

EXP NO: 1

AZURE DEVOPS ENVIRONMENT SETUP

Aim:

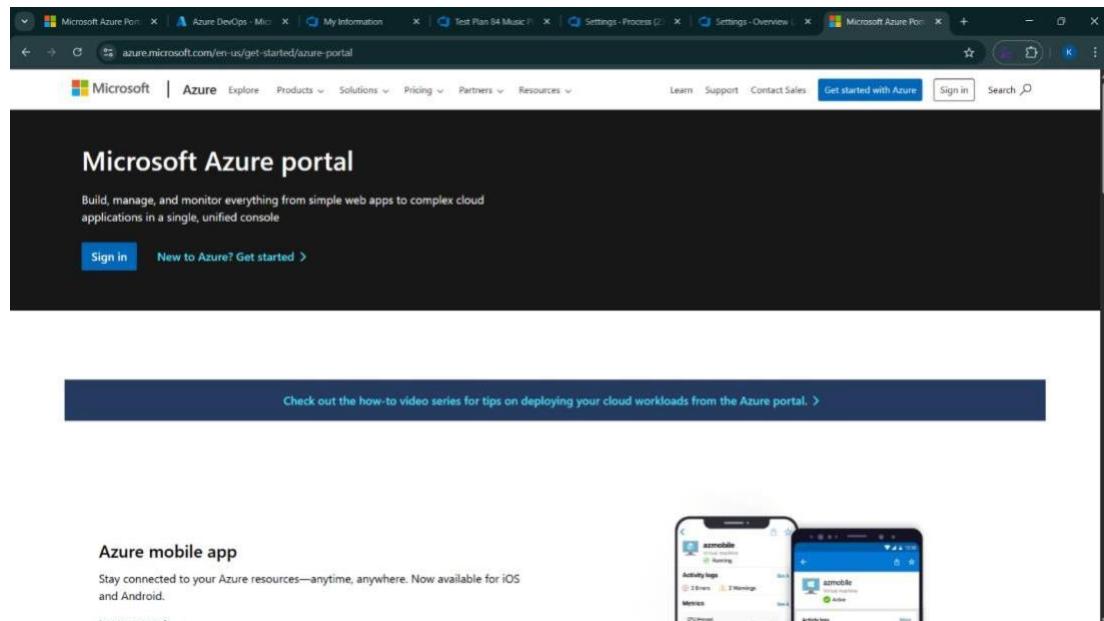
To set up and access the Azure DevOps environment by creating an organization through the Azure portal.

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>



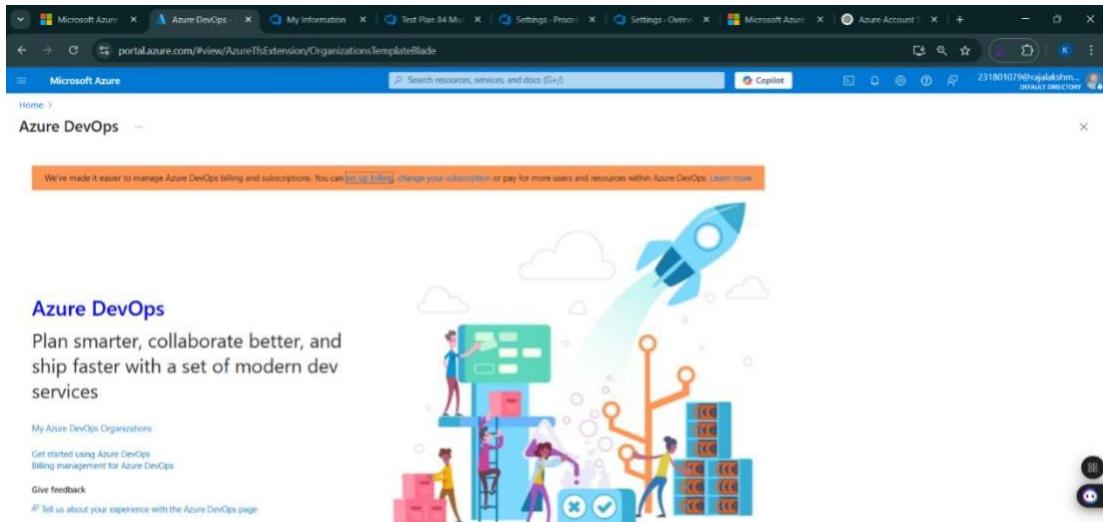
2. Azure home page

The screenshot shows the Microsoft Azure home page. At the top, there's a search bar with the placeholder "Search resources, services and tools (S+T)". Below the search bar, the "Azure services" section features a "Create a resource" button and icons for various services: 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 and favorite resources, including "Music" (Resource group) and "Music_playlist_Batch_Creator" (Resource group). 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 a link to the Azure mobile app.

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 the search bar set to "Azure DevOps Organizations". The search results are displayed under the "Services" and "Marketplace" sections. Under "Services", items like Azure Native New Relic Service, Managed DevOps Pools, and Azure DevOps organizations are listed. Under "Marketplace", items like Static Web App, Rocky Linux 9, and InfraCloud Cloud (Official Version) are listed. The "Documentation" section includes links to DevOps architecture design, Secure your Azure DevOps, and Course AZ-400T00-A: Designing and Implementing Microsoft DevOps solutions. The "Microsoft Entra ID" section shows Azure DevOps and Continue searching in Microsoft Entra ID. The bottom of the screen shows the URL <https://portal.azure.com/#blade/AzureDevOpsOrganizationsTemplateBlade>.

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.

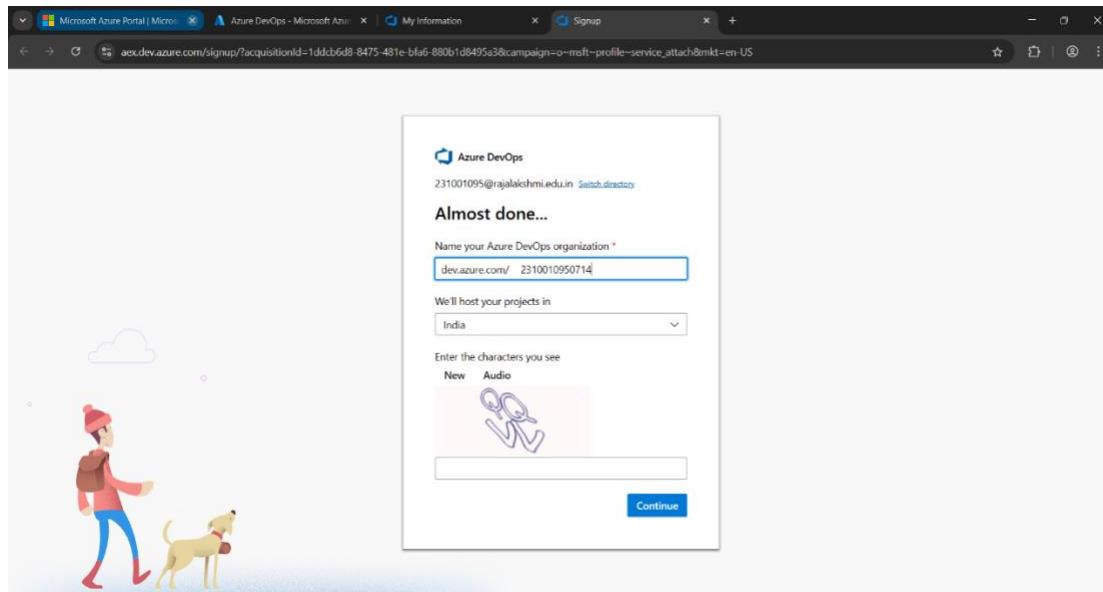
EXP NO: 2

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.

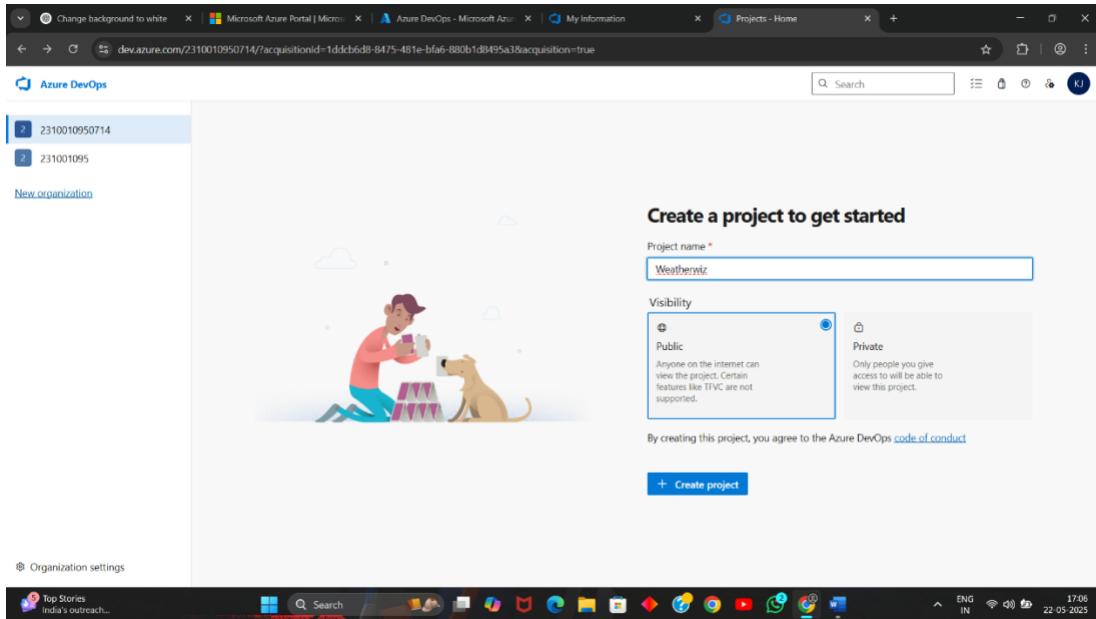
c. Enter the project name, description, and visibility options:

Name: Choose a name for the project (e.g., **WeatherWiz**).

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.



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 'Kishore JM' and a 'Sign out' button. A large circular profile picture placeholder for 'KJ' is on the left. Below it, the user's name 'Kishore JM' and email '231001095@rajalakshmi.edu.in' are shown, along with a 'Edit profile' link. A dropdown menu for 'Microsoft account' lists 'India' and the same email address. To the right, the 'Azure DevOps Organizations' header includes a 'Create new organization' button. Under 'Projects', there is a card for 'WeatherWiz - Your Personal Weather Companion'. An 'Actions' section offers 'Open in Visual Studio' and 'New project' options.

4. Project dashboard

The screenshot shows the Azure DevOps project dashboard for 'WeatherWiz - Your Personal Weather Companion'. The top navigation bar includes links for 'Overview', 'Summary', 'Dashboards', 'Wiki', 'Boards', 'Repos', 'Pipelines', 'Test Plans', and 'Artifacts'. The main content area features a 'About this project' section with a description of WeatherWiz as a smart weather app. To the right, 'Project stats' are displayed, showing 'Boards' (0 work items) and 'Members' (6 users: LC, KK, UR, KJ, Z, MP). A search bar and a 'Public' button are also present.

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 project "WeatherWiz - Your Personal Weather Companion". The left sidebar is visible with options like Overview, Boards, Work items, Boards, Backlogs, Sprints, Queries, Delivery Plans, Analytics views, Repos, Pipelines, Test Plans, Artifacts, and Project settings. The main area is titled "Work items" and shows a table with one row. The table columns are ID, Title, Assigned To, State, Area Path, and Tags. The single row contains ID 19, Title "WeatherWiz - Your Personal Weather Companion", Assigned To 231001098, State "New", Area Path "WeatherWiz - Your Personal W...", and no tags listed.

This screenshot is similar to the previous one, showing the Azure DevOps Boards page. However, a user profile overlay is displayed over the top right corner. The overlay shows a circular profile picture with initials "KJ", the name "Kishore JM", the email "231001095@rajalakshmi.edu.in", and links for "My Microsoft account" and "Switch directory". A "Sign out" link is also present. The main content of the page remains the same, displaying the single work item from the previous screenshot.

Result:

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

EXP NO: 3

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

Aim:

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

Create Epic, Features, User Stories, Task

The screenshot shows the Azure DevOps interface for the WeatherWiz project. On the left, the navigation menu is open, with 'Backlogs' selected. The main area displays a backlog board titled 'WeatherWiz - Your Personal Weather Companion Team'. The backlog is organized by type: Epic, Feature, and User Story. The first Epic is 'WeatherWiz - Your Personal Weather Companion', which contains several Features like 'Real-Time Weather Updates' and 'Display pressure levels'. These Features further contain User Stories such as 'View AQI for a location' and 'Simple and Clear Weather Forecast'. The backlog also includes a Feature for 'Hourly and Detailed Forecasts' and another for 'Interactive Weather Map', each with its own set of User Stories. The status of items ranges from 'New' to 'Active'.

1. Fill in Epics

The screenshot shows the 'Work Items' creation page for a new Epic. The title 'Enter title' is highlighted with a red border, and an error message 'NEW EPIC * Field 'Title' cannot be empty.' is displayed above it. The form includes fields for 'Status' (set to 'New'), 'Area' (set to 'WeatherWiz - Your Personal Weather Companion'), 'Reason' (set to 'New'), and 'Iteration' (set to 'WeatherWiz - Your Personal Weather Companion\Iteration 3'). The 'Description' section has a placeholder 'Click to add Description.' The 'Planning' section includes 'Priority' (set to '2'), 'Risk', and 'Effort'. The 'Deployment' section includes 'Business Value', 'Time Criticality', and a note about tracking releases. The 'Development' section includes 'Add link' and a note about linking to Azure Repos. The 'Related Work' section is currently empty.

2. Fill in Features

The screenshot shows the Azure DevOps interface for creating a new work item. The URL in the browser is dev.azure.com/231001095/WeatherWiz/_workitems/create/Feature. The page title is "Summary - Overview". The left sidebar shows the project navigation with "Work items" selected. The main form is for a "Feature" work item. The "Title" field is highlighted in red with the error message "Field 'Title' cannot be empty." Below the title is a text input field labeled "Enter title". The "Planning" section includes fields for "Priority" (set to 2), "Risk", and "Business Value". The "Deployment" section includes a note about tracking releases and deployment status reporting. The "Development" section has an "Add link" button. The "Related Work" section has an "Add link" button and a link to "Add an existing work item as a parent".

3. Fill in User Story Details

The screenshot shows the Azure DevOps interface for creating a new work item. The URL in the browser is dev.azure.com/231001095/WeatherWiz/_workitems/create/UserStory. The page title is "Summary - Overview". The left sidebar shows the project navigation with "Work items" selected. The main form is for a "User Story" work item. The "Title" field is highlighted in red with the error message "Field 'Title' cannot be empty." Below the title is a text input field labeled "Enter title". The "Planning" section includes fields for "Story Points" (set to 2), "Priority", and "Risk". The "Classification" section includes fields for "Value area" (set to "Business") and "Business". The "Development" section has an "Add link" button. The "Related Work" section has an "Add link" button and a link to "Add an existing work item as a parent".

4. Fill in Task Details

The screenshot shows the Azure DevOps interface for creating a new task. The URL in the browser is https://dev.azure.com/231001095/WeatherWiz%20-%20Your%20Personal%20Weather%20Companion/_task/231001095. A validation error message "NEW TASK * Field 'Title' cannot be empty." is displayed above the title input field. The task details include:

- Description:** Click to add Description.
- Planning:** Priority: 2, Activity: WeatherWiz - Your Personal Weather Companion\Iteration 3
- 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](#)
- Effort (Hours):** Original Estimate: 0, Remaining: 0, Completed: 0
- 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.
- Implementation:** None listed.
- Related Work:** None listed.

Result:

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

EXP NO: 4

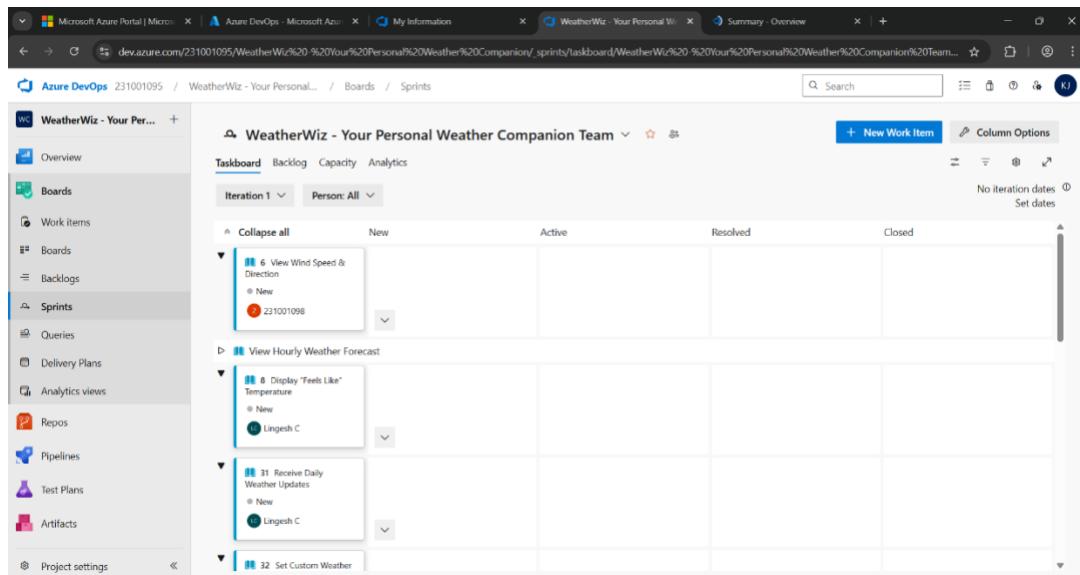
SPRINT PLANNING

Aim:

To assign user story to specific sprint for the WeatherWiz - Weather Companion Project.

Sprint Planning :

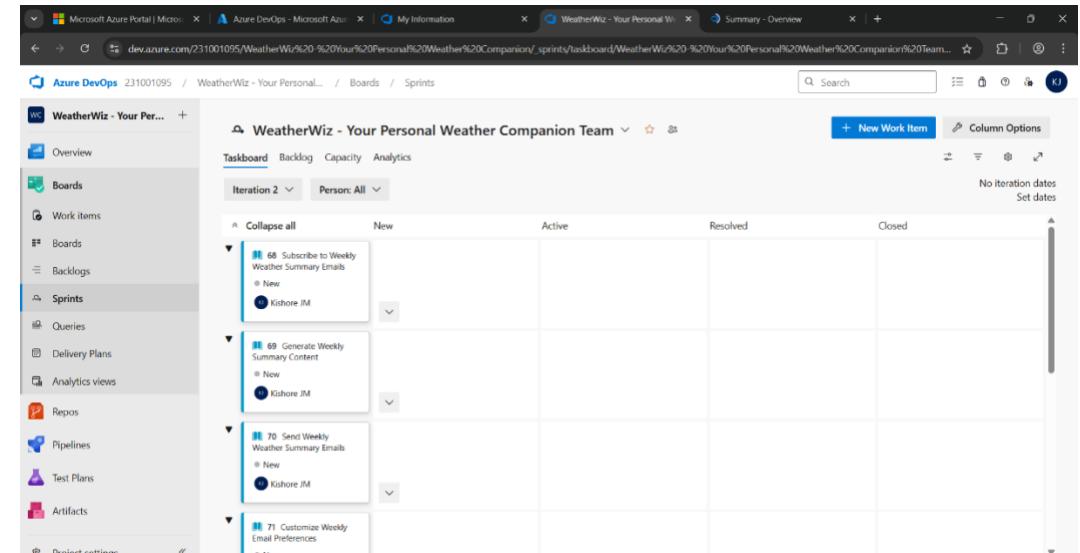
Sprint 1



The screenshot shows the Azure DevOps Taskboard for the WeatherWiz project. The left sidebar is collapsed, and the main area displays a taskboard for 'Iteration 1'. The board has columns for New, Active, Resolved, and Closed. There are four tasks visible:

- 6 View Wind Speed & Direction**: Status: New, Assigned to Linges C.
- 8 View Hourly Weather Forecast**: Status: New, Assigned to Linges C.
- 31 Receive Daily Weather Updates**: Status: New, Assigned to Linges C.
- 32 Set Custom Weather**: Status: New, Assigned to Linges C.

Sprint 2



The screenshot shows the Azure DevOps Taskboard for the WeatherWiz project. The left sidebar is collapsed, and the main area displays a taskboard for 'Iteration 2'. The board has columns for New, Active, Resolved, and Closed. There are four tasks visible:

- 68 Subscribe to Weekly Weather Summary Emails**: Status: New, Assigned to Kishore JM.
- 69 Generate Weekly Summary Content**: Status: New, Assigned to Kishore JM.
- 70 Send Weekly Weather Summary Emails**: Status: New, Assigned to Kishore JM.
- 71 Customize Weekly Email Preferences**: Status: New, Assigned to Kishore JM.

Sprint 3

The screenshot shows the Azure DevOps Sprints board for the WeatherWiz - Your Personal Weather Companion Team. The board displays four work items in Iteration 3:

- 72 Daily Outfit Suggestions Based on Weather (New, assigned to KEERTHI HAASAN K)
- 73 Set Outfit Style and Preference Settings (New, assigned to 231001098)
- 74 Visual Outfit Display with Weather Context (New, assigned to 231001098)
- 77 Suggest Optimal Appliance Usage Times (New)

The board has columns for New, Active, Resolved, and Closed. The New column contains the four work items listed above. The Active, Resolved, and Closed columns are currently empty.

2116231001095

CS23432

Result:

The Sprints are created for the WeatherWiz Project.

EXP NO: 5

POKER ESTIMATION

Aim:

Create Poker Estimation for the user stories - WeatherWiz - Weather Companion Project.

Poker Estimation

The screenshot shows the Azure DevOps interface for a user story titled "72 Daily Outfit Suggestions Based on Weather". The story is assigned to KEERTHI HAASAN K and has 0 comments. It is in the "New" state under the "WeatherWiz - Your Personal Weather Companion" area and iteration. The description states: "As a user, I want to receive daily outfit recommendations that match the weather forecast so I can dress appropriately and comfortably." The acceptance criteria include: "Outfit suggestions reflect real-time weather (temperature, rain, wind).", "Suggestions are updated daily in the morning.", "Each recommendation includes top, bottom, shoes, and accessory (e.g., umbrella, sunglasses).", and "Content refreshes automatically if weather updates significantly.". The planning section shows Story Points at 3, Priority at 2, and Risk at 2 - Medium. The deployment section indicates that releases are tracked via Azure Pipelines. The classification section lists Value area as Business and Geek as Gleek. The discussion section contains the text "9|eek_". The related work section is currently empty.

Result:

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

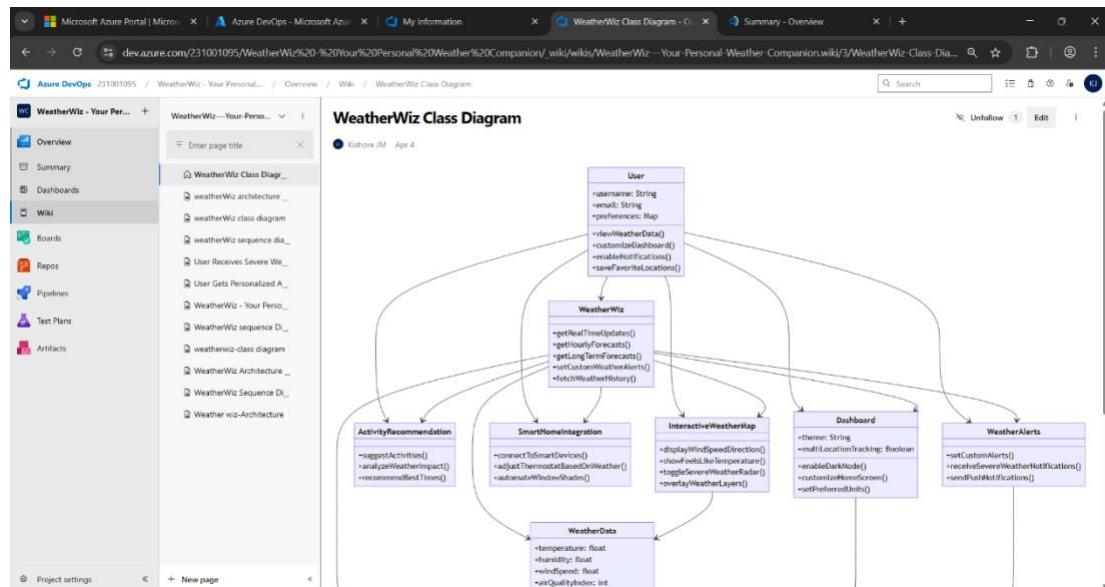
EXP NO: 6

DESIGNING CLASS AND SEQUENCE DIAGRAMS FOR PROJECT ARCHITECTURE

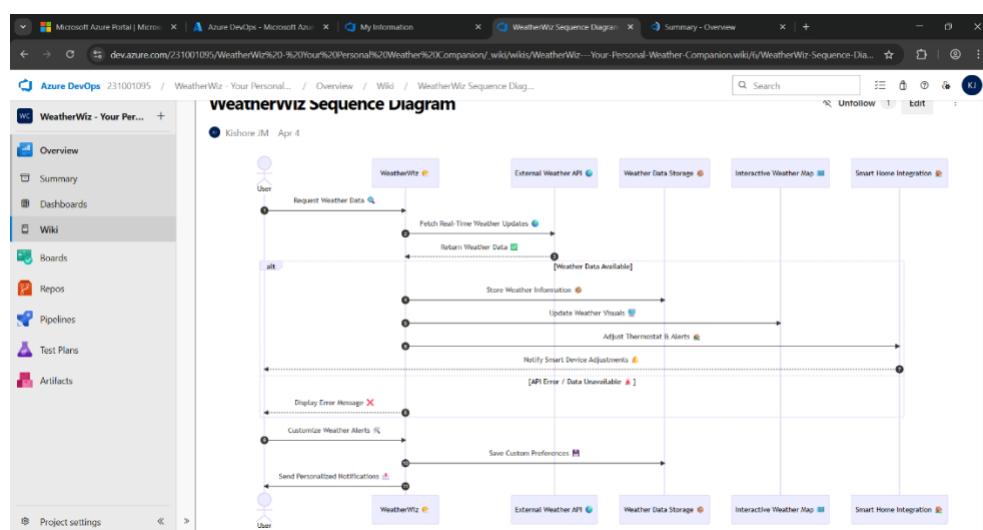
Aim:

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.

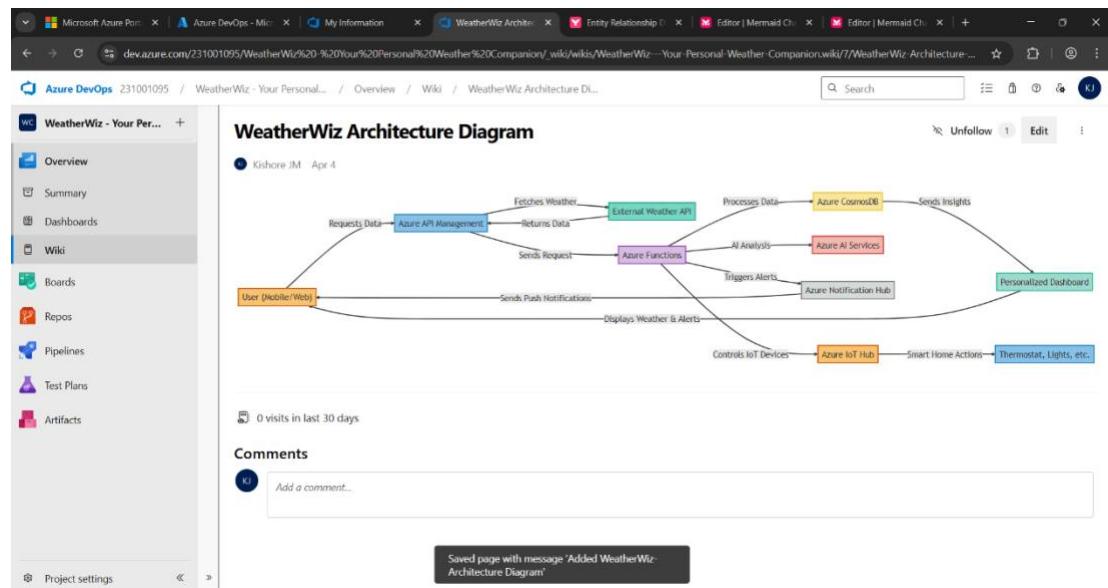
EXP NO: 7

DESIGNING ARCHITECTURAL AND ER DIAGRAMS FOR PROJECT STRUCTURE

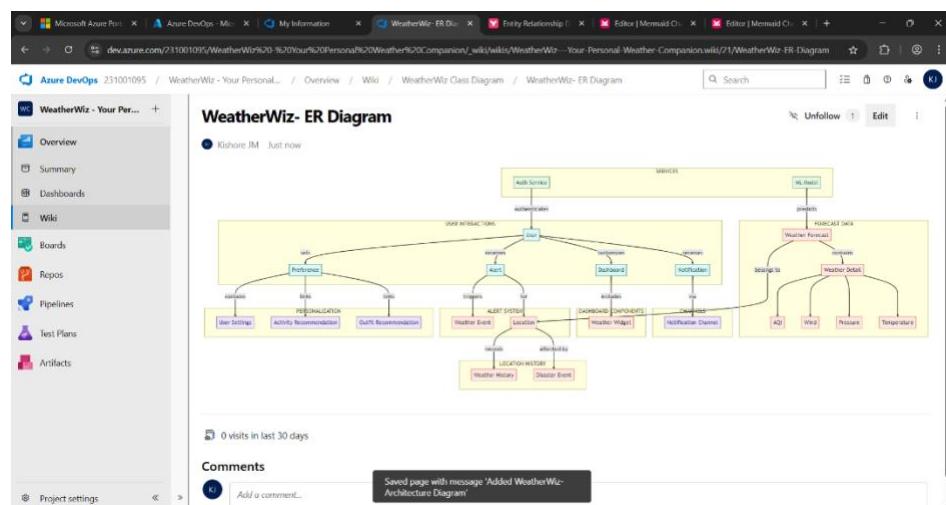
Aim:

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 WeatherWiz - Weather Companion.

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**

- View Current Weather by Location
- Hourly and Weekly Forecasts
- Severe Weather Alerts
- Add and Manage Favorite Locations
- View Weather by Categories (e.g., temperature, wind, precipitation)
- Weather-Based Recommendations (e.g., clothing, travel tips)

2. Define User Interactions

Each test case simulates a real user behavior such as :

- Logging in
- Searching for a city's weather
- Adding a location to favorites
- Viewing extended forecast
- Receiving alerts or recommendations

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 city to favorites, or Receives accurate 7-day forecast.

4. Design Error Path Test Cases

- Simulate negative or unexpected scenarios to test robustness and error handling.
- Example: Login fails with invalid credentials, Weather data fetch fails due to no internet, Invalid city name entered in search.

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, TC08 – Add Favorite Location).
- Helps in quick identification and linking to user stories or features.

7. Separate Test Suites

- Grouped test cases based on functionality (e.g., Login, Weather Data Retrieval, Forecast and Alerts, Recommendations and Tips).

8. Prioritize and Review

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

1. New test plan

The screenshot shows the 'New Test Plan' dialog in the Azure DevOps interface. On the left, there's a sidebar with project navigation: Overview, Boards, Repos, Pipelines, Test Plans (selected), Test plans, Progress report, Parameters, Configurations, Runs, Artifacts, and Project settings. The main area has three input fields: 'Name' (WeatherWiz - Test Plan), 'Area Path' (WeatherWiz - Your Personal Weather Companion), and 'Iteration' (WeatherWiz - Your Personal Weather Companion/Iteration 3). At the bottom right are 'Create' and 'Cancel' buttons.

2. Test suite

The screenshot shows the 'Test Plan' page in the Azure DevOps interface. The sidebar on the left is identical to the previous screenshot. The main area displays a 'Test Suites' section with a 'New Suite' button. A context menu is open over the 'New Suite' button, containing options: 'New Suite', 'Assign configurations', 'Export', 'Open', 'Assign testers to run all tests', 'Rename', 'Delete', and 'Import test suites'. Below the menu, there's a section titled 'Add a test case' with a 'New Test Case' button.

3. Test case

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

WeatherWiz - Weather Companion– Test Plans

USER STORIES

- As a user, I want to get real-time weather updates (ID: 201).
- As a user, I want to see weather by location (ID: 202).
- As a user, I want to save favorite cities for quick access (ID: 203).
- As a user, I want weather alerts (e.g., rain, storm) (ID: 204).
- As a user, I want to customize temperature units (Celsius/Fahrenheit) (ID: 205).

Test Suites

Test Suit: TS01 - Real-Time Weather Updates (ID: 301)

1. TC01 – Real-Time Weather Display

- **Action:**
 - Open app.
 - Enable device location
 - Wait for weather to load
- **Expected Results:**
 - Current temperature.
 - Weather condition.
 - Icon display correctly.
- **Type:** Happy Path

2. TC02 – No Internet Weather Error

- **Action:**
 - Turn off Wi-Fi/Mobile Data.
 - Open the app.
- **Expected Results:**
 - Message: “Cannot fetch weather. Please check your internet connection.”
- **Type:** Error Path

Test Suit: TS02 - Location-Based Weather Search (ID: 302)

1. TC03 – Search Weather for a City

- **Action:**
 - Tap “Search”.
 - Enter “Delhi”.
- **Expected Results:**
 - Weather info for Delhi is displayed.
- **Type:** Happy Path

2. TC04 – Invalid City Search

- **Action:**

- Tap “Search”.
 - Enter "%%%%\$\$\$".
- **Expected Results:**
 - Error: “City not found. Please enter a valid city.”
- **Type:** Error Path

Test Suit: TS03 - Manage Favorite Cities (ID: 303)

1. TC05 – Add City to Favorites

- **Action:**
 - Search for a city.
 - Tap “★” to add it to favorites.
- **Expected Results:**
 - City added to “Favorites” list.
- **Type:** Happy Path

2. TC06 – Add Duplicate Favorite

- **Action:**
 - Try adding same city again.
- **Expected Results:**
 - Message: “City already exists in favorites”.
- **Type:** Error Path

Test Suit: TS04 - Weather Alerts (ID: 304)

1. TC07 – Show Rain Alert

- **Action:**
 - App detects rain in forecast.
- **Expected Results:**
 - User receives in-app or push alert: “Rain expected today”.
- **Type:** Happy Path

2. TC08 – Alert Fails to Trigger

- **Action:**
 - Alert is enabled.
 - Forecast has storm.
 - No alert shown.
- **Expected Results:**
 - Fallback message: “Alert system unavailable. Please check manually.”
- **Type:** Error Path

Test Suit: TS05 - Unit Preferences (ID: 305)

1. TC09 – Switch to Fahrenheit

- **Action:**
 - Go to Settings.
 - Select “Fahrenheit”.
- **Expected Results:**
 - Weather values are updated to °F.
- **Type:** Happy Path

2. TC10 – Unit Switch Fails

- **Action:**
 - Go to Settings.
 - Tap on unit toggle.
 - No change occurs.
- **Expected Results:**
 - Error: "Unable to update units. Please try again.".
- **Type:** Error Path

Test Suit: TS06 - Weather Widget Integration (ID: 306)

1. TC11 – Display Weather on Home Widget

- **Action:**
 - Add WeatherWiz widget to the home screen.
 - Allow location access.
- **Expected Results:**
 - Widget displays current temperature and condition (e.g., "26°C – Cloudy").
- **Type:** Happy Path

2. TC12 – Widget Fails Without Permission

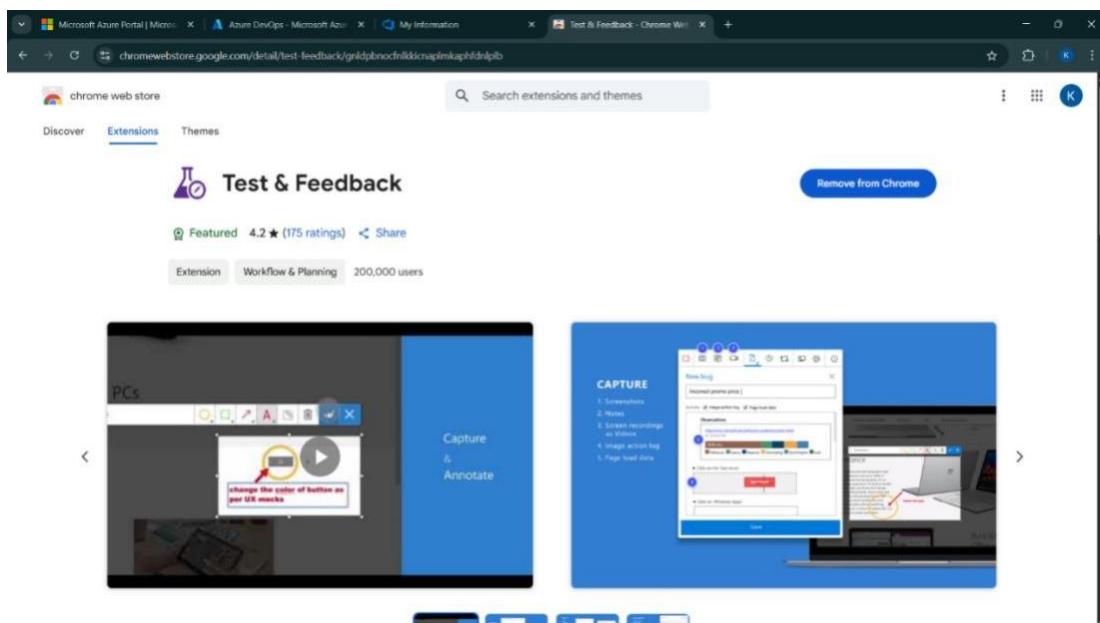
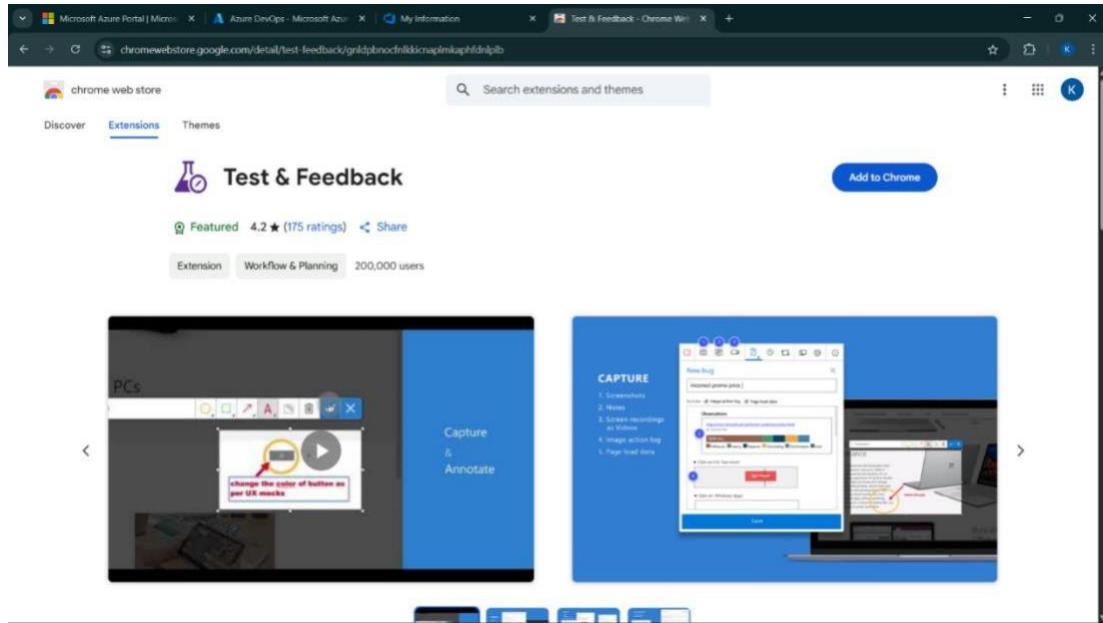
- **Action:**
 - Add widget.
 - Deny location permission.
- **Expected Results:**
 - Message on widget: "Enable location to display weather".
- **Type:** Error Path

Test Cases

The screenshot shows the Azure DevOps Test Plan interface for a test case titled "103 No Internet Weather Error". The test case is assigned to "Kishore JM" and is in the "Design" state. The area is "WeatherWiz - Your Personal Weather Companion" and the iteration is "WeatherWiz - Your Personal Weather Companion\Iteration 3". The "Steps" section contains two steps: 1. Turn off Wi-Fi/Mobile Data (Expected result: Message: "Cannot fetch weather. Please check your internet connection.") and 2. Open the app. The "Deployment" section provides instructions on tracking releases. The "Related Work" section shows a link to "Current Weather Display" and a test item "110 Receive Rain Alert Notifications".

The screenshot shows the Azure DevOps Test Plan interface for a test case titled "112 Alert Fails to Trigger". The test case is assigned to "KEERTHI HAASAN K" and is in the "Design" state. The area is "WeatherWiz - Your Personal Weather Companion" and the iteration is "WeatherWiz - Your Personal Weather Companion\Iteration 3". The "Steps" section contains three steps: 1. Alert is enabled (Expected result: Fallback: "Alert system unavailable. Please check manually."), 2. Forecast has storm, and 3. No alert shown. The "Deployment" section provides instructions on tracking releases. The "Related Work" section shows a link to "Receive Rain Alert Notifications" and a test item "110 Receive Rain Alert Notifications".

4. Installation of test



Test and feedback

Showing it as an extension

The screenshot shows the Azure DevOps interface for a project named 'WeatherWiz - Your Personal...'. The left sidebar is open, showing 'Test Plans' selected under 'Test plans'. In the main content area, a test plan titled 'WeatherWiz - Test...' is displayed, with a 'Test Suites' section containing several items like 'TS06 - Weather Widget Int...', 'TS05 - Unit Preferences (2)', and 'TS04 - Weather Alerts (2)'. A modal window titled 'TS04 - Weather Alerts (ID: 99)' is open, showing 'Test Cases (2 items)': 'Title' and 'Alert Fails to Trigger'. On the right side, a vertical 'Extensions' panel is visible, listing various extensions with 'Full access': 'Custom Cursor for Chrome™', 'Grammarly: AI Writing and...', 'MetaMask', 'Save image as Type', and 'Test & Feedback'. The 'Test & Feedback' extension is highlighted.

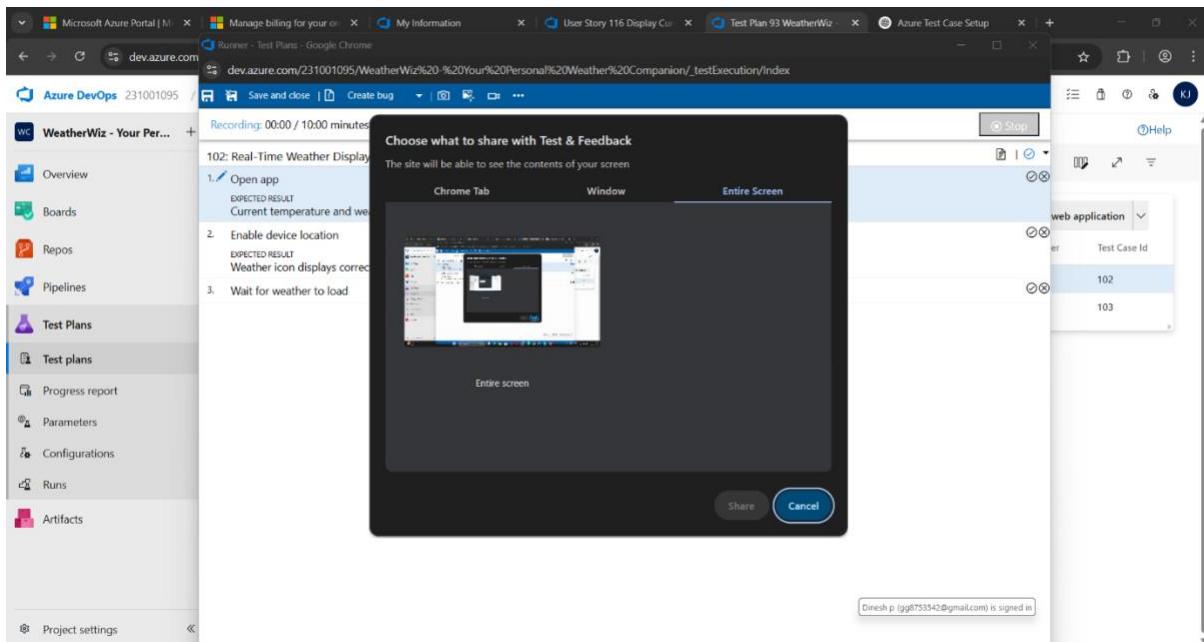
1. Running the test cases

The screenshot shows the Azure DevOps interface for the same project. The left sidebar is open, showing 'Test Plans' selected under 'Test plans'. A test case titled '102: Real-Time Weather Display' is currently being viewed. The test steps are listed as follows:

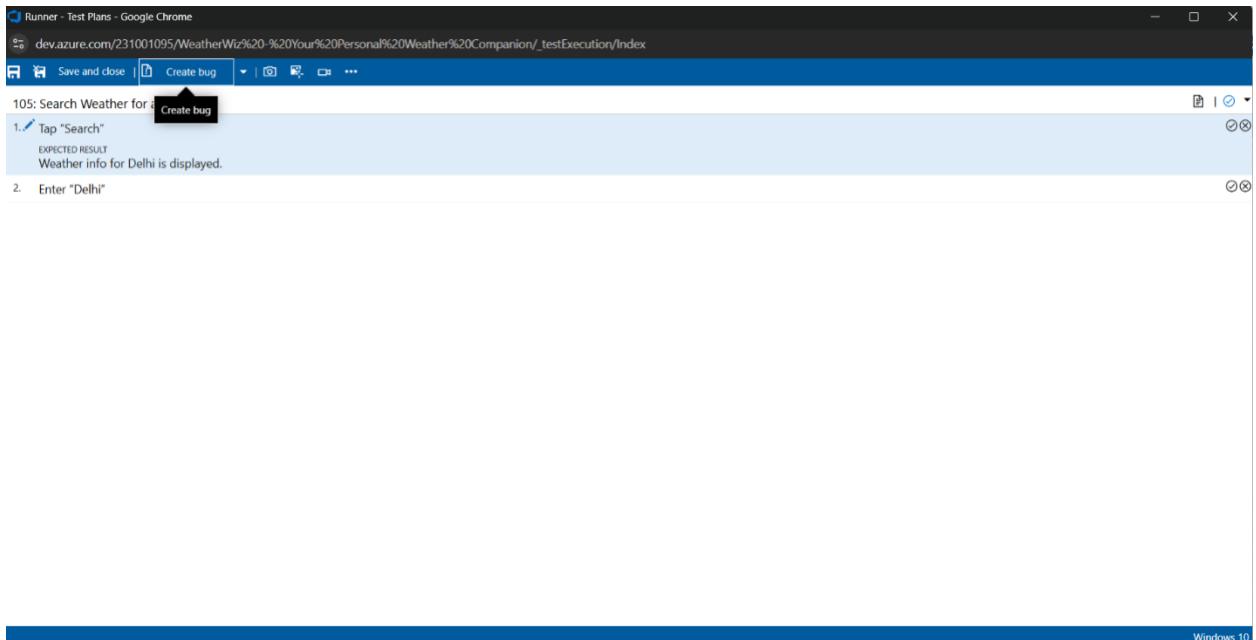
1. Open app
EXPECTED RESULT: Current temperature and weather condition are shown
2. Enable device location
EXPECTED RESULT: Weather icon displays correctly
3. Wait for weather to load

A vertical sidebar on the right shows a list of 'Test Case Id' with items 1, 2, and 3, each with a checkbox and a delete icon.

2. Recording the test case



3. Creating the bug



Runner - Test Plans - Google Chrome
dev.azure.com/231001095/WeatherWiz%20-%20Your%20Personal%20Weather%20Companion/_testExecution/Index

Save and close | Create bug | ...

103*: No Internet Weather Error

1. Turn off Wi-Fi/Mobile Data
2. Open the app

Internet Connectivity Error

NEW BUG +

Unassigned

0 comments Add tag

Save & Close

Details (2) ...

Status: New Area: WeatherWiz - Your Personal Weather Companion
Reason: New Iteration: WeatherWiz - Your Personal Weather Companion\Iteration 3

Repro Steps

5/23/2025 6:34 AM Bug filed on "No Internet Weather Error"

Step no.	Result	Title
1.	Passed	Turn off Wi-Fi/Mobile Data
2.	Failed	Open the app

Expected Result
Message: "Cannot fetch weather. Please check your internet connection."

Planning

Resolved Reason: Story Points
Priority: 2 Severity: 3 - Medium Activity: Original Estimate

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.

Windows 10

Project settings <>

Runner - Test Plans - Google Chrome
dev.azure.com/231001095/WeatherWiz%20-%20Your%20Personal%20Weather%20Companion/_testExecution/Index

Save and close | Create bug | ...

106*: Invalid City Search

1. Tap "Search" in the search bar
2. Enter "Invalid City Name"

Invalid City Name

NEW BUG +

Names Names and Named

Unassigned

0 comments Add tag

Save & Close

Details (2) ...

Status: New Area: WeatherWiz - Your Personal Weather Companion
Reason: New Iteration: WeatherWiz - Your Personal Weather Companion\Iteration 3

System Info

Browser - Name	Google Chrome 136
Browser - Language	en-US
Browser - Height	764
Browser - Width	1483
Browser - User agent	Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/136.0.0.0 Safari/537.36
Operating system - Name	Windows NT 10.0; Win64; x64
Operating system - Architecture	x86_64
Operating system - Processor model	12th Gen Intel(R) Core(TM) i5-12450H
Operating system - Number of processors	12
Memory - Available	7054331904
Memory - Capacity	16831893504

Completed

Gleek

9|eek_-

Tested By: Gleek 106 Invalid City Search Updated 37 minutes ago, ● Design

System Info

Found in Build
Integrated in Build

Windows 10

4. Test case results

The screenshot shows the Azure Test Case Setup interface. On the left, the navigation bar includes 'WeatherWiz - Your Personal...', 'Overview', 'Boards', 'Repos', 'Pipelines', 'Test Plans', 'Test plans' (which is selected), 'Progress report', 'Parameters', 'Configurations', 'Runs', and 'Artifacts'. Below this is 'Project settings'. The main area displays a 'Test Suites' list with 'May 22 - May 29' and a 'Current' button. Under 'Test Suites', 'WeatherWiz - Test Plan' is expanded, showing 'TS06 - Weather Widget Int...', 'TS05 - Unit Preferences (2)', 'TS04 - Weather Alerts (2)', 'TS03 - Manage Favorite Ci...', 'TS02 - Location-Based We...', and 'TS01 - Real-Time Weather ...'. A modal window titled 'TS02 - Location-Based Weather Se...' is open, showing the 'Execute' tab selected. It lists 'Test Points (2 items)': 'Search Weather for a City' (Failed) and 'Invalid City Search' (Passed). The status bar at the bottom right says 'Open execution history for current test point'.

5. Test report summary

The screenshot shows the Azure Boards interface. The left sidebar includes 'WeatherWiz - Your Personal...', 'Overview', 'Boards' (selected), 'Backlogs', 'Sprints', 'Queries', 'Delivery Plans', 'Analytics views', 'Repos', 'Pipelines', 'Test Plans', 'Artifacts', and 'Project settings'. The main area shows a 'Work Items' list with a 'NEW BUG' entry. The details for the bug are as follows:

- Title:** App fails to show "No Internet" message on weather fetch failure
- Assignee:** Kishore JM
- State:** New
- Reason:** New
- Area:** WeatherWiz - Your Personal Weather Companion
- Iteration:** WeatherWiz - Your Personal Weather Companion\Iteration 3
- Device:** Samsung Galaxy A52 / iPhone 13
- Network:** No internet (Wi-Fi and mobile data disabled)
- Environment:** Production
- Effort (Hours):** Original Estimate
- Remaining:** Remaining
- Completed:** Completed
- Discussion:** A comment box with placeholder text: 'Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.'
- Gleek:** geek_
- System Info:** Found in Build, Integrated in Build

- Assigning bug to the developer and changing state

6. Progress report

The screenshot shows the Azure DevOps interface for a project named "WeatherWiz - Your Per...". The left sidebar is open, showing options like Overview, Boards, Repos, Pipelines, Test Plans, Progress report (which is selected), Parameters, Configurations, Runs, and Artifacts. The main area is titled "Progress report" and displays a summary of test plans and points, along with an "Outcome trend" chart for the last 14 days.

Summary

- 1 Test plans
- 12 Test points
- 12 (12 / 12) Test points run (100% Run)
- 83% (10 / 12) Pass rate (10 Passed, 2 Failed)

Outcome trend

Last 14 Days

Date	Passed	Failed
2025-05-09	0	0
2025-05-10	0	0
2025-05-11	0	0
2025-05-12	0	0
2025-05-13	0	0
2025-05-14	0	0
2025-05-15	0	0
2025-05-16	0	0
2025-05-17	0	0
2025-05-18	0	0
2025-05-19	0	0
2025-05-20	0	0
2025-05-21	0	0
2025-05-22	10	2
2025-05-23	10	2

7. Changing the test template

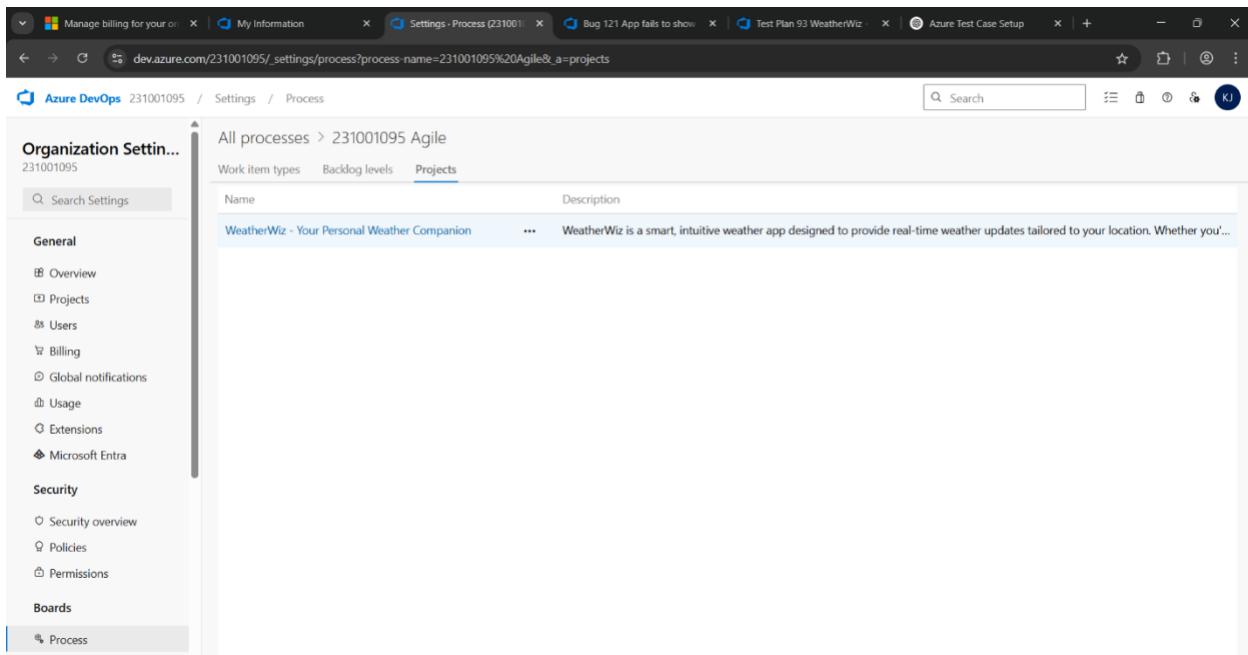
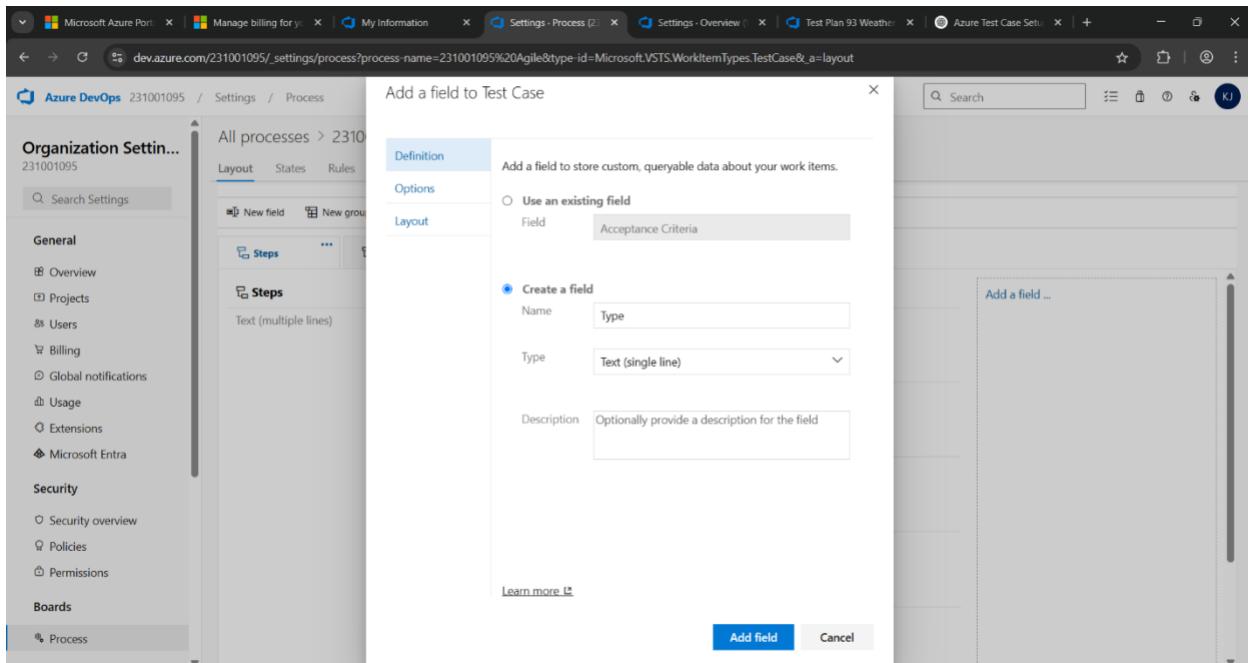
The screenshot shows the "Settings - Process" page in the Azure DevOps interface. The left sidebar includes sections for General (Overview, Projects, Users, Billing, Global notifications, Usage, Extensions, Microsoft Entra), Security, and Boards. The main area lists "All processes" with four options: Basic (default), Agile, Scrum, and CMMI. Each template has a brief description and a "Team projects" column indicating the number of projects using it.

Name	Description	Team projects
Basic (default)	This template is flexible for any process and great for teams getting started with Az...	0
Agile	... This template is flexible and will work great for most teams using Agile planning me...	1
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 improv...	0

The screenshot shows the 'All processes' section of the Azure DevOps Settings - Process page. The left sidebar is titled 'Organization Settings' and includes sections for General, Security, Boards, Pipelines, and Process (which is currently selected). The main content area displays a table of process 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

8. View the new test case template



The screenshot shows the Azure DevOps Settings - Process page for a specific organization setting (231001095). The current view is the 'Test Case' layout configuration. The left sidebar lists various settings categories like General, Security, and Boards. The main area displays the 'Layout' tab for the 'Test Case' section. It includes sections for 'Steps' (Text (multiple lines)), 'Recent test results' (Recent test case results), 'Deployment' (Deployments), 'Development' (Links), 'Related Work' (Links), 'Status' (Type: Text (single line)), and 'Priority' (Integer). There are also tabs for 'States' and 'Rules'.

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:

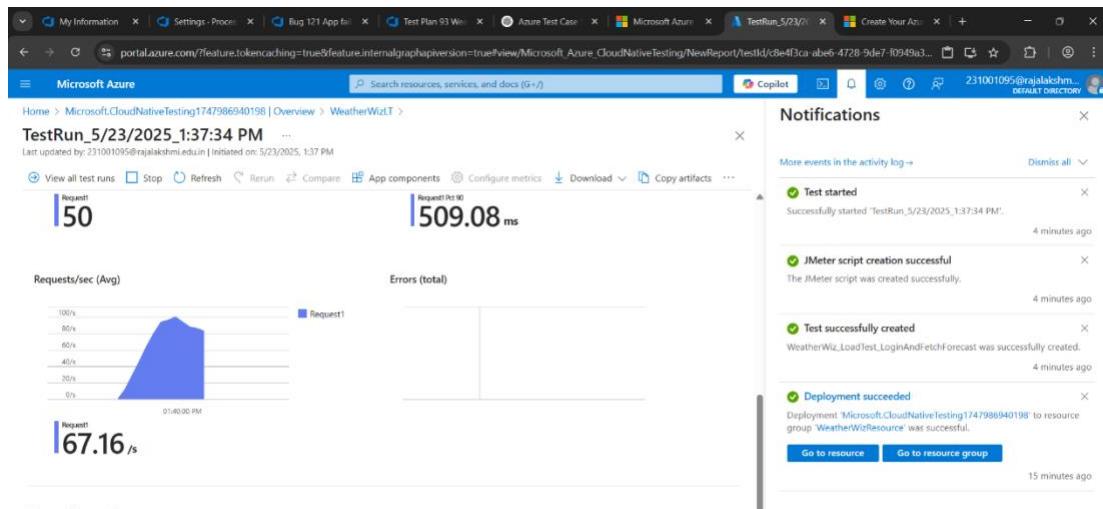
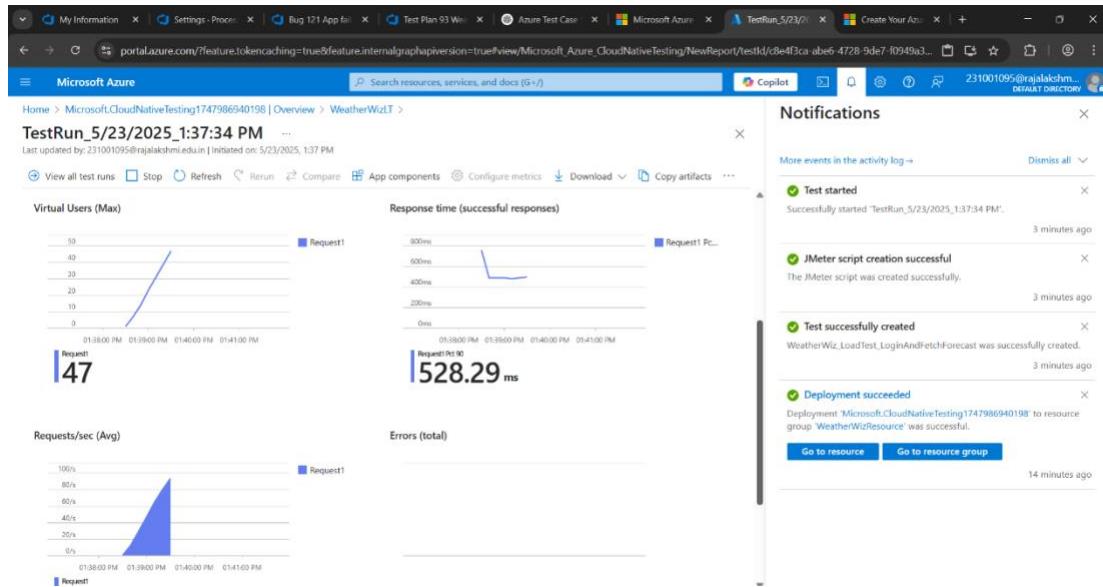
1. Sign in to Azure Portal
Go to <https://portal.azure.com> and log in.
2. Create the Resource
 - o Go to *Create a resource* → Search for “Azure Load Testing”.
 - o Select Azure Load Testing and click Create.
3. Fill in the Configuration Details
 - o *Subscription*: Choose your Azure subscription.
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

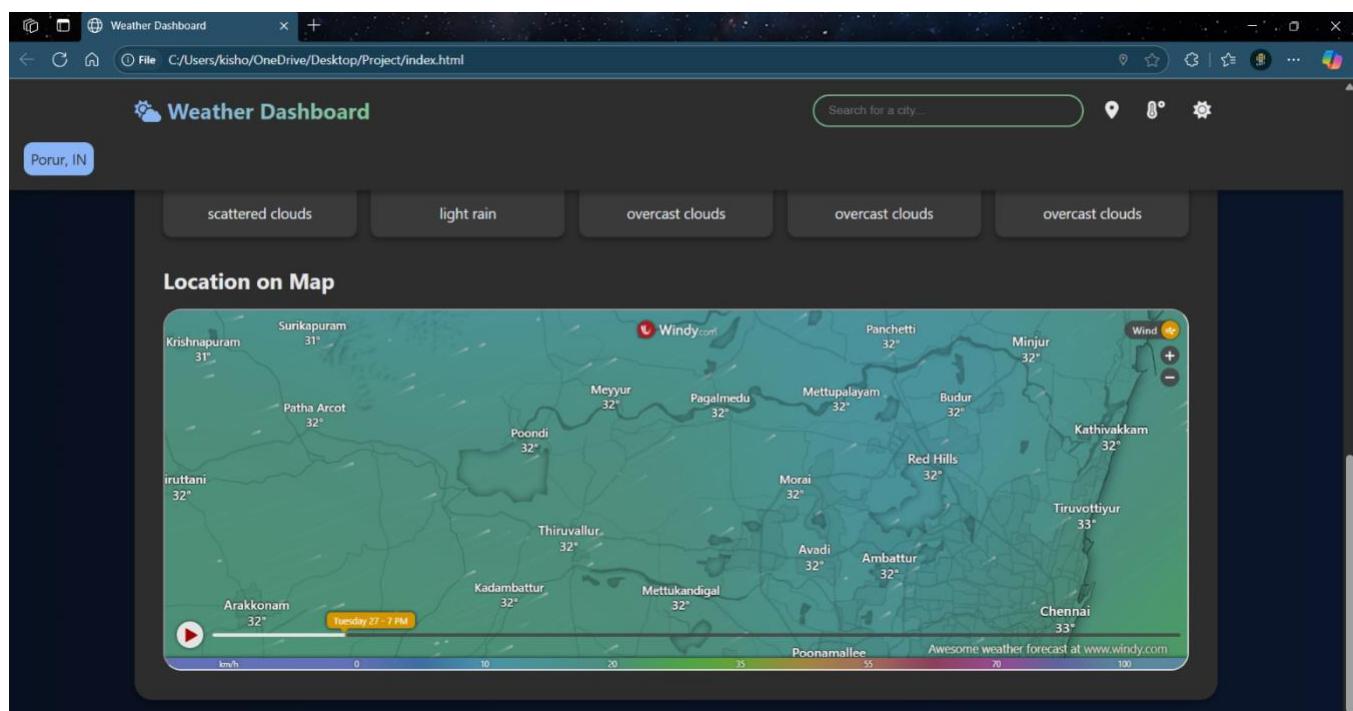
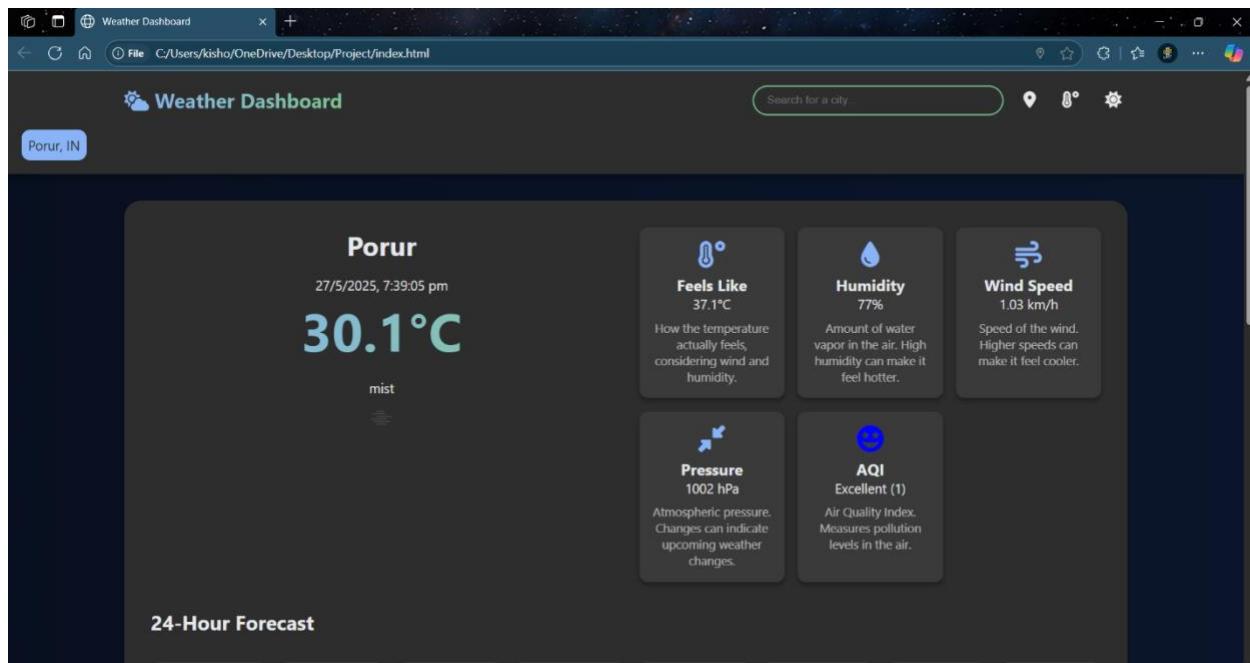
Steps to Create and Run a Load Test:

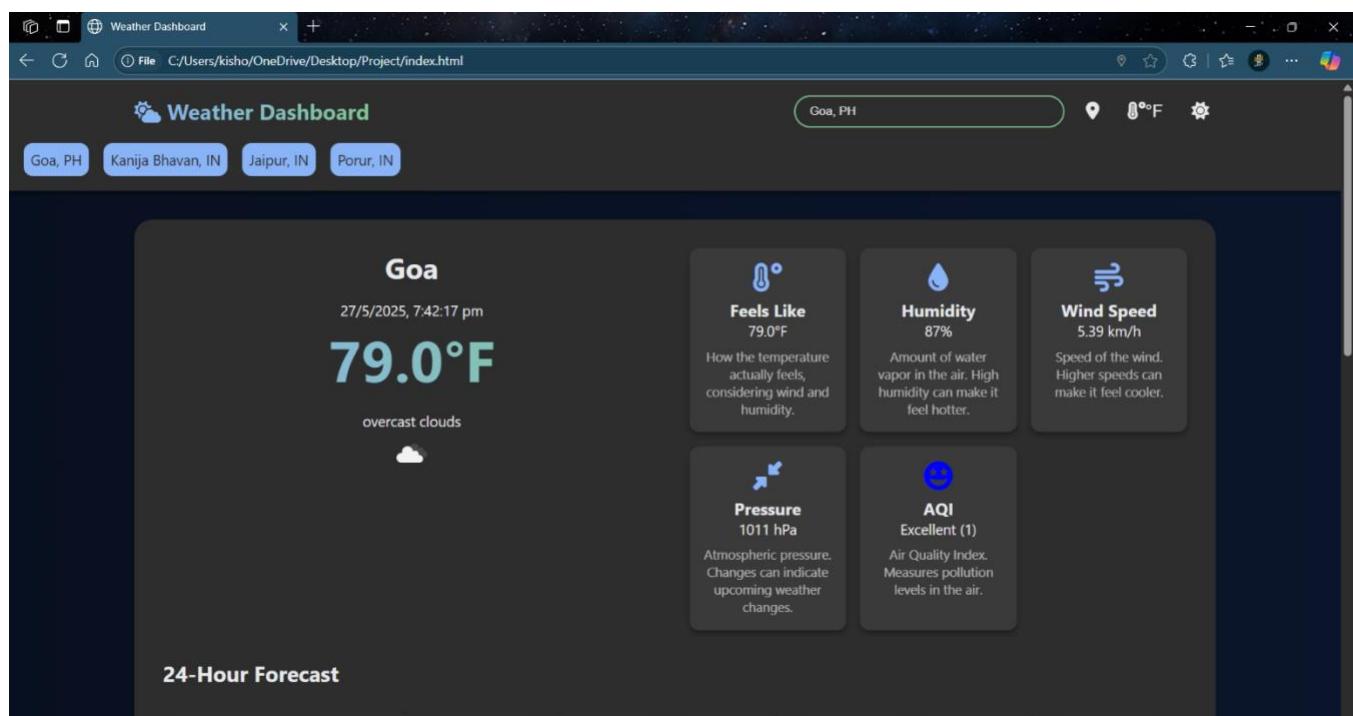
Once your resource is ready:

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.

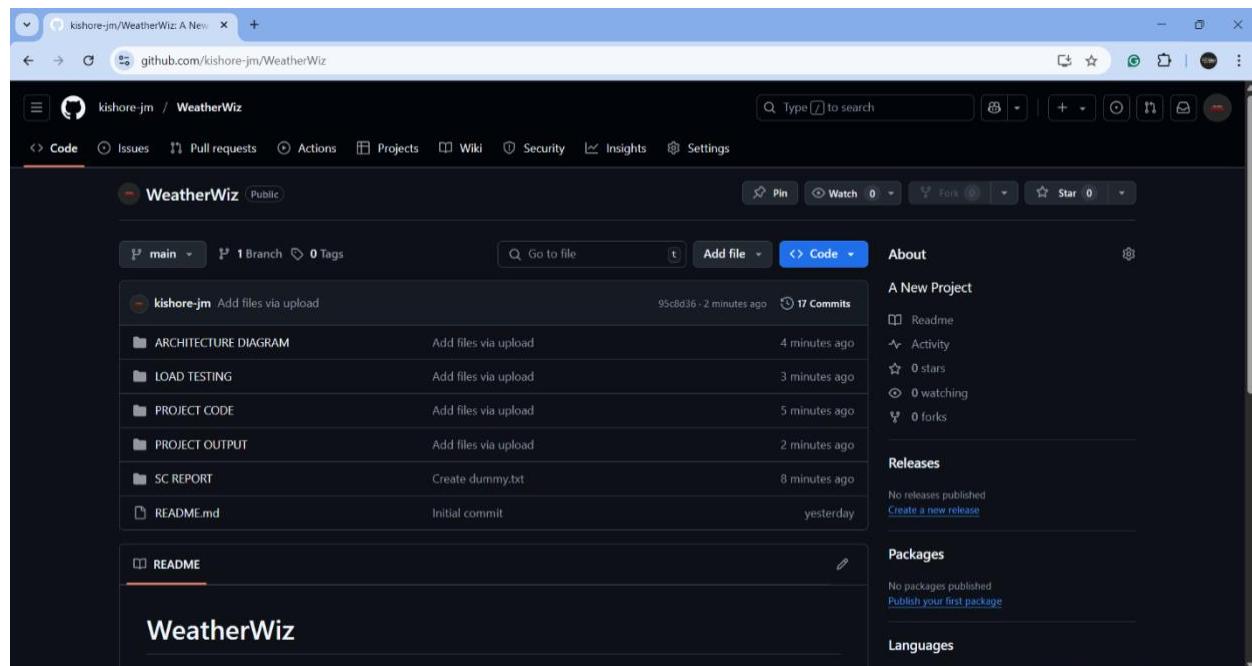
EXP NO: 10

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 WeatherWiz - Weather Companion 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.