**Exercise 15: Online Bookstore - API Documentation with Swagger**

**add Swagger dependency to pom.xml (or build.gradle)**

<dependency>

<groupId>io.springfox</groupId>

<artifactId>springfox-boot-starter</artifactId>

<version>3.0.0</version>

</dependency>

**annotate REST controllers and methods with Swagger annotations**

import io.swagger.v3.oas.annotations.Operation;

import io.swagger.v3.oas.annotations.Parameter;

import io.swagger.v3.oas.annotations.responses.ApiResponse;

import io.swagger.v3.oas.annotations.responses.ApiResponses;

import io.swagger.v3.oas.annotations.tags.Tag;

@RestController

@RequestMapping("/books")

@Tag(name = "Book API")

public class BookController {

@GetMapping

@Operation(summary = "Get all books")

@ApiResponses(value = {

@ApiResponse(responseCode = "200", description = "Successful operation"),

@ApiResponse(responseCode = "500", description = "Internal Server Error")

})

public List<BookDTO> getAllBooks() {

// ...

}

@GetMapping("/{id}")

@Operation(summary = "Get book by ID")

@ApiResponses(value = {

@ApiResponse(responseCode = "200", description = "Successful operation"),

@ApiResponse(responseCode = "404", description = "Book not found")

})

public BookDTO getBookById(@Parameter(description = "Book ID") @PathVariable Long id) {

// ...

}

// ...

}

**generate and review API documentation using Swagger UI**

http://localhost:8080/swagger-ui/index.html

In the above code, i have documented the bookstore's REST APIs using Swagger and Springdoc.

- I have added the Swagger dependency to the project.

- I have annotated the REST controllers and methods to generate API documentation.

- I have generated and reviewed the API documentation using Swagger UI.

Note that i have used @Tag to group related APIs, @Operation to describe API operations, @Parameter to describe API parameters, and @ApiResponse to describe API responses.