



Spring Testing Homework

Recap

1. Introduction to Testing
2. Understanding Junit and AsserJ
3. Unit Testing vs Integration Testing
4. Unit Testing the Persistence Layer
5. Understanding Mockito
6. Unit Testing the Service Layer
7. Integration Testing
8. Jacoco Test Coverage Report Generation

Homework

1. Create a simple Spring Boot application to manage a library system. The system will have two main entities: Book and Author. You will implement basic CRUD operations, define relationships between entities, and create custom query methods. You need to define the schema for this assignment by yourself. Implement endpoints to:

- Create a new book and author.
- Retrieve a list of all books and authors.
- Retrieve a single book or author by ID.
- Update book and author details.
- Delete a book or author.
- Find books by title.
- Find books published after a certain date.
- Find authors by name.
- Find all books by a specific author.

Homework

2. Implement Custom Validation Logic for various attributes in different Dto in the library management system.
3. Create Unit Tests for all Repositories and Service Layer code
4. Create Integration tests for all API endpoints.
5. Generate Jacoco report for the library management system.

