



RAJALAKSHMI

ENGINEERING COLLEGE

SOFTWARE CONSTRUCTION

Laboratory Record Note Book

Name :

Year / Branch / Section :

Register No. :

Semester :

Academic Year :



**RAJALAKSHMI ENGINEERING COLLEGE
(AUTONOMOUS)**

RAJALAKSHMI NAGAR, THANDALAM – 602 105

BONAFIDE CERTIFICATE

NAME _____ REGISTER NO. _____

ACADEMIC YEAR 2024-25 SEMESTER- IV **BRANCH:** B. Tech Information Technology [AD/AE]. This Certification is the Bonafide record of work done by the above student in the **CS23432- Software Construction** Laboratory during the year 2024-2025.

Signature of Faculty -in _ Charge

Submitted for the Practical Examination held on _____

Internal Examiner

External Examiner

LAB PLAN
CS23432-SOFTWARE CONSTRUCTION LAB

Ex No	Date	Topic	Page No	Sign
1	21/01/2025	Study of Azure DevOps		
2	28/01/2025	Problem Statement		
3	04/02/2025	Agile Planning		
4	18/02/2025	Create User stories with Acceptance Criteria		
5	25/02/2025	Designing Sequence Diagrams using Azure DevOps-WIKI		
6	04/03/2025	Designing Class Diagram using Azure DevOps-WIKI		
7	11/03/2025	Designing Use case Diagram using Azure DevOps-WIKI		
8	18/03/2025	Designing Activity Diagrams using Azure DevOps-WIKI		
9	25/03/2025	Designing Architecture Diagram Using Star UML		
10	01/04/2025	Design User Interface		
11	08/04/2025	Implementation – Design a Web Page based on Scrum Methodology		
12	15/04/2025	Testing-Test Plan, Test Case and Load Testing		

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.

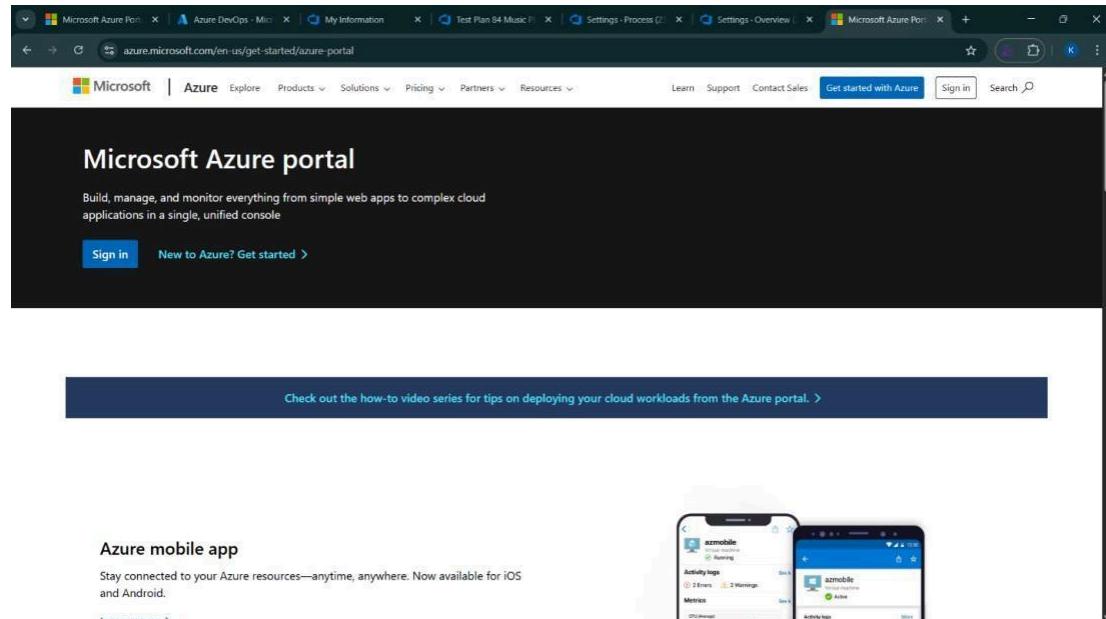
INSTALLATION

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>



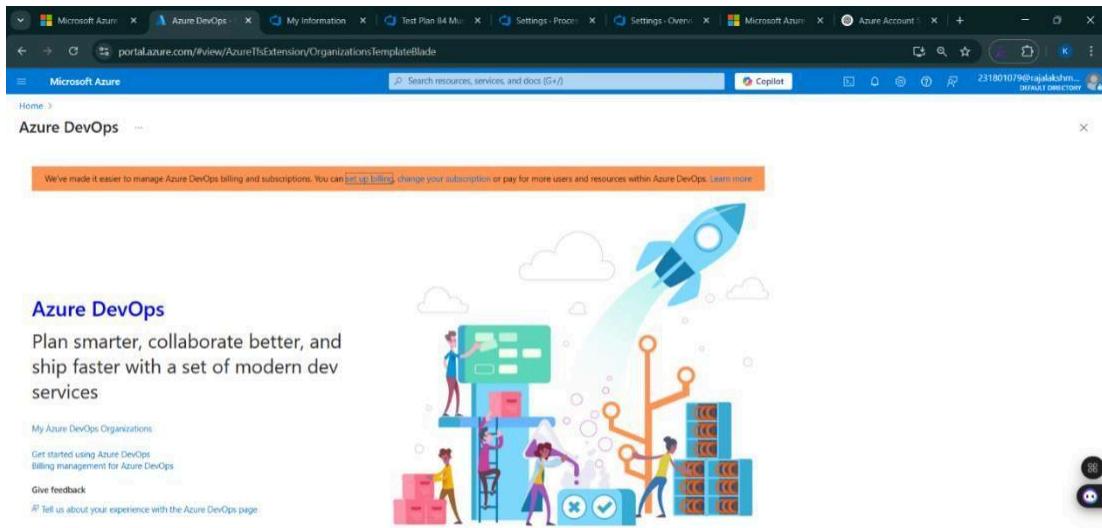
2. Azure home page

The screenshot shows the Microsoft Azure home page. At the top, there's a navigation bar with tabs like Microsoft Azure, Azure DevOps, My Information, Test Plan 84 Min, Settings - Process, Settings - Overview, Microsoft Azure, and Azure Account. Below the navigation bar is the Azure services header with icons for Create a resource, Azure DevOps organizations, Subscriptions, Dashboard hub, Resource groups, Azure Load Testing, Quickstart Center, Azure AI services, Kubernetes services, and More services. The main content area has sections for Resources (Recent and Favorite), Navigate (Subscriptions, Resource groups, All resources, Dashboard), Tools (Microsoft Learn, Azure Monitor, Microsoft Defender for Cloud, Cost Management), and Useful links. A search bar at the top right contains the text "is and".

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 again, but with a search result highlighted. The search bar at the top right now contains the text "Azure DevOps Organizations". The result is shown in a modal window titled "DevOps" with tabs for All, Services (7), and Marketplace (31). The "All" tab is selected, displaying items like Azure Native New Relic Service, Managed DevOps Pools, Azure DevOps organizations, Azure Native Dynatrace Service, Static Web App, Rocky Linux 9, Build Agents for Azure DevOps, InfluxDB Cloud (Official Version), DevOps architecture design - Azure Architecture Center, Secure your Azure DevOps - Azure DevOps, Course AZ-400T00-A: Designing and Implementing Microsoft DevOps solutions - T..., Managed DevOps Pools Overview - Managed DevOps Pools, Microsoft Entra ID, Azure DevOps, and Continue searching in Microsoft Entra ID. The URL in the address bar is https://portal.azure.com/#blade/Azure/TsExtension/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.

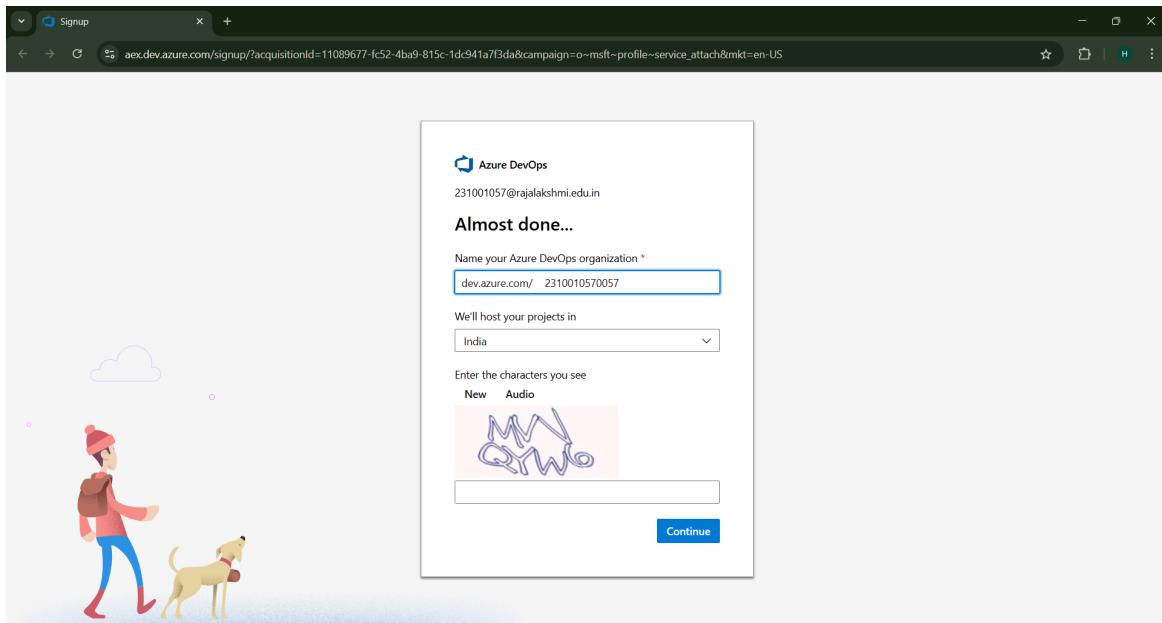
EXP NO: 2

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 a project to get started

Project name *

E LEARNING PLATFORM

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](#).

+ Create project

- 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, there are three organization cards:

- dev.azure.com/231001057** (Owner)
- dev.azure.com/2310010570057** (Owner)
- dev.azure.com/2116231001062** (Member)

For the third organization, "E-Learning Project", the details shown are:

- Projects**: E-Learning Project
- Actions**: Open in Visual Studio, Manage security, Browse extensions, Leave

On the left sidebar, under "Visual Studio Dev Essentials", it says "Get everything you need to build and deploy your app on any platform." and "Use your benefits".

4. Project dashboard

The screenshot shows the "Summary - Overview" page for the "E-Learning Project". The left sidebar includes links for Overview, Summary, Dashboards, Wiki, Boards, Pipelines, Artifacts, and Project settings.

The main content area displays the following information:

- E-Learning Project** (Project name)
- About this project**:
 - The E-Learning Platform is a comprehensive, web-based learning management system (LMS) developed to offer seamless and flexible education for students, professionals, and educators. This platform enables remote learning through interactive digital content, performance tracking, and real-time communication. It is ideal for academic institutions, training centers, and corporate learning environments.
 - Key Features:**
 - User Authentication & Roles: Secure login for students, instructors, and admins.
 - Course Creation & Management: Instructors can upload videos, documents, and quizzes.
 - Interactive Learning: Multimedia content, discussion forums, and live class integration.
 - Assessment & Certification: Auto-graded quizzes, assignments, and downloadable certificates.
 - Progress Tracking: Dashboard for learners to track progress and performance.
 - Notifications: Email/SMS alerts for new courses, deadlines, and announcements.
 - Use Cases:**
 - Academic Institutions: Schools and colleges can conduct online classes and exams.
 - Corporate Training: Companies can onboard employees and upskill them through structured modules.
 - Tutoring Platforms: Individual educators or coaching centers can offer online courses.
 - Skill Development: Government or private organizations can run digital literacy or vocational training programs.
- Project stats**: Period: Last 7 days
- Boards**: 1 Work items created, 0 Work items completed
- Members**: FZ, HS, HC, BD

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.

The screenshot shows the Azure DevOps Boards page for the 'E-Learning Project' team. The left sidebar has 'Backlogs' selected. The main area displays the 'Backlog' view for the 'E-Learning Project Team'. A table lists 8 Epics with their titles and details. To the right, there's a 'Planning' panel showing 'Iteration-45' with 3 tasks and 'Iteration 1' with 26 tasks. A search bar and various navigation icons are at the top.

Order	Work Item Type	Title	State	Effort	Business Value
1	Epic	> Course Content Enhancement and Multimedia Integration	New	Business	High
2	Epic	> Course Discovery and Enrollment	New	Business	Medium
3	Epic	> Learning Material Access and Engagement	New	Business	Medium
4	Epic	> Assignments and Grading	New	Business	Medium
5	Epic	> Communication and Collaboration	New	Business	Medium
6	Epic	> Course Management for Instructors	New	Business	Medium
7	Epic	> Student Engagement and Communication	New	Business	Medium
8	Epic	> Platform Personalization and Accessibility	New	Business	Medium

The screenshot shows the Azure DevOps backlog page for the 'E-Learning Project Team'. At the top, there's a search bar and a sign-in button for 'Harish S'. Below, a 'New Work Item' button is visible. The backlog table shows three items: 'New', 'New', and 'New'. A 'Sign in with a different account' dialog is overlaid on the page. The backlog table has columns for State, Effort, Business Value, and Value.

State	Effort	Business Value	Value
New	Business	Medium	High
New	Business	Medium	Medium
New	Business	Medium	Medium

Result:

Successfully created an Azure DevOps project with user story management and an 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 'E-Learning Project'. On the left, the navigation menu is open, showing 'Backlogs' as the selected item under 'Boards'. The main area displays a backlog board titled 'E-Learning Project Team'. The backlog is organized into a hierarchy: there are 8 Epics at the top level, each containing one or more Features, which in turn contain User Stories. The first Epic, 'Course Content Enhancement and Multimedia Integration', contains three Features: 'Multimedia Lesson Integration', 'YouTube Videos in Lessons', and 'Attach PDF Study Materials'. The second Epic, 'Course Discovery and Enrollment', contains two Features: 'Supplementary Resource Management' and 'Course Discovery and Enrollment'. The third Epic, 'Learning Material Access and Engagement', contains one Feature: 'Assignments and Grading'. The fourth Epic, 'Communication and Collaboration', contains one Feature: 'Course Management for Instructors'. The fifth Epic, 'Student Engagement and Communication', contains one Feature: 'Student Engagement and Communication'. The sixth Epic, 'Platform Personalization and Accessibility', contains one Feature: 'Platform Personalization and Accessibility'. All work items are currently in the 'New' state and are categorized under the 'Business' value area.

1. Fill in Epics

The screenshot shows the details of a specific Epic in the Azure DevOps interface. The Epic is titled 'Course Content Enhancement and Multimedia Integration' (workitem=58). The 'Planning' section includes fields for Priority (set to 2), Risk, and Effort. The 'Deployment' section includes a note about tracking releases and deployment status reporting. The 'Development' section includes a 'Add link' button and a note about linking to Azure Repos. The 'Related Work' section includes a 'Add link' button and a note about adding existing work items as parents. The 'Classification' section includes fields for Value area (set to Business) and Child (with a note about linking to E-Learning Lessons Information).

2.Fill in Features

This screenshot shows the 'FEATURE' card for item 59, titled 'Multimedia Lesson Integration'. The card includes sections for Description, Planning, Deployment, Development, and Classification.

Description: Click to add Description.

Planning: Priority: 2, Risk: 1, Effort: 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, Parent: #58 Course Content Enhancement and Multimedia I... Updated Apr 25.

Classification: Value area: Business.

3.Fill in User Story Details

This screenshot shows the 'USER STORY' card for item 60, titled 'YouTube Videos in Lessons'. The card includes sections for Description, Planning, Deployment, Development, and Classification.

Description: As an **instructor**, I want to embed YouTube videos into my lessons, so that students can benefit from external visual resources.

Acceptance Criteria:

- **Acceptance Criteria 1:** Instructors can embed YouTube links into lesson content using a video block.
- **Acceptance Criteria 2:** Students can play the video directly without being redirected from the platform.

Planning: Story Points: 1, Priority: 2, Risk: 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, Parent: #59 Multimedia Lesson Integration Updated Apr 25.

Classification: Value area: Business.

Result:

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

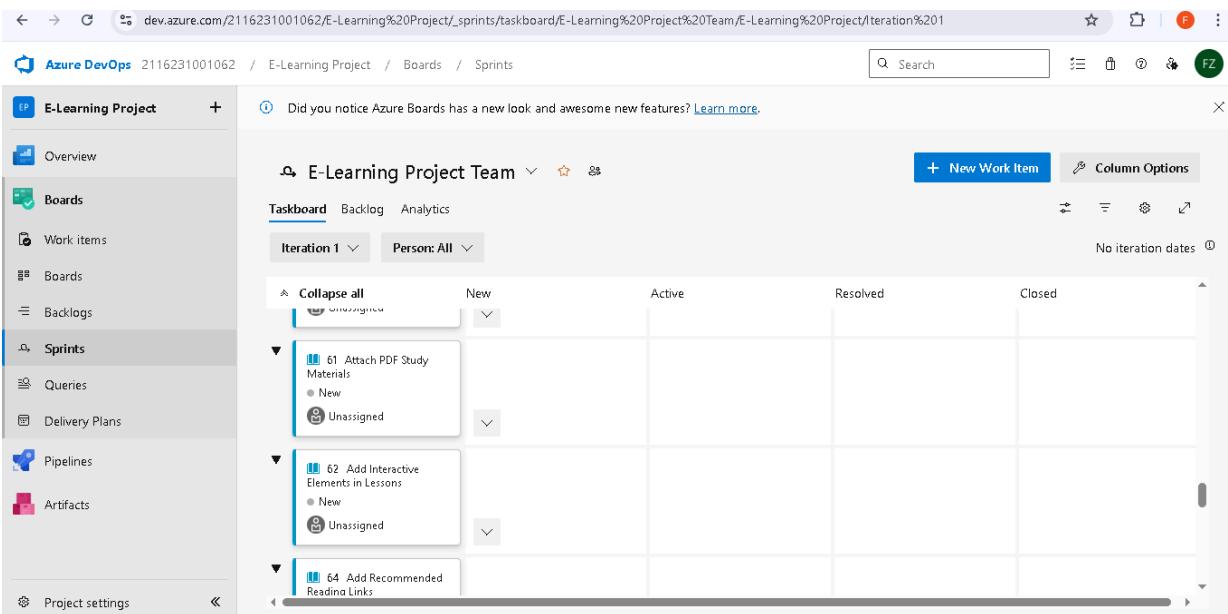
EXP NO: 4

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 E-Learning Project Team. The left sidebar navigation includes Overview, Boards, Work items, Boards, Backlogs, Sprints (selected), Queries, Delivery Plans, Pipelines, Artifacts, and Project settings. The main area displays the Taskboard for Iteration 1, with columns for New, Active, Resolved, and Closed. Three user stories are listed:

- 61 Attach PDF Study Materials (New, Unassigned)
- 62 Add Interactive Elements in Lessons (New, Unassigned)
- 64 Add Recommended Reading Links (New, Unassigned)

Sprint-2

← → ⌂ dev.azure.com/2116231001062/E-Learning%20Project/_sprints/taskboard/E-Learning%20Project%20Team/E-Learning%20Project/Iteration%202

Azure DevOps 2116231001062 / E-Learning Project / Boards / Sprints

E-Learning Project +

Did you notice Azure Boards has a new look and awesome new features? [Learn more.](#)

E-Learning Project Team

Taskboard Backlog Analytics

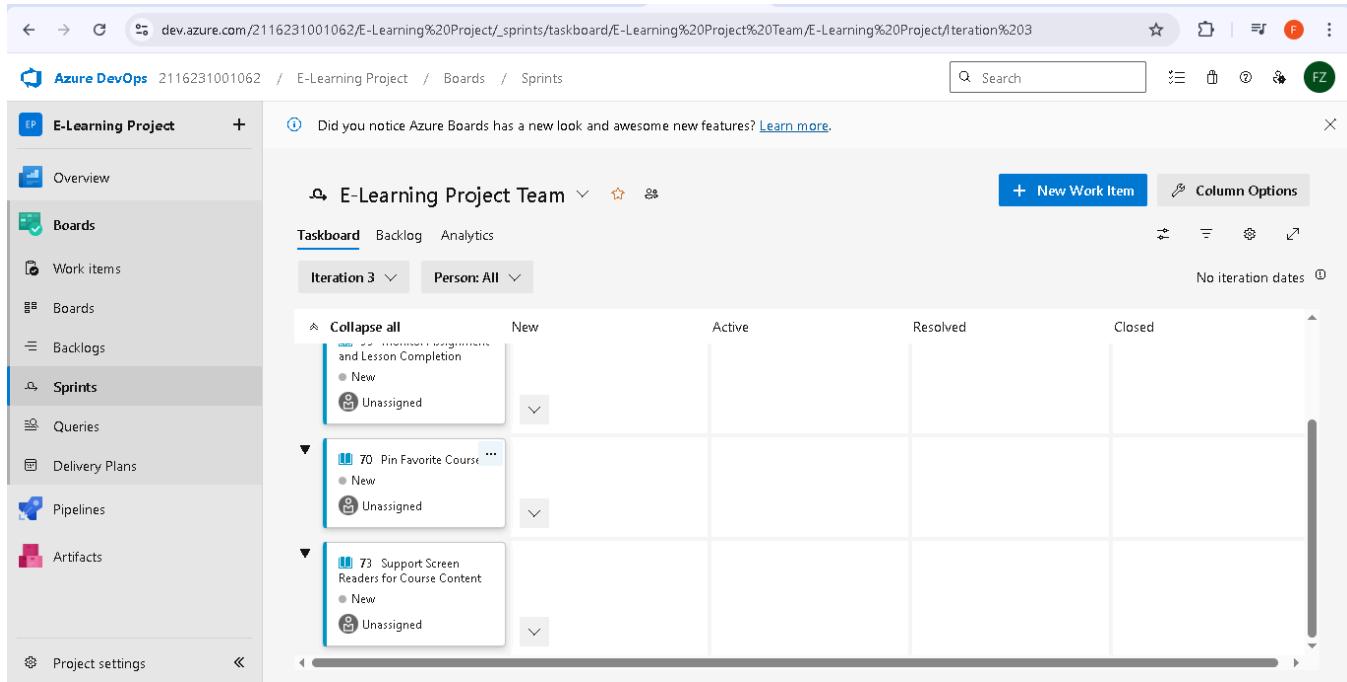
Iteration 2 Person: All No iteration dates

Collapsible backlog items:

- 6 One-Click Course Enrollment (New, Hemanth C)
- 7 Access Welcome and Orientation Material (New, Unassigned)
- 35 Send Private Messages (New)

Columns: New, Active, Resolved, Closed

Sprint 3

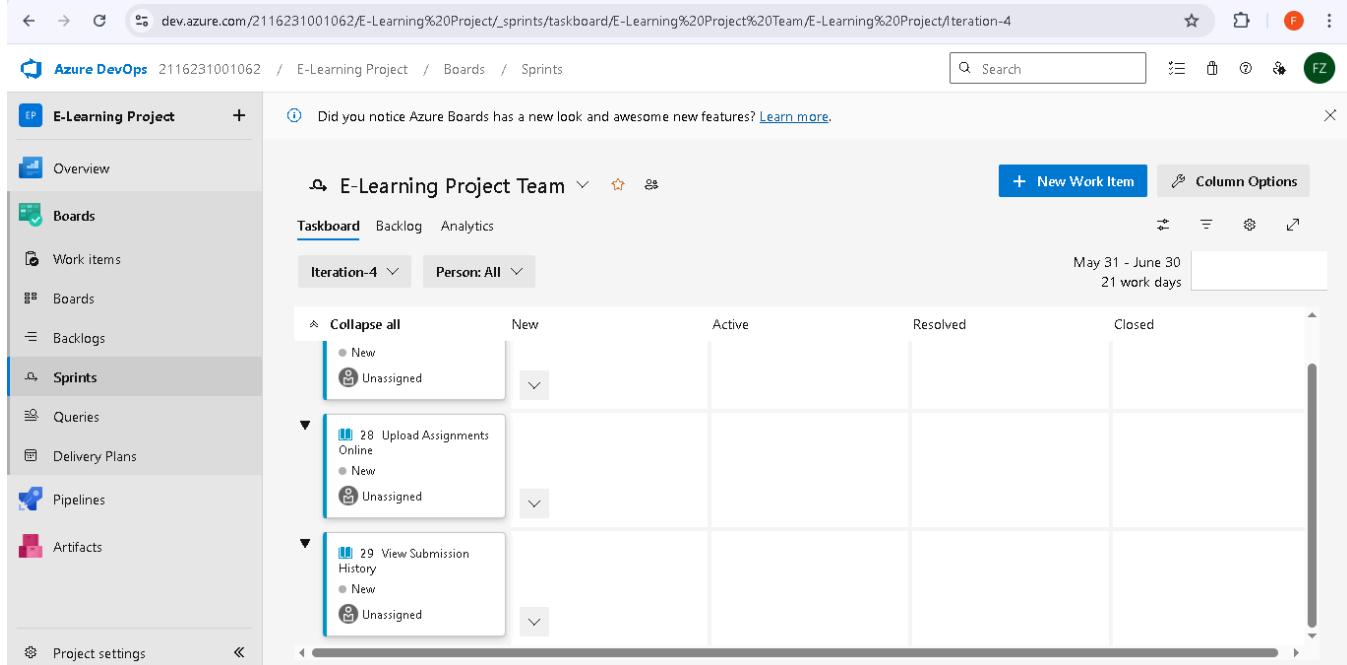


The screenshot shows the Azure DevOps Taskboard for the E-Learning Project Team in Sprint 3. The board has columns for New, Active, Resolved, and Closed. There are three items visible:

- New:** One item, "70 Pin Favorite Course", is listed as New and Unassigned.
- Active:** One item, "73 Support Screen Readers for Course Content", is listed as New and Unassigned.
- Resolved:** No items are currently resolved.

The sidebar on the left shows the project navigation, and the top bar includes a search bar and various project settings.

Sprint 4



The screenshot shows the Azure DevOps Taskboard for the E-Learning Project Team in Sprint 4. The board has columns for New, Active, Resolved, and Closed. There are three items visible:

- New:** One item, "28 Upload Assignments Online", is listed as New and Unassigned.
- Active:** One item, "29 View Submission History", is listed as New and Unassigned.
- Resolved:** No items are currently resolved.

The sidebar on the left shows the project navigation, and the top bar includes a search bar and various project settings. A date range is displayed at the top right: May 31 – June 30, 21 work days.

Result:

The Sprints are created for the E-Learning Project.

EXP NO: 5	POKER ESTIMATION
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Aim:

Create Poker Estimation for the user stories - E-Learning Project.

Poker Estimation

USER STORY 10*

10 Track Course Progress

Faqrudeen Faizan Z 0 Comments Add Tag

Save Follow Details

Updated by Hernanth C: Apr 4

Description	Planning	Deployment
Acceptance Criteria	Story Points: 10 Priority: 2 Risk: 2 - Medium	To track releases associated with this work item, go to Releases and turn on deployment status reporting for Boards in your pipeline's Options menu. Learn more about deployment status reporting
Discussion	Classification	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.
	Value area: Business	Related Work

Result:

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

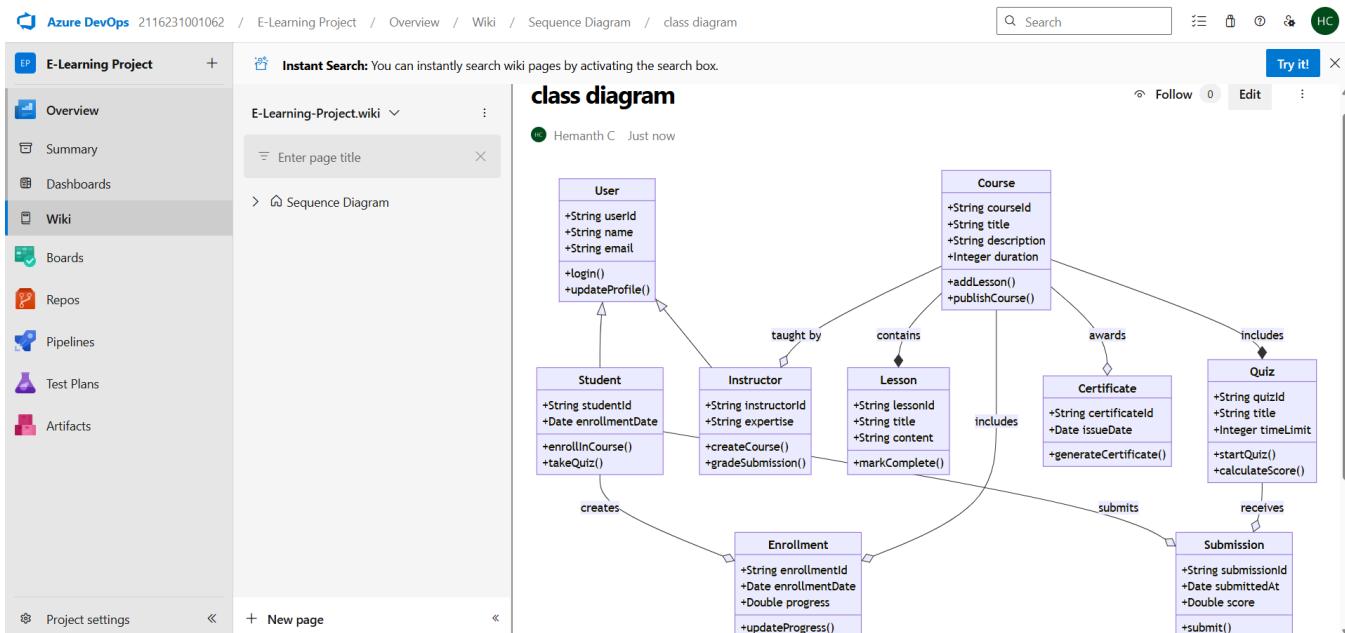
EXP NO: 6

DESIGNING CLASS AND SEQUENCE DIAGRAMS FOR PROJECT ARCHITECTURE

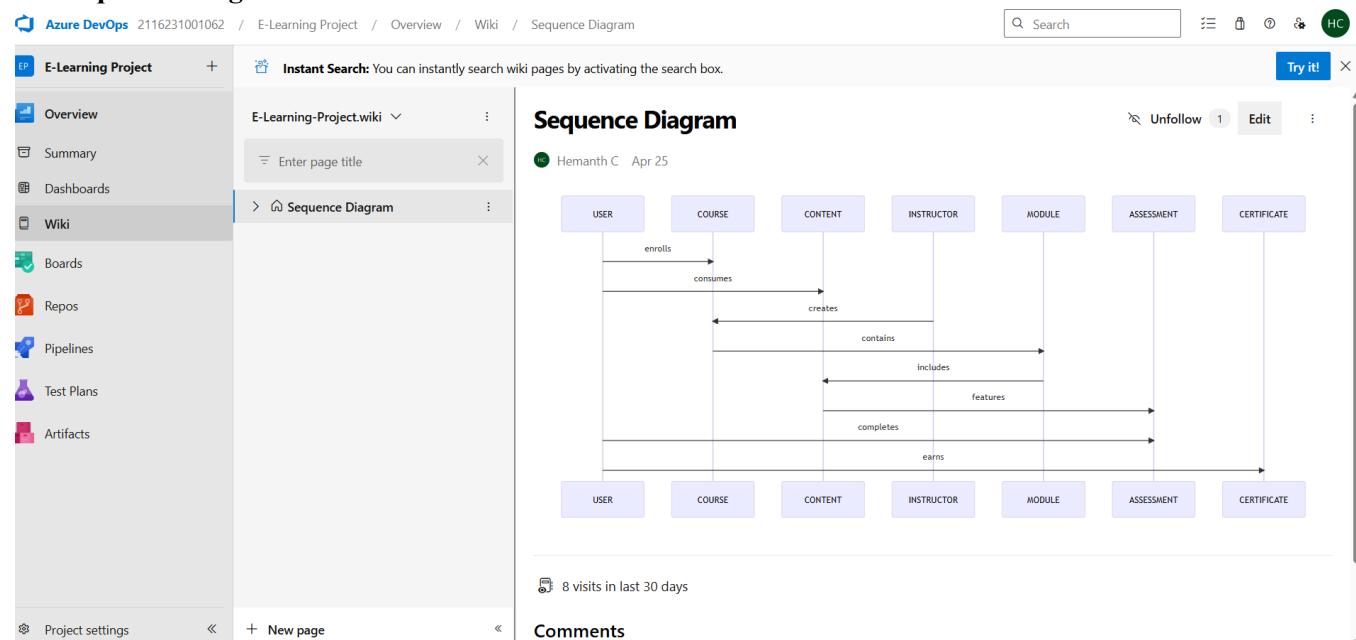
Aim:

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-learning platform project.

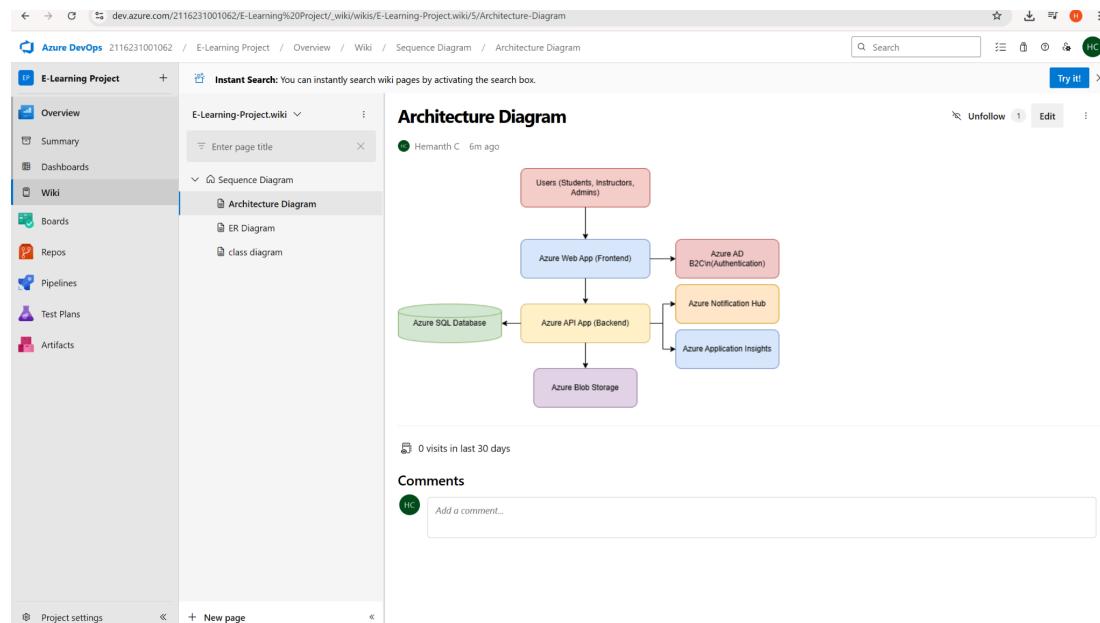
EXP NO: 7

DESIGNING ARCHITECTURAL AND ER DIAGRAMS FOR PROJECT STRUCTURE

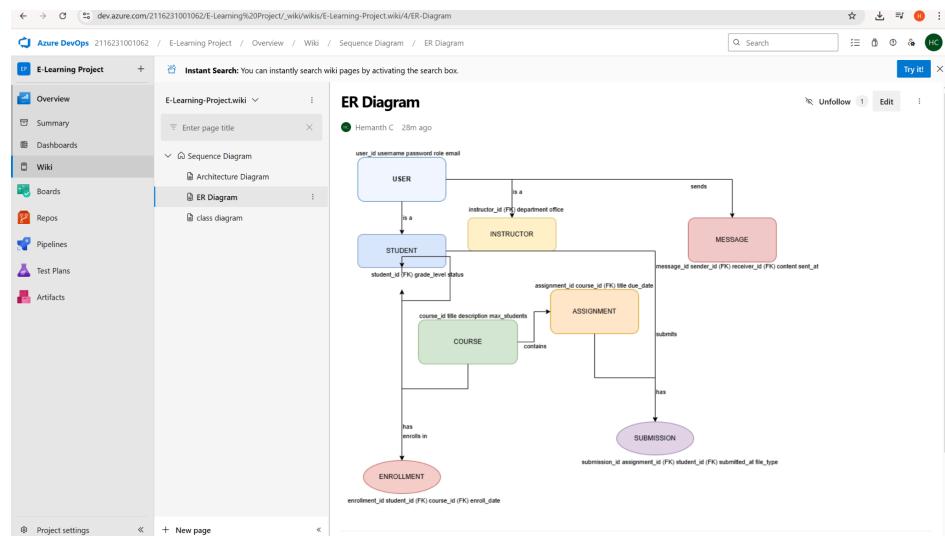
Aim:

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 E-Learning platform project.

EXP NO: 8	TESTING – TEST PLANS AND TEST CASES
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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

- o User Signup & Login
- o Viewing and Managing course
- o Fetching Real-time Metadata
- o Editing course (rename, reorder, record)
- o Creating smart course playlists based on categories

2. Define User Interactions

- o Each test case simulates a real user behaviour (e.g., logging in , adding a course).

3. Design Happy Path Test Cases

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

4. Design Error Path Test Cases

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

5. Break Down Steps and Expected Results

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

6. Use Clear Naming and IDs

- o Test cases are named clearly (e.g., TC01 – Successful Login, TC10 – Save Fails).
- o Helps in quick identification and linking to user stories or features.

7. Separate Test Suites

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

- o Improves organization and test execution flow in Azure DevOps.

8. Prioritize and Review

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

1. New test plan

New Test Plan

Name *

Area Path *

Iteration *

Create **Cancel**

2. Test suite

Test Cases (4 items)				
	Order	Test Case Id	Assigned To	State
<input type="checkbox"/> TC01 - Successful Sign Up	1	78	Karthikeyan Se... Design	Pending
<input type="checkbox"/> TC02 - Invalid Email	2	80	Karthikeyan Se... Design	Pending
<input type="checkbox"/> TC03 - Requirement based suite	3	81	Karthikeyan Se... Design	Pending
<input type="checkbox"/> TC04 - Query based suite	4	82	Karthikeyan Se... Design	Pending

3.Test case

TC01 – Successful Sign Up

Action:

- Go to the Sign-Up page.
- Enter a valid name, email, and password.
- Click "Sign Up".

Expected Results:

- Form is displayed properly.
- Fields accept valid input.
- Account is created, and the user is redirected to the dashboard.

Type: Happy Path

TC02 – Sign Up with Existing Email

Action:

- Go to the Sign-Up page.
- Enter a name and an already registered email.
- Click "Sign Up".

Expected Results:

- Fields accept input.
- Error message "Email already registered" is shown.

Type: Error Path

Test Suite: TS02 - Course Dashboard (ID: 202)

TC03 – View Enrolled Courses

Action:

- Login successfully.
- Navigate to "My Courses".

Expected Results:

- All enrolled courses are listed with thumbnails and progress indicators.

Type: Happy Path

TC04 – Courses Not Loading

Action:

- Disconnect internet.
- Navigate to "My Courses".

Expected Results:

- Page loads with placeholder.
- Error message "Unable to load courses. Please check your connection." is shown.

Type: Error Path

Test Suite: TS03 - Course Enrollment (ID: 203)

TC05 – Successful Course Enrollment

Action:

- Login successfully.
- Navigate to "Course Catalog".
- Select a course and click "Enroll".

Expected Results:

- Course is added to "My Courses" list.

- Confirmation message "Successfully enrolled" is shown.

Type: Happy Path

TC06 – Enrollment Failure Due to Server Issue

Action:

- Login successfully.
- Select a course and click "Enroll".
- Simulate backend server error.

Expected Results:

- Enrollment fails.
- Error message: "Unable to enroll at this moment. Try again later."

Type: Error Path

Test Suite: TS04 - Quiz System (ID: 204)

TC07 – Take and Submit Quiz Successfully

Action:

- Navigate to an enrolled course.
- Click on "Start Quiz".
- Answer all questions.
- Click "Submit".

Expected Results:

- Quiz is submitted.
- Immediate feedback and score are displayed.

Type: Happy Path

TC08 – Quiz Submission Timeout

Action:

- Start a quiz.
- Wait until the session times out without submitting.

Expected Results:

- Quiz auto-submits.
- Message: "Session expired. Auto-submitted."
- Partial feedback shown if applicable.

Type: Error Path

Test Suite: TS05 - Progress Tracking (ID: 205)

TC09 – Real-Time Progress Updates

Action:

- Start watching a lesson video.
- Mark lesson as completed.

Expected Results:

- Progress bar updates instantly.
- Course dashboard reflects updated status.

Type: Happy Path

TC10 – Progress Not Updating Due to Session Expiry

Action:

- Start a lesson.
- Stay idle until session expires.
- Try to mark lesson as completed.

Expected Results:

- Action fails.
- Message: "Session expired. Please log in again to continue."

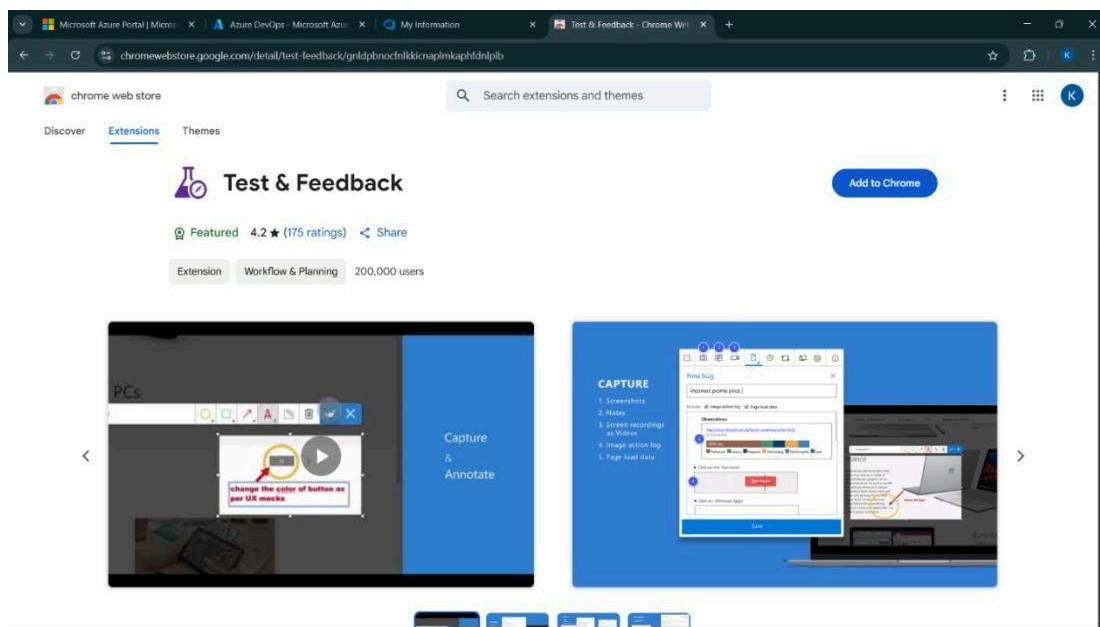
Type: Error Path

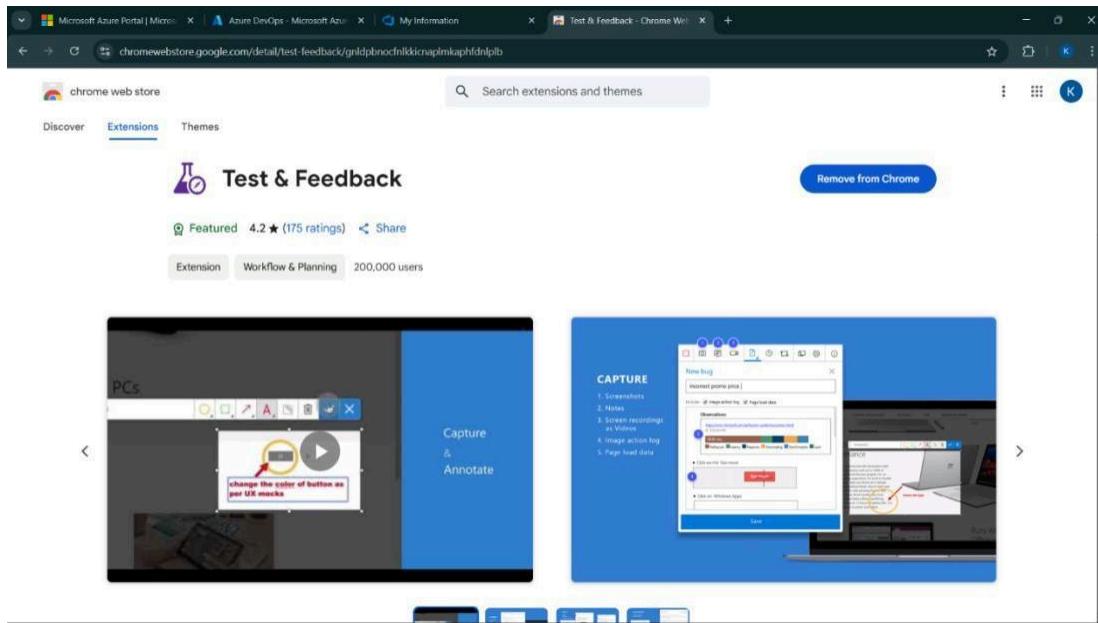
Test Cases

The screenshot shows a test case configuration window. At the top, there are tabs for 'Steps' (selected), 'Summary', and 'Associated Automation'. The 'Steps' tab displays two steps: 1. 'Disconnect from internet' with the expected result 'Network is offline' and 2. 'Navigate to "My Playlists"' with the expected result 'Error message "Unable to load playlists" is shown'. Below the steps, there is a section for 'Status' with fields for 'Priority' (set to 2) and 'Automation status' (set to 'Not Automated'). On the left side of the window, there is a sidebar with icons for 'Overview', 'Board', 'Repos', 'Pipelines', 'Test Plan', 'Program', 'Params', 'Config', 'Runs', and 'Artifacts'. The 'Test Plan' icon is currently selected. At the bottom of the window, there are buttons for 'Project settings' and 'Run'.

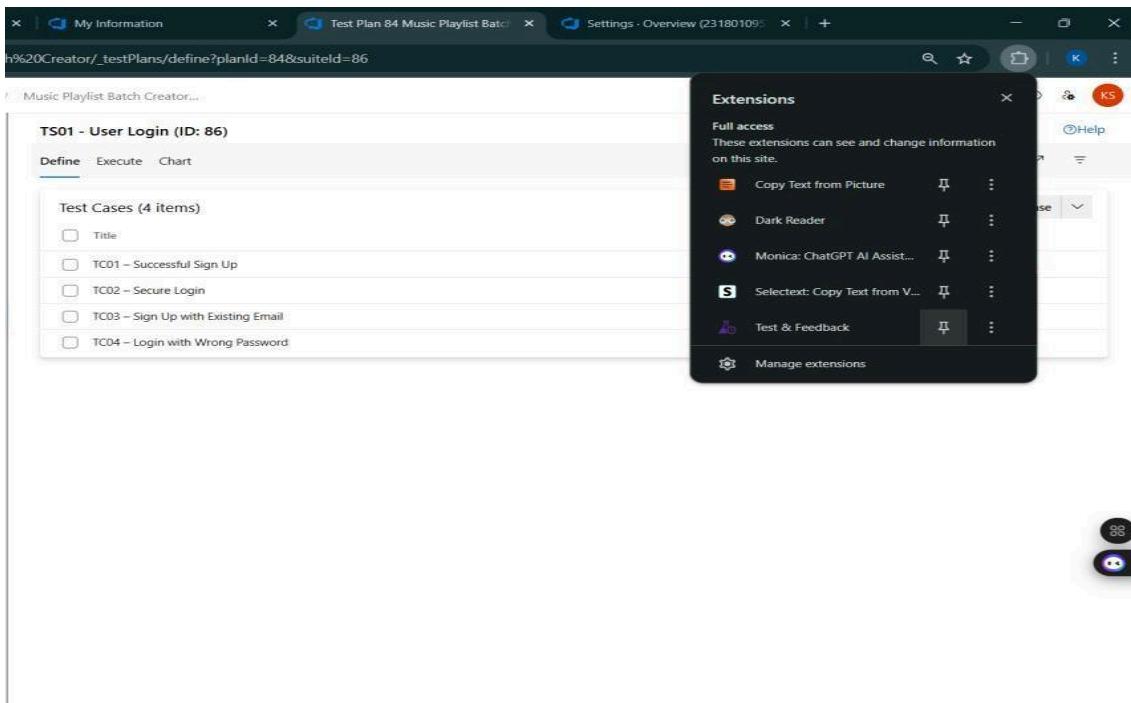
The screenshot shows the Microsoft Azure DevOps Test Plan interface. A test step titled "Log in successfully" is selected. The "Expected result" column contains the text "User is redirected to dashboard". The "Status" section indicates a priority of 2 and an automation status of "Not Automated". The "Steps" tab is active, and the "Summary" tab is visible below it.

4. Installation of test





Test and feedback
Showing it as an extension



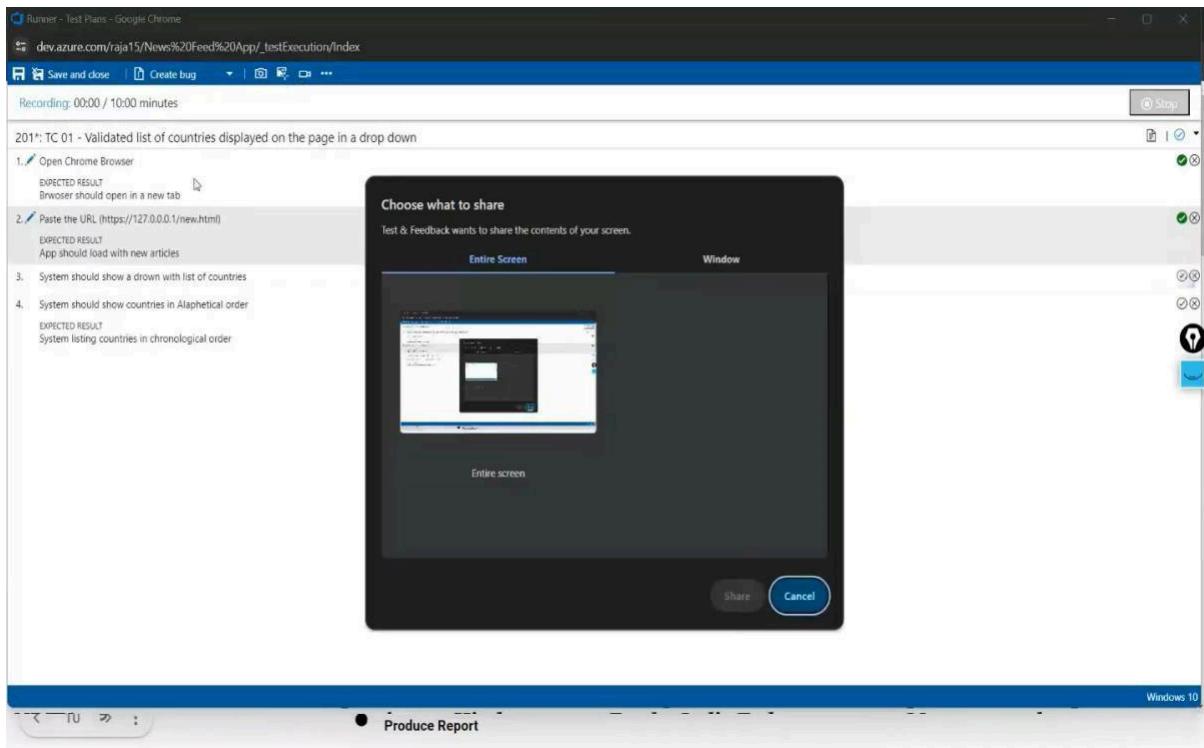
5. Running the test cases

Screenshot of the TestRail 'Execute' interface showing two test points: TC05 – View Playlist Page (Passed) and TC06 – Playlist Loading Failure (Pending). A context menu is open for TC05, with options like 'Run' and 'Edit test case'. A 'Run for web application' dropdown is also visible.

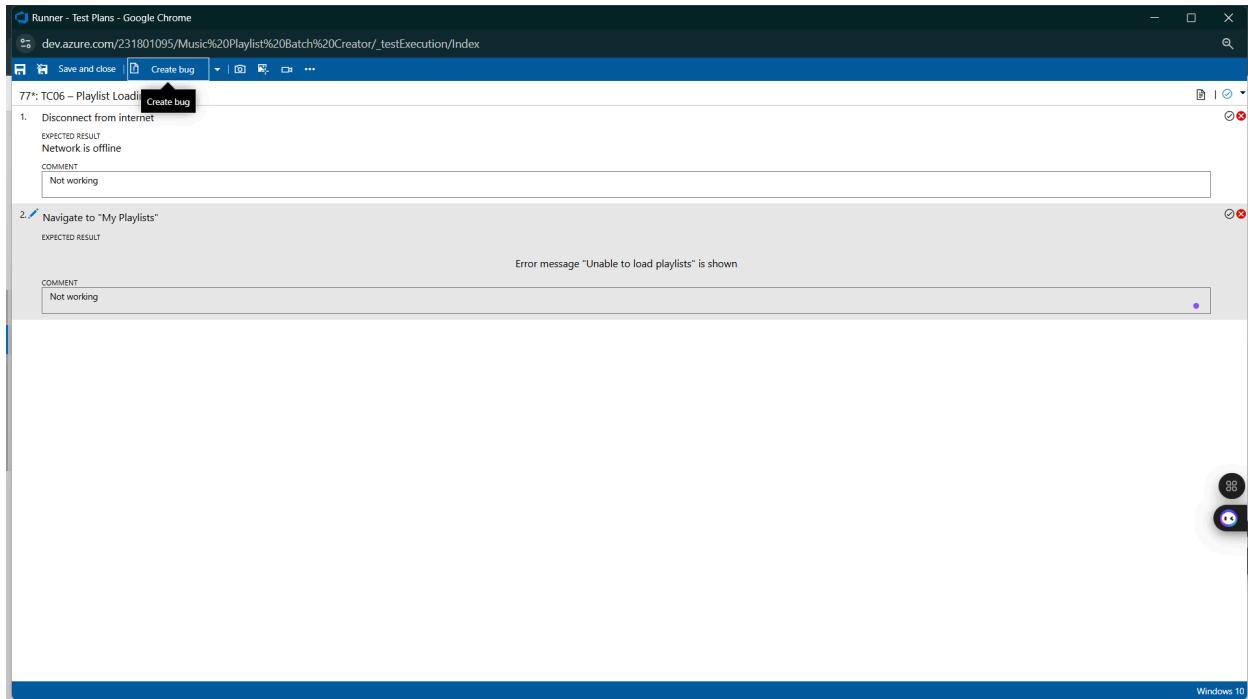
Screenshot of the test execution results. Step 1: Log in successfully (Passed). Step 2: Navigate to "My Playlists" section (Pending). The 'EXPECTED RESULT' for step 2 is "All created playlists are displayed clearly".

Windows 10

6.Recording the test case



7.Creating the bug



TB01 - Playlist loading spinner keeps spinning indefinitely on poor network

Repro Steps

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

1. Failed Disconnect from internet
Expected Result
Network is offline
2. 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
77 TC06 - Playlist Loading Failure
Updated 10-04-2025. ● Design

System Info

Found in Build

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	x86_64
Operating system - Processor model	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.

Attachments

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

8. Test case results

The screenshot shows a web-based test management interface. On the left, there's a sidebar with a tree view titled "TS02 - View Playlists (ID: 87)" under "Test Points (2 items)". The items listed are "Title", "TC05 – View Playlist Page" (which is selected and highlighted in blue), and "TC06 – Playlist Loading Failure". To the right of this sidebar is a main content area titled "TC05 – View Playlist Page" and "Test Case Results". This area contains a table with the following data:

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

At the bottom of the main content area, there's a link: "Open execution history for current test point".

9. Test report summary

- Assigning bug to the developer and changing state

The screenshot shows a detailed view of a bug tracking work item. The title of the work item is "BUG 203: BG 01 - Countries Drop down Not Available on the page". The work item has the following details:

- State:** 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

Planning: Resolved Reason: **Story Points:** 2 **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

Effort (Hours): Original Estimate

Related Work:

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	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

Deployment

To track releases associated with this work item, go to 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.

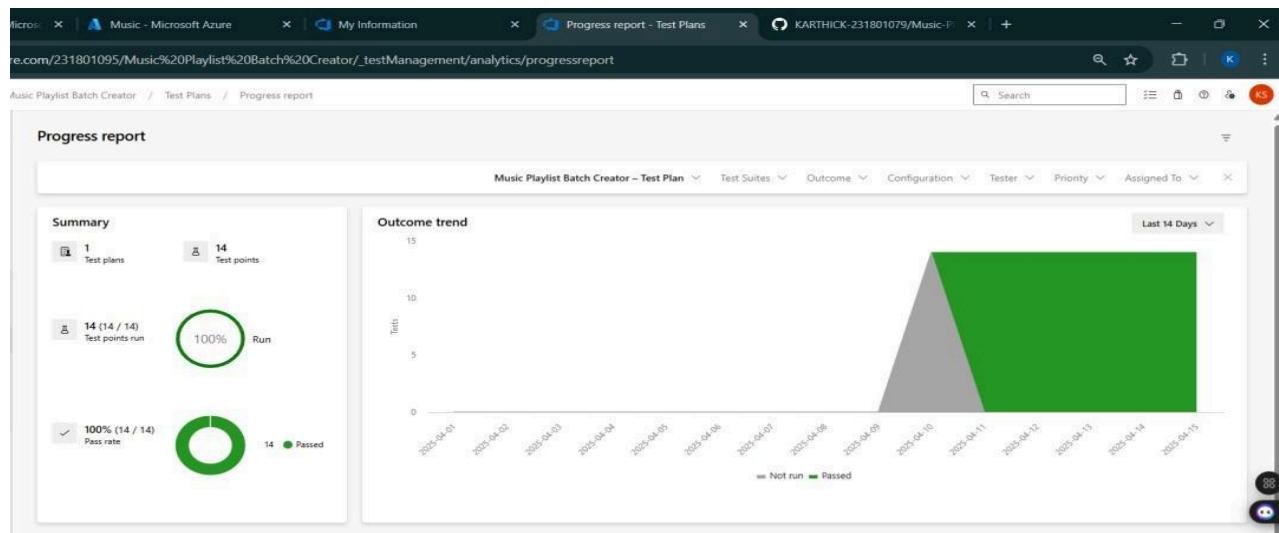
Related Work

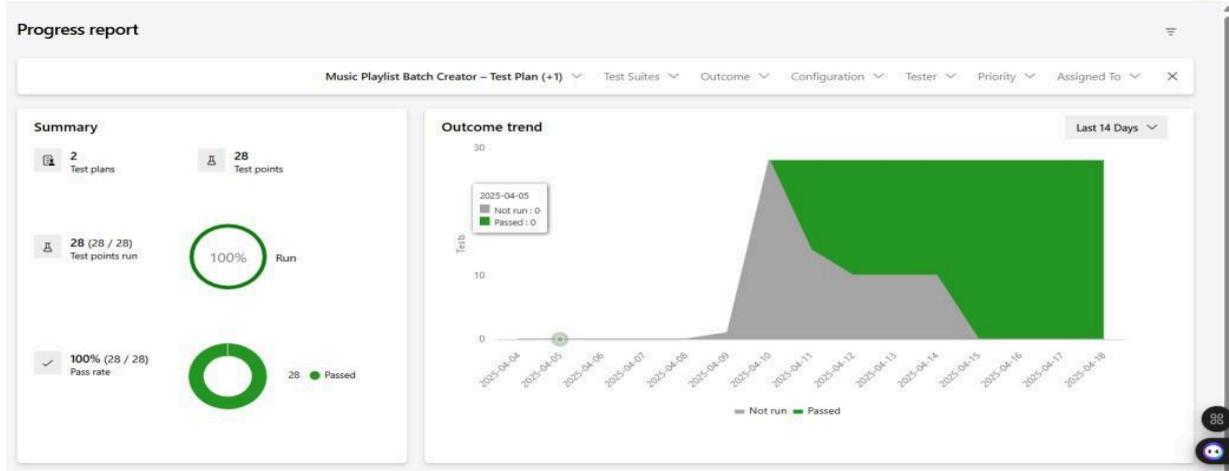
+ Add link
Add an existing work item as a parent

Tested By: 77 TC06 – Playlist Loading Failure
Updated 10-04-2025, ● Design

System Info

10. Progress report





11. Changing the test template

Microsoft Azure Portal | Microsoft | Azure DevOps - Microsoft | My Information | Test Plan 84 Music Playlist | Settings - Process (231801095) | Settings - Overview (231801095) | +

dev.azure.com/231801095/_settings/process

Azure DevOps 231801095 / Settings / Process

All processes

Processes Fields

Organization Settings... 231801095

Search Settings

General

- Overview
- Projects
- Users
- Billing
- Global notifications
- Usage
- Extensions
- Microsoft Entra

Security

- Security overview
- Policies
- Permissions

Boards

- Process

Pipelines

- Agent pools
- Settings
- Deployment pools

Help Filter by process name

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

Screenshot of the Azure DevOps Settings - Process page showing the 'All processes' list.

The page title is "Settings / Process". The left sidebar shows "Organization Settings" for "231801095" and lists categories like General, Security, Boards, Pipelines, and Process (which is selected).

The main content area displays a table titled "All processes" with columns: Name, Description, and Team projects.

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

Screenshot of the Azure DevOps Settings - Process page showing the 'All processes' list after creating a new Agile process template.

The page title is "Settings / Process". The left sidebar shows "Organization Settings" for "231801095" and lists categories like General, Security, Boards, Pipelines, and Process (which is selected).

The main content area displays a table titled "All processes" with columns: Name, Description, and Team projects.

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)'. The 'Layout' tab shows 'Acceptance Criteria' assigned to the 'Field' column. A large 'Add a field ...' area is visible on the right.

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

The screenshot shows the Azure DevOps Settings - Process page. The URL is https://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, Pipelines, and Process. The "Process" section is selected. In the main area, there are tabs for "Steps", "Summary", and "Associated Aut...". A "Custom" section is visible, showing a field named "Steps" with a type of "Text (multiple lines)". Other sections include "Recent test results", "Deployment", "Development", "Related Work", and "Status". A search bar at the top right contains the text "Search".

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:

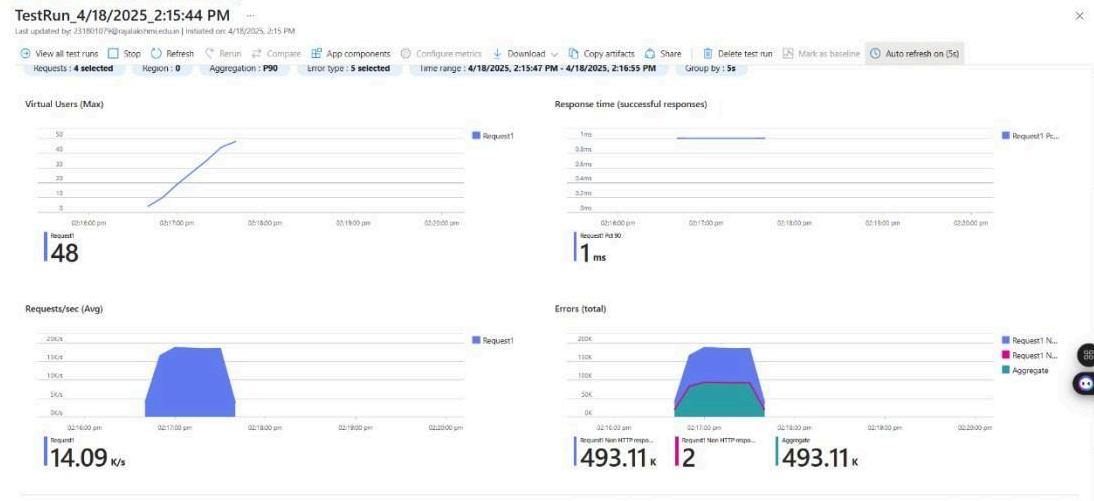
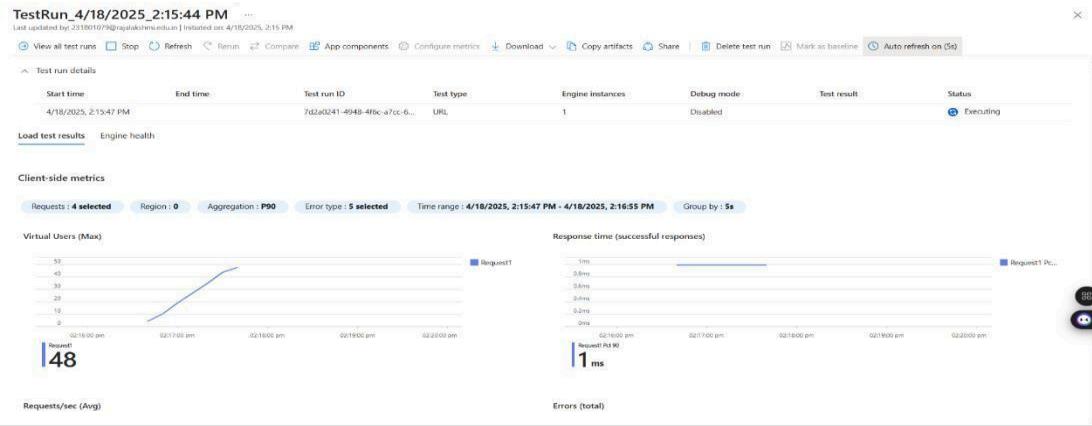
1. Sign in to Azure Portal
Go to <https://portal.azure.com> and log in.
2. Create the Resource
 - o Go to *Create a resource* → Search for “Azure Load Testing”.
 - o Select Azure Load Testing and click Create.
3. Fill in the Configuration Details
 - o *Subscription*: Choose your Azure subscription.
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



Welcome, kishore.292006@gmail.com

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Full Stack - Introduction

Intro to Full Stack Development

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Internet of Things - Introduction

This courses is intende for CSE/ECE undergrads for embedded systems.

[Enroll](#)

Operating system Fundamentals

This course id designed for basic OS concepts scheduling, RTOS and working in linux environment

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[Logout](#)



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 E-learning platform project.

GitHub Project Structure

The screenshot shows a GitHub repository page for 'Education-platform' owned by 'Giridharan-D29'. The repository is public and contains 7 commits. The commit history shows files like 'static/images', 'templates', 'Procfile', 'README.md', 'app.py', 'requirements.txt', and 'vercel.json' being added. The 'Code' tab is selected, showing the main branch. The repository has 1 branch and 0 tags. The 'About' section indicates no description, website, or topics provided. It shows 0 stars, 1 watching, and 0 forks. The 'Releases' section shows no releases published. The 'Packages' section shows no packages published. The 'Languages' section shows a single bar for Python. The sidebar on the left lists 'Code', 'Issues', 'Pull requests', 'Actions', 'Projects', 'Wiki', 'Security', 'Insights', and 'Settings'.

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.