Assignment No. 1 – Requirement Analysis and User Story Writing

Project Title:
Online Book Store

1. Requirement Analysis

1.1 Client Overview
The client requires an Online Book Store that allows users to browse, search, and purchase books conveniently from anywhere. The platform should have a user-friendly interface, secure transactions, and account management capabilities.

1.2 User Requirements (Preferences and Expectations)

User Type	Preferences / Expectations
Visitor (Guest User)	- Browse books without logging in - Search for books by title, author, or category - View book details and reviews
Registered User	- Create and manage user account - Add books to cart or wishlist - Make secure online payments - View order history - Track order status
Admin	- Add, update, or delete books - Manage inventory - View and process customer orders - Manage user accounts and payments

2. Functional Requirements

Category	Requirement Description
Authentication	Users can register, log in, and reset passwords securely.
Catalog Management	Books are displayed with title, author, price, rating, and availability.
Search & Filter	Users can search books by title, author, ISBN, or category.

Shopping Cart	Users can add, remove, or update quantities of selected books.
Checkout & Payment	Users can place orders using secure online payment gateways.
Order Management	Users can view order history and track current orders.
Admin Features	Admins can manage books, users, and orders through a dashboard.
Notifications	Email/SMS notifications for order confirmation and shipping updates.

3. Non-Functional Requirements

Type	Description
Performance	The system should load pages within 3 seconds.
Security	Use HTTPS, encryption for passwords and transactions.
Usability	Interface should be intuitive and mobile-friendly.
Scalability	System should support up to 10,000 concurrent users.
Availability	99.5% uptime required.
Maintainability	Code should be modular and documented for future updates.
Compatibility	Works on all modern browsers and mobile devices.

4. User Stories (Gherkin Format)

User Story: User Registration
As a new user, I want to create an account so that I can purchase books and track my orders.

- Acceptance Criteria:

Given I am on the registration page
When I provide valid information and click 'Register'

Then my account should be created successfully
And I should receive a confirmation email

User Story: Book Search
As a customer, I want to search for books by title or author so that I can quickly find the book I want to buy.

- Acceptance Criteria:

Given I am on the home page
When I enter a book title or author name in the search bar
Then the system should display relevant books matching my query

User Story: Add to Cart
As a registered user, I want to add books to my cart so that I can purchase them later.

- Acceptance Criteria:

Given I am logged in
And I am viewing a book's details
When I click 'Add to Cart'
Then the selected book should appear in my cart

User Story: Checkout and Payment
As a customer, I want to securely pay for my selected books so that I can complete my purchase online.

- Acceptance Criteria:

Given I have books in my cart
When I proceed to checkout and enter valid payment details
Then the payment should be processed securely
And I should receive an order confirmation message

User Story: Admin Book Management
As an admin, I want to add or update books in the catalog so that users always see the latest available books.

- Acceptance Criteria:

Given I am logged in as an admin
When I add or edit a book's details
Then the updated book information should appear in the catalog

5. Sprint Planning

Sprint	Duration	User Stories Covered	Deliverables
Sprint 1	2 weeks	User Registration, Login, Catalog Display	User authentication module, book listing page
Sprint 2	2 weeks	Search & Filter, Cart Management	Search bar, cart page
Sprint 3	2 weeks	Checkout, Payment, Order Tracking	Secure payment and order module
Sprint 4	2 weeks	Admin Panel, Reports, Notifications	Admin dashboard, email notifications