# PRACTICAL - 1

**AIM:** Identify the requirement and set objectives for a software project.

**Scenario:** Assume you are the project manager for a software development project. The project involves creating a new mobile application for a client. The client wants the application to enhance user engagement and include specific features.

#### Task:

- 1. Identify the requirements and list the key objectives for the PS APP and Inventory Management system.
- 2. Ensure that each objective follows the SMART criteria.
- 3. Create Epic, Stories and Tasks using Jira software.

#### **Solution:**

**Project Title: PS APP** 

## **Key Objective:**

- Develop user authentication and profile management system.
- Implement an inventory management system for in-app purchases and DLC tracking.
- Create a content browsing feature for games and media.
- Enhance user engagement with achievements, rewards, and notifications.
- Ensure cross-device synchronization of user data and content.

#### **SMART Criteria:**

- Specific: Create an engaging, user-friendly mobile app with seamless onboarding, login, registration, password recovery, and a personalized home screen.
- Measurable: The app will achieve 90% user engagement by allowing users to register and log in easily, reducing drop-off during onboarding by 30%, and ensure password recovery is completed by at least 95% of users who request it.
- Achievable: Develop the app with the required features using an agile methodology, testing each feature in iterative sprints.
- Relevant: These features align with the client's goal of increasing user engagement and retention through simplified access and personalized experience.
- Time-bound: The application should be completed within 8 weeks, with specific milestones at the end of each sprint (2 weeks per sprint).

# **Key Requirements:**

# **Epic 1: User Onboarding and Authentication**

**Story 1:** Landing/Onboarding Page

• Task 1: Design the "Landing/Onboarding" page with an engaging introduction to the app.

• Task 2: Add a "Get Started" button that leads to the login/registration page.

#### Story 2: User Login

- Task 1 : Create a login page with email and password fields.
- Task 2: Implement token-based authentication (JWT).
- Task 3: Add an option for users to log in via social media accounts (Google/Facebook).

### Story 3: User Registration

- Task 1: Design a Registration form with fields for username, email and password.
- Task 2: Implement server-side validation for registration inputs.
- Task 3: Store user registration data securely in the database.

### Story 4: Forgot Password

- Task 1: Design a "Forgot Password" page with an email input for password reset.
- Task 2: Implement email-based password recovery.

### **Epic 2: Home Page and Content Display**

#### **Story 1 :** Home Page Layout

- Task 1 : Design the homepage with a carousel for featured games.
- Task 2: Create a section with game cards to display popular games.
- Task 3: Implement a search bar for users to search specific games.

#### **Story 2:** Game Interaction

- Task 1: Implement tap functionality on game cards to view game details.
- Task 2: Integrate a rating system to allow users to rate games.

## **Epic 3: Shopping Cart and Favourite System**

## **Story 1:** Shopping Cart

- Task 1 : Design the shopping cart page with options to view added items.
- Task 2: Implement functionality to add, remove and edit items in the cart.
- Task 3: Integrate the checkout process for in-app purchases.

### Story 2: Favourite System

- Task 1 : Add functionality to allow users to mark games as favourites.
- Task 2: Display a list of favourite games on the "Favourite" page.

#### **Epic 4: Notification and User Profile**

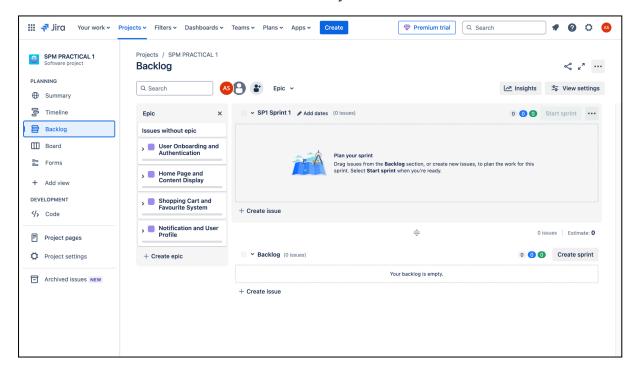
#### **Story 1:** Notification System

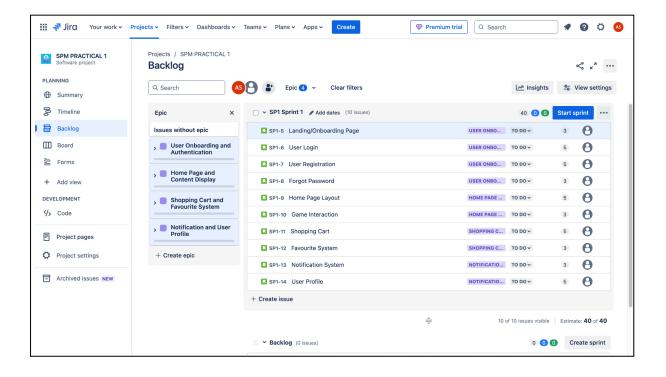
• Task 1: Implement a notification system to notify users of new content and updates.

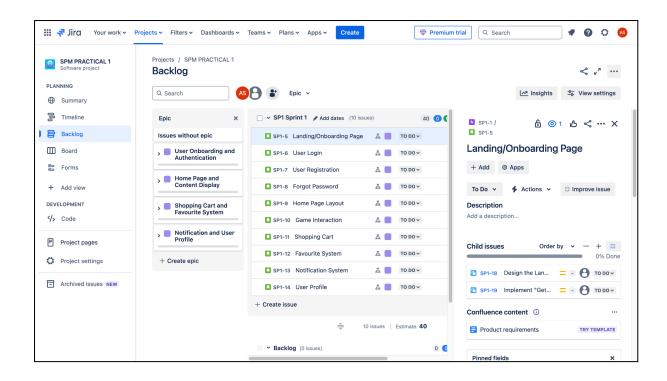
• Task 2 : Design a notification page to show all user alerts.

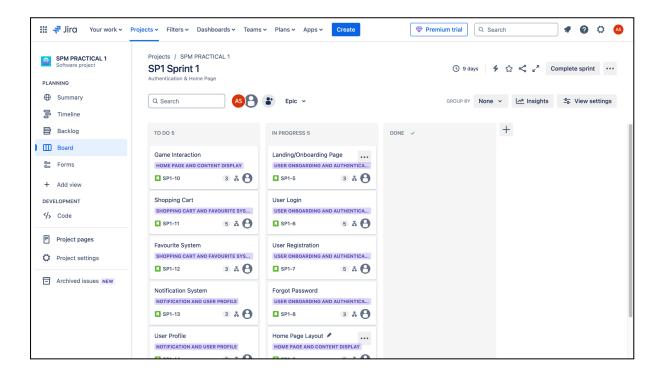
#### Story 2: User Profile

- Task 1: Create a profile page to display personal details such as username, email and preferences.
- Task 2: Add functionality to update personal details and preferences.
- Task 3: Integrate a profile picture upload option.
- Task 4: Also add a tab for the order history.









**Project Title:** Stock Inventory Management System

### **Key Objective:**

- Develop a secure user authentication and role-based access system.
- Implement an efficient stock management system for tracking inventory levels and stock movements.
- Create a product catalog with categorization, search, and filtering options.
- Enable order management, including stock purchases, sales, and restocking.
- Implement a notification system for low stock alerts and order updates.

#### **SMART Criteria:**

- Specific: Build an inventory management system with features for product tracking, stock monitoring, order processing, and real-time notifications.
- Measurable: Ensure 95% accuracy in stock tracking, reduce manual inventory errors by 40%, and improve order processing efficiency by 50%.
- Achievable: Develop the system in iterative sprints using agile methodology with regular testing.
- Relevant: The system addresses the need for streamlined inventory tracking and order management, improving business efficiency.
- Time-bound: Complete the application within 8 weeks, with bi-weekly sprints focusing on key modules.

## **Key Requirements:**

### **Epic 1: User Authentication and Role Management**

Story 1: User Login & Role-Based Access

- Task 1: Implement a secure login system for admins, managers, and staff.
- Task 2: Restrict access based on user roles (e.g., only admins can add new products).

## Story 2: User Registration & Profile Management

- Task 1: Design a registration form for new users with role selection.
- Task 2: Implement profile management features for updating user details.

#### Story 3: Password Recovery

• Task 1: Implement a "Forgot Password" feature using email verification.\

#### **Epic 2 : Stock Management System**

#### **Story 1:** Product Catalog

• Task 1: Develop a database schema for product details (name, SKU, price, quantity, supplier, etc.).

• Task 2: Create a product listing page with categorization and filtering options.

## Story 2: Stock Tracking & Updates

- Task 1: Implement real-time stock level tracking.
- Task 2: Add functionality to update stock when new items are received or sold.

### **Epic 3: Order Management**

### Story 1: Stock Purchase Orders

- Task 1: Create a module for adding new stock purchase entries.
- Task 2: Implement approval workflow for purchase orders.

### **Story 2:** Sales Order Processing

- Task 1: Develop an interface to create and manage sales orders.
- Task 2: Integrate automatic stock deduction when an order is confirmed.

# **Epic 4: Notification & Reporting**

### **Story 1 :** Low Stock Alerts

• Task 1: Implement an automatic alert system for low stock levels.

### Story 2: Order & Inventory Reports

• Task 1: Generate daily, weekly, and monthly reports on stock levels and order history.

