

**RAJALAKSHMI ENGINEERING COLLEGE**  
**RAJALAKSHMI NAGAR, THANDALAM – 602 105**



**(REGULATION 2023)**

**CS23432  
Software Construction**

**DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND MACHINE  
LEARNING                    LABORATORY RECORD NOTEBOOK**

Name : ..... K.ASWIN

Year / Branch / Section : ..... 2/AIML/FA

Register No. : ..... 2116-231501027

Semester : ..... 4

Academic Year : ..... 2024-2025



**RAJALAKSHMI ENGINEERING COLLEGE (AUTONOMOUS)**

**RAJALAKSHMI NAGAR, THANDALAM – 602 105**

**BONAFIDE CERTIFICATE**

NAME K.Aswin REGISTER NO. 2116-231501027

ACADEMIC YEAR 2024-25 SEMESTER- IV BRANCH: AIML-B.Tech

This Certification is the Bonafide record of work done by the above student

in the **CS23432- Software Construction** Laboratory during

the year 2024 – 2025.

Signature of Faculty -in Charge

Submitted for the Practical Examination held on \_\_\_\_\_

Internal Examiner

External Examiner

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Name: K.ASWIN Branch: AIML ec: FA Roll no: 2116-231501027

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**EXP NO: 1**

## AZURE DEVOPS ENVIRONMENT SETUP

### **AIM:**

To establish and evaluate the process of setting up an Azure DevOps environment by creating a new organization through the Azure portal.

### **INSTALLATION**

1. Open a web browser and navigate to:

<https://azure.microsoft.com/en-us/get-started/azure-portal>.

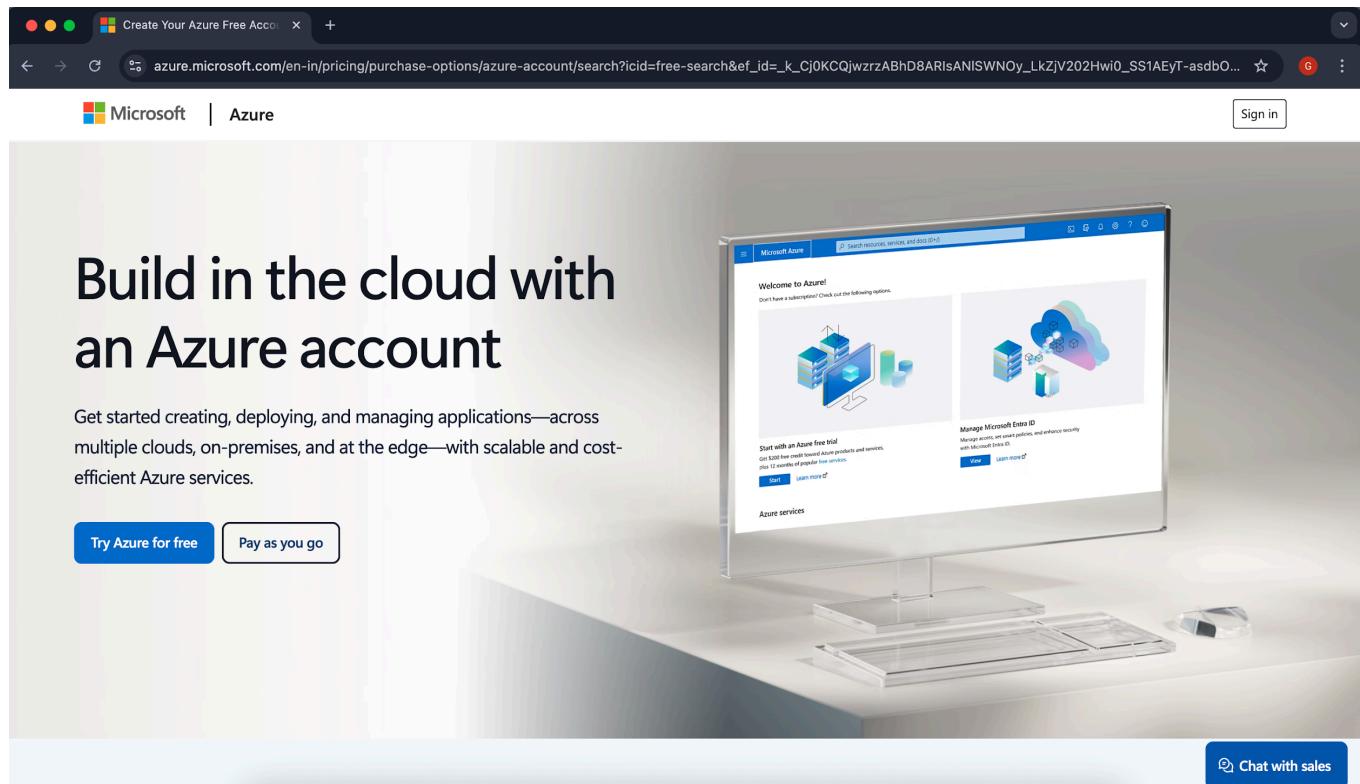
a. **If you have an account:**

Sign in using your Microsoft credentials (e.g., Outlook, Hotmail, or Azure AD account).

b. **If you don't have an account:**

Create a new Microsoft account at:

<https://signup.live.com/?lic=1>.



## 2. Azure home page

The screenshot shows the Microsoft Azure home page. At the top, there's a search bar and a Copilot button. On the right, a user profile is shown with the email 231501048@rajalakshmi.edu.in and a note about multifactor authentication. Below the header, there's a section titled "Azure services" with links to Create a resource, Azure DevOps organizations, Resource groups, SQL databases, Virtual machines, Subscriptions, Azure Arc, Dev centers, Projects, and More services. The "Resources" section shows a list of recent resources: HMS-Database (SQL database), HMS (Resource group), and Azure for Students (Subscription). Below that is a "Navigate" section with links to Subscriptions, Resource groups, All resources, and Dashboard. A "Tools" section follows, featuring various Azure service icons.

3. Search for **Azure DevOps Organizations** in the Azure portal's search bar and select it to open the DevOps environment.

The screenshot shows the Microsoft Azure home page again, but with the search bar now containing the text "Devops". A search results overlay is displayed, showing "Services" and "Marketplace" sections. Under "Services", there are entries for Azure Native New Relic Service, Managed DevOps Pools, Azure DevOps organizations, and Azure Native Dynatrace Service. Under "Marketplace", there are entries for Static Web App, Rocky Linux 9, Build Agents for Azure DevOps, and InfluxDB Cloud (Official Version). The rest of the page layout remains the same, including the "Azure services" bar, "Resources" section, "Navigate" section, and "Tools" section.

4. Click on 'My Azure DevOps Organizations', set up a new organization, and you'll be automatically directed to the Azure DevOps dashboard.

A screenshot of the Microsoft Azure portal showing the Azure DevOps organization creation blade. The URL is [portal.azure.com/#view/AzureTfsExtension/OrganizationsTemplateBlade](https://portal.azure.com/#view/AzureTfsExtension/OrganizationsTemplateBlade). The page displays a banner about managing Azure DevOps billing and subscriptions, followed by the main content area which includes the Azure DevOps logo, a brief description of the service, and a large central illustration of a rocket launching from a base of code repositories and databases, with several people working on the launch.

## Result:

The Azure DevOps environment was successfully accessed, and a new organization was created via the Azure portal.

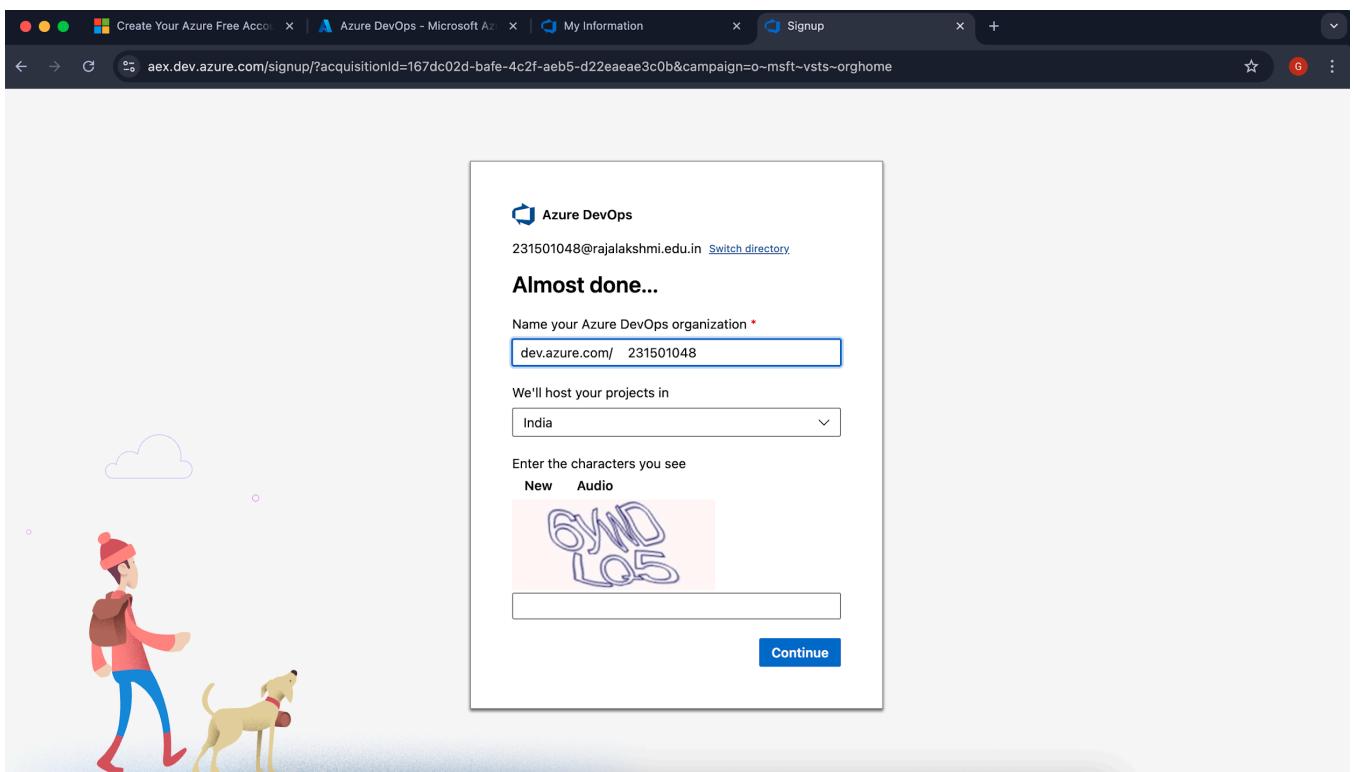
**EXP NO: 2**

## **AZURE DEVOPS PROJECT SETUP AND USER STORY MANAGEMENT**

### **Aim:**

To establish an Azure DevOps project that enables streamlined collaboration and effective agile project management.

#### **1.Create An Azure Account**



#### **2.Create Your First Project in the Organization**

##### **a) Initialize Project Setup**

Once your organization is established, create your first project to manage code repositories, pipelines, work items, and other development components.

##### **b) Access Project Creation**

From your organization's homepage, select "**New Project**" to begin the setup process.

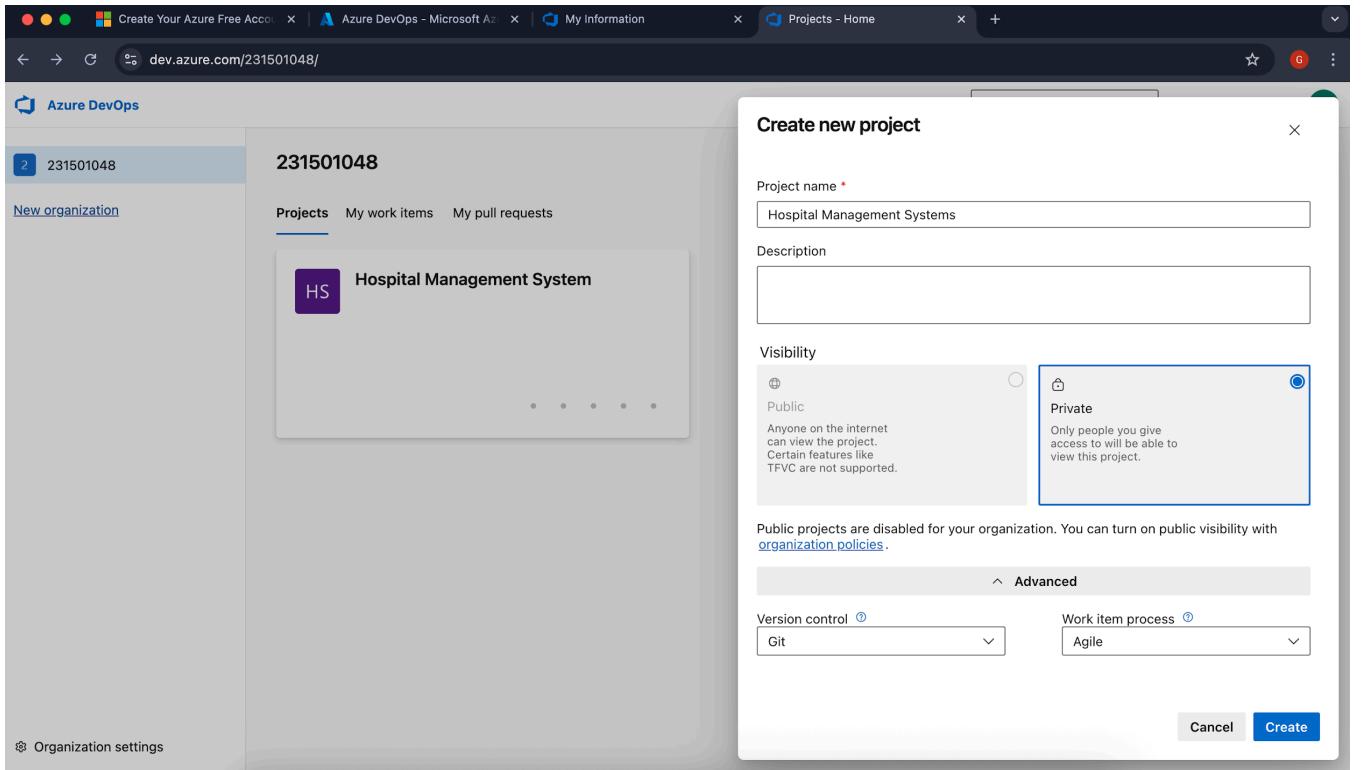
##### **c) Configure Project Details**

Provide the following information:

- **Name:** Assign a descriptive project name (e.g., "LMS").
- **Description (Optional):** Add relevant details about the project's purpose.
- **Visibility:** Select either:
  - *Private* (Restricted to invited members)
  - *Public* (Visible to all users)

##### **d) Finalize Creation**

After entering all required details, click "**Create**" to complete the project setup.



3. After successful login:

- a) Verify the currently active organization displayed in the top navigation bar
- b) To change organizations (if you have access to multiple):
  - Locate the organization selector dropdown in the top-left corner (adjacent to your profile icon)
  - Choose your desired organization from the available options
- c) The system will automatically redirect you to the selected organization's dashboard

The screenshot shows the Azure DevOps Organizations interface. On the left, there is a profile card for 'Girivasanth V' with a green circular icon containing 'GV'. The card includes email '231501048@rajalakshmi.edu.in', a dropdown for 'Microsoft account', location 'India', and email '231501048@rajalakshmi.edu.in'. Below this is a section for 'Visual Studio Dev Essentials' with a brief description and a 'Use your benefits' link. On the right, the main area displays 'Azure DevOps Organizations' with a 'Create new organization' button. It lists a single project: 'dev.azure.com/231501048' (Owner) titled 'Hospital Management System'. There is also a link to 'Open in Visual Studio'. A section for 'Organizations Pending Deletion' is shown with a 'Expand' link.

## 4. Project dashboard

The screenshot shows the Azure DevOps Project Overview page for the 'Hospital Management System' project. The left sidebar contains navigation links: Overview, Summary, Dashboards, Wiki, Boards, Repos, Pipelines, Test Plans, Artifacts, and Project settings. The main content area has a title 'Hospital Management System' with a 'Private' button and an 'Invite' button. The 'About this project' section includes a 'Wiki / Read.me' link and a detailed description of the system's purpose: 'The Hospital Management System (HMS) is a comprehensive software solution designed to streamline hospital operations, enhance patient care, and improve administrative efficiency. The system integrates patient registration, appointment scheduling, and electronic health records (EHR) into a centralized platform, ensuring seamless coordination between medical staff, patients, and administrative personnel.' The 'Key Objectives' section lists five goals: 1. Digitize Patient Management, 2. Improve Appointment Scheduling, 3. Enhance Medical Record Accessibility, 4. Increase Patient Engagement, and 5. Automate Administrative Tasks. The 'Core Features' section lists '1. Patient Registration & Management'. The right side features a 'Project stats' panel with data for the last 7 days: 29 work items created, 18 work items completed, 0 pull requests opened, and 1 commit by 1 author. The 'Members' section shows 5 team members: GV, Anya, AS, A, and a placeholder user icon.

## 5. Creating and Managing User Stories

### a. Access Work Boards

- Navigate to the **Boards** section using the left-hand menu
- This displays your project's work management interface including backlogs, sprints, and work items

### b. Create a New User Story

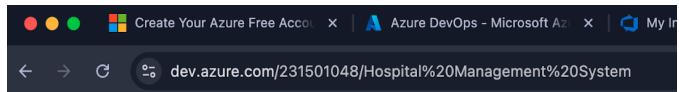
- Locate the "**Add Work Item**" control (typically at the top of the page)
- This may appear as:

- A "+" button
- An "Add New Work Item" option
- A dropdown menu

- Select "**User Story**" from the available work item types
- Complete the form with your story details

The screenshot shows the Azure DevOps interface for the 'Hospital Management System' project. The left sidebar navigation bar includes 'Overview', 'Boards', 'Work items', 'Backlogs', 'Sprints', 'Queries', 'Delivery Plans', 'Analytics views', 'Repos', 'Pipelines', 'Test Plans', 'Artifacts', and 'Project settings'. The main content area is titled 'Work items' and shows a table of recently updated work items. The columns are: ID, Title, Type, Assigned To, State, Area Path, and Tag. The table contains 30 rows of work items, with the first few rows being 'Bug', 'Epic', 'Feature', 'Issue', and 'Task'. The 'Assigned To' column shows names like 'Girivasanth V', 'Unassigned', and 'Adharsh Shankar'. The 'Area Path' column consistently shows 'Hospital Management System'. The 'Tag' column is mostly blank or shows 'New'.

ID	Title	Type	Assigned To	State	Area Path	Tag
1	Patient Record Management System	Bug	Girivasanth V	New	Hospital Management System	
2	New Feature for Patient Record	Epic	Unassigned	New	Hospital Management System	
3	Patent Record Management System	Feature	Adharsh Shankar	New	Hospital Management System	
4	Test Case for Patient Record	Issue	Unassigned	New	Hospital Management System	
7	User Story for Patient Record	Task	Adharsh Shankar	New	Hospital Management System	
11	Appointment Scheduling System	Form	Adharsh Shankar	New	Hospital Management System	
12	Appointment Booking	Form	Unassigned	New	Hospital Management System	
13	Appointment Booking by Patients	Form	Adharsh Shankar	New	Hospital Management System	
18	Doctor's Daily Schedule View	Form	Adharsh Shankar	New	Hospital Management System	
22	Appointment Reminders	Form	Unassigned	New	Hospital Management System	
23	Appointment Reminders for Patients	Form	Unassigned	New	Hospital Management System	
28	Electronic Health Records (EHR)	Form	Adharsh Shankar	New	Hospital Management System	
29	Comprehensive Medical Records	Form	Unassigned	New	Hospital Management System	
30	Access and Update Patient Medical Records During Consultations	Form	Adharsh Shankar	New	Hospital Management System	



Like 0

prehensive software solution designed to  
and improve administrative efficiency.  
**ment scheduling, and electronic**  
suring seamless coordination between

### Result:

The Azure DevOps project has been successfully configured with user story management capabilities and agile workflow implementation.

**EXP NO: 3**

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

### **Aim:**

To create and organize epics, features, user stories, and backlogs in Azure DevOps for streamlined project execution.

### **Create Epic, Features, User Stories, Task**

The screenshot shows the Azure DevOps interface for the 'Hospital Management System Team'. The left sidebar includes options like Overview, Boards, Work items, Backlogs, Sprints, Queries, Delivery Plans, Analytics views, Repos, Pipelines, Test Plans, Artifacts, and Project settings. The main area displays the 'Backlog' tab under 'Analytics'. It lists three epics: 1. Patient Registration Management, 2. Appointment Scheduling System, and 3. Electronic Health Records (EHR), all in the 'New' state. To the right, there's a 'Planning' sidebar for 'Sprint 3' (4/21/2025 - 4/28/2025) with a total planned effort of 13 working days.

### **1.Create Epic and Fill the Details**

The screenshot shows the 'Create Epic' form in Azure DevOps. The 'Title' field is mandatory and currently empty, indicated by a red error message: 'NEW EPIC \* Field 'Title' cannot be empty.' Other fields include 'State' (set to 'New'), 'Area' (set to 'Hospital Management System'), 'Reason' (set to 'New'), and 'Iteration' (set to 'Hospital Management System|Sprint 1'). The form is divided into several sections: 'Description' (with a placeholder 'Click to add Description.'), 'Planning' (Priority set to 2, Risk, Effort, Business Value, Time Criticality), 'Deployment' (with a note about tracking releases), 'Development' (with a note about linking to Azure Repos), and 'Classification' (with a note about related work).

## 2.Create Feature and Fill the Details

The screenshot shows the Azure DevOps interface for creating a new work item. The URL is [https://dev.azure.com/231501048/Hospital%20Management%20System/\\_workitems/create/Feature](https://dev.azure.com/231501048/Hospital%20Management%20System/_workitems/create/Feature). The left sidebar shows the project navigation with 'Hospital Management...' selected. The main area is titled 'Work Items' with a sub-section 'Back to Work Items'. A red error message 'NEW FEATURE \* Field 'Title' cannot be empty.' is displayed above the title input field. The form fields include:

- Title:** Enter title (empty)
- State:** New
- Reason:** New
- Area:** Hospital Management System
- Iteration:** Hospital Management System|Sprint 1
- Description:** Click to add Description.
- Planning:** Priority: 2, Risk: (empty), Story Points: (empty)
- 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.
- Discussion:** Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.
- 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.
- Classification:** Value area: Business, Story Points: (empty)
- Related Work:** (empty)

## 3.Create User Story and Fill the Details

The screenshot shows the Azure DevOps interface for creating a new work item. The URL is [https://dev.azure.com/231501048/Hospital%20Management%20System/\\_workitems/create/User%20Story](https://dev.azure.com/231501048/Hospital%20Management%20System/_workitems/create/User%20Story). The left sidebar shows the project navigation with 'Hospital Management...' selected. The main area is titled 'Work Items' with a sub-section 'Back to Work Items'. A red error message 'NEW USER STORY \* Field 'Title' cannot be empty.' is displayed above the title input field. The form fields include:

- Title:** Enter title (empty)
- State:** New
- Reason:** New
- Area:** Hospital Management System
- Iteration:** Hospital Management System|Sprint 1
- Description:** Click to add Description.
- Planning:** Story Points: (empty), Priority: 2, Risk: (empty)
- 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.
- Acceptance Criteria:** Click to add Acceptance Criteria.
- Discussion:** Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request.
- 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.
- Classification:** Value area: Business, Story Points: (empty)
- Related Work:** (empty)

#### 4.Create Task and Fill the Details

The screenshot shows the 'New Task' creation interface in Azure DevOps. The left sidebar is titled 'Hospital Management...' and includes links for Overview, Boards, Work items, Repos, Pipelines, Test Plans, Artifacts, and Project settings. The main area has a header 'Work Items' and a sub-header 'NEW TASK \* Field 'Title' cannot be empty.' Below this is a text input field labeled 'Enter title'. Underneath the title input are fields for 'State' (set to 'New'), 'Area' (set to 'Hospital Management System'), 'Reason' (set to 'New'), and 'Iteration' (set to 'Hospital Management System|Sprint 1'). To the right of these fields is a 'Save' button and other save-related icons. The main body of the form is divided into sections: 'Description' (with a placeholder 'Click to add Description.'), 'Planning' (with 'Priority' set to '2' and 'Activity' listed), 'Deployment' (with a note about tracking releases), 'Discussion' (with a comment input field and a link to switch to Markdown editor), 'Effort (Hours)' (with 'Original Estimate', 'Remaining', and 'Completed' fields), 'Implementation' (with 'Integrated in Build' status), and 'Development' (with a note about linking to Azure Repos). A 'Related Work' section is also visible.

#### Result:

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

**EXP NO: 4**

# SPRINT PLANNING

## Aim:

To allocate user stories to designated sprints for the Hospital Management System project.

## Sprint Planning Sprint 1

**Hospital Management System Team**

**Sprint 1**

New	Active	Closed
<ul style="list-style-type: none"><li>3. Patient Registration via Online Form<ul style="list-style-type: none"><li>New</li><li>Adharsh Shankar</li></ul></li><li>7. View Patient Profile After Registration<ul style="list-style-type: none"><li>New</li><li>Adharsh Shankar</li></ul></li></ul>		<ul style="list-style-type: none"><li>8. Design Patient Registration UI Form<ul style="list-style-type: none"><li>Closed</li><li>Girivasanth V</li></ul></li><li>9. Implement View Functionality for Registered Patient Profile<ul style="list-style-type: none"><li>Closed</li><li>Girivasanth V</li></ul></li><li>10. Develop API Endpoint to Retrieve Registered Patient Profile<ul style="list-style-type: none"><li>Closed</li><li>Girivasanth V</li></ul></li></ul>

## Sprint 2

**Hospital Management System Team**

**Sprint 2**

New	Active	Closed
<ul style="list-style-type: none"><li>13 Appointment Reminders for Patients<ul style="list-style-type: none"><li>New</li><li>Adharsh Shankar</li></ul></li><li>18 Doctor's Daily Schedule View<ul style="list-style-type: none"><li>New</li><li>Adharsh Shankar</li></ul></li></ul>		<ul style="list-style-type: none"><li>14 Create Doctor Availability Calendar UI<ul style="list-style-type: none"><li>Closed</li><li>Girivasanth V</li></ul></li><li>15 Implement Appointment Slot Management System<ul style="list-style-type: none"><li>Closed</li><li>Girivasanth V</li></ul></li><li>16 Develop conflict detection for overlapping appointments<ul style="list-style-type: none"><li>Closed</li><li>Girivasanth V</li></ul></li><li>17 Create Appointment Confirmation Screen<ul style="list-style-type: none"><li>Closed</li><li>Girivasanth V</li></ul></li><li>19 Design Doctor Dashboard with Schedule View<ul style="list-style-type: none"><li>Closed</li><li>Girivasanth V</li></ul></li><li>20 Implement Patient Quick-View Functionality<ul style="list-style-type: none"><li>Closed</li><li>Girivasanth V</li></ul></li><li>24 Integrate Email Service (SendGrid/Mailgun)<ul style="list-style-type: none"><li>Closed</li><li>Girivasanth V</li></ul></li><li>26 Create Reminder Templates<ul style="list-style-type: none"><li>Closed</li><li>Girivasanth V</li></ul></li><li>27 Implement Scheduling for Reminders (15 mins, 1h before)<ul style="list-style-type: none"><li>Closed</li><li>Girivasanth V</li></ul></li></ul>

## Sprint 3

The screenshot shows the Azure DevOps Taskboard for the Hospital Management System Team. The left sidebar is collapsed, showing options like Overview, Boards, Work items, Backlogs, Sprints (selected), Queries, Delivery Plans, Analytics views, Repos, Pipelines, Test Plans, Artifacts, and Project settings. The main area displays the Taskboard for Sprint 3, with tabs for Taskboard, Backlog, Capacity, and Analytics. The Taskboard view shows a grid of work items. A specific work item, "30 Access and Update Patient Medical Records During Consultations", is expanded, showing it is New and assigned to Adharsh Shankar. The work items listed are:

ID	Description	Status	Assignee
31	Design EHR interface	Closed	Girivasanth V
38	Implement medical history section	Closed	Girivasanth V
39	Develop a Prescription Management System for EHR	Closed	Girivasanth V
40	Implement Test Results Upload and Viewing System	Closed	

At the top right, there are buttons for "New Work Item" and "Column Options". Below the grid, a status bar indicates "April 21 - April 28" and "1 work day remaining".

## Result:

Agile sprints have been configured for the Hospital Management System initiative.

**EXP NO: 5**

## **POKER ESTIMATION**

### **Aim:**

Create Poker Estimation for the user stories – Hospital Management System Project.

### **Poker Estimation**

The screenshot shows a user story card in the Azure DevOps interface. The title is "USER STORY 3" and the description is "3 Patient Registration via Online Form". The card is assigned to "Adharsh Shankar" and has 1 comment and 0 tags. The state is "New" and the area is "Hospital Management System". The reason is "New" and the iteration is "Hospital Management System|Sprint 1". The last update was by "Girivasanth V" 1 hour ago. The card is divided into several sections: Description, Planning, Deployment, Acceptance Criteria, Classification, Development, and Related Work. The "Description" section contains the story text: "As a new patient, I want to register myself through an online form, So that I can be added to the hospital's system and receive a unique Patient ID for future medical services". The "Acceptance Criteria" section lists 8 requirements. The "Planning" section shows Story Points (8), Priority (2), and Risk. The "Deployment" section provides instructions for tracking releases. The "Classification" section includes Value area (Business) and Story Points (8). The "Development" section has an "Add link" button and a link to Azure Repos. The "Related Work" section lists 2 work items: "New Patient Registration" (updated 12 Apr, New) and "Patient Registration".

### **Result:**

Project estimations were determined via Planning Poker, assigning story points to each user story.

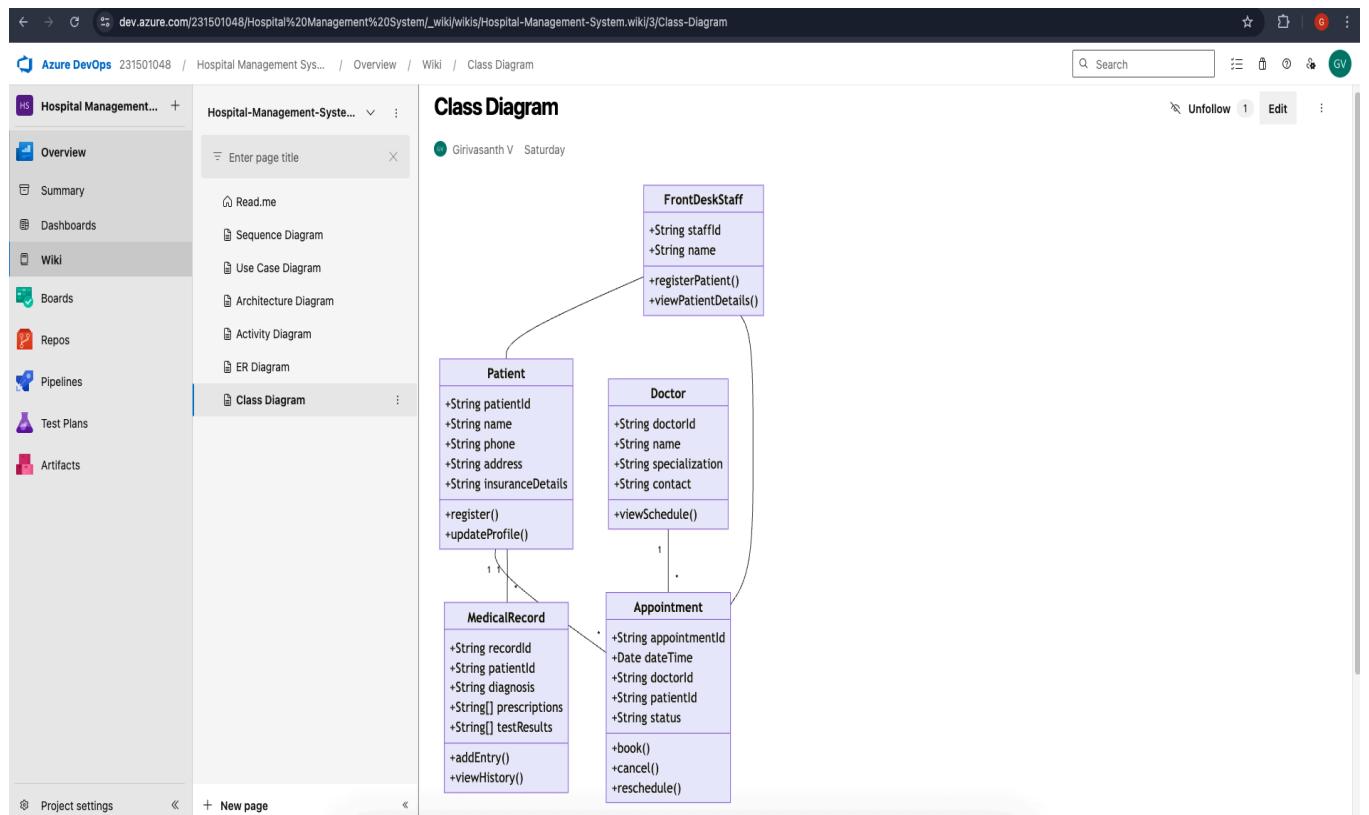
**EXP NO: 6**

## **DESIGNING CLASS AND SEQUENCE DIAGRAMS FOR PROJECT ARCHITECTURE**

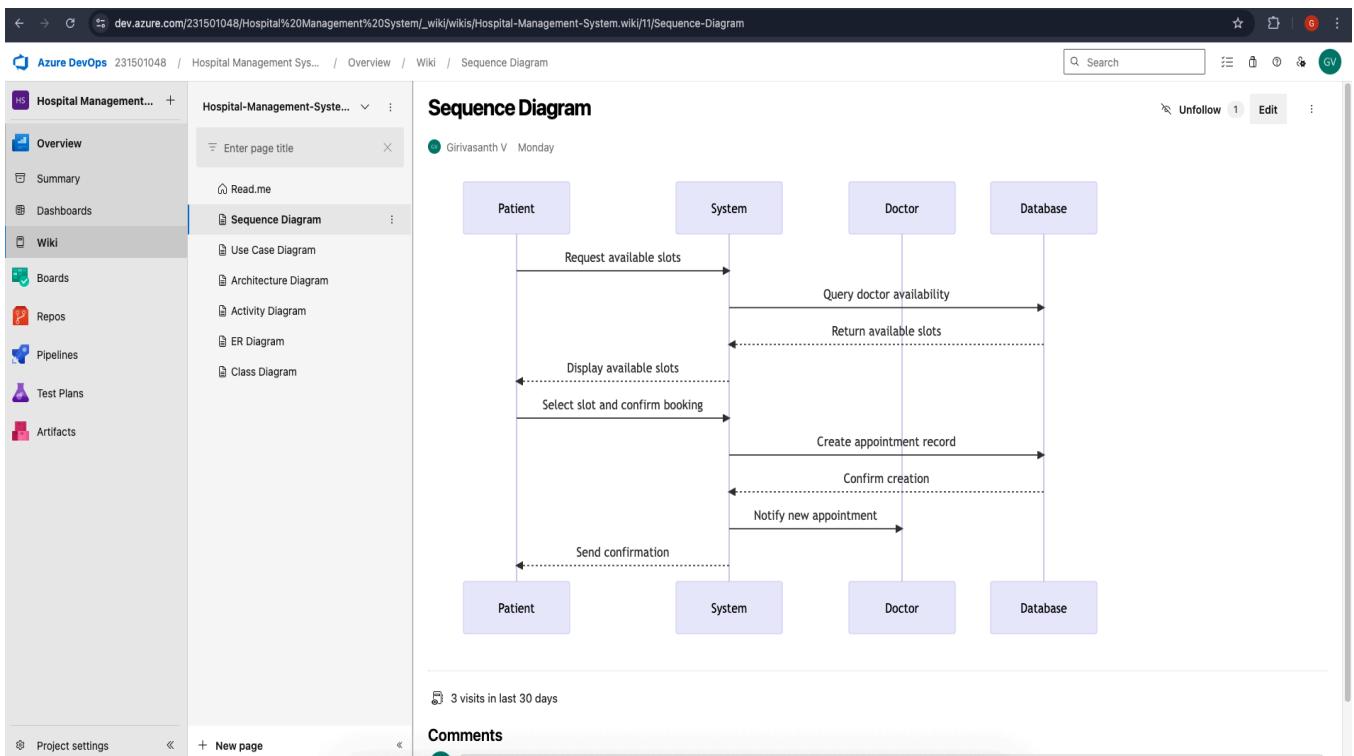
### **Aim:**

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 have been successfully designed for the Hospital Management System.

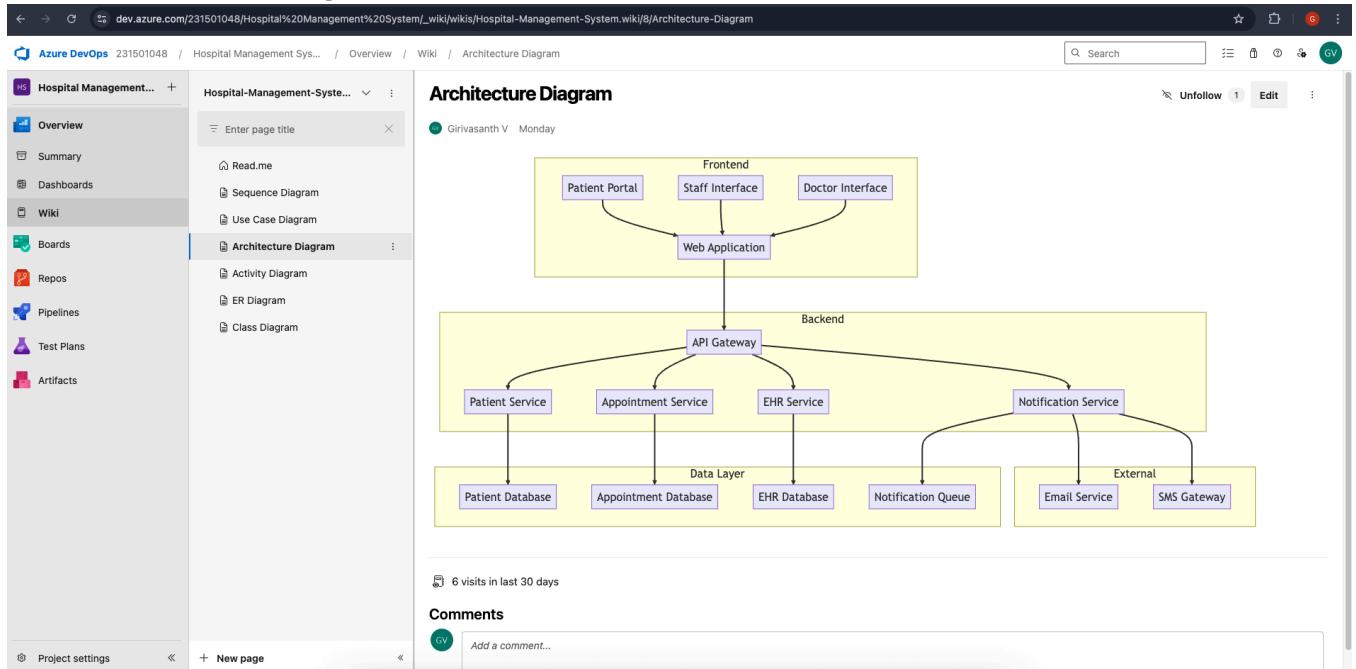
<b>EXP NO: 7</b>	<b>DESIGNING ARCHITECTURAL AND ER DIAGRAMS FOR PROJECT STRUCTURE</b>
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## Create Epic, Features, User Stories, Task

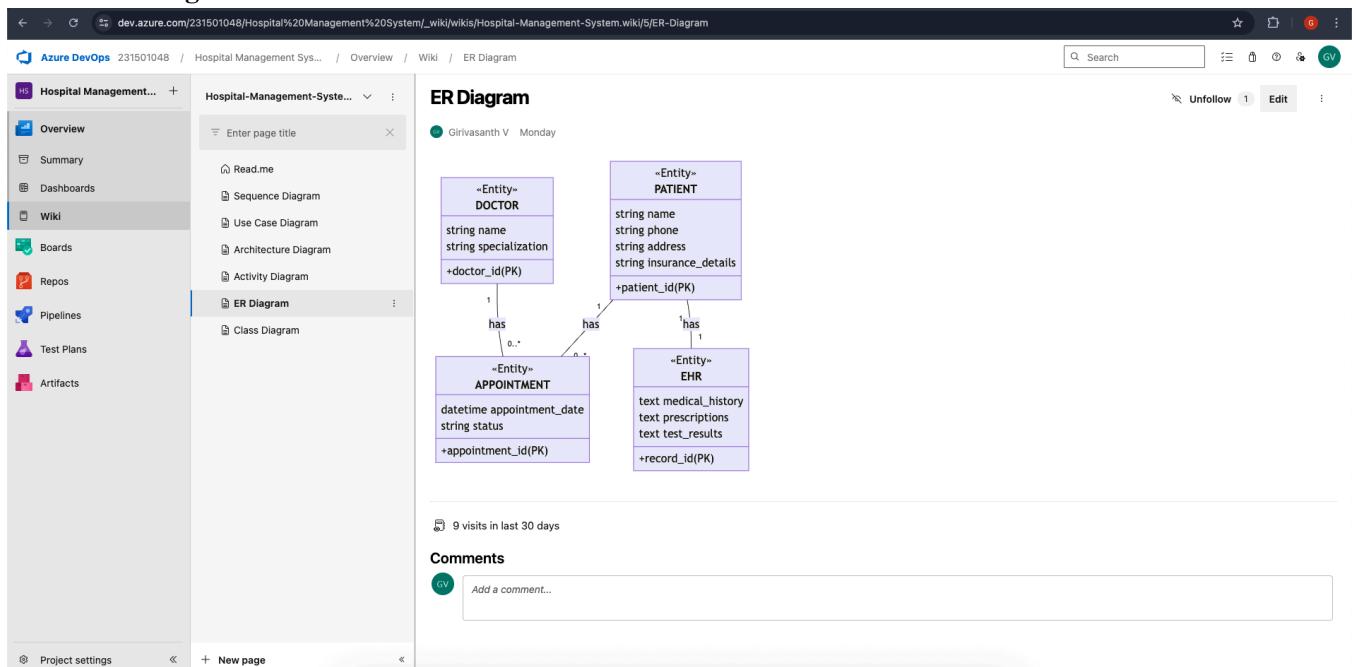
### Aim:

Create system architecture and ER diagrams to document the project's design.

## 7A. Architectural Diagram



## 7B. ER Diagram



**Result:**

The Architecture Diagram and ER Diagram have been successfully designed for the Hospital Management System.

<b>EXP NO: 8</b>	<b>TESTING – TEST PLANS AND TEST CASES</b>
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**Aim:**

Develop test plans in Azure DevOps featuring two test cases per user story (one successful execution path and one error scenario) for five selected user stories.

**Test Planning and Test Case:**

**Test Case Design Procedure**

**1.Understand Core Features**

- Patient Registration & Management
- Appointment Scheduling
- Electronic Health Records (EHR)
- Doctor Schedule Management
- Reporting & Analytics

**2.Define User Interactions**

- Each test case simulates real hospital workflows:
  - Front desk registering new patients
  - Patients booking appointments
  - Doctors updating medical records
  - Patients viewing test results

**3.Design Happy Path Test Cases**

- Validate normal system operations:
  - Successful patient registration
  - Correct appointment booking
  - Proper EHR updates
  - Accurate schedule displays

**4.Design Error Path Test Cases**

- Test system error handling:
  - Registration with missing fields
  - Booking unavailable time slots
  - Unauthorized EHR access attempts
  - Offline system operations

**5.Break Down Steps and Expected Results**

- Each test includes:
  - Clear step-by-step actions
  - Specific expected outcomes
  - Example:*Action:* Book appointment *Expected:* Slot marked booked, confirmation sent

**6.Use Clear Naming and IDs**

- Consistent naming convention:
  - TC-REG-01: Successful Registration
  - TC-APP-02: Prevent Double-Booking
  - TC-EHR-03: Block Unauthorized Access

**7.Organize Test Suites**

- Group by functionality:
  - TS-REG: Registration tests
  - TS-APP: Appointment tests
  - TS-EHR: Medical records tests
  - TS-SEC: Security tests

**8.Prioritize and Review**

- Mark critical tests (P0):

- Data security
- Appointment conflicts
- EHR accuracy
- Review for:
  - Requirement coverage
  - Edge cases
  - Compliance needs (HIPAA/GDPR)

## 1. New test plan

The screenshot shows the 'Test Plans' page in Azure DevOps. The left sidebar includes links for Overview, Boards, Repos, Pipelines, Test Plans, Test plans, Progress report, Runs, and Artifacts. The main area displays a table of test plans:

Title	Test Plan ID	State	Area Path	Iteration	Assigned To
Hospital Management System Team_Stories_Sp...	78	Active	Hospital Management System	Hospital Management System Sprint 3	Girivasanth V
Hospital Management System Team_Stories_Sp...	66	Active	Hospital Management System	Hospital Management System Sprint 2	Girivasanth V
Hospital Management System Team_Stories_Sp...	33	Active	Hospital Management System	Hospital Management System Sprint 1	Adharsh Shankar

## 2. Test suite

The screenshot shows the 'Test Suites' page in Azure DevOps. The left sidebar includes links for Overview, Boards, Repos, Pipelines, Test Plans, Test plans, Progress report, Runs, and Artifacts. The main area displays a table of test points under the heading '23 : Appointment Reminders for Patients (ID: 74)'. The table has columns for Title, Outcome, Order, Test Case Id, Configuration, and Tester.

Title	Outcome	Order	Test Case Id	Configuration	Tester
TC11 - SMS Reminder Delivered 24 Hours Before Appointment	Passed	1	73	Windows 10	Girivasanth V
TC12 - Email Reminder Contains Correct Appointment Details	Passed	2	75	Windows 10	Girivasanth V
TC13 - No Reminder Sent for Cancelled Appointments	Passed	3	76	Windows 10	Girivasanth V

### 3. Test case

Provide two test cases for at least five user stories, demonstrating both happy path (success scenarios) and error path (failure scenarios) in Azure DevOps.

#### USER STORIES

- As a hospital receptionist or admin I want to view the complete patient profile after registration, So that I can verify the details, make updates if required, and manage the patient's visit efficiently.
- As a **new patient**, I want to **register myself through an online form**, So that I can be added to the hospital's system and receive a **unique Patient ID** for future medical services
- As a **doctor**, I want **to view my daily schedule with patient details so I can prepare for consultations**.
- As a patient, I want to receive appointment reminders via SMS or email so I don't miss my appointment.

#### Test Suites

##### Test Suite: TS01 - Patient Registration (ID: 91)

###### 1. TC01 – Successful Patient Registration

- **Action:**
  - Go to the Patient Registration page.
  - Enter valid patient details (name, phone, address, insurance).
  - Click "Register".
- **Expected Results:**
  - Registration form is displayed.
  - Fields accept values without error.
  - Unique patient ID is generated, and patient is redirected to confirmation page.
  - **Type:** Happy Path

###### 2. TC02 – Registration with Missing Mandatory Fields

- **Action:**
  - Go to the Patient Registration page.
  - Leave one mandatory field blank.
  - Click "Register".
- **Expected Results:**
  - Error message appears highlighting the missing field.
  - Registration is not completed.
  - **Type:** Error Path

###### 3. TC03 – Duplicate Patient Detection

- **Action:**
  - Register a new patient.
  - Attempt to register the same patient again with identical details.
- **Expected Results:**
  - System detects potential duplicate and shows warning message.
  - Option to proceed or view existing patient record.
  - **Type:** Error Path

##### Test Suite: TS02 - Appointment Scheduling (ID: 92)

###### 1. TC04 – Successful Appointment Booking

- **Action:**
  - Log in as patient.
  - Select available doctor and time slot.
  - Confirm booking.
- **Expected Results:**
  - Appointment is booked successfully.
  - Confirmation appears with appointment details.
  - **Type:** Happy Path

###### 2. TC05 – Book Already Reserved Time Slot

- **Action:**
    - Attempt to book an already booked time slot.
  - **Expected Results:**
    - Error message "This time slot is no longer available" appears.
    - System suggests nearest available slots.
    - **Type:** Error Path
3. **TC06 – Appointment Reminder Notification**
- **Action:**
    - Book an appointment for tomorrow.
    - Wait for reminder trigger time.
  - **Expected Results:**
    - SMS/email reminder is sent 24 hours before appointment.
    - Notification contains correct appointment details.
    - **Type:** Happy Path

#### **Test Suite: TS03 - EHR Access (ID: 93)**

1. **TC07 – Doctor Access to Patient Records**
  2. **TC08 – Unauthorized EHR Access Attempt**
  3. **TC09 – Patient Portal EHR View**
- **Action:**
    - Log in as doctor.
    - Search for patient and open EHR.
  - **Expected Results:**
    - Complete patient medical history is displayed.
    - Doctor can add new notes and prescriptions.
    - **Type:** Happy Path
  - **Action:**
    - Log in as non-treating doctor.
    - Attempt to access patient EHR.
  - **Expected Results:**
    - Access is denied with "Unauthorized" message.
    - Attempt is logged in audit trail.
    - **Type:** Error Path

#### **Test Suite: TS04 - Doctor Schedule Management (ID: 94)**

1. **TC10 – View Daily Schedule**
  2. **TC11 – Schedule Conflict Detection**
- **Action:**
    - Log in as doctor.
    - Navigate to "My Schedule".
  - **Expected Results:**
    - All appointments for the day are displayed chronologically.
    - Patient details are visible for each appointment.
    - **Type:** Happy Path
  - **Action:**
    - Attempt to schedule overlapping appointments.
  - **Expected Results:**
    - System prevents scheduling conflicts.
    - Error message "This would create a schedule conflict" appears.
    - **Type:** Error Path

#### **Test Suite: TS05 - Reporting (ID: 95)**

## 1. TC12 – Generate Patient Report

- **Action:**
  - Log in as admin.
  - Select report parameters (date range, department).
  - Click "Generate Report".
- **Expected Results:**
  - Report is generated with correct data.
  - Export options (PDF, CSV) are available.
  - **Type:** Happy Path

## 2. TC13 – Report Generation with Invalid Parameters

- **Action:**
  - Select future date range for report.
  - Click "Generate Report".
- **Expected Results:**
  - Error message "Invalid date range selected" appears.
  - Report is not generated.
  - **Type:** Error Path

## Test Cases

The screenshot shows the Azure DevOps Work Item details page for a test case named 'TC13 - No Reminder Sent for Cancelled Appointments'. The work item is assigned to 'Girivasanth V' and has no comments or tags. It is set to 'Design' state and 'New' reason, with 'Hospital Management System' as the area and 'Hospital Management System/Sprint 2' as the iteration. The 'Steps' tab is selected, showing an empty list. The 'Deployment' tab is also present. In the 'Discussion' section, there is a placeholder for adding a comment. The 'Development' section includes links to 'Releases' and 'Azure Repos'. The 'Related Work' section lists a single work item titled '23 Appointment Reminders for Patients' with a status of 'Active' and updated 1h ago. The 'Status' section shows priority settings.

The screenshot shows the Azure DevOps interface for a work item titled 'TEST CASE 81'. The work item details are as follows:

- State:** Design
- Area:** Hospital Management System
- Reason:** New
- Iteration:** Hospital Management System\Sprint 3

The 'Steps' section is collapsed. The 'Deployment' section contains a note: "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".

The 'Discussion' section has a placeholder: "Add a comment. Use # to link a work item, @ to mention a person, or ! to link a pull request." A link to "switch to Markdown editor" is provided.

The 'Related Work' section lists a work item: "30 Access and Update Patient Medical Records During Consultations" (Updated 48m ago, Active). The 'Status' section shows "Priority".

#### 4. Installation of test

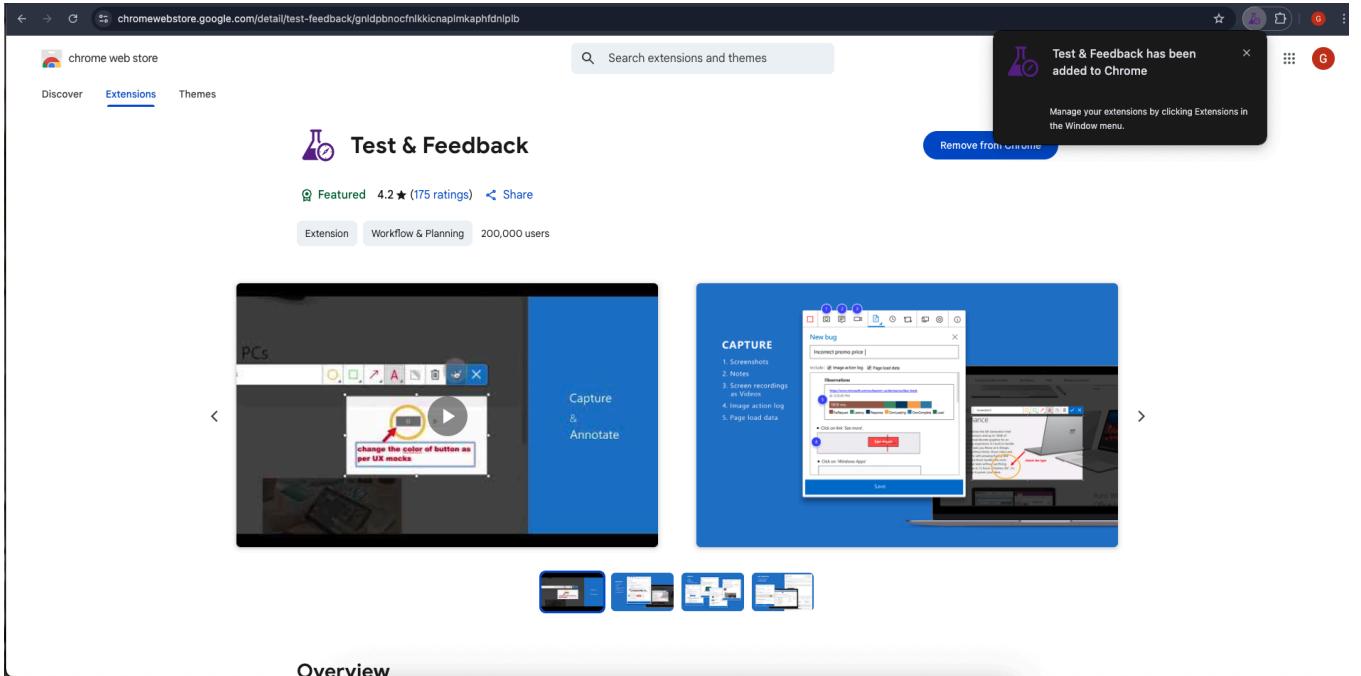
The screenshot shows the Chrome Web Store page for the 'Test & Feedback' extension. The extension details are:

- Featured**
- 4.2 ★ (175 ratings)**
- Share**
- Extension**
- Workflow & Planning**
- 200,000 users**

The main visual area displays two screenshots of the extension in use:

- Capture & Annotate:** Shows a screenshot of a web page with a red annotation box highlighting a button and the text "change the color of button as per UX mocks".
- Capture:** Shows a screenshot of a bug reporting interface with a "New bug" dialog open, displaying fields like "Incorrect price" and "Observation".

Below the screenshots are four small thumbnail images representing different features of the extension.

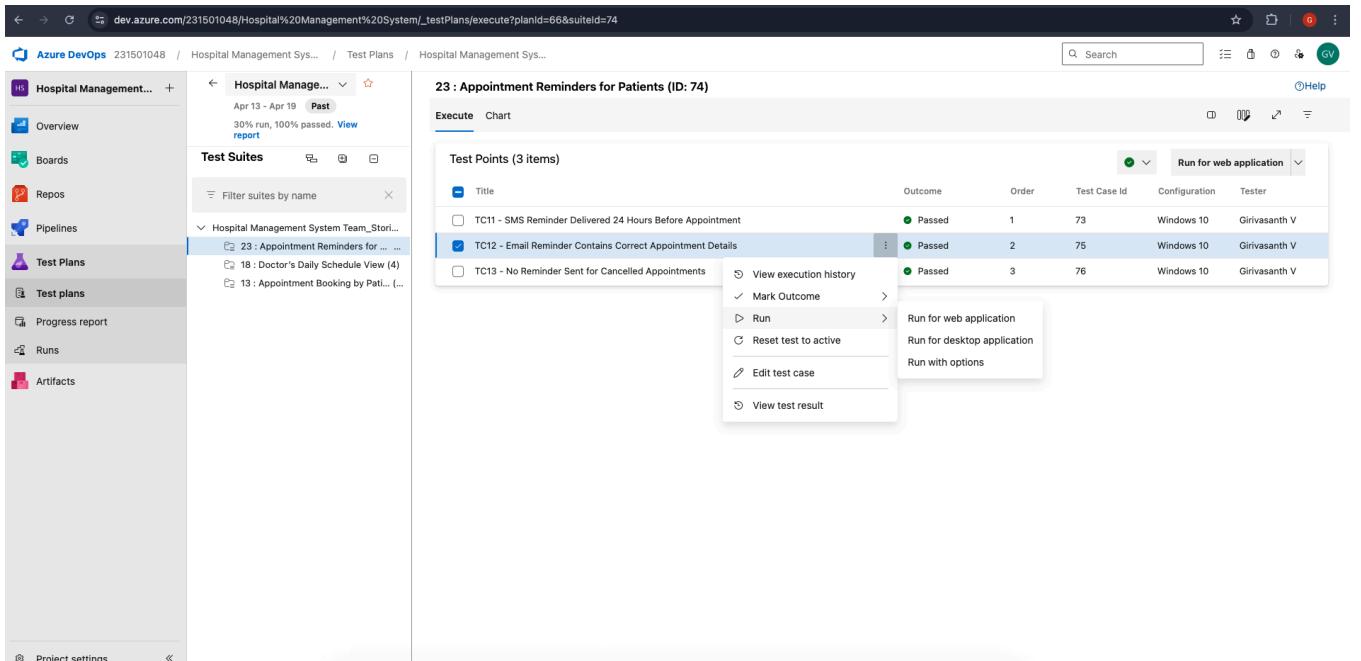


### Overview

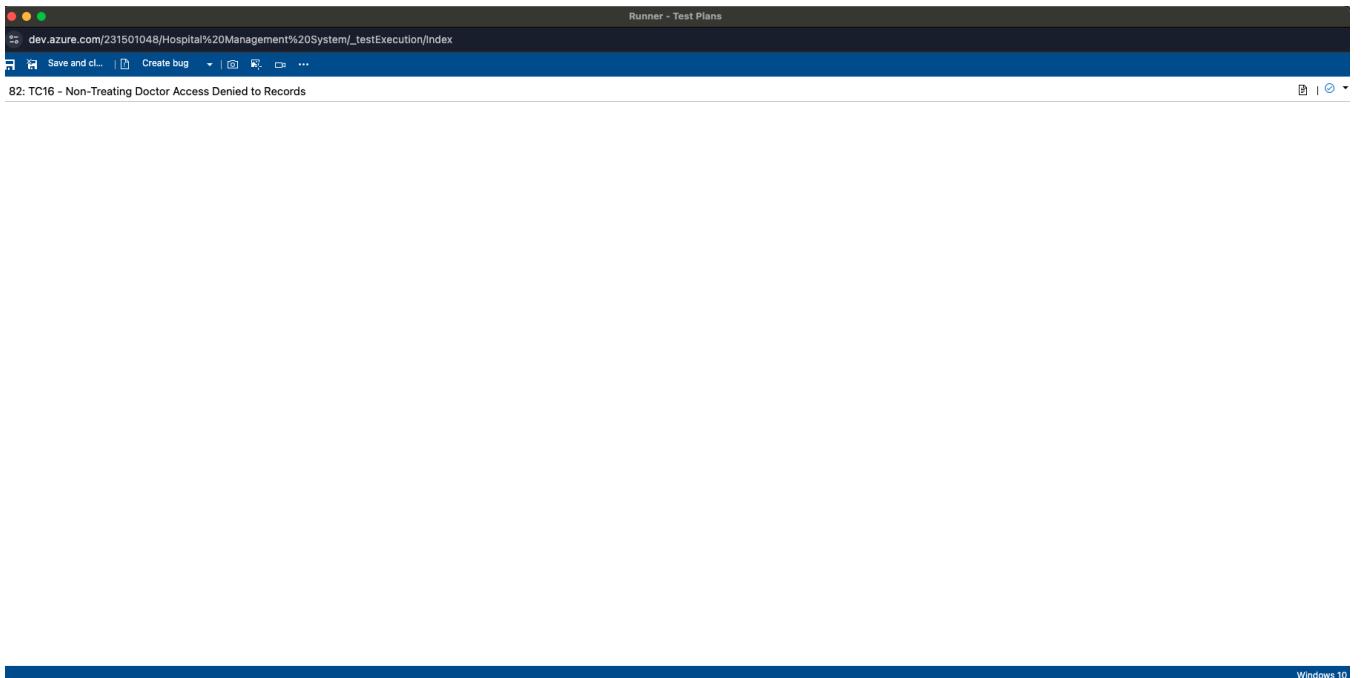
Test and feedback  
Showing it as an  
extension

Title	Outcome	Order	Test Case Id	Configuration	Tester
TC11 - SMS Reminder Delivered 24 Hours Before Appointment	Passed	1	73	Windows 10	Girivasanth V
TC12 - Email Reminder Contains Correct Appointment Details	Passed	2	75	Windows 10	Girivasanth V
TC13 - No Reminder Sent for Cancelled Appointments	Passed	3	76	Windows 10	Girivasanth V

## 5. Running the test cases

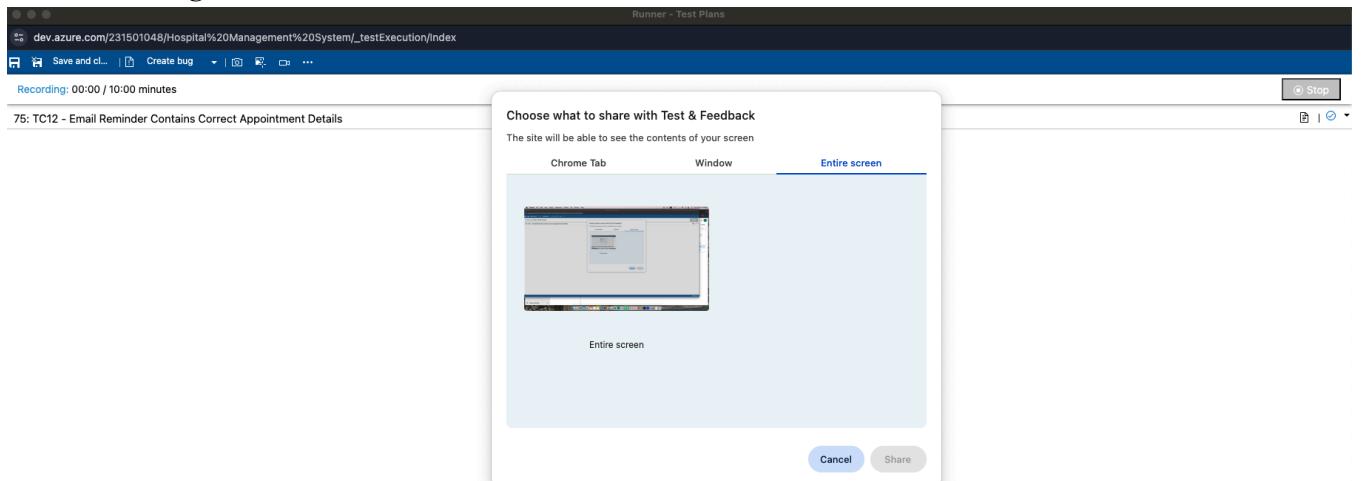


The screenshot shows the Azure DevOps Test Plans interface. On the left, the navigation bar includes 'Overview', 'Boards', 'Repos', 'Pipelines', 'Test Plans' (selected), 'Test plans', 'Progress report', 'Runs', and 'Artifacts'. Below this is a 'Project settings' link. The main area displays a 'Test Suites' list under 'Hospital Management System Team\_Story...' with three items: '23 : Appointment Reminders for Patients (ID: 74)', '18 : Doctor's Daily Schedule View (4)', and '13 : Appointment Booking by Patient (4)'. A context menu is open over the first item, listing options: 'View execution history', 'Mark Outcome', 'Run', 'Reset test to active', 'Edit test case', and 'View test result'. To the right, a table titled 'Test Points (3 items)' lists three entries: 'TC11 - SMS Reminder Delivered 24 Hours Before Appointment' (Passed, Order 1, Test Case Id 73, Windows 10, Girivasanth V), 'TC12 - Email Reminder Contains Correct Appointment Details' (Passed, Order 2, Test Case Id 75, Windows 10, Girivasanth V), and 'TC13 - No Reminder Sent for Cancelled Appointments' (Passed, Order 3, Test Case Id 76, Windows 10, Girivasanth V). A 'Run for web application' button is visible at the top right of the table.

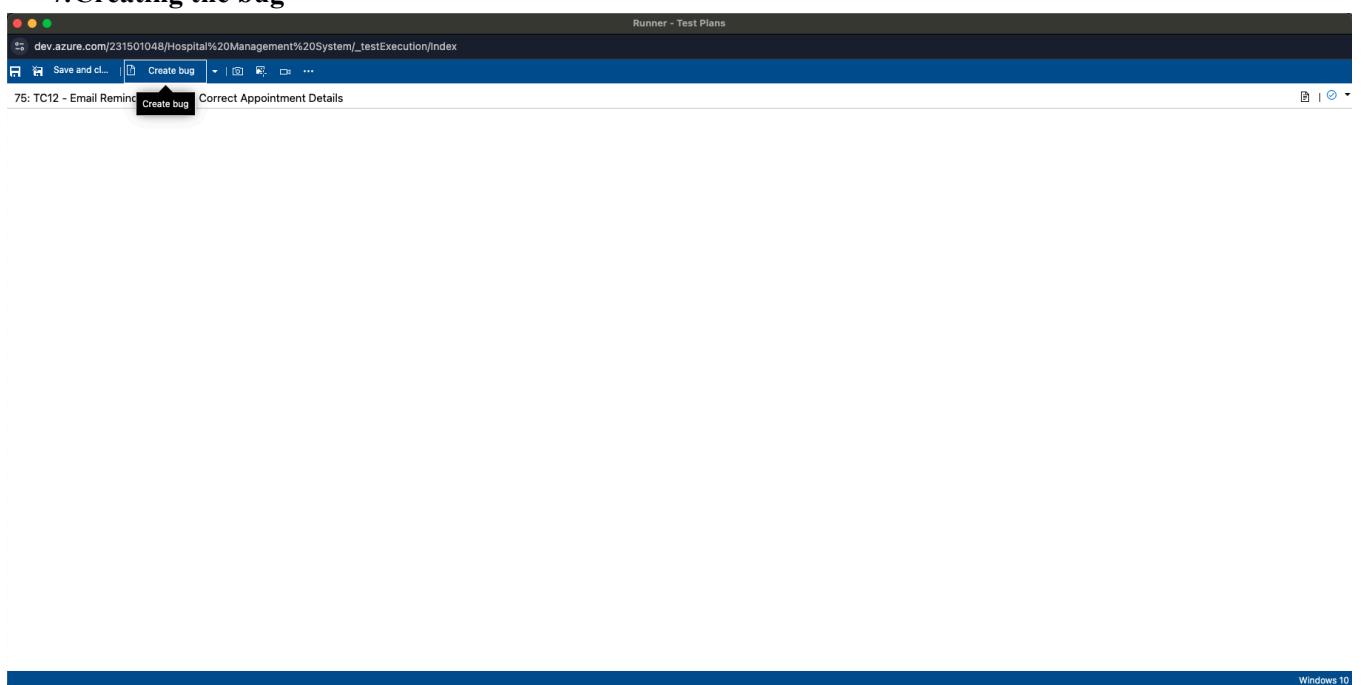


The screenshot shows the 'Runner - Test Plans' interface. The URL is 'dev.azure.com/231501048/Hospital%20Management%20System/\_testExecution/Index'. The page title is 'Runner - Test Plans'. At the top, there are links for 'Save and cl...', 'Create bug', and other navigation options. Below is a list of test cases, starting with '82: TC16 - Non-Treating Doctor Access Denied to Records'. The status for this case is 'In Progress'. The bottom of the screen shows a dark blue footer bar with the text 'Windows 10'.

## 6.Recording the test case



## 7.Creating the bug



Runner - Test Plans

Save and cl... Create bug ...

75. TC12 - Email Reminder Contains Correct Appointment Details

**NEW BUG \***

**Details Not Found**

Unassigned 0 comments Add tag

State: New Area: Hospital Management System  
Reason: New Iteration: Hospital Management System|Sprint 2

**Repro Steps**

4/30/2025 5:23 PM Bug filed on "TC12 - Email Reminder Contains Correct Appointment Details"

**Test Configuration:** Windows 10

**System Info**

Browser - Name	Google Chrome 135
Browser - Language	en-GB
Browser - Height	914
Browser - Width	1819
Browser - User agent	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/135.0.0.0 Safari/537.36
Operating system - Name	Macintosh; Intel Mac OS X 10_15_7
Operating system - Architecture	arm64
Operating system - Processor model	Apple M1
Operating system - Number of processors	8
Memory - Available	142934016
Memory - Capacity	8589934592
Display - Pixels per inch (X axis)	0
Display - Pixels per inch (Y axis)	0

**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 Parent: 23 Appointment Reminders for Patients Updated an hour ago, Active

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 75 TC12 - Email Reminder Contains Correct App... Updated 56 minutes ago, Design

Windows 10

Azure DevOps 231501048 / Hospital Management Sys... / Boards / Work items

Recently updated Back to Work Items

89 Detail not found

No one selected 0 Comments Add Tag

State: Active Area: Hospital Management System  
Reason: Investigate Iteration: Hospital Management System|Sprint 2

**Repro Steps**

4/30/2025 5:19 PM Bug filed on "TC12 - Email Reminder Contains Correct Appointment Details"

**Test Configuration:** Windows 10

**System Info**

Browser - Name	Google Chrome 135
Browser - Language	en-GB
Browser - Height	914
Browser - Width	1819
Browser - User agent	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/135.0.0.0.0.0 Safari/537.36
Operating system - Name	Macintosh; Intel Mac OS X 10_15_7
Operating system - Architecture	arm64
Operating system - Processor model	Apple M1
Operating system - Number of processors	8
Memory - Available	15011328
Memory - Capacity	8589934592
Display - Pixels per inch (X axis)	0
Display - Pixels per inch (Y axis)	0
Display - Device pixel ratio	1

**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 Parent: 23 Appointment Reminders for Patients Updated 1h ago, Active

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 75 TC12 - Email Reminder Contains Correct App... Updated 7m ago, Design

**Discussion**

Project settings <<

Discussion

## 8. Test case results

The screenshot shows the Azure DevOps interface for a project titled "Hospital Management System". The left sidebar includes options like Overview, Boards, Repos, Pipelines, Test Plans, Test plans, Progress report, Runs, and Artifacts. The "Test plans" section is currently selected. In the center, a "Test Suites" list shows a suite named "23 : Appointment Reminders for Patients (ID: 74)" with a status of "Past" and a run date of April 13 - April 19. The suite has a 30% completion rate and 100% passed tests. A "View report" link is present. To the right, a modal window titled "Test Case Results" displays the outcome of three test points:

Test Point	Outcome	TimeSt...	Configur...	Run by	Tester	Test
TC11 - SMS Reminder Delivered 24 Hours Before...	Passed	Just now	Windows ...	Girivasanth V	Girivasanth V	Hos
TC12 - Email Reminder Contains Correct Appointment Details	Passed	15m ago	Windows ...	Girivasanth V	Girivasanth V	Hos
TC13 - No Reminder Sent for Cancelled Appointments						

An "Open execution history for current test point" link is at the bottom of the modal.

## 9. Test report summary

The screenshot shows the Azure DevOps interface for a project titled "Hospital Management System". The left sidebar includes options like Overview, Boards, Work items, Boards, Backlogs, Sprints, Queries, Delivery Plans, Analytics views, Repos, Pipelines, Test Plans, and Artifacts. The "Work items" section is currently selected. A specific work item, "BUG 87 Duplicate Patient ID Generation", is displayed. The details include:

- Title:** BUG 87 Duplicate Patient ID Generation
- State:** Active
- Reason:** Approved
- Repro Step:** Approved, Investigate
- Created:** 4/30/2025 4:36 PM (Bug filed on "TC03 - Duplicate Patient Detection by Email/Phone")
- Test Configuration:** Windows 10
- System Info:**

Browser - Name	Google Chrome 135
Browser - Language	en-GB
Browser - Height	914
Browser - Width	1819
Browser - User agent	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/135.0.0.0 Safari/537.36
Operating system - Name	Macintosh; Intel Mac OS X 10_15_7
Operating system - Architecture	arm64
Operating system - Processor model	Apple M1
Operating system - Number of processors	8
Memory - Available	81838080
Memory - Capacity	8589934592
Display - Pixels per inch (X axis)	0
Display - Pixels per inch (Y axis)	0
Display - Device pixel ratio	1
- Planning:**
  - Resolved Reason: None
  - Story Points: None
  - Priority: 2
  - Severity: 3 - Medium
- 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.
- Effort (Hours):**
  - Original Estimate: None
  - Remaining: None
  - Completed: None
- Related Work:**
  - Add link: None
  - Parent: None
  - 3 Patient Registration via Online Form Updated 48m ago • Active
  - Tested By: None
  - 47 TC03 - Duplicate Patient Detection by Email/Phone Updated 2h ago • Design
- System Info:** None

- The bug has been assigned to the developer, and its status has been updated accordingly.

[https://dev.azure.com/231501048/Hospital%20Management%20System/\\_workitems/edit/89](https://dev.azure.com/231501048/Hospital%20Management%20System/_workitems/edit/89)

**Recently updated** | Back to Work Items

**89 Detail not found**

Girivasanth V | 0 Comments Add Tag

**Save** | **Follow** | **Details** | **4** | **0**

Updated by Girivasanth V: Just now

**Repro Steps**

4/30/2025 5:19 PM Bug filed on "TC12 - Email Reminder Contains Correct Appointment Details"

**Test Configuration:** Windows 10

**System Info**

Browser - Name	Google Chrome 135
Browser - Language	en-GB
Browser - Height	914
Browser - Width	1819
User agent	Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/135.0.0.0 Safari/537.36
Operating system - Name	Mac OS X, Intel Mac OS X 10_15_7
Operating system - Architecture	arm64
Operating system - Processor model	Apple M1
Operating system - Number of processors	8
Memory - Available	150111328
Memory - Capacity	8589934592
Display - Pixels per inch (X axis)	0
Display - Pixels per inch (Y axis)	0
Display - Device pixel ratio	1

**Planning**

Resolved Reason  
Story Points  
Priority 2  
Severity 3 - Medium  
Activity

**Deployment**

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

**Development**

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

**Effort (Hours)**

Original Estimate  
Remaining  
Completed

**Related Work**

Add link ▾ Parent  
[23 Appointment Reminders for Patients](#) Updated 1h ago • Active  
Tested By  
[75 TC12 - Email Reminder Contains Correct App...](#) Updated 53m ago • Design

**System Info**

## 10. Progress report

[https://dev.azure.com/231501048/Hospital%20Management%20System/\\_testManagement/analytics/progressreport](https://dev.azure.com/231501048/Hospital%20Management%20System/_testManagement/analytics/progressreport)

**Progress report**

Hospital Management System Team\_Stories\_Sprint 1 Test Suites Outcome Configuration Tester Priority Assigned To

**Summary**

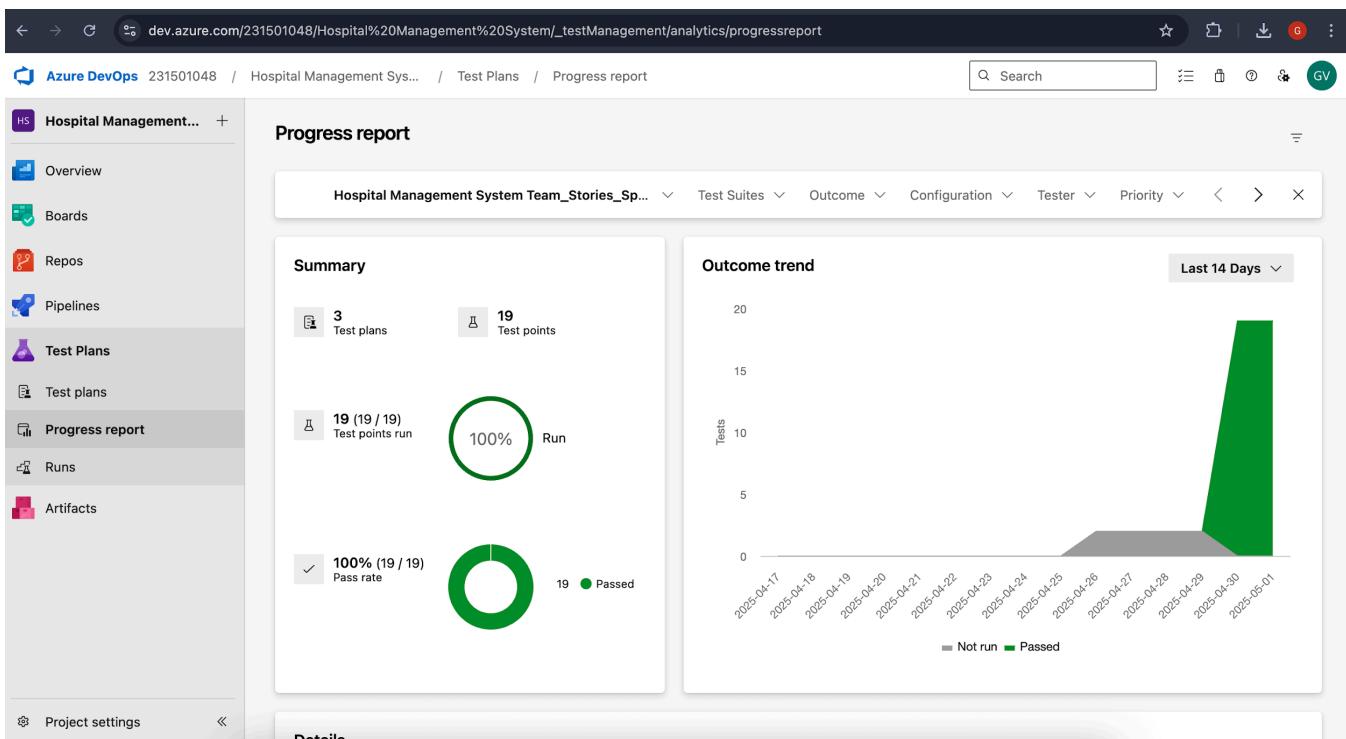
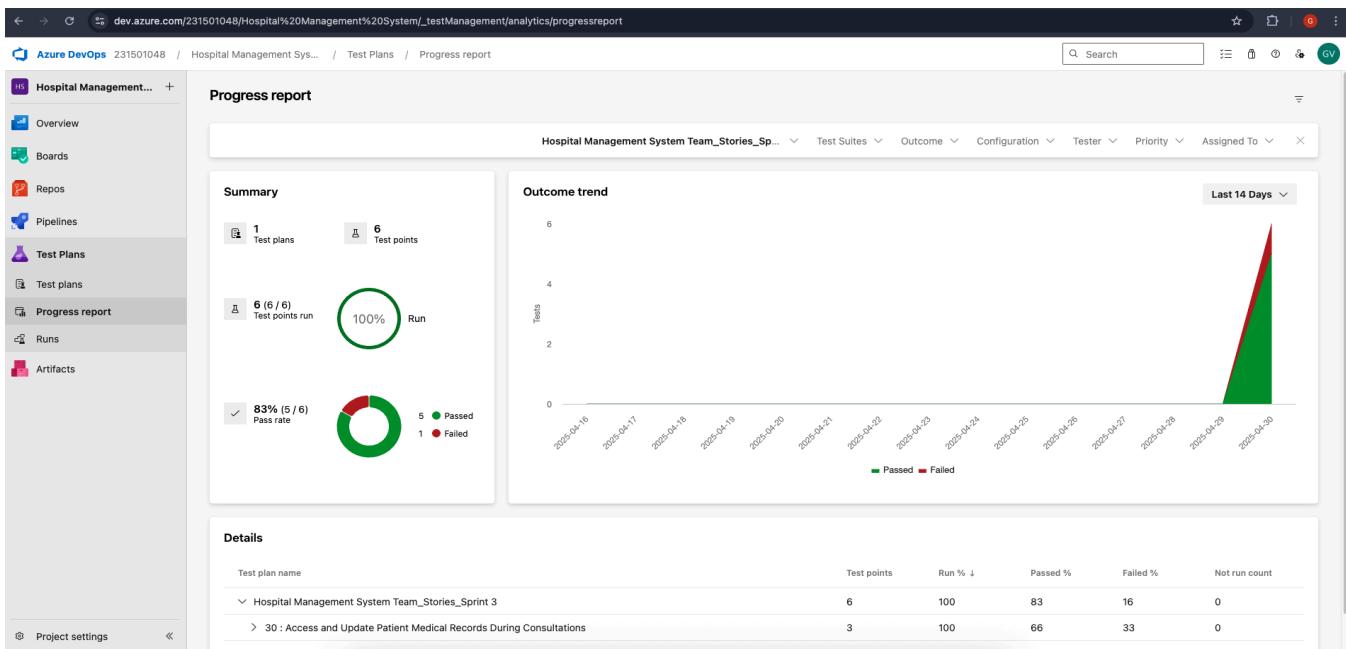
- 1 Test plans
- 5 Test points
- 5 (5 / 5) Test points run (100% Run)
- 60% (3 / 5) Pass rate (3 Passed, 2 Failed)

**Outcome trend**

Last 14 Days

**Details**

Test plan name	Test points	Run %	Passed %	Failed %	Not run count
Hospital Management System Team_Stories_Sprint 1	5	100	60	40	0



## Result:

Test plans and test cases covering both Happy Path and Error Path scenarios have been created in Azure DevOps for the respective user stories.

**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:**

##### **1.Sign in to Azure Portal**

- Navigate to <https://portal.azure.com> and log in.

##### **2.Create the Azure Load Testing Resource**

- Go to **Create a resource** → Search for "**Azure Load Testing**".
- Select **Azure Load Testing** and click **Create**.

##### **3.Configure Resource Settings**

- **Subscription:** Choose your Azure subscription.
- **Resource Group:** Select an existing one or create a new one.
- **Name:** Enter a unique name (avoid special characters).
- **Location:** Select the preferred region for deployment.

##### **4.(Optional) Add Tags**

- Configure tags for better organization and billing tracking.

##### **5.Deploy the Resource**

- Click **Review + Create**, then **Create**.
- Once deployment completes, select **Go to resource**.

#### **Steps to Create and Run a Load Test**

##### **1.Access Your Load Testing Resource**

- Open your Azure Load Testing resource and select **Add HTTP requests > Create**.

##### **2.Configure Basic Test Settings**

- **Test Name:** Provide a unique identifier.
- **Description (Optional):** Briefly describe the test purpose.
- **Run After Creation:** Leave this option checked.

##### **3.Define Load Parameters**

- **Test URL:** Enter the target endpoint (e.g., <https://yourapi.com/products>).

##### **4.Start the Test**

- Click **Review + Create** → **Create** to initiate the load test.

## Load Testing

Microsoft Azure Search resources, services, and docs (G+) Copilot 231501048@rajalakshmi.. DEFAULT DIRECTORY:231501048...

Home > HMSteering > TestRun\_5/1/2025\_12:52:53 PM ... Last updated by: 231501048@rajalakshmi.edu.in | Initiated on: 01/05/2025, 12:52 pm

View all test runs  Stop  Refresh  Rerun  Compare  App components  Configure metrics  Download  Copy artifacts  Share  Delete test run  Mark as baseline  Auto refresh on (10s)

Start time	End time	Test run ID	Test type	Engine instances	Debug mode	Test result	Status
01/05/2025, 12:52:58		2845914e-a6a4-4ea6-bb4a-a6e903822196	URL	1	Disabled	Pass	Executing

Load test results Engine health

Client-side metrics

Requests : All Region : 0 Aggregation : P90 Error type : 0 Time range : 01/05/2025, 12:52:58 - 01/05/2025, 12:54:03 Group by : 10s

Virtual Users (Max) Response time (successful responses)

Request1 1

Response time (successful responses) Request Pct 90: 40 ms

Request1 40 ms

Requests/sec (Avg) Errors (total)

Request1 356.3 /s

Errors (total)

---

Microsoft Azure Search resources, services, and docs (G+) Copilot 231501048@rajalakshmi.. DEFAULT DIRECTORY:231501048...

Home > HMSteering > TestRun\_5/1/2025\_12:52:53 PM ... Last updated by: 231501048@rajalakshmi.edu.in | Initiated on: 01/05/2025, 12:52 pm

View all test runs  Stop  Refresh  Rerun  Compare  App components  Configure metrics  Download  Copy artifacts  Share  Delete test run  Mark as baseline  Auto refresh on (10s)

Client-side metrics

Requests : All Region : 0 Aggregation : P90 Error type : 0 Time range : 01/05/2025, 12:52:58 - 01/05/2025, 12:54:03 Group by : 10s

Virtual Users (Max) Response time (successful responses)

Request1 50

Response time (successful responses) Request Pct 90: 88.44 ms

Request1 88.44 ms

Requests/sec (Avg) Errors (total)

Request1 627.76 /s

Errors (total)

Server-side metrics

You have not configured any app components. [Configure app components](#) to see server side metrics.

---

The screenshot shows the MediCare HMS dashboard. On the left, a dark sidebar lists navigation items: MAIN (Dashboard), MANAGEMENT (Patients, Doctors, Appointments), and SYSTEM (Settings, Logout). The main content area has a header with a search bar ('Search patients, doctors, appointments...') and a user profile ('Dr. Sarah Johnson, Administrator'). Below the header are four summary cards: 'Total Patients' (1,248, +12% from last month), 'Today's Appointments' (42, -3% from yesterday), 'Available Doctors' (28, +2 new this week), and 'Available Rooms' (15, No change). A section titled 'Today's Appointments' lists four entries:

Patient	Doctor	Time	Status	Actions
John Smith	Dr. Sarah Johnson	09:00 AM	Scheduled	<a href="#">Details</a>
Emily Davis	Dr. Michael Brown	10:30 AM	Scheduled	<a href="#">Details</a>
Robert Wilson	Dr. Sarah Johnson	11:15 AM	Completed	<a href="#">Details</a>
Jennifer Lee	Dr. Amanda Taylor	02:00 PM	Cancelled	<a href="#">Details</a>

### Result:

The Azure Load Testing resource is now active, and the performance test for the specified endpoint has been completed.

**EXP NO: 10**

## **GITHUB: PROJECT STRUCTURE & NAMING CONVENTIONS**

### **Aim:**

To outline the project's folder structure and file naming conventions in a clear, standardized manner, ensuring that developers, hospital staff, and administrators can easily navigate, maintain, and expand the **Hospital Management System**.

### **GitHub Project Structure**

The screenshot shows a GitHub repository page for 'Software-Construction'. The main navigation bar includes 'Code', 'Issues', 'Pull requests', 'Actions', 'Projects', 'Wiki', 'Security', 'Insights', and 'Settings'. Below the navigation is a search bar and a 'Go to file' button. The repository name 'GirivasanthVimalan / Software-Construction' is displayed. A pull request for 'Update README.md' is shown, with the commit message '715c614 · now · History'. The README.md file content is displayed below, featuring a logo and the title 'Hospital Management System (HMS)'.

**Hospital Management System (HMS)**

A smart, efficient, and patient-centric healthcare solution

The dashboard shows the following statistics: Total Patients (1,248), Today's Appointments (42), Available Doctors (28), and Available Nurses (15). Below this, a table lists 'Today's Appointments' for patients John Smith, Emily Davis, Robert Wilson, and Jennifer Lee, each with their doctor's name and appointment status (e.g., Submitted, Pending, Confirmed, Cancelled).

<https://private-user-images.githubusercontent.com/17218897/439549172-d2007646-0df6-4fd4-8f33-063c823f0d7d.png?jwt=eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJpc3MiOiJnaXRodWIuY29tIiwYXVkijoicmF3LmdpdGh1YnVzZXJb250ZW...>

The screenshot shows a GitHub repository page for 'Software-Construction' by GirivasanthVimalan. The repository has 7 commits, 1 branch, and 0 tags. The README file contains a screenshot of the 'MediCare HMS' application interface, which includes a search bar, patient list, and navigation menus for 'Today's Appointments', 'Available Doctors', and 'Available Rooms'. The 'About' section notes 'No description, website, or topics provided'. The 'Releases' section indicates 'No releases published' and links to 'Create a new release'. The 'Packages' section shows 'No packages published' and links to 'Publish your first package'. The 'Languages' section is partially visible at the bottom.

## Result:

The repository maintains a logical folder structure and standardized naming conventions, creating an intuitive experience for developers navigating the project.