CLASS: F.Y. MCA   **SEM: I AY:24-25**

COURSE CODE: MC504   **SUBJECT NAME: SOFTWARE ENGINEERING LAB**

ROLL NO: 2024510001   **BATCH: A**

NAME: ATHARVA VASANT ANGRE

EXPERIMENT NO: 01

EXPERIMENT TITLE: Prepare User Stories, product backlog

Objective:

1. To understand difference between Epic and a User Story

2. To write the Acceptance criteria from developers' point of view.

3. To create a CRC and Product backlog.

Abstract:

Attendance Management System

Traditional attendance methods in classrooms, such as calling roll numbers or passing around attendance sheets, have remained unchanged for years. These methods are time-consuming, error-prone, and often result in issues like proxy attendance. Additionally, the manual process generates physical records that are rarely used after the term and contribute to environmental waste when discarded.

Modern technological systems have improved the process but still lack transparency for students and institutions. As a result, students are often unaware of their attendance status until they face problems like being placed on defaulter lists, which can cause complications for educational institutions.

This project aims to address the shortcomings of both traditional and modern attendance systems. By implementing advanced technology, the system will provide greater visibility for both students and institutions, ensuring a smoother and more efficient attendance management process

Functions:

The system comprises of 4 major modules and their sub modules as follows:

1. Admin Login:
   a. Register the Students.
   b. Delete the Students Record.
   c. Update the Students Record.

d. Generate the defaulter's List.

e. View the defaulter's List.

f. View a specific Student's Attendance.

2. Student Login:

a. View its overall Attendance.

b. View its Subject wise Attendance.

c. View the consolidated Attendance.

d. View the defaulter's List.

e. Reset its Login Password.

f. Raise a Complaint ticket.

3. Teaching Staff Login:

a. Verify Student's Attendance.

b. View the consolidated Attendance.

c. View a specific Student's overall Attendance.

d. View a specific Student's Subject wise Attendance.

e. View the defaulter's List.

4. Office Staff Login:

a. Verify the Defaulters List.

b. Publish the Defaulters List.

c. Resolve the Complaint raised.

d. Register a student.

LAB 1.1: Create user stories.

Epic:

EPIC ID	AS A <USER>	I WANT TO	USER STORY ID 1	USER STORY ID 2	USER STORY ID 3	USER STORY ID 4
1	Student.	Handles the attendance.	As a student I want to view the attendance data.	As a student I want to view the Defaulter's list.	As a student I want to Raise a complaint regarding the attendance.	
2	Teaching Staff	Verify and View Students attendance.	As a Teacher, I want to verify the class attendance.	As a Teacher, I want to view consolidated attendance.	As a Teacher, I want to view the students overall and subject wise attendance.	As a Teacher, I want to view the defaulter's list.
3	Office Staff	Manage defaulter list, resolve complaint raised and register student.	As an office staff, I want to verify the defaulters list.	As an office staff, I want to publish the defaulters list.	As an office staff, I want to resolve the complaint raised.	As an office staff, I want to register a student.

User Stories:

USER STORY ID	AS A <TYPE OF USER>	I WANT TO <PERFORM TASK>	SO THAT I CAN <ACHIEVE SOME GOAL>
1	Student.	Handle my attendance data.	View overall attendance list, subject wise attendance list.
2	Student.	Handle defaulter's data.	View the defaulter's list.
3	Student.	Raise a complaint.	Clarify if there is any mistake in the attendance.
4	Teacher	Verify the class's attendance.	Mark the class's Attendance.
5	Teacher	Handle the consolidated attendance.	View the overall class's attendance.
6	Teacher	Handle attendance of a specific student.	View the attendance of a specific student.
7	Teacher	Handle the Defaulter's list.	View the defaulter's list.
8	Office Staff	Manage defaulter list.	Verify the defaulters list.
9	Office Staff	Handle defaulter list.	Publish the defaulters list.
10	Office Staff	Resolve complaint raised	Resolve the complaint raised.
11	Office Staff	Register students.	To register a student.

Acceptance Criteria:

EPIC ID	EPIC	USER STORY	ACCEPTANCE CRITERIA
1	As a Student, I want to handle my attendance data.	Handle my attendance data.	-Ensure the Student is able to Login the app. -View the overall attendance. -View the subject wise attendance. -View the month wise attendance. -View the consolidated attendance.
		Handle defaulter's data.	-Ensure the Student is able to View the defaulter's list for the previous month. -View the defaulter's list for a specific month.
		Raise a complaint.	-Ensure the Student is able to raise a complaint if there is any mistake in the attendance or in the defaulter's list.
2	As a Teacher I want to verify and View Students attendance.	Verify the class's attendance.	-Mark the attendance for the class. -Modify the attendance if there are any changes. -Submit the attendance for the day.

		Handle the consolidated attendance.	-View the overall class's attendance. -View attendance trends over a specific time period (monthly, weekly, etc.).
		Handle attendance of a specific student.	-Search for and view the attendance of a specific student. -View the attendance percentage of a specific student across different subjects.
		Handle the Defaulter's list.	-View the list of students marked as defaulters. -View defaulters for a specific month or previous months. -Update the defaulter's list if necessary (e.g., if a student's attendance is corrected).
3	As an Office staff, I want to Manage defaulter list, resolve complaint raised and register student.	Manage defaulter list	-Verify the defaulters list for accuracy. - Ensure defaulter records are up-to-date and correct. - Cross-check defaulters based on attendance criteria.
		Handle defaulter list	- Publish the defaulters list. - Ensure the defaulters list is shared with relevant stakeholders (teachers, students). - Ensure the defaulters list is published on time.
		Resolve complaint raised	- Resolve the complaint raised by the student or teacher. - Ensure complaints are addressed within a specific time frame.
		Register students	- Successfully register a student in the system. - Ensure all mandatory student details are captured during registration. - Ensure students receive confirmation of registration.

LAB 1.2: Create CRC card and Product Backlog

Class Responsibility Collaborator:

Student	
-View attendance data (overall and subject-wise). -View the defaulter's list. -Raise complaints regarding attendance.	Teaching Staff Office Staff

| Teacher	
-Verify and mark class attendance. -View consolidated attendance. -View attendance of a specific student (overall and subject-wise). -View the defaulter's list.	Student Office Staff

Office Staff	
-Verify and mark class attendance. -View consolidated attendance. -View attendance of a specific student (overall and subject-wise). -View the defaulter's list.	Student Teaching Staff

Product Backlog:

User Story ID	As a <type of user>	I want to <perform some task>	So that I can <achieve some goal>	Priority	Sprint	Status
1	Student	Handle my attendance data	View overall attendance list, subject-wise attendance list	High	1	To Do
2	Student	Handle defaulter's data	View the defaulter's list	High	1	To Do

3	Student	Raise a complaint	Clarify if there is any mistake in the attendance	Medium	2	To Do
4	Teacher	Verify the class's attendance	Mark the class's attendance	High	1	In Progress
5	Teacher	Handle the consolidated attendance	View the overall class's attendance	High	1	To Do
6	Teacher	Handle attendance of a specific student	View the attendance of a specific student	Medium	2	To Do
7	Teacher	Handle the defaulter's list	View the defaulter's list	High	1	To Do
8	Office Staff	Manage defaulter list	Verify the defaulters list	High	1	To Do
9	Office Staff	Handle defaulter list	Publish the defaulters list	Medium	2	To Do
10	Office Staff	Resolve complaint raised	Resolve the complaint raised	Medium	2	To Do
11	Office Staff	Register students	To register a student	High	1	To Do

LAB 1.3: Create First project and user stories in Azure Devops

Ms Azure – Step 1: - Type Ms Azure in a Search Engine
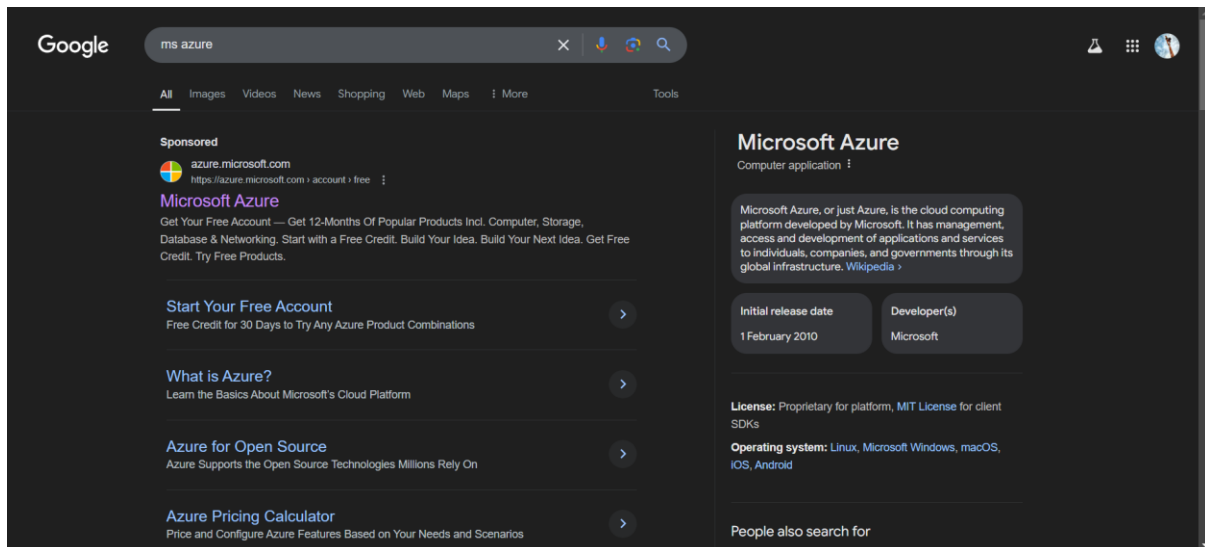
Step 2: - Click on Free Account
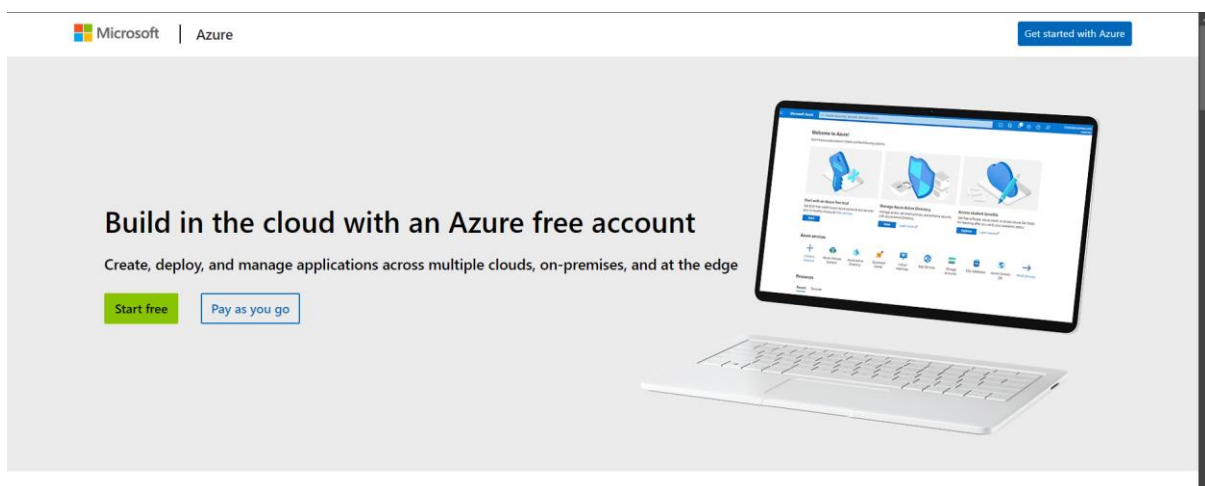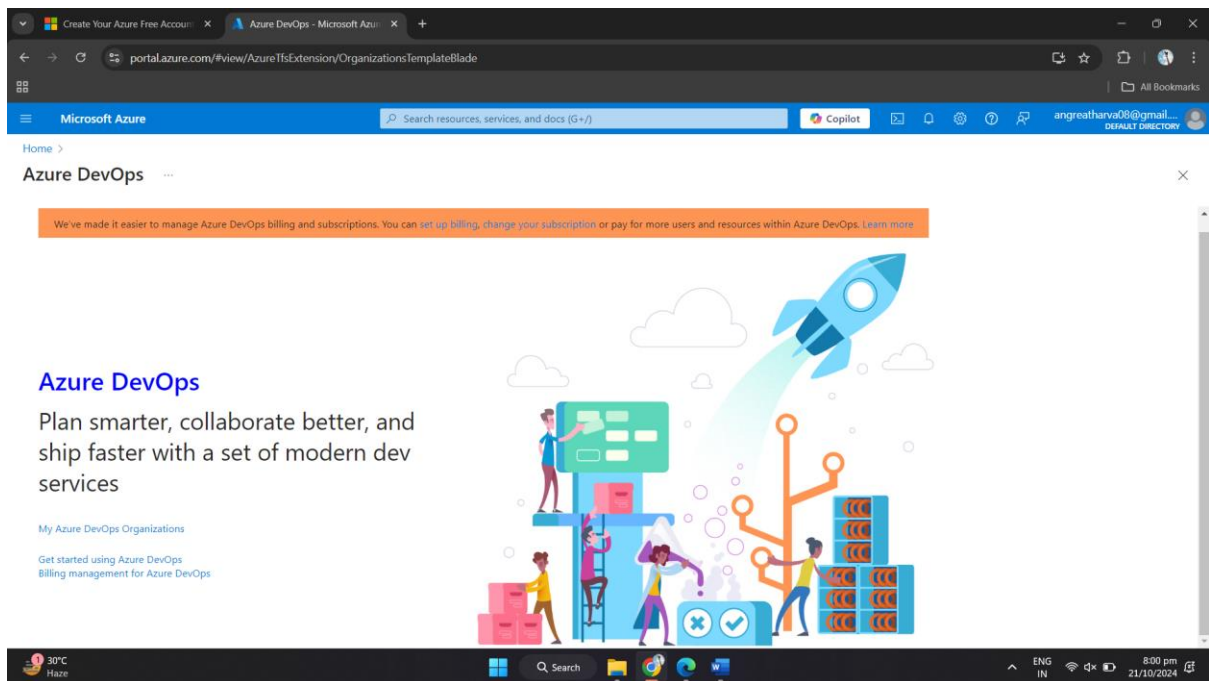

Step 3 : Click on Start Free
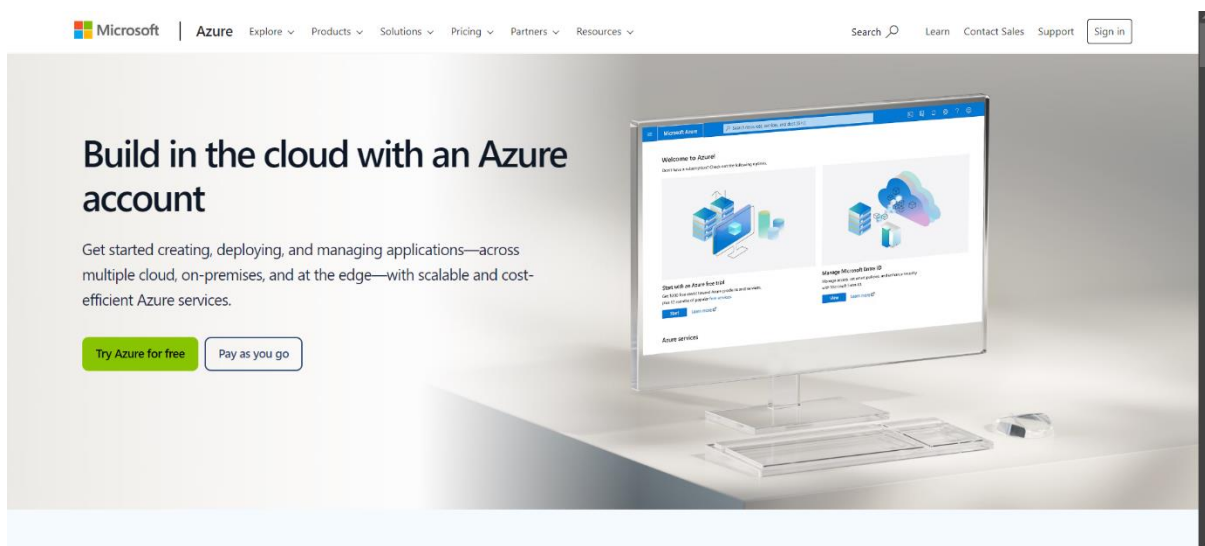
Step 4: After Creating an account with Ms Azure , you will be redirected to this screen.
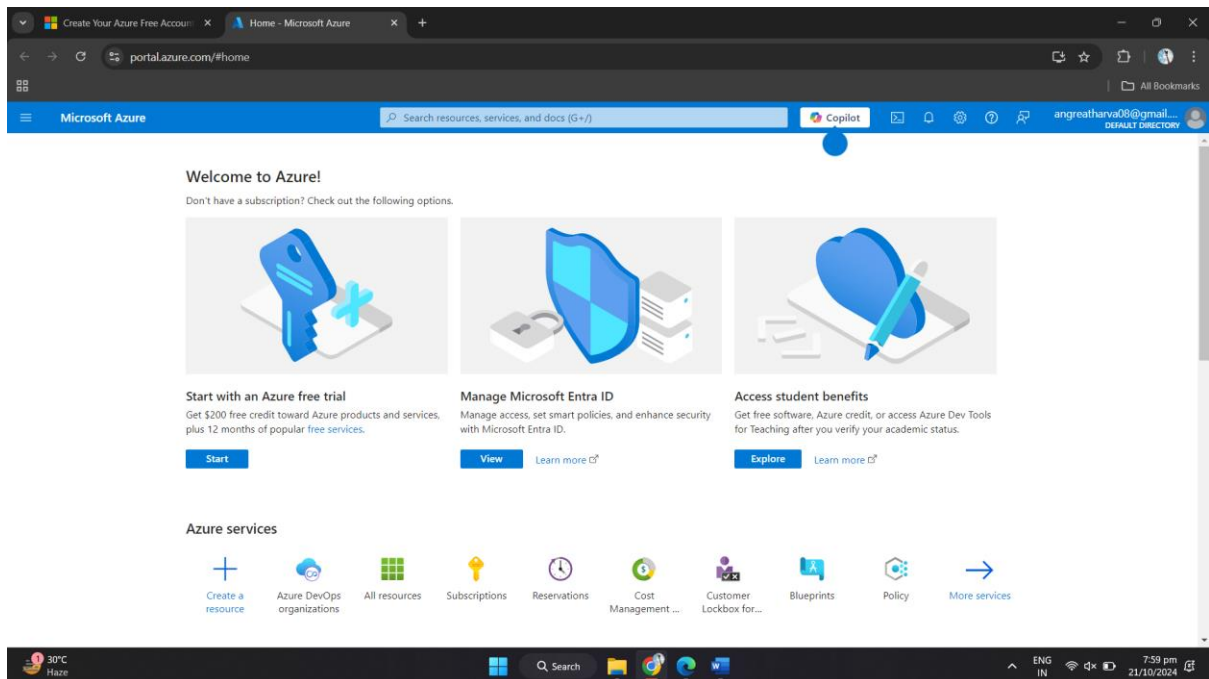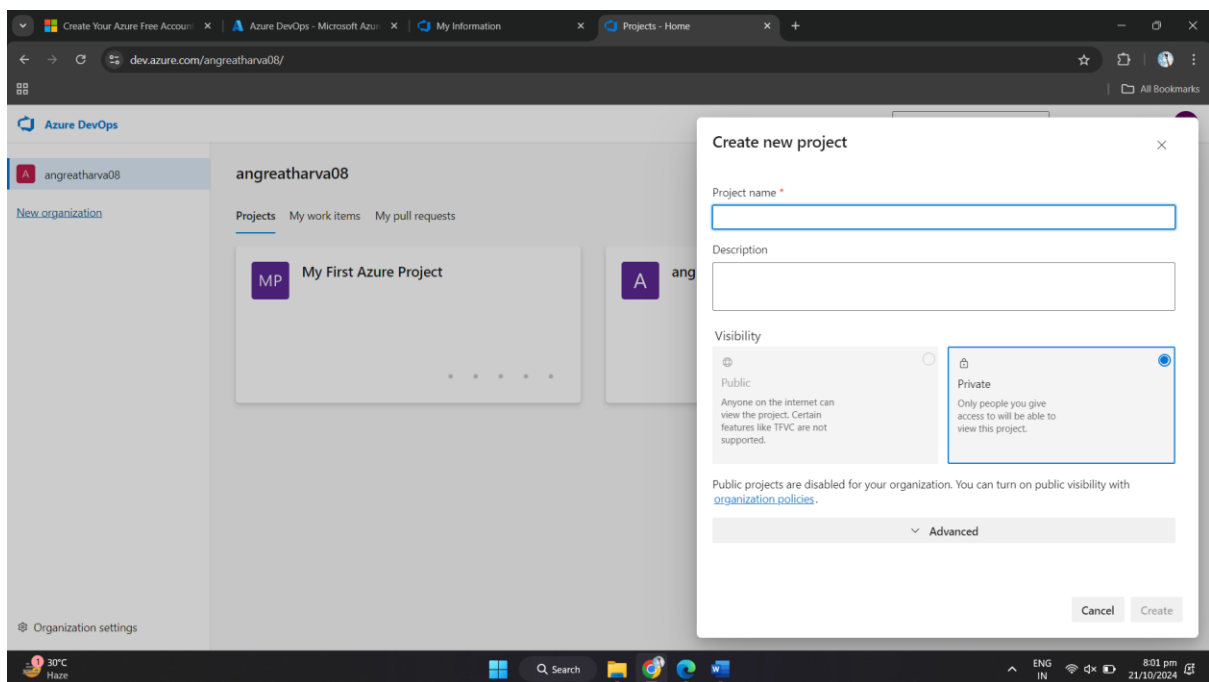

Step 5 : In Search type Azure DevOps Organization
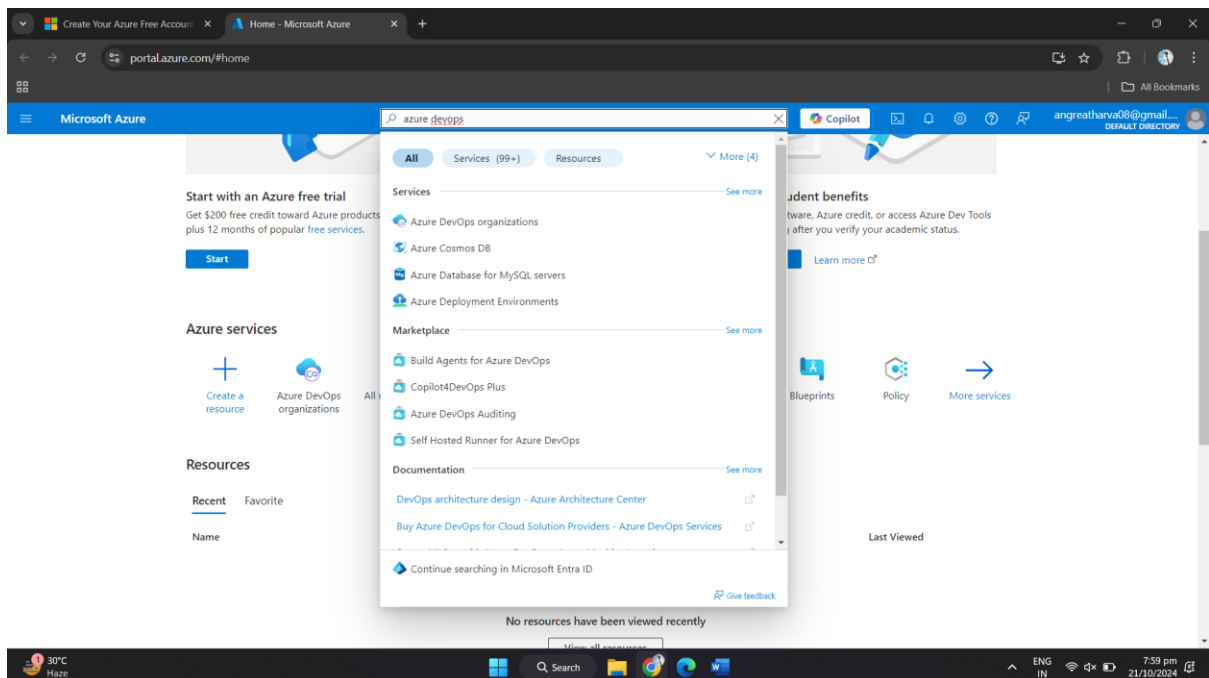
Step 6: Azure DevOps , Click on My Azure DevOps Organizations

Step 7: Click on "New Project "
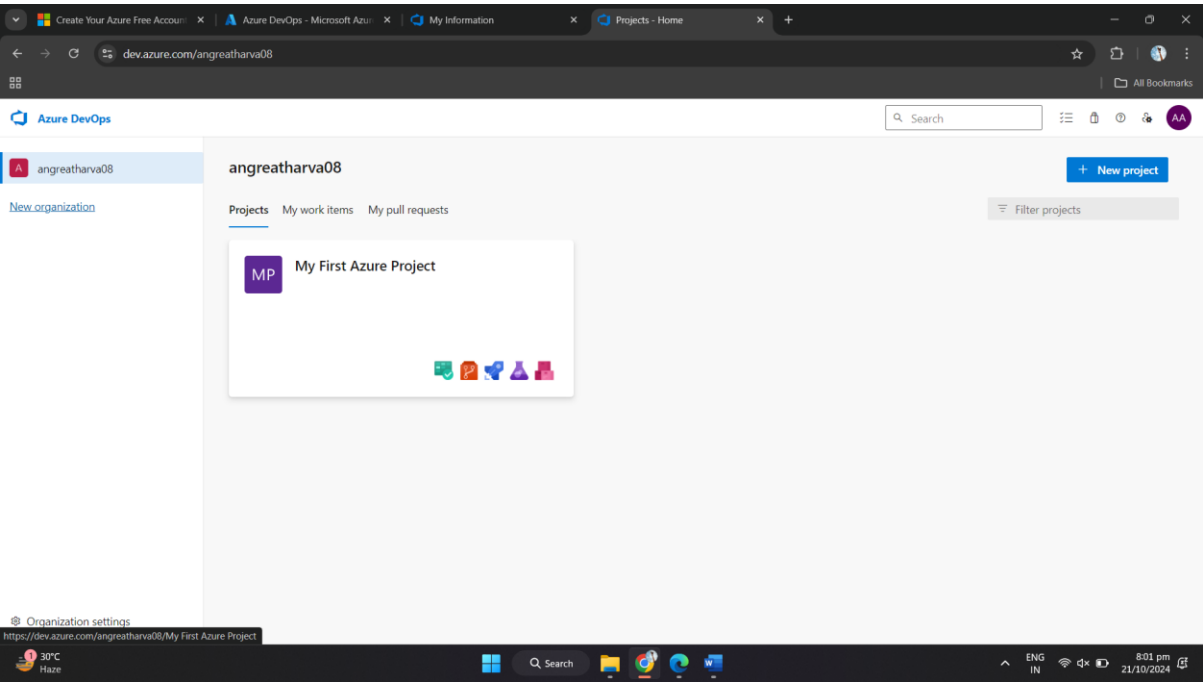

Project Name- My First Project

Create New Project: - My First Azure Project

Visibility – Private

 Advanced

Work Item Process – Agile

Click on "Create"

Step 8:- You will be redirected to this screen

Step 9:

As a User, I want to _____so that I can _____.

Epic:

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2	As a Teacher I want to verify and View Students attendance.	Verify the class's attendance.	-Mark the attendance for the class. -Modify the attendance if there are any changes. -Submit the attendance for the day.
		Handle the consolidated attendance.	-View the overall class's attendance.

			-View attendance trends over a specific time period (monthly, weekly, etc.).
		Handle attendance of a specific student.	-Search for and view the attendance of a specific student. -View the attendance percentage of a specific student across different subjects.
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Step 10:- Goto New Work Item -> User Story
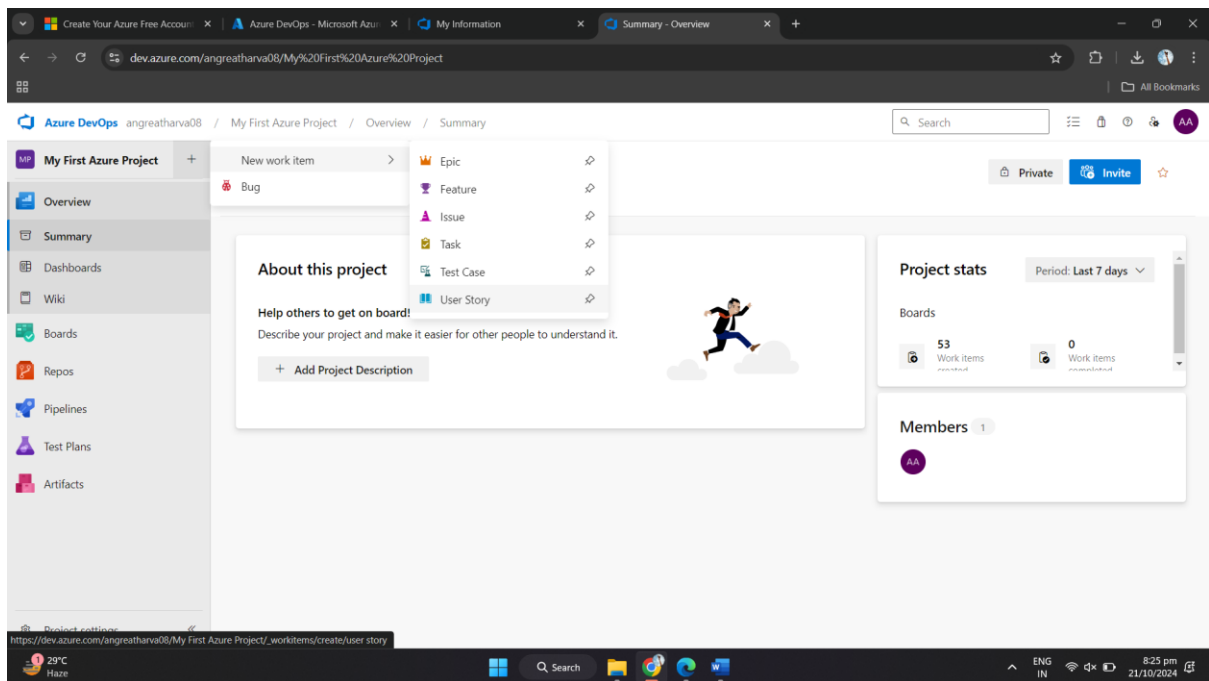
Step 11 : Add User story and Acceptance Criteria
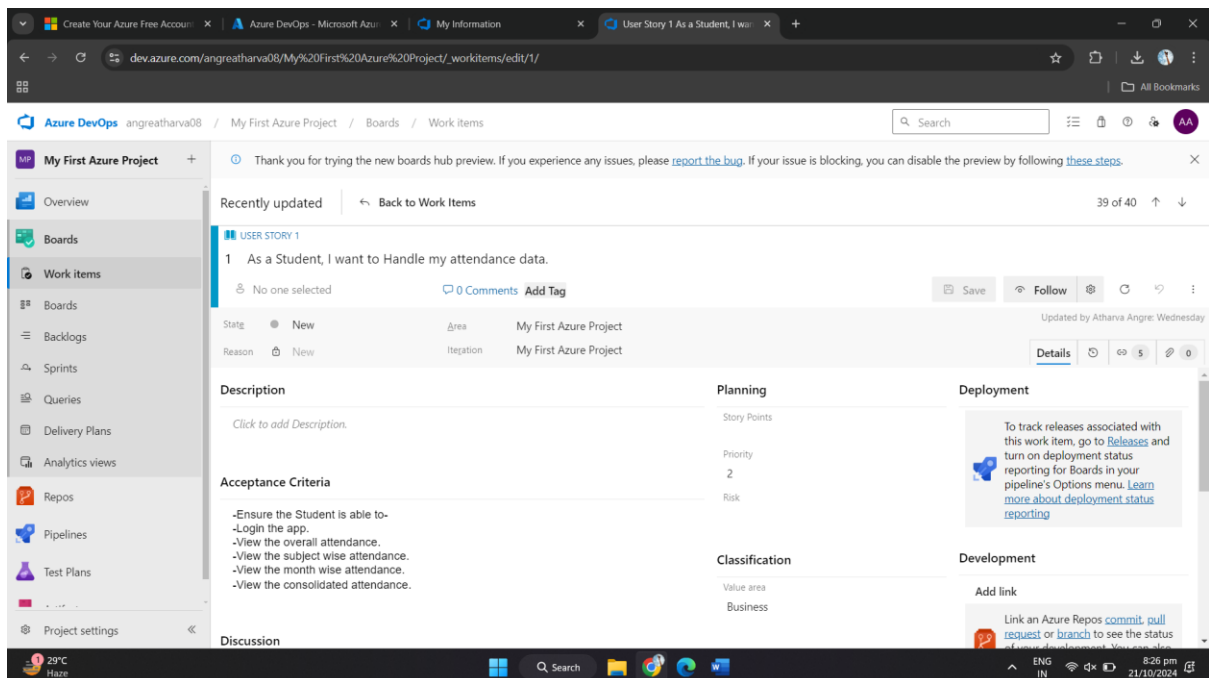
Step 12: Go to Test Plans
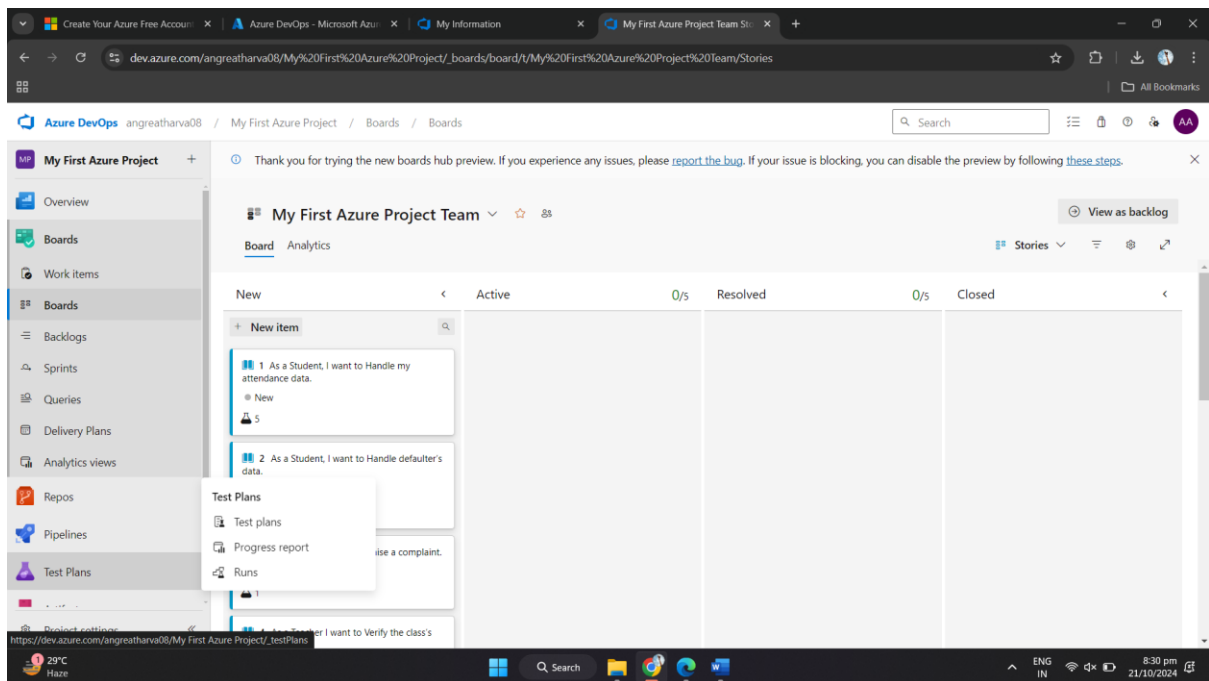
Step 13 : To add and Run a Test in Azure, GoTo Boards
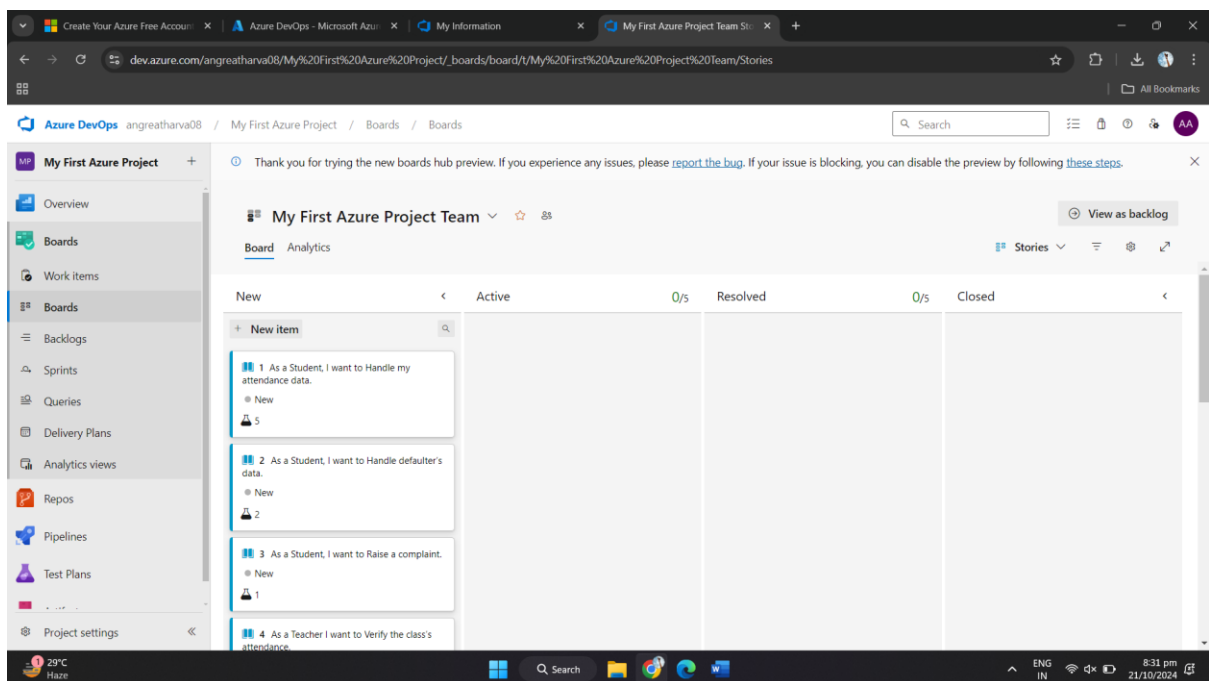
Step 14 – Go to add test from each user story
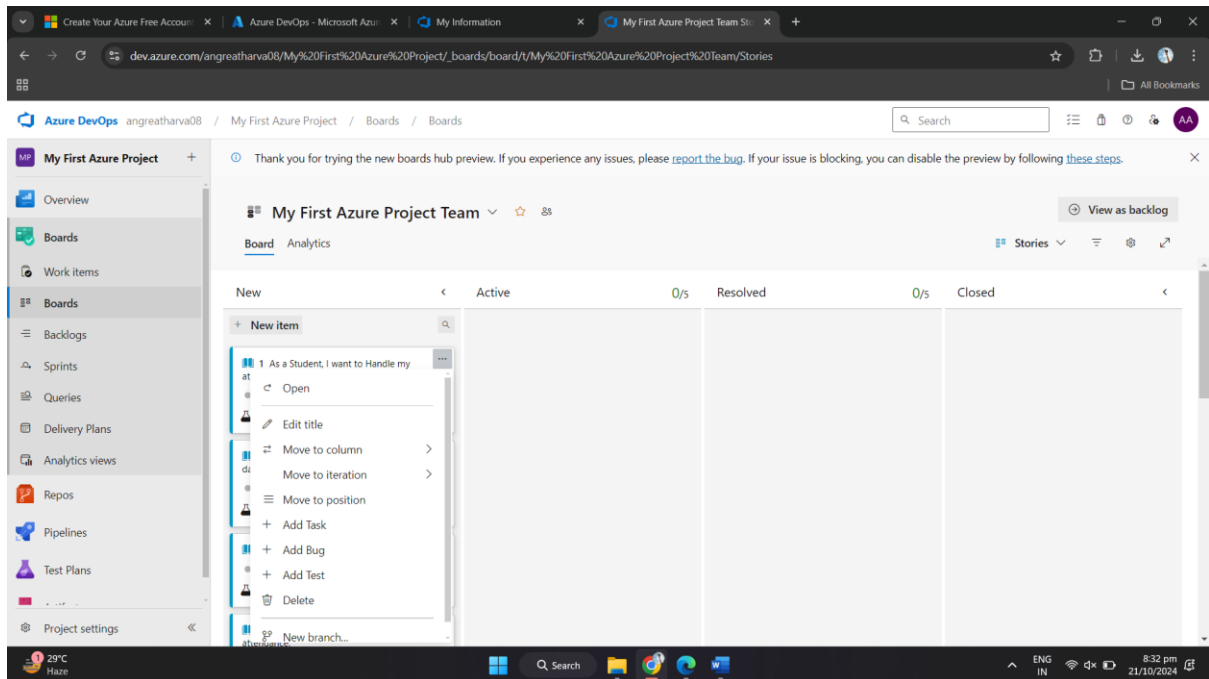
Step 15 - Add different types of Functionalities for which the user story needs to be tested
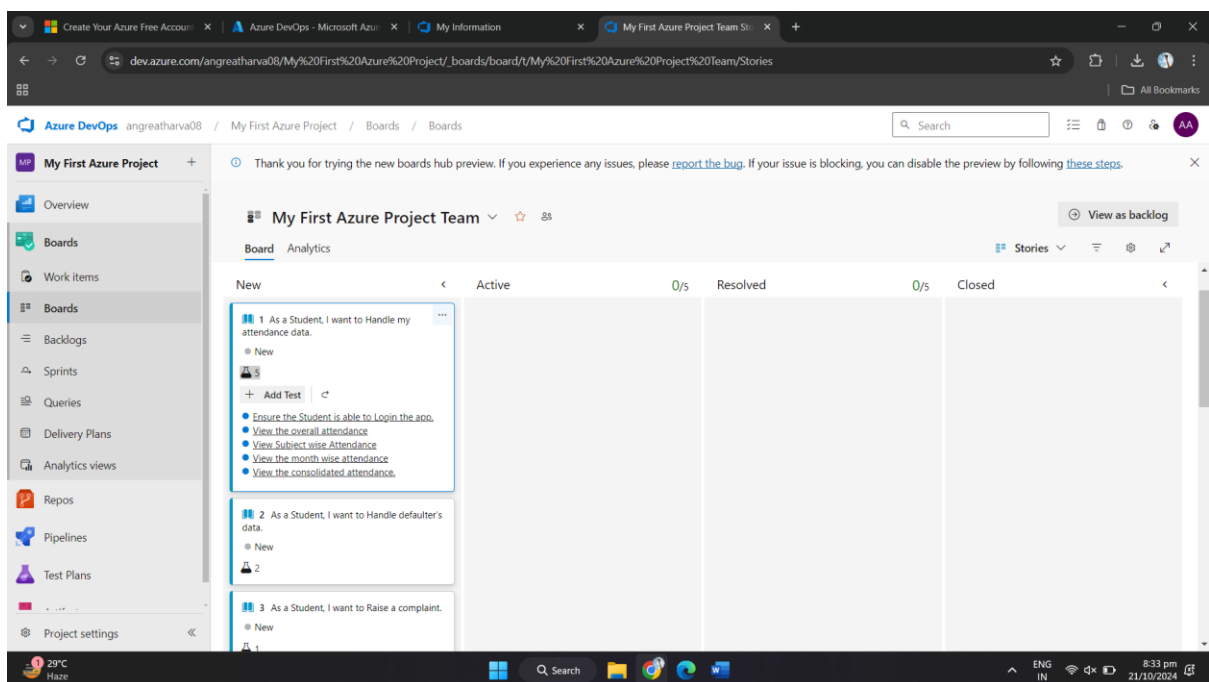
Step 16 - Click on any one Test case, Add required details in Action and Expected Results

Step 17: click on Run Test

Step 18 : You can set the result as per the output .

Step 19 : Go to Test Plans , Progress Report and Runs
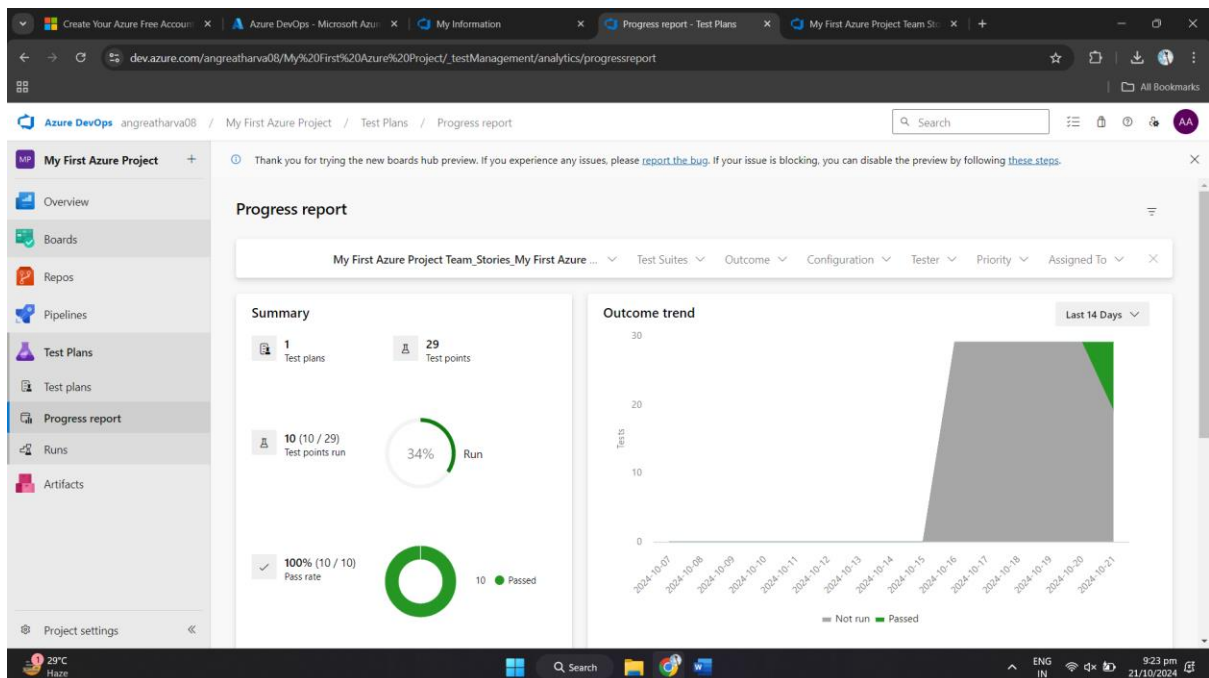
Step 20: https://azuredevopslabs.com/labs/azuredevops/testmanagement/ (Install Extension "Test & Feedback as per the given documentation")