# Azure DevOps Theoretical Assessment

**Project :** TeamPulse – Project Management Dashboard

## Epic

TeamPulse – Project Management Dashboard

TeamPulse is a comprehensive web-based project management dashboard designed to help teams improve productivity, track milestones, and enhance collaboration. The platform provides modules for user authentication, analytics visualization, sprint tracking, and internal communication — offering complete transparency and efficiency across all project phases.

A screenshot of a computer

AI-generated content may be incorrect.

## Feature 1 : User Authentication & Role Management

### Feature Description

This feature ensures secure access control to the TeamPulse application. It includes modules for user registration, login, and role assignment to guarantee that only authorized users can view or modify data. The feature also defines user-level permissions and authentication workflows.

A screenshot of a computer

AI-generated content may be incorrect.

### User Story 1.1 - Admin Account Management

As an Admin, I want to create and manage user accounts so that I can control who has access to the TeamPulse dashboard and ensure that each user has the right permissions.

A screenshot of a computer

AI-generated content may be incorrect.

### Tasks

- Define User Roles and Permissions: Identify all user types and access levels.  
- Create Database Schema for Users and Roles: Logical schema for user credentials.  
- Design UI for Adding and Editing Users: Mock UI for management.

### User Story 1.2 - Role Assignment Control

As a Manager, I want to assign specific roles to my team members so that access to data and features is appropriately limited.

A screenshot of a computer

AI-generated content may be incorrect.

### Tasks

- Map User IDs to Specific Roles.  
- Implement Role Selection Dropdown.  
- Validate Role Updates.

### User Story 1.3 - User Login Authentication

As a User, I want to log in securely using my credentials so that I can access my assigned tasks and project details.

A screenshot of a computer

AI-generated content may be incorrect.

### Tasks

- Design Login and Registration Page.  
- Integrate Theoretical Authentication Logic.  
- Document Password Reset Flow.

## Feature 2 : Dashboard Analytics & KPIs

### Feature Description

Provides analytical visualization of project progress and team productivity. Consolidates metrics such as sprint velocity and task completion rate for better decision-making.

A screenshot of a computer

AI-generated content may be incorrect.

### User Story 2.1 - KPI Visualization

As a Manager, I want to view KPIs to evaluate team performance.

A screenshot of a computer

AI-generated content may be incorrect.

### Tasks

- Identify Relevant KPIs.  
- Design KPI Widgets.  
- Document Data Refresh Cycle.

### User Story 2.2 - Performance Reports

As an Admin, I want to generate performance reports for each sprint to analyze team efficiency.

A screenshot of a computer

AI-generated content may be incorrect.

### Tasks

- Define Report Structure.  
- Design Report Template.  
- Document Export Procedure.

## Feature 3 : Task & Sprint Management

### Feature Description

Supports Agile execution by enabling task creation, sprint allocation, and progress tracking for better visibility.

A screenshot of a computer

AI-generated content may be incorrect.

### User Story 3.1 - Task Creation and Assignment

As a Scrum Master, I want to create and assign tasks to team members to define responsibilities clearly.

A screenshot of a computer

AI-generated content may be incorrect.

### Tasks

- Design Task Creation Form.  
- Define Task Attributes.  
- Map Tasks to Sprints.

### User Story 3.2 - Update Task Status

As a Developer, I want to update my task status to show progress.

A screenshot of a computer

AI-generated content may be incorrect.

### Tasks

- Create Kanban Board Columns.  
- Implement Status Update Logic.  
- Track Status History.

## Feature 4 : Team Chat & Notifications

### Feature Description

Enables internal communication with chat and notification modules for real-time updates.

A screenshot of a computer

AI-generated content may be incorrect.

### User Story 4.1 - Real-Time Team Chat

As a Team Member, I want to chat with my teammates to discuss project updates.

A screenshot of a computer

AI-generated content may be incorrect.

### Tasks

- Design Chat Interface.  
- Define Message Schema.  
- Document Chat Workflow.

### User Story 4.2 - System Notifications

As a Manager, I want to receive notifications for key events like sprint completion or task updates.

A screenshot of a computer

AI-generated content may be incorrect.

### Tasks

- Define Notification Categories.  
- Design Notification Popup/Alert UI.  
- Document Trigger Conditions.

**TASKS OF ALL USER STORIES :**

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

**Additional Sections:**

**1. Iteration / Sprint Planning**

Sprint planning in Azure DevOps helps organize work items (User Stories and Tasks) into short, manageable development cycles. It enables teams to focus on specific deliverables while maintaining steady progress through measurable goals.

Sprint Name: Sprint 1 – Foundation Build

Duration: 2 Weeks

Sprint Goal: To complete setup of authentication and task management modules.

Steps to implement in Azure DevOps:  
1. Navigate to Project Settings → Boards → Sprints.  
2. Create Sprint 1 with defined start and end dates.  
3. Drag selected User Stories and Tasks into Sprint 1 from the Backlog view.  
4. Assign team members to specific tasks.  
5. Use the Taskboard view to track progress through To Do, In Progress, and Done columns.

Sprint planning ensures structured delivery, prevents overload, and keeps the team aligned with Agile principles.

A screenshot of a computer

AI-generated content may be incorrect.

Sprint 1 – iteration 1

A screenshot of a computer

AI-generated content may be incorrect.

Sprint 1 – iteration 2

A screenshot of a computer

AI-generated content may be incorrect.

Sprint 1 – iteration 3

**2. Tags and Priorities**

Tags and priorities help classify work items by functionality and urgency, improving coordination across teams.

Example for TeamPulse:  
• Frontend – UI elements like dashboards and chat (P2)  
• Backend – Authentication, logic, APIs (P1)  
• Database – Schema and data design (P1)  
• Analytics – Reports, KPIs, charts (P3)

In Azure DevOps, tags are added directly to work items, while priorities (P1, P2, P3) indicate importance. Filtering by tags or priority ensures efficient tracking and balanced workloads.

**3. Acceptance Criteria**

Acceptance criteria define what success looks like for each User Story. They ensure a shared understanding between developers, testers, and stakeholders.

Examples for TeamPulse:  
• Login Authentication: Must reject invalid credentials, auto-expire sessions, and redirect after login.  
• KPI Visualization: Dashboard must display accurate sprint data and refresh periodically.  
• Task Assignment: Tasks should link to a sprint and contain mandatory fields.  
• Team Chat: Only project members can send messages; unread notifications must appear.

**4. Definition of Done (DoD)**

The Definition of Done ensures consistent completion standards for all work items. A task or story is considered Done when:  
• All acceptance criteria are satisfied.  
• Documentation is complete and peer-reviewed.  
• Work is ready for testing or sprint closure.  
• Dependencies are closed and linked properly.

**5. Burndown Chart (Optional – Bonus)**

A Burndown Chart visualizes sprint progress, showing the remaining work over time. It helps track completion trends and forecast sprint success.

Implementation in Azure DevOps:  
• Go to Boards → Sprints → Analytics tab.  
• Select the Burndown Chart widget.  
• Assign all Sprint 1 items to visualize progress.  
The chart’s X-axis represents time, and the Y-axis shows remaining tasks or story points.

This visualization helps teams identify bottlenecks early and maintain a sustainable development pace.

A screenshot of a computer

AI-generated content may be incorrect.

For iteration 1

A screenshot of a computer

AI-generated content may be incorrect.

For iteration 2

**Summary Table of Additional Sections**

1. Iteration / Sprint Planning – Organize work into cycles; screenshot of Sprint 1 plan.  
   2. Tags and Priorities – Categorize and rank tasks; screenshot of tag list.  
   3. Acceptance Criteria – Define success metrics; bullet points per story.  
   4. Definition of Done – Establish completion standards.  
   5. Burndown Chart – Track sprint progress visually (optional).