**Exercise 1: Online Bookstore - Setting Up RESTful Services**

**Business Scenario:**

You are tasked with developing a RESTful service for an online bookstore. The service will manage books, authors, and customers.

**Instructions:**

1. **Setup Spring Boot Project:**
   * Initialize a new Spring Boot project named **BookstoreAPI**.
   * Add dependencies: **Spring Web, Spring Boot DevTools, Lombok**.
2. **Project Structure:**
   * Familiarize yourself with the generated project structure.
3. **What's New in Spring Boot 3:**
   * Explore and document the new features introduced in Spring Boot 3.

**Solution**

Some of the key features introduced in Spring Boot 3 include:

* **Java 17 Support**: Full support for Java 17, including the use of new language features.
* **Improved Native Image Support**: Enhanced support for GraalVM native images, making Spring Boot applications faster and lighter.
* **Enhanced Observability**: New observability and tracing features using Micrometer and Spring Cloud Sleuth.
* **Updated Dependency Versions**: Dependency upgrades for Spring Framework 6.0, Hibernate 6.0, and other libraries.
* **Improved Configuration**: Improved handling and validation of application configuration properties.
* **Security Improvements**: Enhanced security features, including more powerful password encoding mechanisms and improved CSRF protection.

**BookstoreApiApplication.java**

package com.example.bookstoreapi;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class BookstoreApiApplication {

public static void main(String[] args) {

SpringApplication.run(BookstoreApiApplication.class, args);

}

}

**BookController.java**

package com.example.bookstoreapi.controller;

import org.springframework.web.bind.annotation.GetMapping;

import org.springframework.web.bind.annotation.RequestMapping;

import org.springframework.web.bind.annotation.RestController;

@RestController

@RequestMapping("/api/books")

public class BookController {

@GetMapping

public String getBooks() {

return "List of books";

}

}

**pom.xml**

<dependencies>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-starter-web</artifactId>

</dependency>

<dependency>

<groupId>org.springframework.boot</groupId>

<artifactId>spring-boot-devtools</artifactId>

<scope>runtime</scope>

</dependency>

<dependency>

<groupId>org.projectlombok</groupId>

<artifactId>lombok</artifactId>

<optional>true</optional>

</dependency>

</dependencies>