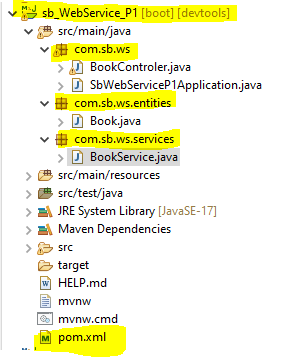
**Creating REST API using Spring Boot | Creating GET functionality**



Book.java:

**package com.sb.ws.entities;**

**public class Book {**

**private int bookId;**

**private String bookName;**

**public Book() {**

**super();**

**}**

**public Book(int bookId, String bookName) {**

**super();**

**this.bookId = bookId;**

**this.bookName = bookName;**

**}**

**public int getBookId() {**

**return bookId;**

**}**

**public void setBookId(int bookId) {**

**this.bookId = bookId;**

**}**

**public String getBookName() {**

**return bookName;**

**}**

**public void setBookName(String bookName) {**

**this.bookName = bookName;**

**}**

**}**

BookController.java

**package com.sb.ws;**

**import java.util.List;**

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

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

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

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

**import com.sb.ws.entities.Book;**

**import com.sb.ws.services.BookService;**

**@RestController**

**public class BookControler {**

**@Autowired**

**private BookService bservice;**

**@GetMapping("/books")**

**public Book getBooks() {**

**Book b = new Book();**

**b.setBookId(123);**

**b.setBookName("Thermo Dynamics");**

**return b;**

**}**

**// to return complete books list**

**@GetMapping("/allbooks")**

**public List<Book> getTotalBooks() {**

**return this.bservice.getAllBooks();**

**}**

**// to return book by id**

**@GetMapping("/books/{id}")**

**public Book getBookById(@PathVariable("id") int id) {**

**return this.bservice.getBookById(id);**

**}**

**}**

BookService.java

**package com.sb.ws.services;**

**import java.util.ArrayList;**

**import java.util.List;**

**import org.springframework.stereotype.Service;**

**import com.sb.ws.entities.Book;**

**@Service**

**public class BookService {**

**private static List<Book> *list* = new ArrayList<>();**

**static {**

***list*.add(new Book(222, "Nuclear Physics"));**

***list*.add(new Book(333, "Molecular Physics"));**

***list*.add(new Book(444, "Organic Chemistry"));**

**}**

**//return all books**

**public List<Book> getAllBooks() {**

**return *list*;**

**}**

**//return book by id**

**public Book getBookById(int id) {**

**Book book;**

**book = *list*.stream().filter(e -> e.getBookId() == id).findFirst().get();**

**return book;**

**}**

**}**

Main class:

package com.sb.ws;

import org.springframework.boot.SpringApplication;

import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication

public class SbWebServiceP1Application {

public static void main(String[] args) {

SpringApplication.run(SbWebServiceP1Application.class, args);

System.out.println("Application running normally !!!");

}

}

Console Output:

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**[32m :: Spring Boot :: [39m [2m (v3.1.5)[0;39m**

**[2m2023-11-09T12:27:43.235+05:30[0;39m [32m INFO[0;39m [35m2664[0;39m [2m---[0;39m [2m[ restartedMain][0;39m [36mcom.sb.ws.SbWebServiceP1Application [0;39m [2m:[0;39m Starting SbWebServiceP1Application using Java 17.0.7 with PID 2664 (E:\Programming\springboot-workspace\sb\_WebService\_P1\target\classes started by Admin in E:\Programming\springboot-workspace\sb\_WebService\_P1)**

**[2m2023-11-09T12:27:43.235+05:30[0;39m [32m INFO[0;39m [35m2664[0;39m [2m---[0;39m [2m[ restartedMain][0;39m [36mcom.sb.ws.SbWebServiceP1Application [0;39m [2m:[0;39m No active profile set, falling back to 1 default profile: "default"**

**[2m2023-11-09T12:27:43.451+05:30[0;39m [32m INFO[0;39m [35m2664[0;39m [2m---[0;39m [2m[ restartedMain][0;39m [36mo.s.b.w.embedded.tomcat.TomcatWebServer [0;39m [2m:[0;39m Tomcat initialized with port(s): 8080 (http)**

**[2m2023-11-09T12:27:43.452+05:30[0;39m [32m INFO[0;39m [35m2664[0;39m [2m---[0;39m [2m[ restartedMain][0;39m [36mo.apache.catalina.core.StandardService [0;39m [2m:[0;39m Starting service [Tomcat]**

**[2m2023-11-09T12:27:43.452+05:30[0;39m [32m INFO[0;39m [35m2664[0;39m [2m---[0;39m [2m[ restartedMain][0;39m [36mo.apache.catalina.core.StandardEngine [0;39m [2m:[0;39m Starting Servlet engine: [Apache Tomcat/10.1.15]**

**[2m2023-11-09T12:27:43.481+05:30[0;39m [32m INFO[0;39m [35m2664[0;39m [2m---[0;39m [2m[ restartedMain][0;39m [36mo.a.c.c.C.[Tomcat-1].[localhost].[/] [0;39m [2m:[0;39m Initializing Spring embedded WebApplicationContext**

**[2m2023-11-09T12:27:43.481+05:30[0;39m [32m INFO[0;39m [35m2664[0;39m [2m---[0;39m [2m[ restartedMain][0;39m [36mw.s.c.ServletWebServerApplicationContext[0;39m [2m:[0;39m Root WebApplicationContext: initialization completed in 241 ms**

**[2m2023-11-09T12:27:43.539+05:30[0;39m [32m INFO[0;39m [35m2664[0;39m [2m---[0;39m [2m[ restartedMain][0;39m [36mo.s.b.d.a.OptionalLiveReloadServer [0;39m [2m:[0;39m LiveReload server is running on port 35729**

**[2m2023-11-09T12:27:43.552+05:30[0;39m [32m INFO[0;39m [35m2664[0;39m [2m---[0;39m [2m[ restartedMain][0;39m [36mo.s.b.w.embedded.tomcat.TomcatWebServer [0;39m [2m:[0;39m Tomcat started on port(s): 8080 (http) with context path ''**

**[2m2023-11-09T12:27:43.559+05:30[0;39m [32m INFO[0;39m [35m2664[0;39m [2m---[0;39m [2m[ restartedMain][0;39m [36mcom.sb.ws.SbWebServiceP1Application [0;39m [2m:[0;39m Started SbWebServiceP1Application in 0.355 seconds (process running for 5484.472)**

**[2m2023-11-09T12:27:43.560+05:30[0;39m [32m INFO[0;39m [35m2664[0;39m [2m---[0;39m [2m[ restartedMain][0;39m [36m.ConditionEvaluationDeltaLoggingListener[0;39m [2m:[0;39m Condition evaluation unchanged**

**Application running normally!!!**

Postman Service Results:

