

EXP NO: 1

AZURE DEVOPS ENVIRONMENT SETUP

Aim:

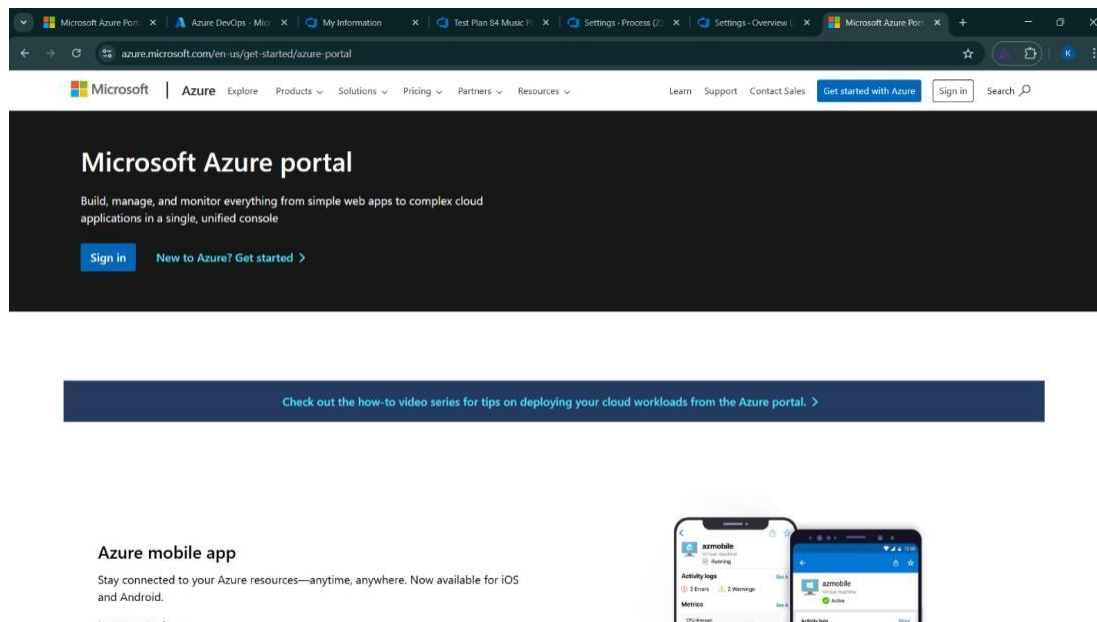
To set up and access the Azure DevOps environment by creating an organization through the Azure portal.

INSTALLATION

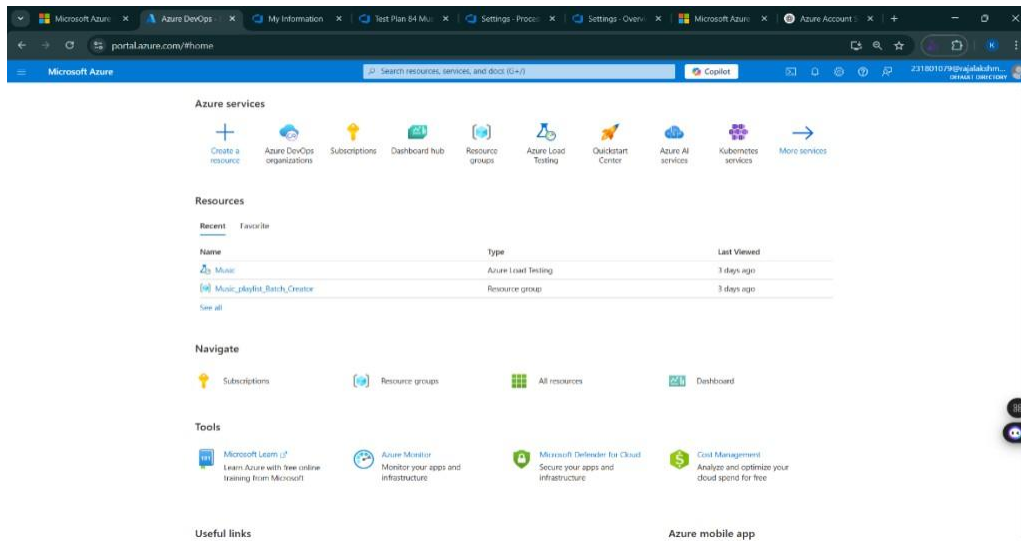
1. Open your web browser and go to the Azure website: <https://azure.microsoft.com/en-us/get-started/azure-portal>.

Sign in using your Microsoft account credentials.

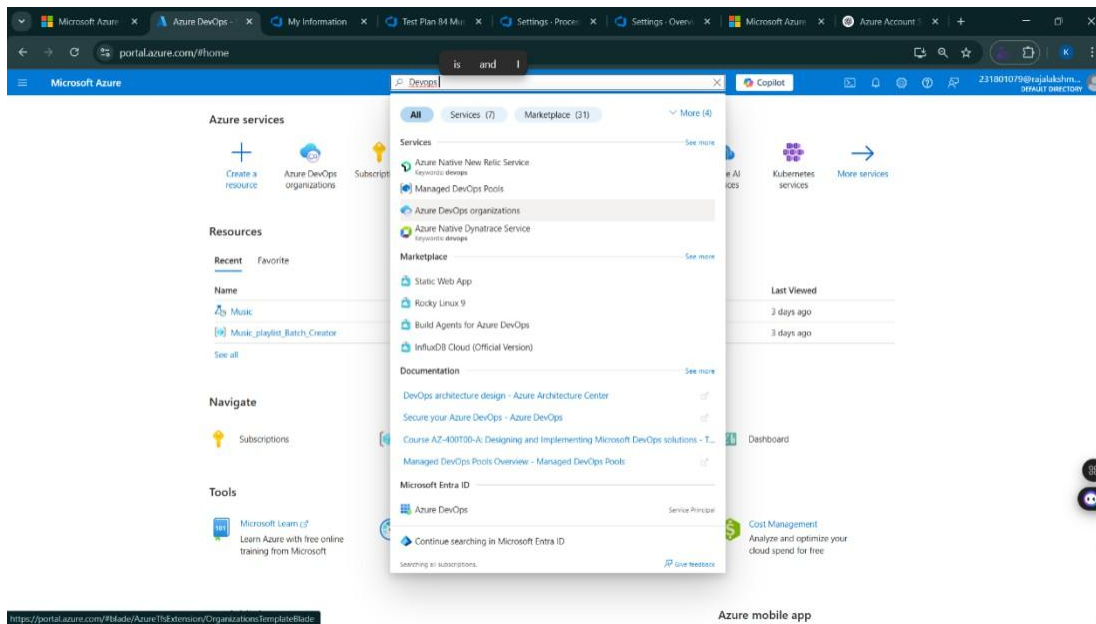
If you don't have a Microsoft account, you can create one here: <https://signup.live.com/?lic=1>



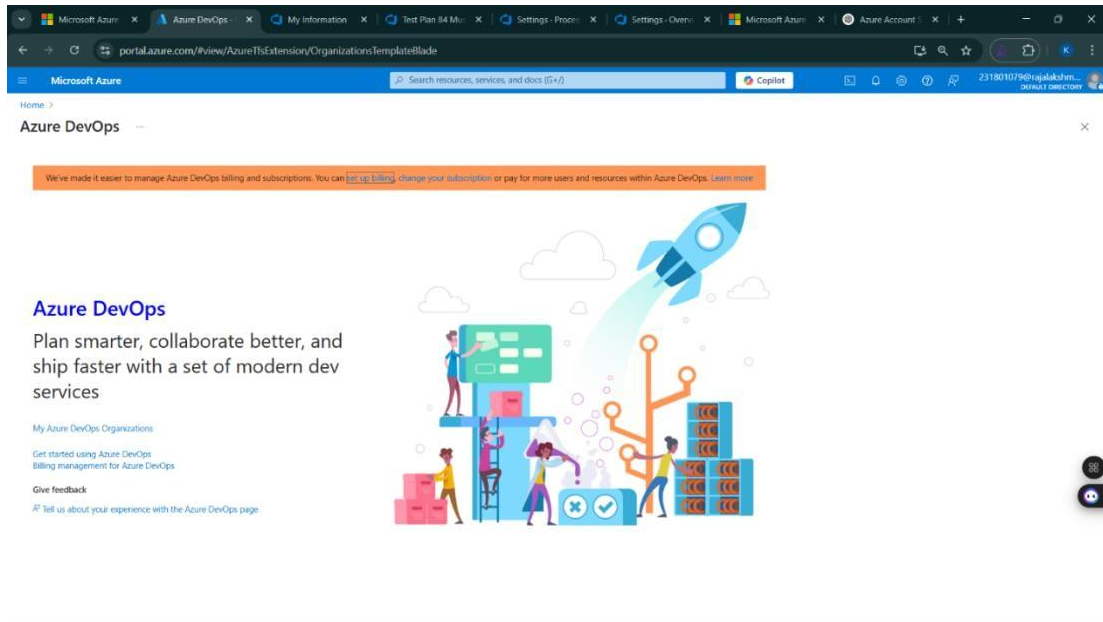
2. Azure home page



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



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.

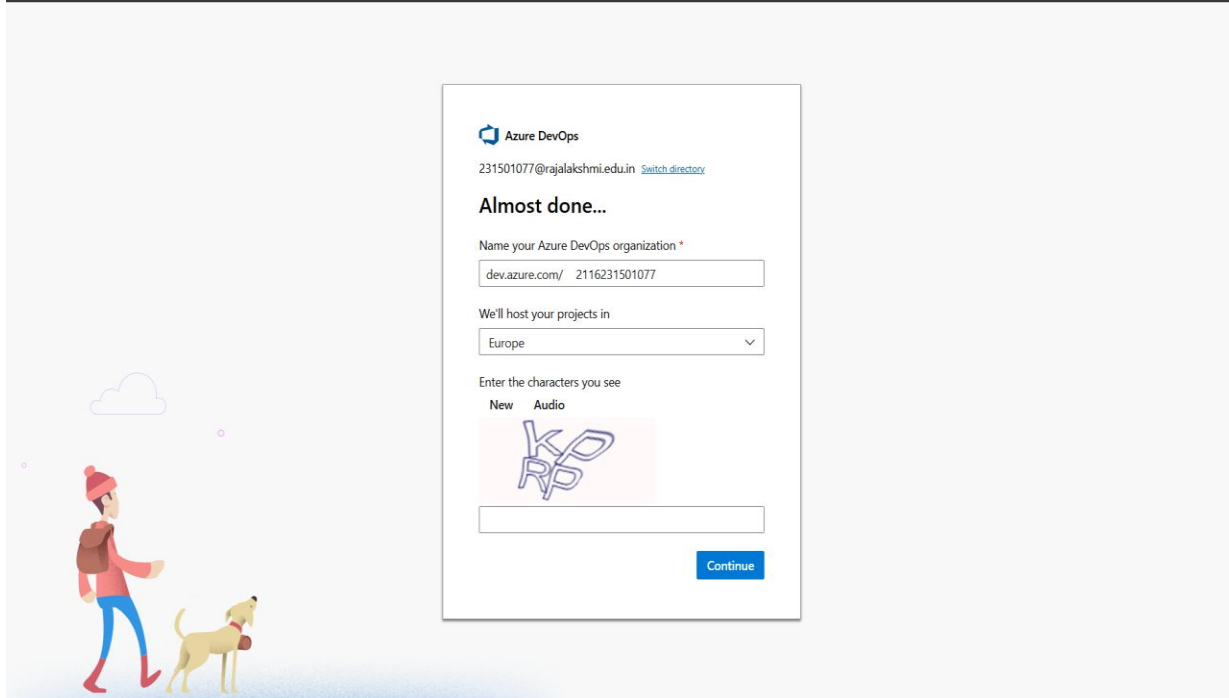
EXP NO: 2

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

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

Create new project

×

Project name *

The Fitness Tracker management System

Description

Visibility

Public

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

Private

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

^ Advanced

Version control ?

Git

Work item process ?

Agile

Cancel

Create

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

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 interface for the 'Fitness Tracker Management System Team'. The left-hand navigation menu 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 the 'Backlog' view for the team. At the top, there is a '+ New Work Item' button and a 'View as Board' button. Below this, there is a table of work items.

Order	Work Item Type	Title	State	Effort	Busin...	Value Area	Tags
1	Epic	> 🏆 Track and Manage User Fitness Activities	New			Business	
2	Epic	> 🏆 Generate Progress Reports and Visual Dashboards	New			Business	
3	Epic	> 🏆 User Registration, Login, and Profile Customization	New			Business	
4	Epic	> 🏆 Set and Track Personalized Fitness Goals	New			Business	
5	Epic	> 🏆 Sync with Wearables and External Health Apps	New			Business	

The screenshot shows the Azure DevOps interface for the 'Fitness Tracker Management System Team'. The left-hand navigation menu 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 the 'Backlog' view for the team. At the top, there is a '+ New Work Item' button and a 'View as Board' button. Below this, there is a table of work items. A Microsoft account sign-in overlay is visible in the top right corner, showing the user's name 'KISHANTHRAJA M' and email '231501077@rajalakshmi.edu.in'. The overlay also includes a 'Sign out' button and a 'Sign in with a different account' button.

Order	Work Item Type	Title	State	Effort	Busin...	Value Area	Tags
1	Epic	> 🏆 Track and Manage User Fitness Activities	New			Business	
2	Epic	> 🏆 Generate Progress Reports and Visual Dashboards	New			Business	
3	Epic	> 🏆 User Registration, Login, and Profile Customization	New			Business	
4	Epic	> 🏆 Set and Track Personalized Fitness Goals	New			Business	
5	Epic	> 🏆 Sync with Wearables and External Health Apps	New			Business	

Result:

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

EXP NO: 3

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

Aim:

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

Create Epic, Features, User Stories, Task

The screenshot shows the Azure DevOps interface for a project named 'Fitness Tracker Management System Team'. The left sidebar contains navigation options: Overview, Boards, Work items, Backlogs (selected), Sprints, Queries, Delivery Plans, Analytics views, Repos, Pipelines, Test Plans, and Artifacts. The main area displays the 'Backlog' view with a table of work items. The table has columns for Order, Work Item Type, Title, State, Effort, Business Area, Value Area, and Tags. The work items are organized into a hierarchy: Epic 1 'Track and Manage User Fitness Activities' contains Feature 'Daily Activity Logging' (with two User Stories) and Feature 'Activity History & Edit Functionality' (with two User Stories). Epic 2 'Generate Progress Reports and Visual Dashboards', Epic 3 'User Registration, Login, and Profile Customization', Epic 4 'Set and Track Personalized Fitness Goals', and Epic 5 'Sync with Wearables and External Health Apps' are also listed.

Order	Work Item Type	Title	State	Effort	Business Area	Value Area	Tags
1	Epic	Track and Manage User Fitness Activities	New		Business		
	Feature	Daily Activity Logging	New		Business		
	User Story	As a user, I want to log my daily workout activity, so th...	New		Business		
	User Story	As a user, I want to select activity type and enter durat...	New		Business		
	Feature	Activity History & Edit Functionality	New		Business		
	User Story	As a user, I want to see a list of all my past activities, s...	New		Business		
	User Story	As a user, I want to be able to edit or delete logged ac...	New		Business		
2	Epic	Generate Progress Reports and Visual Dashboards	New		Business		
3	Epic	User Registration, Login, and Profile Customization	New		Business		
4	Epic	Set and Track Personalized Fitness Goals	New		Business		
5	Epic	Sync with Wearables and External Health Apps	New		Business		

1.Fill in Epics

The screenshot shows the detailed view of an Epic titled 'Track and Manage User Fitness Activities'. The top section includes the Epic title, a 'No one selected' status, '0 Comments', and an 'Add Tag' button. Below this, the 'State' is set to 'New', the 'Area' is 'Fitness Tracker Management System', and the 'Reason' is 'New'. The 'Description' field is empty with a placeholder 'Click to add Description.'. The 'Discussion' section shows a comment box with a placeholder 'Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.'. The 'Planning' section includes fields for Priority (2), Risk, Effort, Business Value, Time Criticality, Start Date, Target Date, and Classification. The 'Deployment' section includes a 'Follow' button and a 'Details' button. The 'Development' section includes an 'Add link' button and a 'Related Work' section with an 'Add link' button.

Description

Click to add Description.

Discussion

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

Planning

Priority: 2

Risk:

Effort:

Business Value:

Time Criticality:

Start Date: Select a date...

Target Date: Select a date...

Classification

Value area:

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

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2.Fill in Features

FEATURE 10

10 Daily Activity Logging

No one selected0 CommentsAdd Tag

Save and CloseFollow

Updated by KISHANTHRAJA M: 1 May

StateNewAreaFitness Tracker Management SystemReasonNewIterationFitness Tracker Management System\Iteration 1

Details30

Description

Click to add Description.

Discussion

KVM

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

switch to Markdown editor

Planning

Priority2RiskEffortBusiness ValueTime CriticalityStart DateSelect a date...Target DateSelect a date...

Classification

Value area

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

3.Fill in User Story Details

USER STORY 20

20 As a user, I want to log my daily workout activity, so that I can keep track of my fitness efforts.

No one selected0 CommentsAdd Tag

Save and CloseFollow

Updated by KISHANTHRAJA M: 1 May

StateNewAreaFitness Tracker Management SystemReasonNewIterationFitness Tracker Management System\Iteration 1

Details10

Description

Click to add Description.

Acceptance Criteria

Click to add Acceptance Criteria.

Discussion

KVM

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

switch to Markdown editor

Planning

Story PointsPriority2Risk

Classification

Value areaBusiness

Deployment

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

Development

Add link

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

Related Work

Add link

Parent

Result:

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

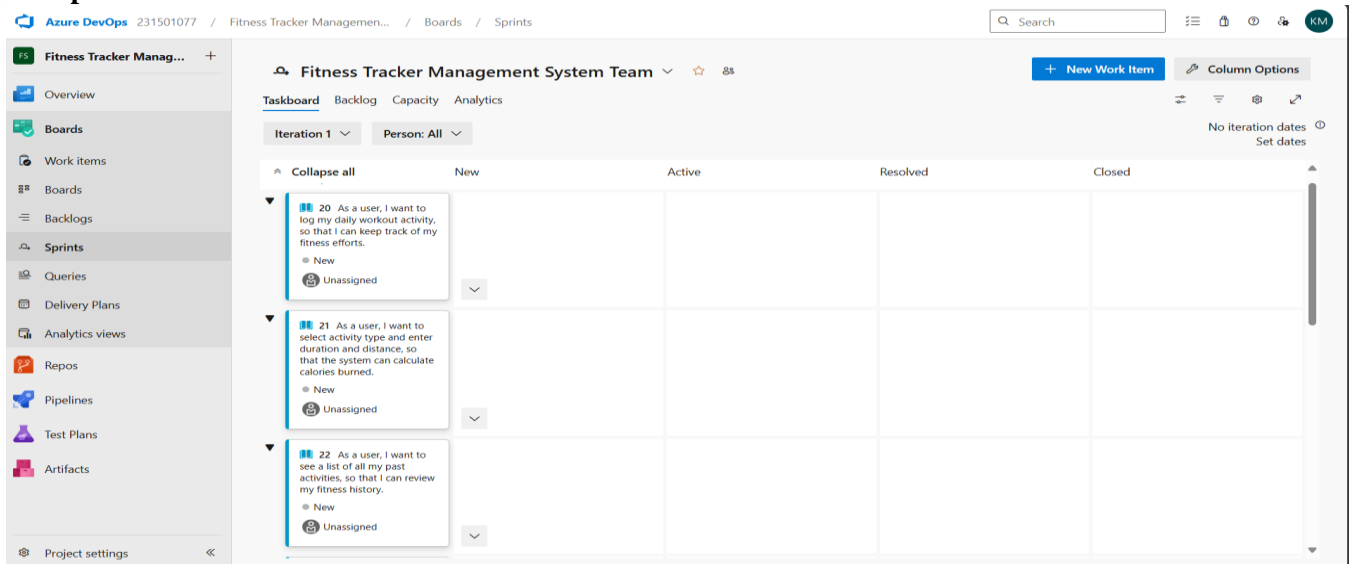
EXP NO: 4

SPRINT PLANNING

Aim:

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

Sprint Planning Sprint 1

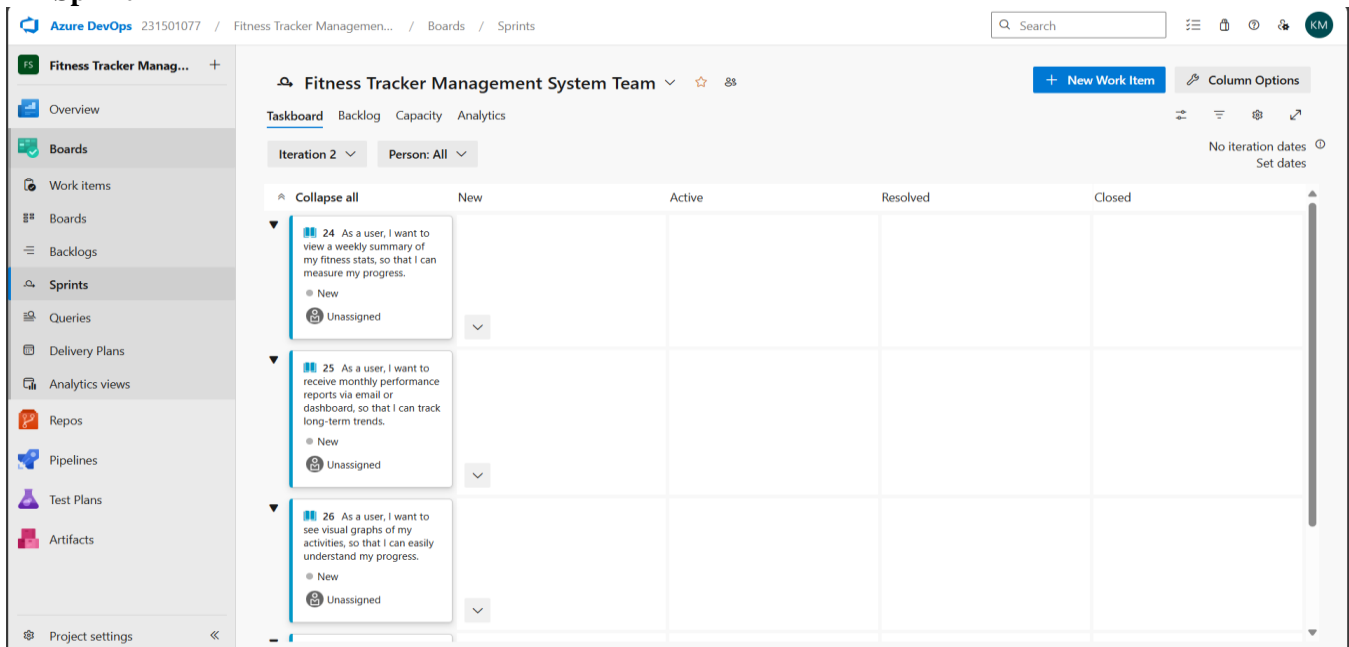


The screenshot shows the Azure DevOps Sprints board for the 'Fitness Tracker Management System Team'. The board is set to 'Iteration 1' and 'Person: All'. It displays a Kanban board with columns: New, Active, Resolved, and Closed. Three user stories are currently in the 'New' column:

- 20 As a user, I want to log my daily workout activity, so that I can keep track of my fitness efforts. (New, Unassigned)
- 21 As a user, I want to select activity type and enter duration and distance, so that the system can calculate calories burned. (New, Unassigned)
- 22 As a user, I want to see a list of all my past activities, so that I can review my fitness history. (New, Unassigned)

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

Sprint 2



The screenshot shows the Azure DevOps Sprints board for the 'Fitness Tracker Management System Team'. The board is set to 'Iteration 2' and 'Person: All'. It displays a Kanban board with columns: New, Active, Resolved, and Closed. Three user stories are currently in the 'New' column:

- 24 As a user, I want to view a weekly summary of my fitness stats, so that I can measure my progress. (New, Unassigned)
- 25 As a user, I want to receive monthly performance reports via email or dashboard, so that I can track long-term trends. (New, Unassigned)
- 26 As a user, I want to see visual graphs of my activities, so that I can easily understand my progress. (New, Unassigned)

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

Sprint 3

231501077 / Fitness Tracker Managemen... / Boards / Sprints

Fitness Tracker Manag...

+

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Project settings

Fitness Tracker Management System Team

+

New Work Item

Column Options

Taskboard

Backlog

Capacity

Analytics

Iteration 3

Person: All

No iteration dates

Set dates

28

As a new user, I want to sign up with my email or social login, so that I can access my fitness account securely.

New

Unassigned

29

As a returning user, I want to securely log in and log out, so that my personal data is protected.

New

Unassigned

30

As a user, I want to update my name, age, and fitness goals, so that my profile reflects my current status.

New

Unassigned

	New	Active	Resolved	Closed
28 As a new user, I want to sign up with my email or social login, so that I can access my fitness account securely.				
29 As a returning user, I want to securely log in and log out, so that my personal data is protected.				
30 As a user, I want to update my name, age, and fitness goals, so that my profile reflects my current status.				

Sprint 4

231501077 / Fitness Tracker Managemen... / Boards / Sprints

Fitness Tracker Manag...

+

Overview

Boards

Work items

Boards

Backlogs

Sprints

Queries

Delivery Plans

Analytics views

Repos

Pipelines

Test Plans

Artifacts

Project settings

Fitness Tracker Management System Team

+

New Work Item

Column Options

Taskboard

Backlog

Capacity

Analytics

Iteration 4

Person: All

June 15 - June 30

11 work days

34

As a user, I want to set daily and weekly activity goals, so that I stay motivated and focused.

New

Unassigned

36

As a user, I want to choose from predefined goal templates, so that I can quickly get started.

New

Unassigned

37

As a user, I want to see a progress bar for my goals, so that I know how close I am to completion.

New

Unassigned

	New	Active	Resolved	Closed
34 As a user, I want to set daily and weekly activity goals, so that I stay motivated and focused.				
36 As a user, I want to choose from predefined goal templates, so that I can quickly get started.				
37 As a user, I want to see a progress bar for my goals, so that I know how close I am to completion.				

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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

👑 EPIC 5

5 Track and Manage User Fitness Activities

No one selected0 CommentsAdd Tag

Save and CloseFollow

Updated by KISHANTHRAJA M: 1 May

Details20

Description

Click to add Description.

Discussion

13M

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

switch to Markdown editor

Planning

Priority
2

Risk

Effort

Business Value

Time Criticality

Start Date
Select a date...

Target Date
Select a date...

Classification

Value area
Business

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](#)

Child

11 Activity History & Edit Functionality
Updated 1 May @ New

10 Daily Activity Logging

Result:

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

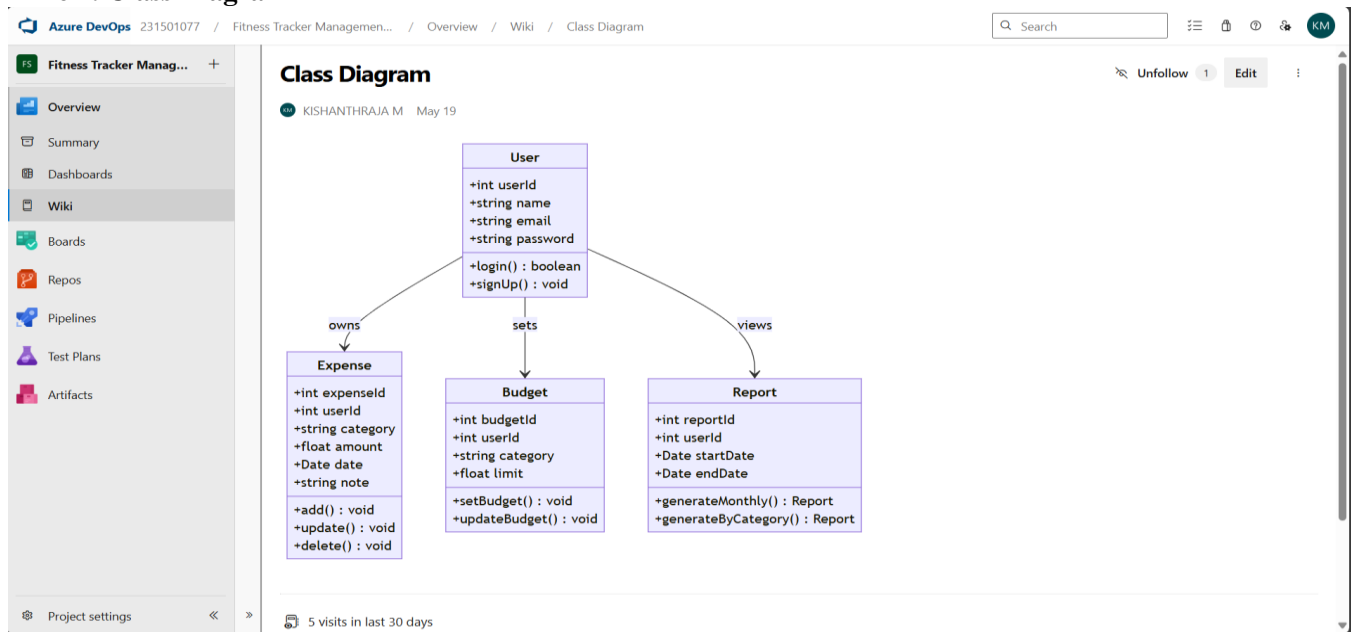
EXP NO: 6

DESIGNING CLASS AND SEQUENCE DIAGRAMS FOR PROJECT ARCHITECTURE

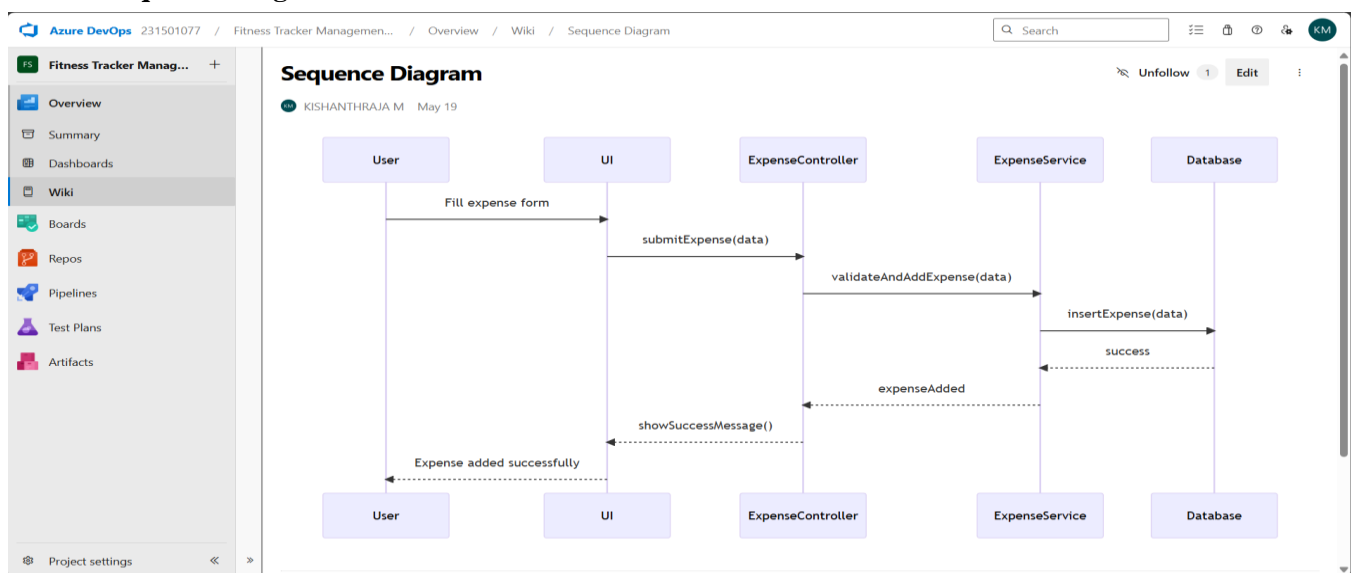
Aim:

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.

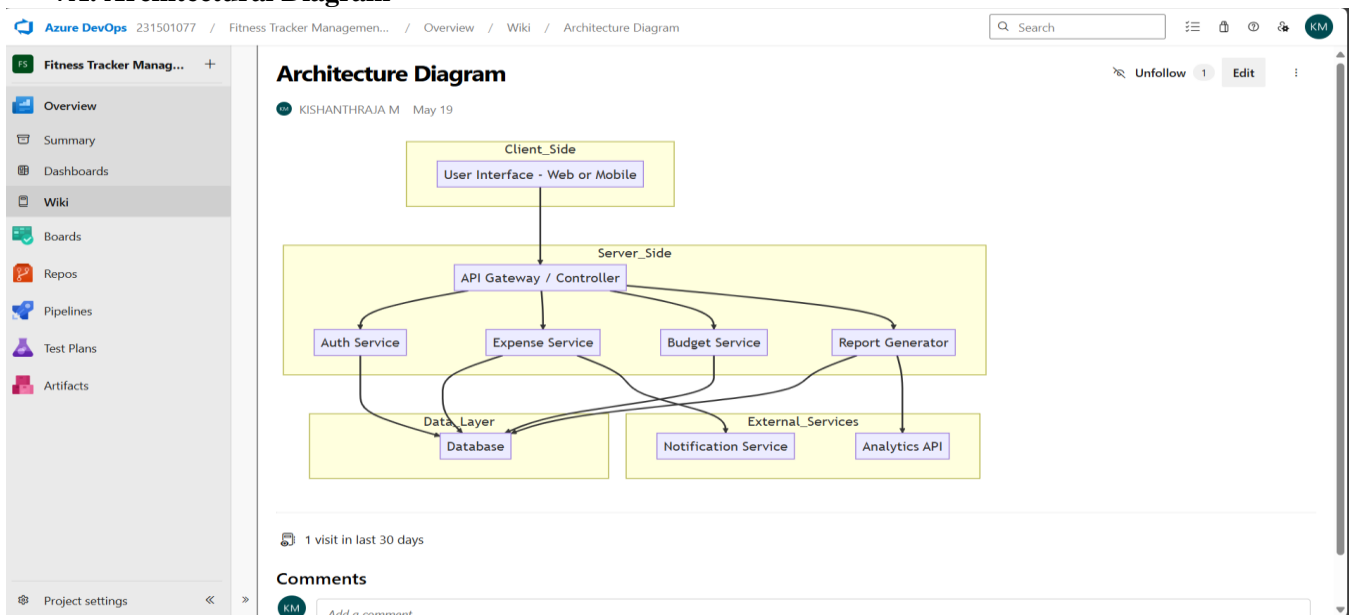
EXP NO: 7

DESIGNING ARCHITECTURAL AND ER DIAGRAMS FOR PROJECT STRUCTURE

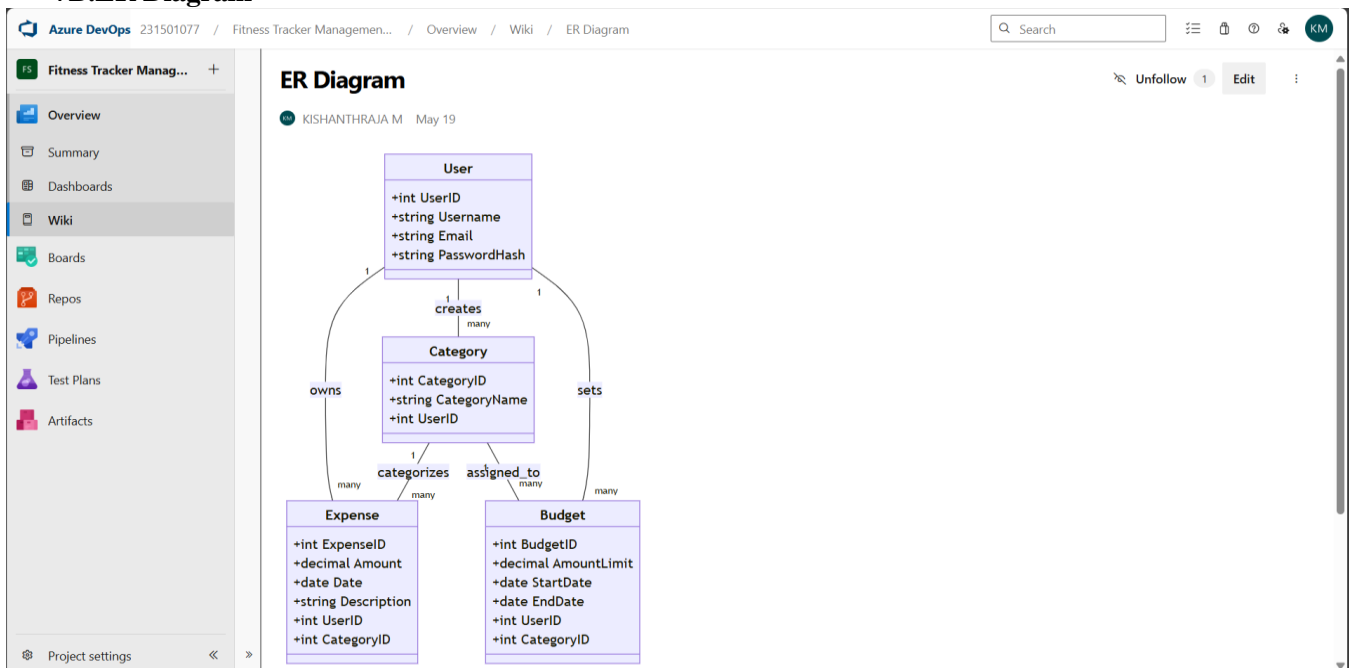
Aim:

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 Goals
- Fetching Real-time Metadata
- Editing exercises

2. Define User Interactions

- Each test case simulates a real user behaviour (e.g., logging in, Adding Fitness goals, adding a task).

3. Design Happy Path Test Cases

- Focused on validating that all features function as expected under normal conditions.
- Example: User logs in successfully, adds a exercise,workout plan

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).
- Helps in quick identification and linking to user stories or features.

7. Separate Test Suites

- Grouped test cases based on functionality (e.g., Login, Signup,Fitness management).

- 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

Azure DevOps 231501077 / Fitness Tracker Managemen... / Test Plans

New Test Plan

Name *
Fitness Tracker Management System - Test Plan

Area Path *
Fitness Tracker Management System

Iteration *
Fitness Tracker Management System\Iteration 1

Create Cancel

2. Test suite

Azure DevOps 231501077 / Fitness Tracker Managemen... / Test Plans / Expense Tracker Manageme...

TS01 - User Login (ID:44) (ID: 46)

Define Execute Chart

Test Cases (3 items)

Title	Order	Test Case Id	Assigned To	Status
TC01 - Successful Sign Up	1	47	KISHANTHRAJ...	D
TC02 - Sign Up with Existing Email	2	48	KISHANTHRAJ...	D
TC03 - Log Activity Successfully	3	49	KISHANTHRAJ...	D

New Test Case

Filter suites by name

Expense Tracker Management Sys...

TS01 - User Login (ID:44) (3)

New Suite

Assign configurations

Export

Open

Assign testers to run all tests

Rename

Delete

Import test suites

Static suite

Requirement based suite

Query based suite

3. Test case

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

Music Playlist Batch Creator – Test Plans

USER STORIES

- As a user, I want to log my daily workout activity, so that I can keep track of my fitness efforts. (ID: 79).
- As a user, I want to select activity type and enter duration and distance, so that the system can calculate calories burned. (ID: 76).
- As a user, I want to see a list of all my past activities, so that I can review my fitness history. (ID: 73).
- As a user, I want to view a weekly summary of my fitness stats, so that I can measure my progress. (ID: 68).

Test Suites

Test Suite: TS01 - User Authentication (Epic: User Registration & Login)

TC01 – Successful Sign Up

- **Action:**
 - Navigate to Sign-Up page.
 - Enter valid name, email, password.
 - Click “Sign Up”.
- **Expected Result:**
 - User is registered and redirected to dashboard.
- **Type:** Happy Path

TC02 – Sign Up with Existing Email

- **Action:**
 - Enter name and already registered email.
 - Click “Sign Up”.
- **Expected Result:**
 - Error message: "Email already exists".
- **Type:** Error Path

Test Suite: TS02 - Activity Logging (Epic: Activity Logging)

TC03 – Log Activity Successfully

- **Action:**

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- Log in.
- Navigate to “Log Activity”.
- Select activity type, enter duration, and click “Save”.
- **Expected Result:**
 - Activity is saved and shown in activity history.
- **Type:** Happy Path

TC04 – Log Activity Without Duration

- **Action:**
 - Select activity type but leave duration blank.
 - Click “Save”.
- **Expected Result:**
 - Error message: "Please enter duration".
- **Type:** Error Path

Test Suite: TS03 - Progress Dashboard (Epic: Dashboard & Reports)

TC05 – View Weekly Summary

- **Action:**
 - Log in.
 - Navigate to “Progress”.
 - Select “Weekly View”.
- **Expected Result:**
 - Weekly stats and graphs are displayed.
- **Type:** Happy Path

TC06 – Graph Load Failure (Offline)

- **Action:**
 - Disconnect internet.
 - Open “Progress” page.
- **Expected Result:**
 - Error: "Unable to load data. Please check your connection".
- **Type:** Error Path

Test Suite: TS04 - Goal Setting (Epic: Goal Management)

TC07 – Set Daily Goal

- **Action:**
 - Go to “Goals”.
 - Enter a daily step goal and save.
- **Expected Result:**
 - Goal is saved and shown on dashboard.
- **Type:** Happy Path

TC08 – Set Goal with Invalid Value

- **Action:**
 - Enter negative steps (e.g., -5000) and save.
- **Expected Result:**
 - Error: “Goal must be a positive number”.
- **Type:** Error Path

Test Suite: TS05 - Profile Customization (Epic: Profile Setup)

TC09 – Update Profile Successfully

- **Action:**
 - Navigate to “Profile”.
 - Change name and profile picture.
 - Click “Update”.
- **Expected Result:**
 - Profile updates are saved.
- **Type:** Happy Path

TC10 – Update with Invalid Email

- **Action:**
 - Change email to “invalidemail”.
 - Click “Update”.
- **Expected Result:**

- Error: "Invalid email format".
- **Type: Error Path**

Test Cases

TEST CASE 49

49 TC03 – Log Activity Successfully

KISHANTHRAJA M

0 Comments
 Add Tag

State

Design

Area

Fitness Tracker Management System

Reason

New

Iteration

Fitness Tracker Management System\Iteration 1

Updated by KISHANTHRAJA M: 3h ago

Save and Close

Follow

Steps

Summary

Associated Automation

1

0

Steps

Action

Expected result

Attachments

1.

Log in.
 Navigate to "Log Activity".
 Select activity type, enter duration, and click "Save".

Activity is saved and shown in activity history.

Click or type here to add a step

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](#)

Tests

50 TB01 - Save button sometimes not responding

Updated 3h ago

New

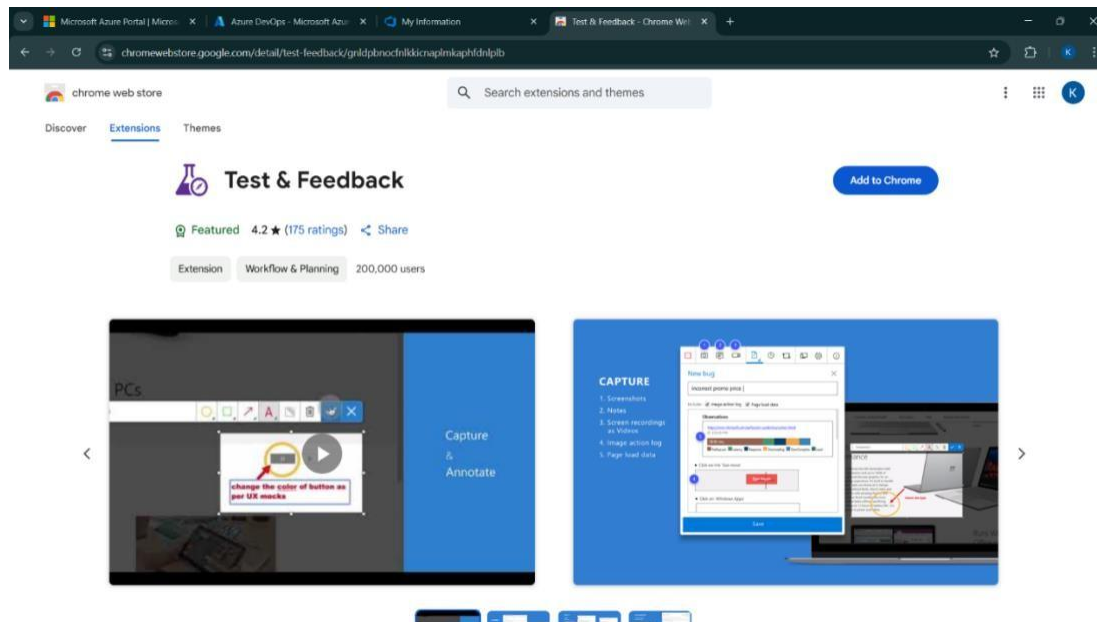
Status

Parameter values

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4. Installation of tes



Test and feedback

Showing it as an extension

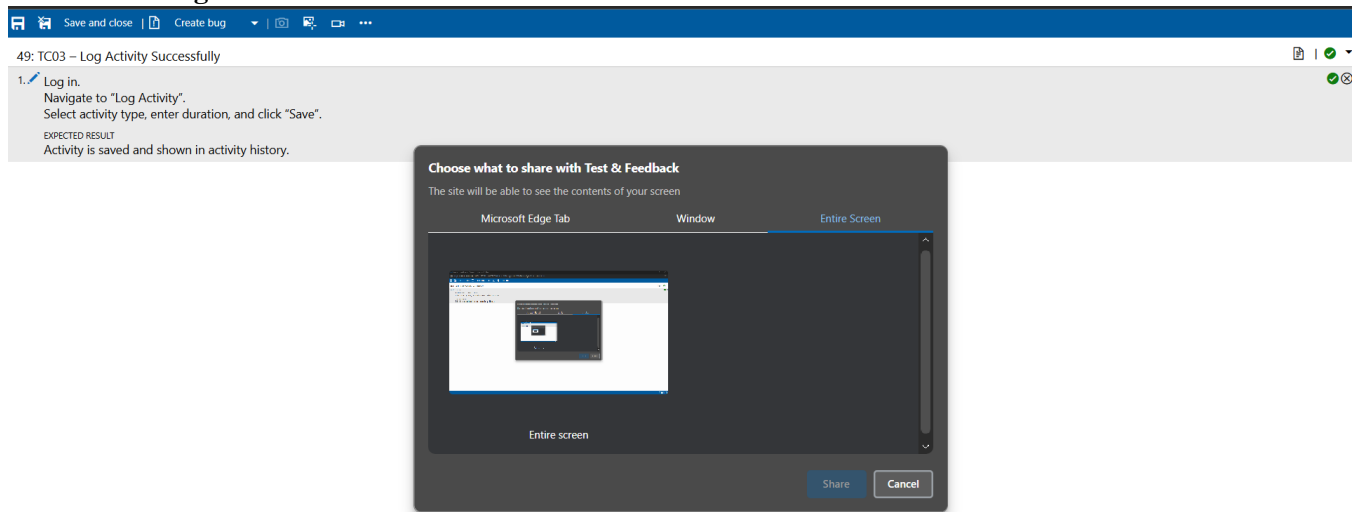
The screenshot displays the Azure DevOps web interface. The browser's address bar shows the URL: `dev.azure.com/231801095/Music%20Playlist%20Batch%20Creator/_testPlans/define?planId=848&suiteId=86`. The left sidebar contains a navigation menu with the following items: Overview, Boards, Repos, Pipelines, Test Plans (selected), Test plans, Progress report, Parameters, Configurations, Runs, and Artifacts. The 'Test Plans' section is expanded, showing a list of test suites under the 'Music Playlist Batch Creator' project. The 'Test Suites' list includes: TS01 - User Login (4), TS02 - View Playlists (2), TS03 - Real-Time Met..., TS04 - Playlist Editing (4), and TS05 - Smart Playlist... The 'TS01 - User Login (ID: 86)' suite is selected, and its details are shown in the main pane. The details pane has tabs for 'Define', 'Execute', and 'Chart'. The 'Define' tab is active, 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. The 'Test & Feedback' extension is highlighted in the sidebar. The 'Extensions' panel is open, showing a list of extensions with 'Test & Feedback' selected. The panel also displays a 'Full access' warning and a 'Manage extensions' button.

5. Running the test cases

The screenshot shows the Azure DevOps Test Plans interface. The left sidebar contains navigation options: Overview, Boards, Repos, Pipelines, Test Plans, Progress report, Parameters, Configurations, Runs, and Artifacts. The 'Test Plans' section is expanded, showing a list of test suites under 'Music Playlist Batch Creator - T...'. The 'Test Suites' list includes 'TS01 - User Login (4)', 'TS02 - View Playlists (2)', 'TS03 - Real-Time Met...', 'TS04 - Playlist Editing (4)', and 'TS05 - Smart Playlist...'. The 'TS02 - View Playlists (ID: 87)' suite is selected, and its 'Execute' tab is active. The 'Test Points (2 items)' table shows two test cases: 'TC05 - View Playlist Page' (Outcome: Passed, Order: 1, Test Case Id: 75) and 'TC06 - Playlist Loading Failure' (Outcome: Passed, Order: 2, Test Case Id: 77). A context menu is open for 'TC05 - View Playlist Page', showing options: View execution history, Mark Outcome, Run, Reset test to active, Edit test case, Assign tester, and View test result. The 'Run' option is selected, and a sub-menu is open with options: Run for web application, Run for desktop application, and Run with options.

The screenshot shows the Azure DevOps Test Results page for 'TC03 - Log Activity Successfully'. The page header includes the URL 'https://dev.azure.com/231501077/Fitness%20Tracker%20Management%20System/_testExecution/Index'. The page content shows the test case title '49: TC03 - Log Activity Successfully' and a list of test steps. The first step is '1. Log in.' with a sub-step 'Navigate to "Log Activity". Select activity type, enter duration, and click "Save".' The 'EXPECTED RESULT' is 'Activity is saved and shown in activity history.' The test result is 'Passed'.

6. Recording the test case

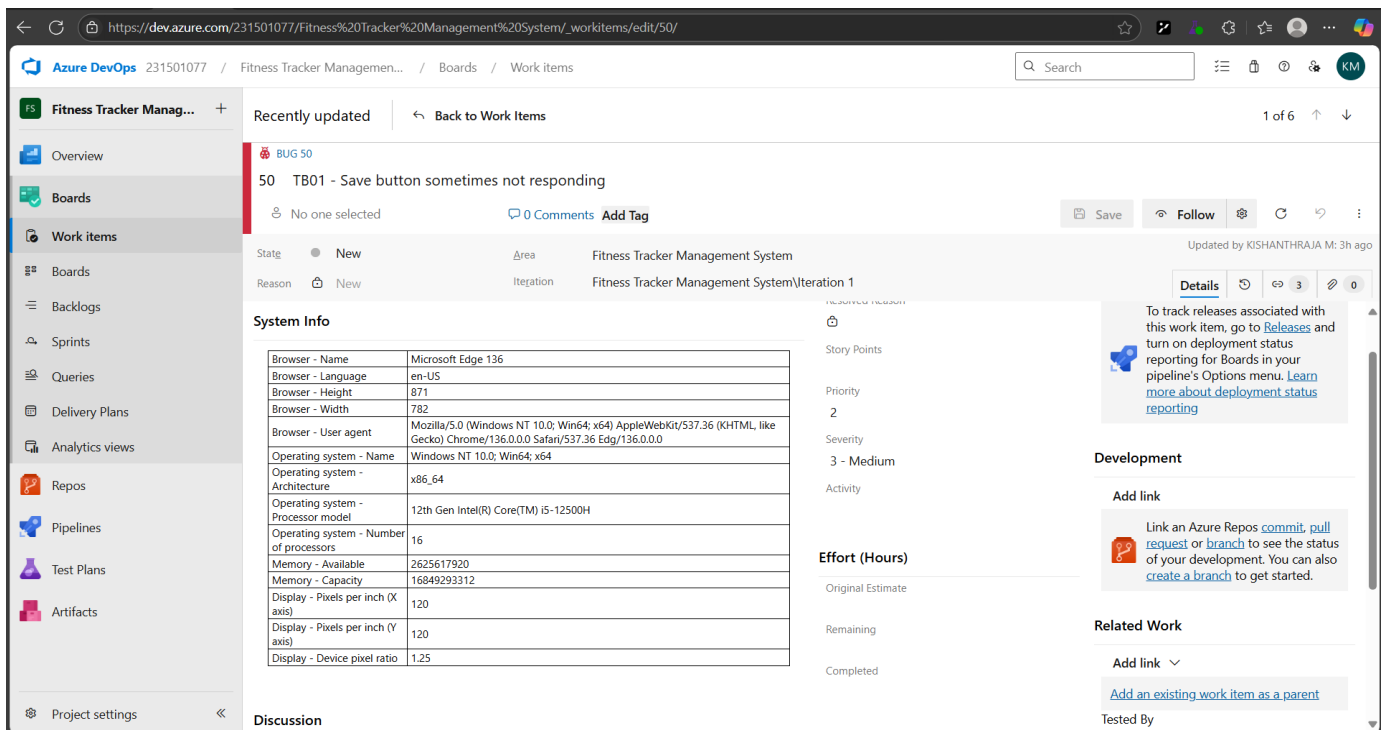
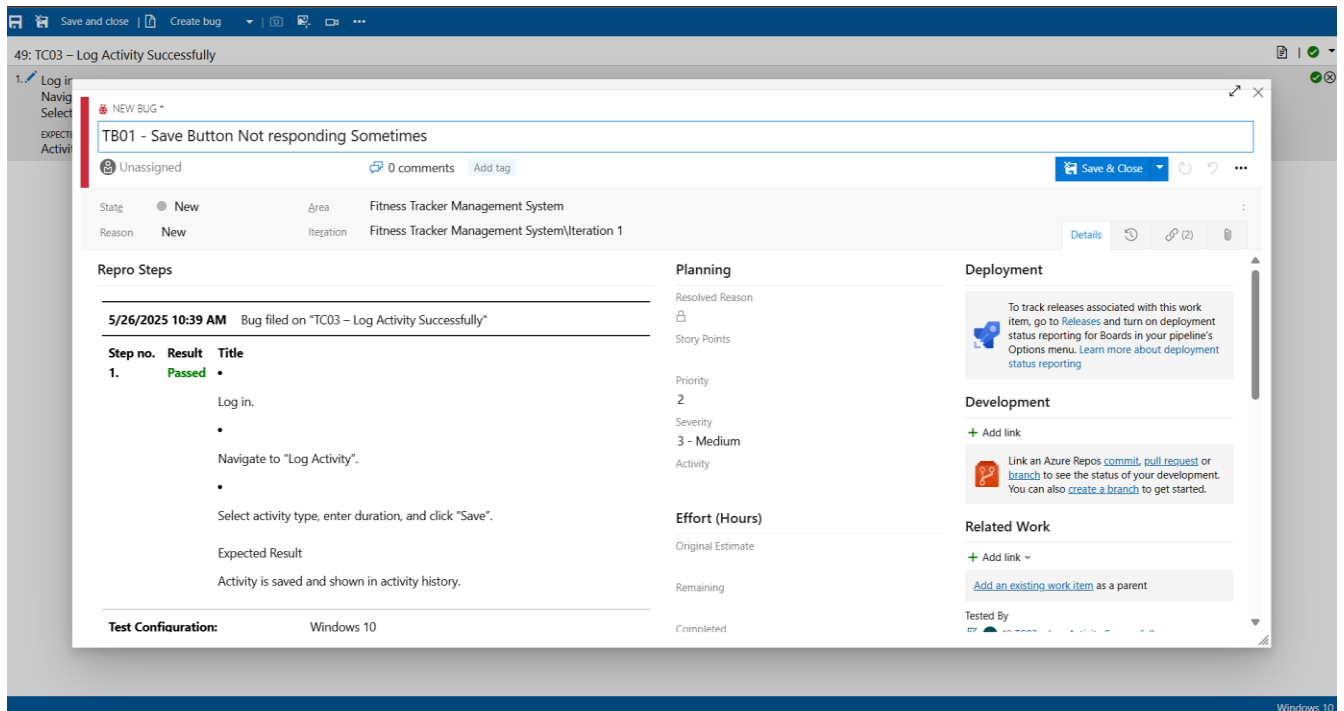


Windows 10

7. Creating the bug



Windows 10



8. Test case results

Azure DevOps 231501077 / Fitness Tracker Management... / Test Plans / Expense Tracker Management...

Fitness Tracker Manag... +

- Overview
- Boards
- Repos
- Pipelines
- Test Plans**
- Test plans
- Progress report
- Parameters
- Configurations
- Runs
- Artifacts

Project settings <<

Expense Tracker ... ▾

May 25 - Jun 1 **Current**

75% run, 100% passed. [View report](#)

Test Suites 📄 📁 📌

Filter suites by name ✕

Expense Tracker Management S... ▾

- TS01 - User Login (ID:44) (3)

TS01 - User Login (ID:44) (ID: 46)

Define **Execute** Chart

Test Points (3 items)

- Title
- ☐ TC01 - Successful Sign Up
- ☐ TC02 - Sign Up with Existing Email
- ☒ **TC03 - Log Activity Successfully**

TC03 - Log Activity Successfully ↑ ↓ ✕

Test Case Results

Outcome	TimeSta...	Configuration	Run by	Tester	Test
✓ Passed	Just now	Windows 10	KISHANTHRAJ...	KISHANTHRAJ...	Expe
✓ Passed	Just now	Windows 10	KISHANTHRAJ...	KISHANTHRAJ...	Expe
ⓘ In Progress	5m ago	Windows 10	KISHANTHRAJ...	KISHANTHRAJ...	Expe
✓ Passed	6m ago	Windows 10	KISHANTHRAJ...	KISHANTHRAJ...	Expe
✓ Passed	3h ago	Windows 10	KISHANTHRAJ...	KISHANTHRAJ...	Expe
✓ Passed	3h ago	Windows 10	KISHANTHRAJ...	KISHANTHRAJ...	Expe
✓ Passed	3h ago	Windows 10	KISHANTHRAJ...	KISHANTHRAJ...	Expe
✓ Passed	3h ago	Windows 10	KISHANTHRAJ...	KISHANTHRAJ...	Expe

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

9. Test report summary

Azure DevOps 231501077 / Fitness Tracker Management... / Boards / Work items

Search 🔍

Recently updated | [Back to Work Items](#) 1 of 6 ↑ ↓

BUG 50

50 TB01 - Save button sometimes not responding

No one selected 0 Comments Add Tag

Save Follow ⚙️ ↺ ↻

Updated by KISHANTHRAJA M: 3h a

Details ⌚ ⌕ 3 ✎ 0

State: New ▾ Area: Fitness Tracker Management System

Reason: ☒ New Iteration: Fitness Tracker Management System\Iteration 1

Repro Step: Active

5/26/2020 Closed - Log Activity Successfully"

Step no. Result Title

1. **Failed**

- Log in.
- Navigate to "Log Activity".
- Select activity type, enter duration, and click "Save".
- Expected Result
- Activity is saved and shown in activity history.
- Comments: Save button sometimes not responding

Test Configuration: Windows 10

Planning

Resolved Reason

Story Points

Priority 2

Severity 3 - Medium

Activity

Effort (Hours)

Original Estimate

Remaining

Completed

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 ▾

- Assigning bug to the developer and changing state

11. Changing the test template

The screenshot shows the Azure DevOps 'All processes' page. The left sidebar is titled 'Organization Settings' and includes a search bar and a list of settings categories: General, Security, Boards, and Pipelines. The 'Process' option under the 'Boards' category is selected. The main content area is titled 'All processes' and contains a table with the following data:

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 practicing Scrum, Kanban, or a hybrid approach.	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 record.	0

Microsoft Azure Portal | M | 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

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

All processes

Processes Fields

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 practicing Scrum.	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 record of process.	0

Microsoft Azure Portal | M | 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

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

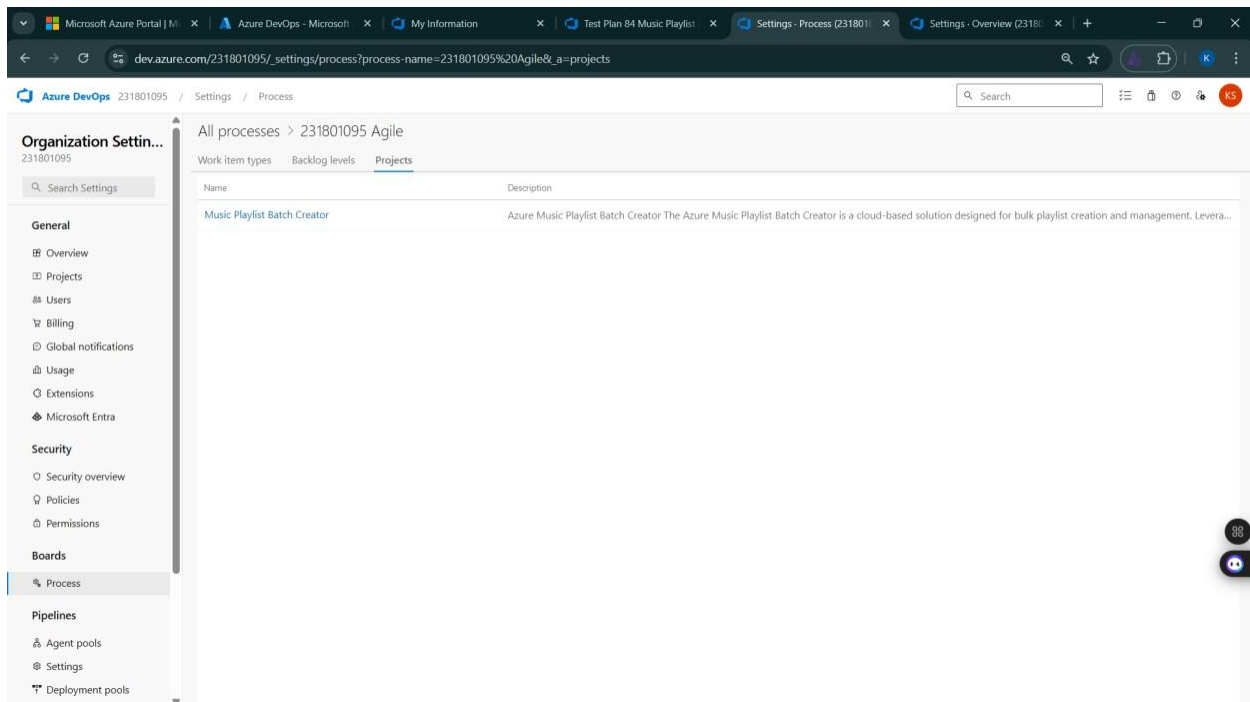
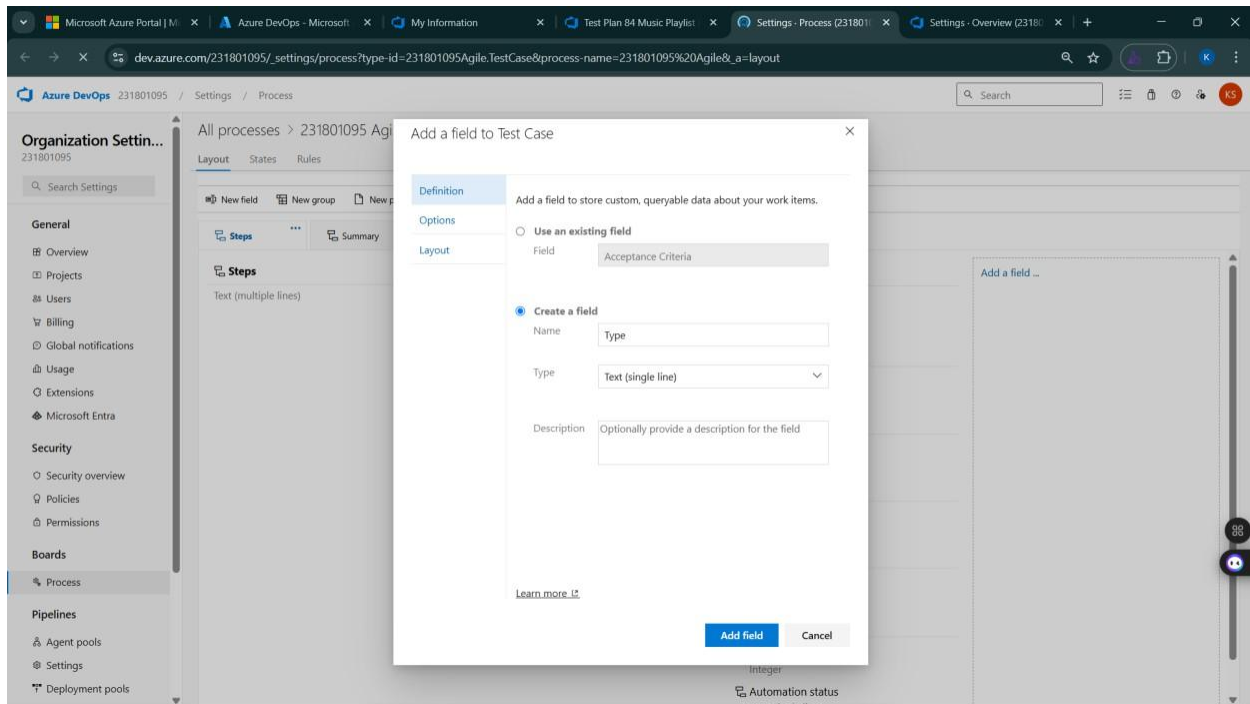
All processes

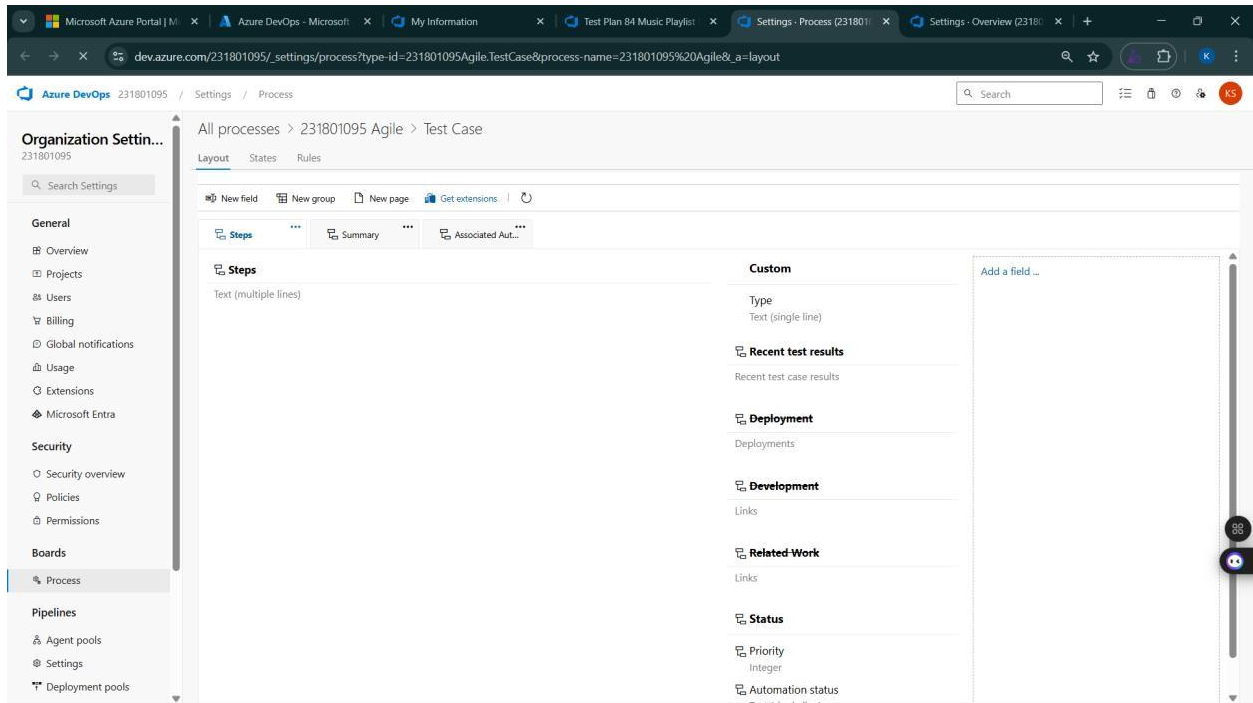
Processes Fields

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 practicing Scrum.	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 record of process.	0

12. View the new test case template





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:

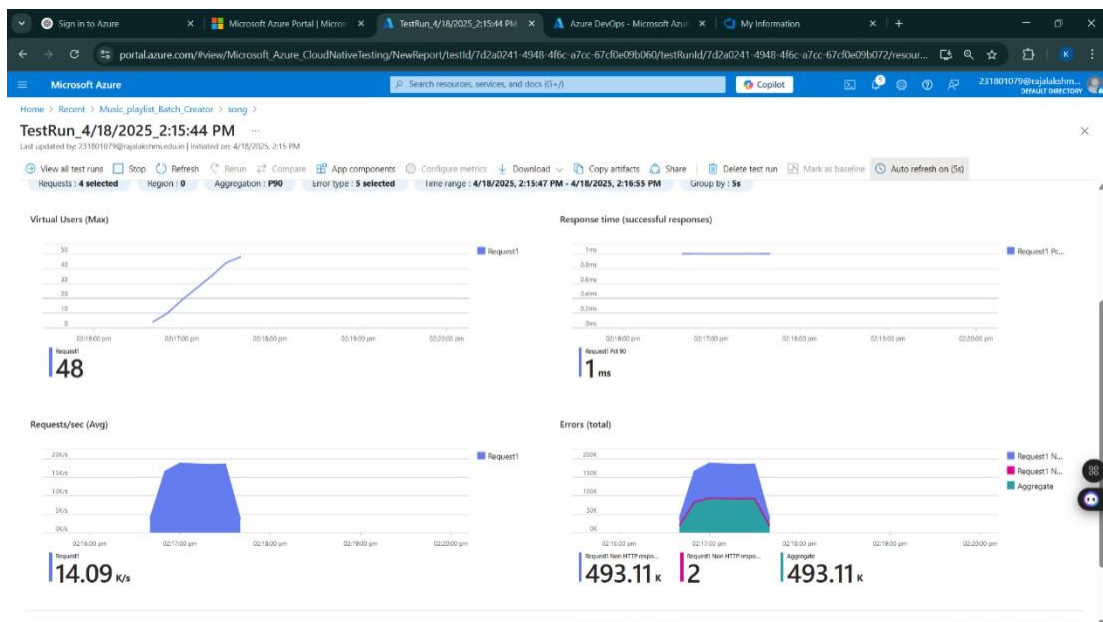
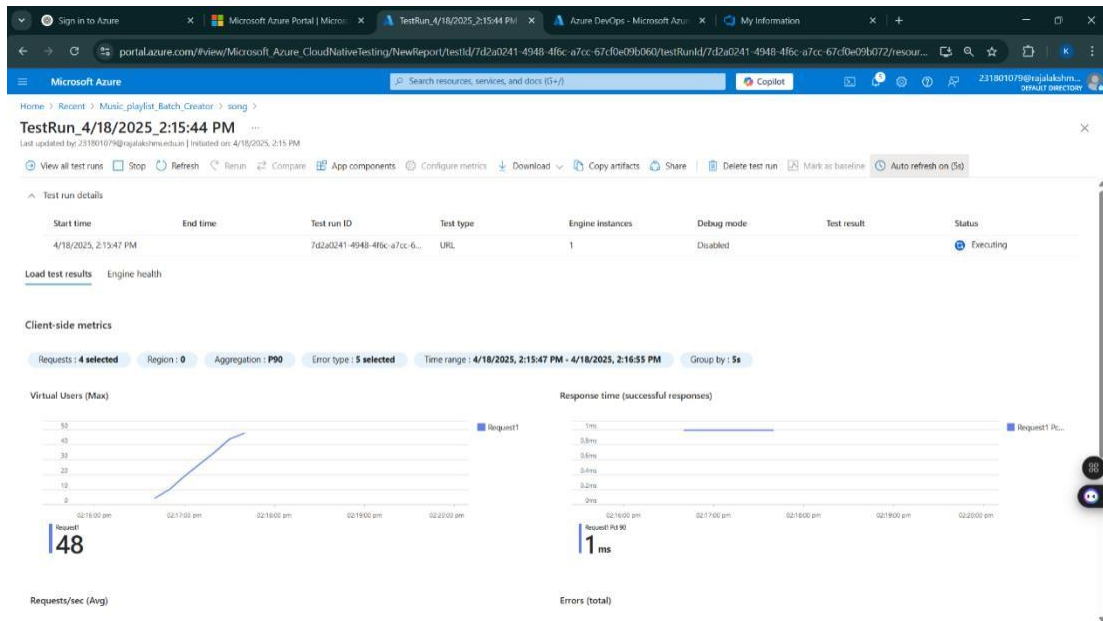
1. Sign in to Azure Portal
Go to <https://portal.azure.com> and log in.
2. Create the Resource
 - Go to *Create a resource* → Search for “Azure Load Testing”.
 - Select Azure Load Testing and click Create.
3. Fill in the Configuration Details
 - *Subscription*: Choose your Azure subscription.
 - *Resource Group*: Create new or select an existing one.
 - *Name*: Provide a unique name (no special characters).
 - *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.

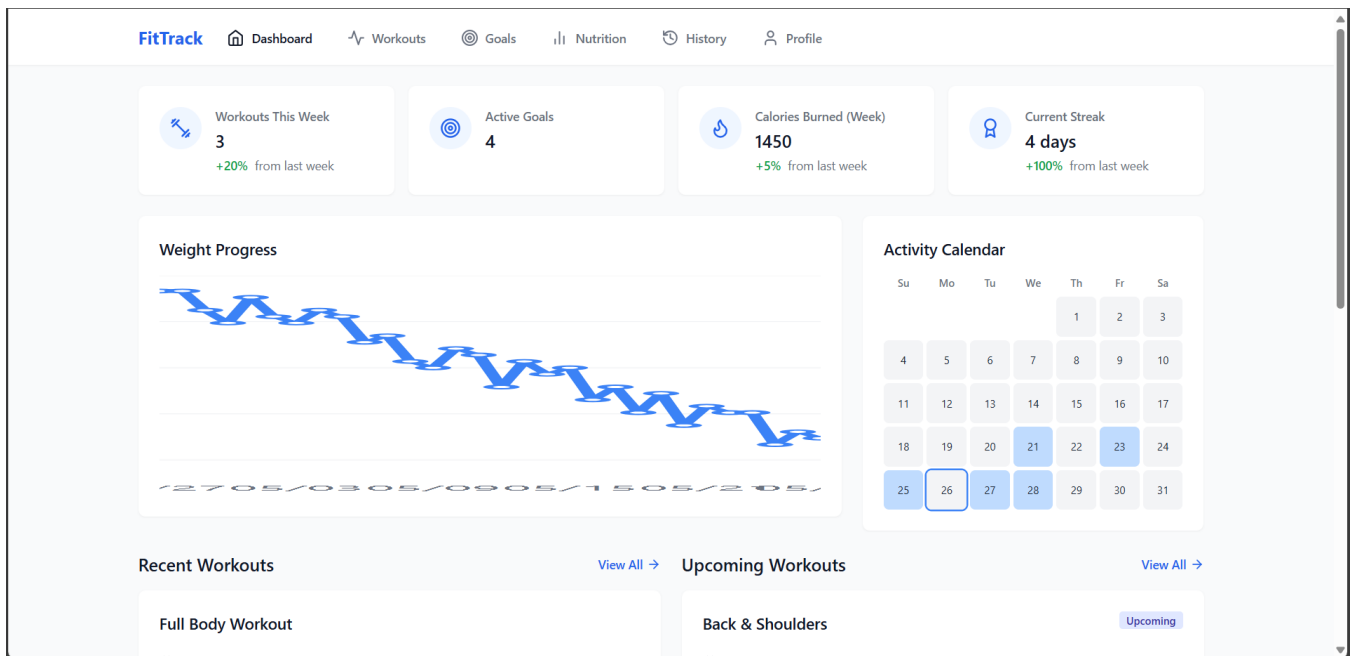
Steps to Create and Run a Load Test:

Once your resource is ready:

1. Go to your Azure Load Testing resource and click Add HTTP requests > Create.
2. Basics Tab
 - *Test Name*: Provide a unique name.
 - *Description*: (Optional) Add test purpose.
 - *Run After Creation*: Keep checked.
3. Load Settings
 - *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.

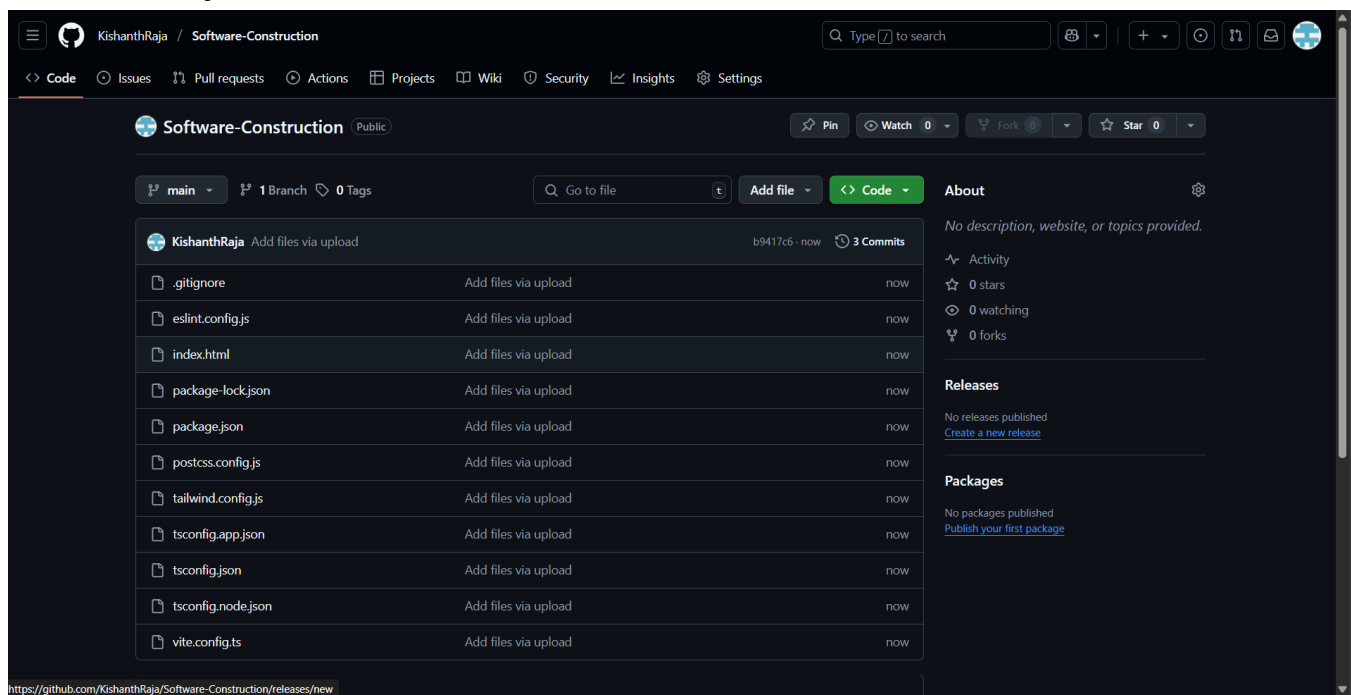
EXP NO: 10

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.