Spring Core and Maven

**Exercise 9: Creating a Spring Boot Application**

**application.properties**

spring.application.name=LibraryManagement

spring.h2.console.enabled=true

spring.h2.console.path=/h2-console

spring.datasource.url=jdbc:h2:mem:librarydb

spring.datasource.driverClassName=org.h2.Driver

spring.datasource.username=sa

spring.datasource.password=

spring.jpa.database-platform=org.hibernate.dialect.H2Dialect

spring.jpa.hibernate.ddl-auto=update

spring.jpa.show-sql=true

**BookRepository.java**

package com.library.repo;

import org.springframework.data.jpa.repository.JpaRepository;

import org.springframework.stereotype.Repository;

import com.library.model.Book;

@Repository

public interface BookRepository extends JpaRepository<Book,Long>{

}

**BookController.java**

package com.library.controller;

import org.springframework.beans.factory.annotation.Autowired;

import org.springframework.web.bind.annotation.\*;

import com.library.model.Book;

import com.library.repo.BookRepository;

import java.util.List;

@RestController

@RequestMapping("/api/books")

public class BookController {

@Autowired

private BookRepository bookRepository;

@GetMapping

public List<Book> getAllBooks() {

return bookRepository.findAll();

}

@PostMapping

public Book createBook(@RequestBody Book book) {

return bookRepository.save(book);

}

@GetMapping("/{id}")

public Book getBookById(@PathVariable Long id) {

return bookRepository.findById(id).orElse(null);

}

@PutMapping("/{id}")

public Book updateBook(@PathVariable Long id, @RequestBody Book bookDetails) {

Book book = bookRepository.findById(id).orElse(null);

if (book == null) return null;

book.setTitle(bookDetails.getTitle());

book.setAuthor(bookDetails.getAuthor());

book.setIsbn(bookDetails.getIsbn());

return bookRepository.save(book);

}

@DeleteMapping("/{id}")

public void deleteBook(@PathVariable Long id) {

bookRepository.deleteById(id);

}

}

**Book.java**

package com.library.model;

import jakarta.persistence.\*;

@Entity

public class Book {

@Id

@GeneratedValue(strategy = GenerationType.*IDENTITY*)

private Long id;

private String title;

private String author;

private String isbn;

public Long getId() { return id; }

public void setId(Long id) { this.id = id; }

public String getTitle() { return title; }

public void setTitle(String title) { this.title = title; }

public String getAuthor() { return author; }

public void setAuthor(String author) { this.author = author; }

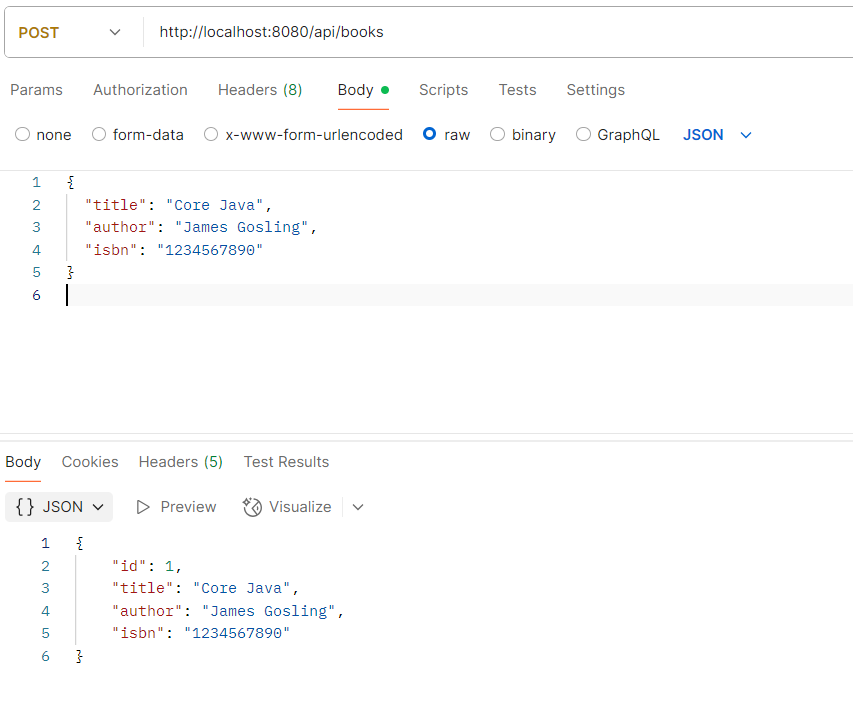
public String getIsbn() { return isbn; }

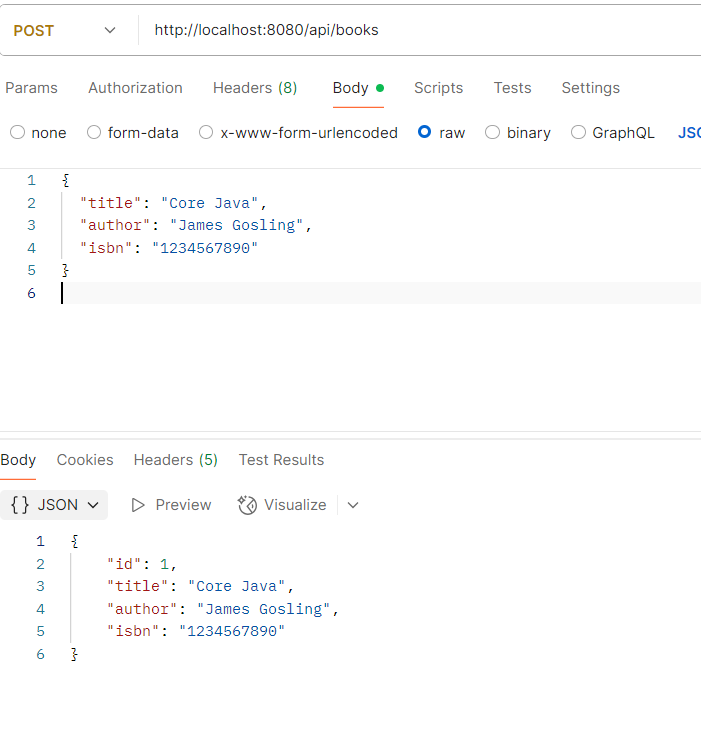
public void setIsbn(String isbn) { this.isbn = isbn; }

}

**OUTPUT**

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