The test steps are listed under the "Steps" tab:

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

Below the steps, there is a section for "Parameter values" and a "Project settings" link.

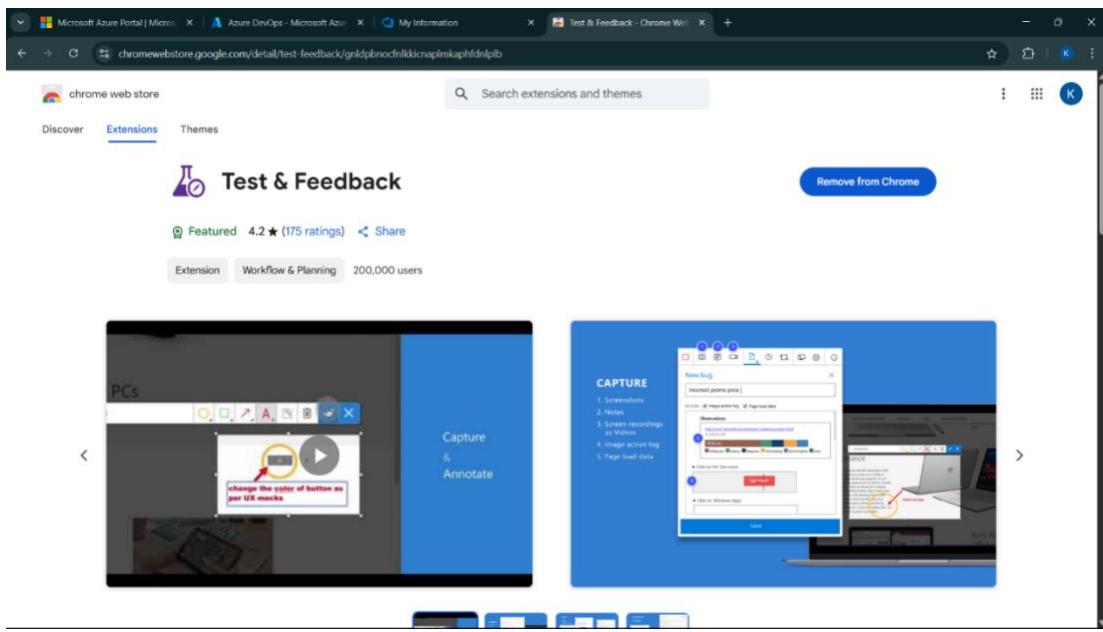
The screenshot shows the Azure DevOps Test Plan interface. A test case titled "TC05 – View Playlist Page" is selected. The test case details include:

- Area:** Music Playlist Batch Creator
- Iteration:** Music Playlist Batch Creator/Integration
- 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.
- 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, demonstrating the extension's annotation and capture features on a mobile device and a desktop screen.
- Add to Chrome button:** A prominent blue button to add the extension to a Chrome browser.



Test and feedback

Showing it as an extension

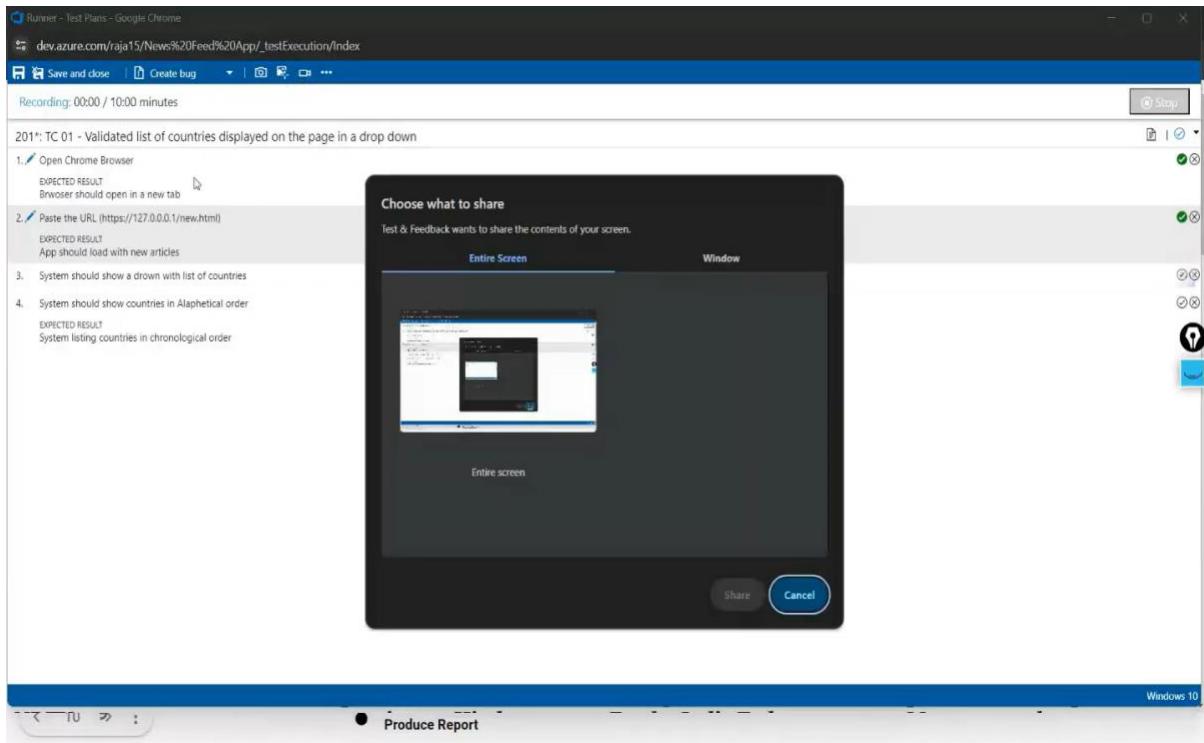
A screenshot of a web browser window showing the Azure DevOps Test Plans interface. The left sidebar shows 'Test Plans' selected. In the main area, a test plan for 'Music Playlist Batch Creator' is open, specifically the 'TS01 - User Login' suite. On the right, the 'Extensions' sidebar is visible, listing several extensions including '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 dark overlay.

5. Running the test cases

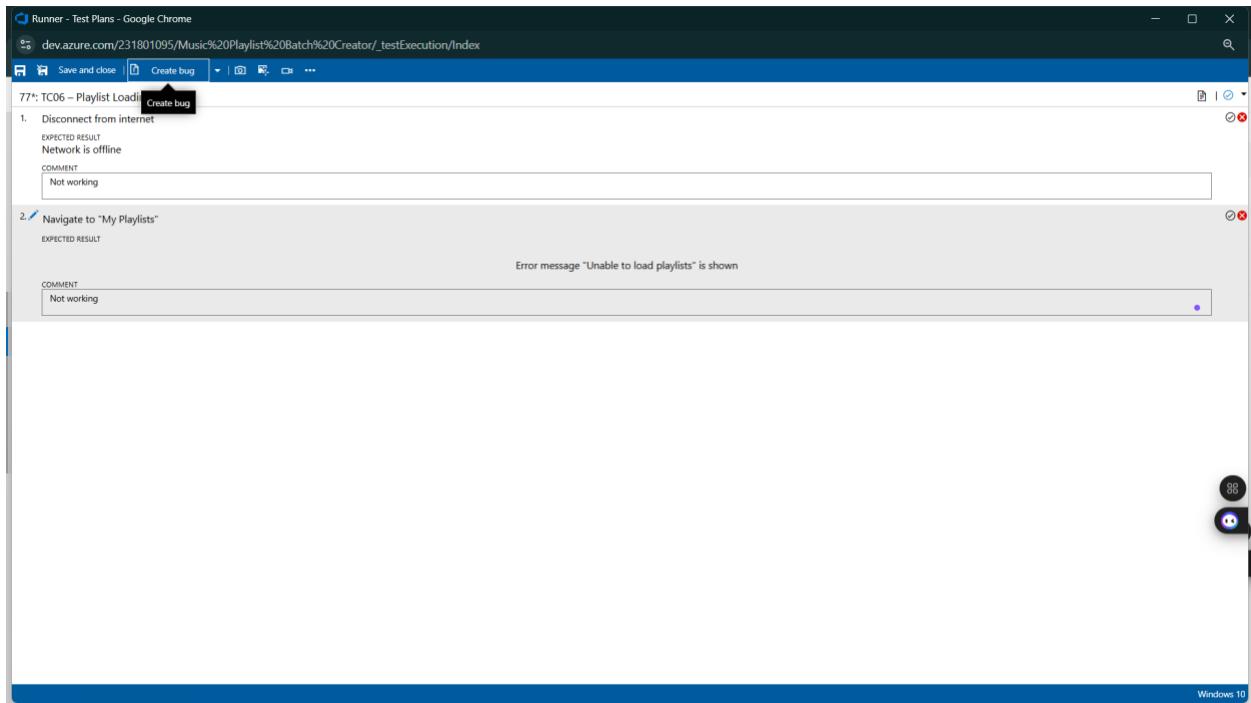
The screenshot shows the Azure DevOps Test Plan interface. On the left, the navigation bar includes 'Overview', 'Boards', 'Repos', 'Pipelines', 'Test Plans', and 'Test plans'. Under 'Test plans', 'Music Playlist Batch Creator' is selected, showing 'Test Suites' like 'TS01 - User Login (4)' and 'TS02 - View Playlists (2)'. The 'TS02 - View Playlists (ID: 87)' suite is currently active. The 'Execute' tab is selected, displaying 'Test Points (2 items)': 'TC05 - View Playlist Page' (Passed, Order 1, Test Case Id 75) and 'TC06 - Playlist Loading Failure' (Passed, Order 2, Test Case Id 77). A context menu is open over the first test point, listing options: 'View execution history', 'Mark Outcome', 'Run', 'Reset test to active', 'Edit test case', 'Assign tester', and 'View test result'. The 'Run' option is highlighted.

The screenshot shows the 'Bug Report Playlist Page' in the Azure DevOps interface. The URL is dev.azure.com/231801095/Music%20Playlist%20Batch%20Creator/_testPlans/execute?planId=84&suitId=87. The page displays a test case step: '75*: TC05 – View Playlist Page'. Step 1: 'Log in successfully' (EXPECTED RESULT: User is redirected to dashboard). Step 2: 'Navigate to "My Playlists" section' (EXPECTED RESULT: All created playlists are displayed clearly).

6.Recording the test case



7.Creating the bug



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

Save and close Create bug ...

77: TC06 – Playlist Loading Failure

1. Disconnect from internet NEW BUG *

2. Navigate to "My Playlists" EXPECTED

3. Click on "Create New Playlist" EXPECTED

4. Enter playlist name and description EXPECTED

5. Click on "Create" button EXPECTED

6. Verify that the new playlist is listed in the "My Playlists" section EXPECTED

7. Disconnect from the internet EXPECTED

8. Try to load the new playlist EXPECTED

9. Verify that the loading spinner keeps spinning indefinitely on poor network EXPECTED

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 ...

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

Effort (Hours)

Original Estimate

Remaining

Completed

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 - Micro | 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

Music Playlist Batch Cr... + Enter Run ID... Go

BUG 92 Unassigned 0 comments Add tag

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

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

System Info

| | |
|---|---|
| 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 | 125 |

Discussion

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

Project settings

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

8. Test case results

The screenshot shows the Azure DevOps interface for a test plan. On the left, the navigation pane includes 'Overview', 'Boards', 'Repos', 'Pipelines', 'Test Plans', and 'Test plans'. Under 'Test plans', 'Music Playlist Batch Creator' is selected, showing 'Test Suites' like 'TS01 - User Login (4)' and 'TS02 - View Playlists (2)'. The main area displays 'TS02 - View Playlists (ID: 87)' with tabs for 'Define', 'Execute', and 'Chart'. The 'Execute' tab is active, showing 'Test Points (2 items)' with 'TC05 - View Playlist Page' selected. A modal window titled 'TC05 – View Playlist Page' is open, showing 'Test Case Results' with a table:

| Outcome | TimeStamp | Configuration | Run by | Tester | Test PL |
|----------------|-----------|---------------|--------------------------|--------------------------------|---------|
| 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 | Karthikkeyan Sendhil | 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 work item. The left sidebar includes 'Overview', 'Boards', 'Work items', 'Backlogs', 'Sprints', 'Queries', 'Delivery Plans', 'Analytics views', 'Repos', 'Pipelines', 'Test Plans', and 'Artifacts'. The main area displays a work item for 'BUG 203 - Countries Drop down Not Available on the page' assigned to 'rajesh prabhu'. The work item details include:

- State:** New (selected)
- Reason:** New
- Repro Step:** Active
- Step no.**: 1. **Result:** Passed. **Title:** Open Chrome Browser. **Expected Result:** Browser should open in a new tab.
- Step no.**: 2. **Result:** Passed. **Title:** Paste the URL (<https://127.0.0.1/new.html>). **Expected Result:** App should load with new articles.
- Step no.**: 3. **Result:** Failed. **Title:** System should show a dropdown with list of countries. **Actual Result:** Produce Report.

The right side of the screen shows sections for 'Planning', 'Deployment', 'Development', and 'Effort (Hours)'. There is also a 'Details' section with a count of 4.

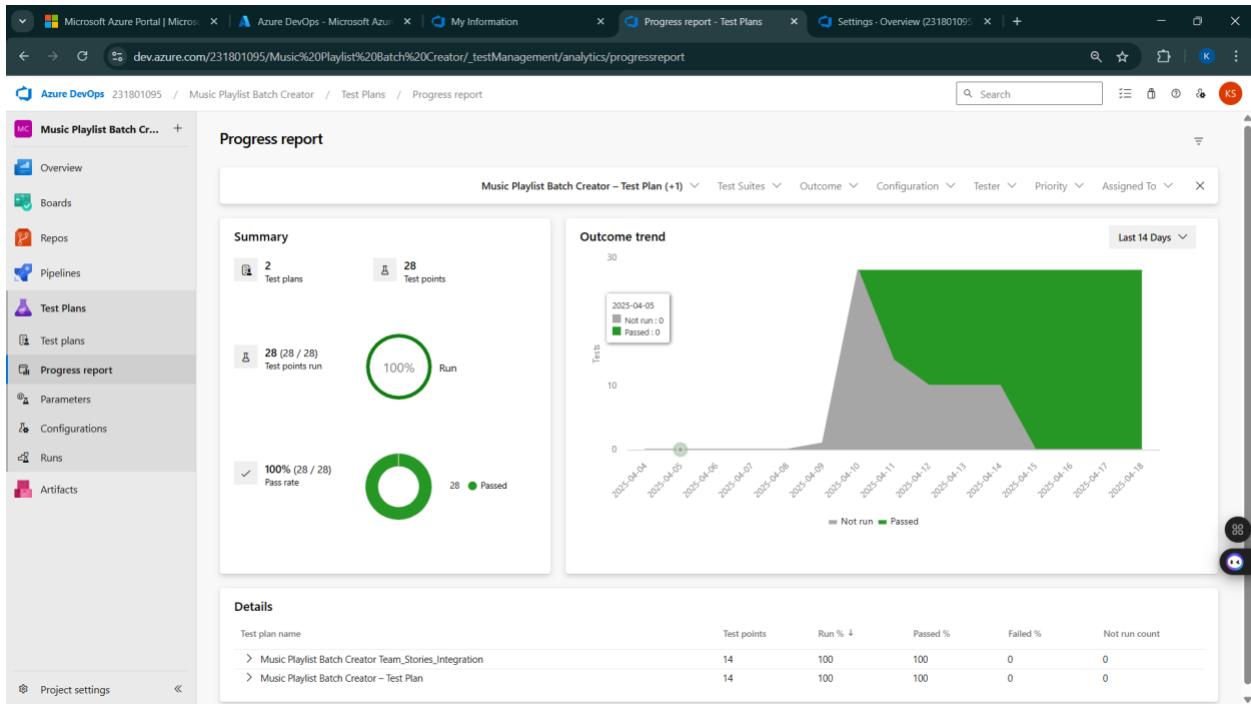
- Assigning bug to the developer and changing state

The screenshot shows a detailed view of a test run in Azure DevOps. The test case is titled "92 TB01 - Playlist loading spinner keeps spinning indefinitely on poor network". A specific step, "18-04-2025 03:23 Bug filed on 'TC06 – Playlist Loading Failure'", has failed. The failure details indicate a disconnect from the internet and a network being offline. The expected result was that the page would not load, but it did. The error message "Unable to load playlists" is shown. The test configuration is set to Windows 10. The planning section shows a priority of 2 and a severity of 3 (Medium). The deployment section includes links to releases and boards. The development section shows a link to an Azure Repos branch. The related work section lists another task. The system info section shows the last update time.

10. Progress report

The screenshot displays the progress report for the "Music Playlist Batch Creator" test plan. The summary section shows 1 test plan and 14 test points, with all 14 test points run at 100% pass rate. The outcome trend chart tracks the progress over the last 14 days, showing a sharp increase in green (Passed) status starting around April 10th. The details section provides a breakdown of the test plan components, all of which have passed 100% of their test points.

| 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

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' 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 screenshot shows the 'All processes' list in the Azure DevOps Settings - Process page. The 'Processes' tab is selected. The list includes the newly created '231801095 Agile (default)' entry under the Agile category, along with other 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 |
| 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 over a background of the Azure DevOps settings interface. The dialog has tabs for 'Definition', 'Options', and 'Layout'. Under 'Definition', the 'Create a field' option is selected, with 'Name' set to 'Type' and 'Type' set to 'Text (single line)'. A description is provided: 'Optionally provide a description for the field'. At the bottom are 'Add field' and 'Cancel' buttons.

The screenshot shows the 'Work-item types' section of the Azure DevOps settings. It lists a single item: 'Music Playlist Batch Creator'. The 'Description' column contains the text: 'Azure Music Playlist Batch Creator 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, showing various settings like Overview, Projects, and Boards.

The screenshot shows the Azure DevOps Settings - Process page. The URL in the browser 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 "Organization Settings" for "231801095" and sections for General, Security, Boards, Pipelines, and Process. The "Process" section is selected. The main content area shows a "Steps" field with "Text (multiple lines)" and a "Custom" section with fields for "Recent test results", "Deployment", "Development", "Related Work", and "Status". A vertical scroll bar is visible on the right side of the main content area.

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:

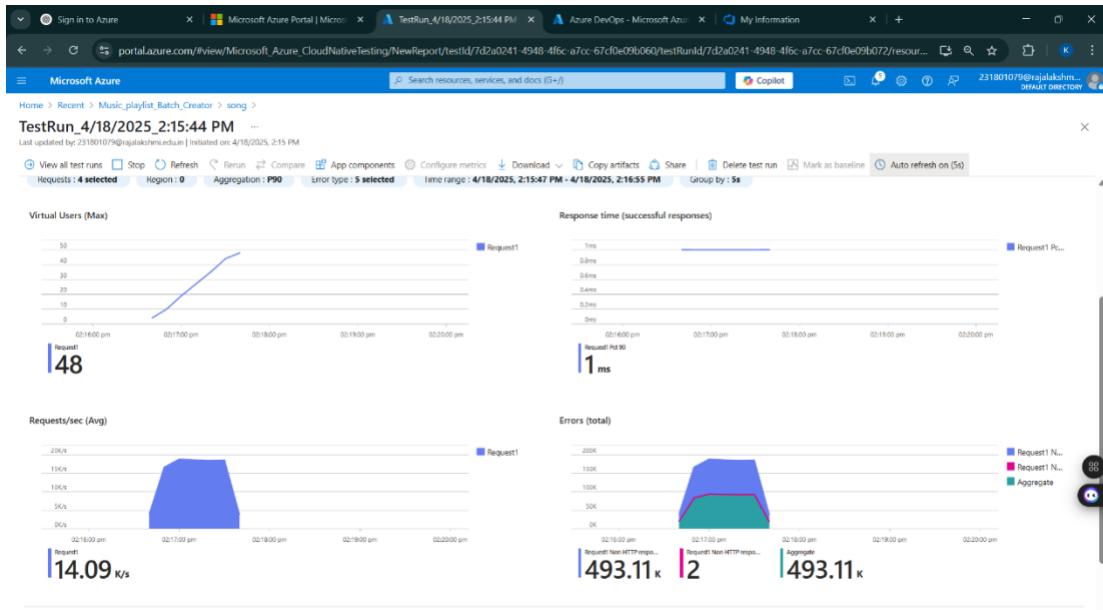
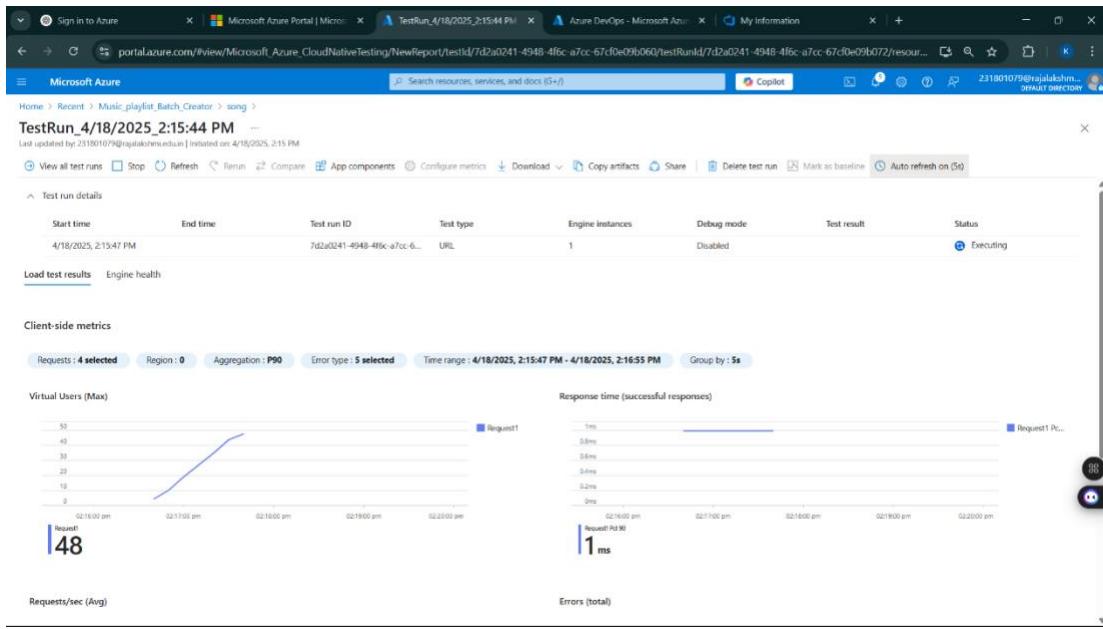
1. Sign in to Azure Portal
Go to <https://portal.azure.com> and log in.
2. Create the Resource
 - o Go to *Create a resource* → Search for “Azure Load Testing”.
 - o Select Azure Load Testing and click Create.
3. Fill in the Configuration Details
 - o *Subscription*: Choose your Azure subscription.
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

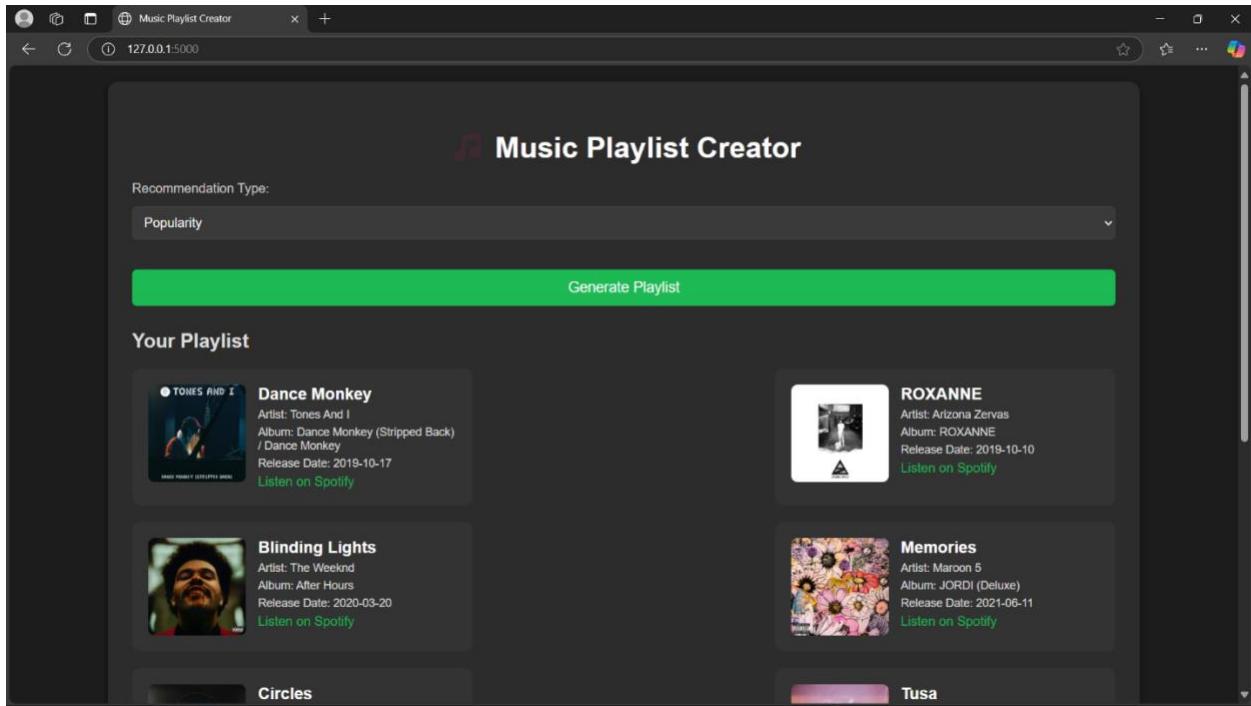
Steps to Create and Run a Load Test:

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.

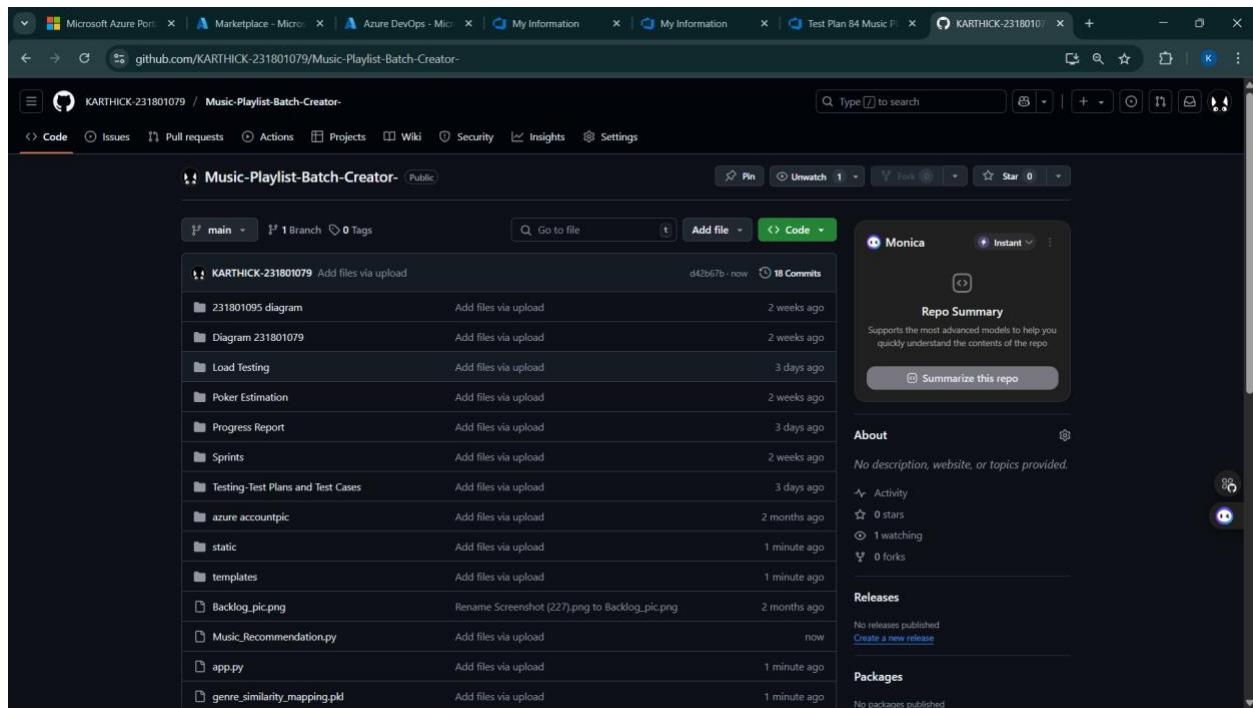
EXP NO: 10

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



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.