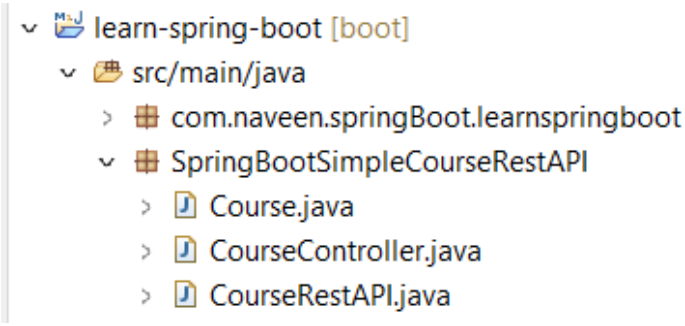
BUILD A SIMPLE REST API WITH SPRING BOOT

PROJECT STRUCTURE:



CourseRestAPI.java

```java
package SpringBootSimpleCourseRestAPI;

import org.springframework.boot.SpringApplication;
import org.springframework.boot.autoconfigure.SpringBootApplication;

@SpringBootApplication
public class CourseRestAPI {

    public static void main(String[] args) {
        SpringApplication.run(CourseRestAPI.class, args);
    }
}
```

CourseController.java

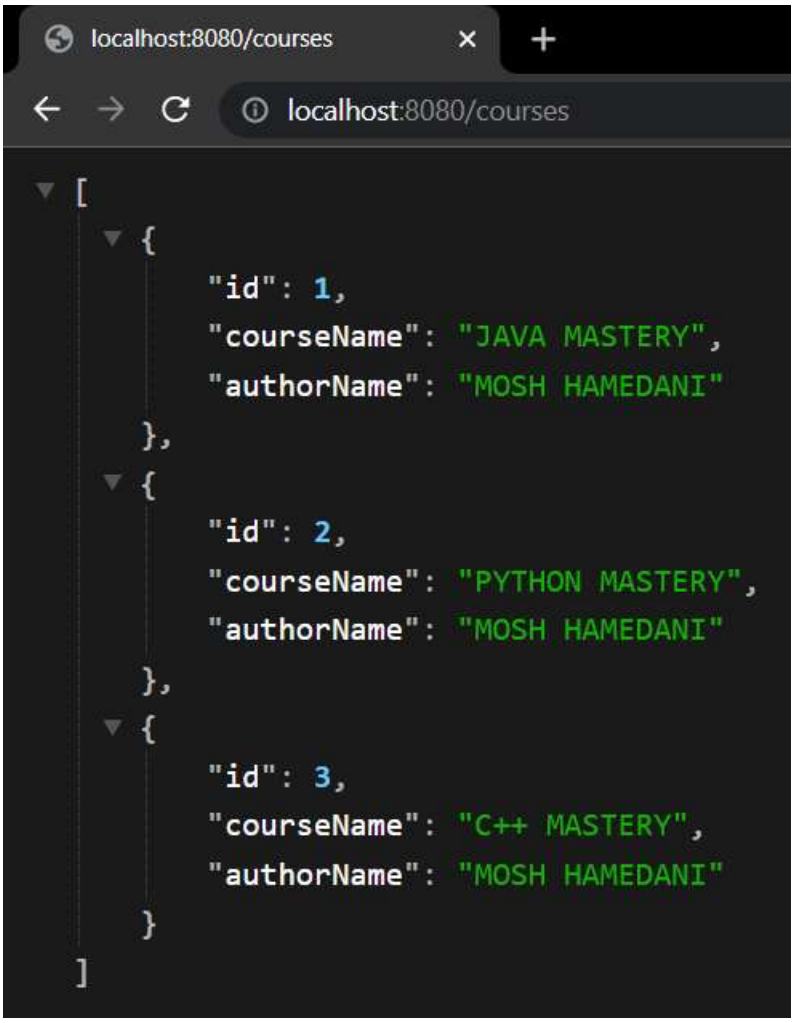
```java
package SpringBootSimpleCourseRestAPI;
import java.util.Arrays;
import java.util.List;

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

@RestController
public class CourseController {

    @RequestMapping("/courses")
    public List<Course> retrieveAllCourses(){
        return Arrays.asList(
                new Course(1, "JAVA MASTERY", "MOSH HAMEDANI"),
                new Course(2, "PYTHON MASTERY", "MOSH HAMEDANI"),
                new Course(3, "C++ MASTERY", "MOSH HAMEDANI")
                );
    }
}
```

@RequestMapping is a Spring Boot annotation that maps HTTP requests to controller methods in a Spring Boot application. It is used to specify the URI (Uniform Resource Identifier) to which the method will respond to and the HTTP request method that the method should handle.

Course.java

```
package SpringBootSimpleCourseRestAPI;

public class Course {
    private int id;
    private String courseName;
    private String authorName;

    public Course(int id, String courseName, String authorName) {
        super();
        this.id = id;
        this.courseName = courseName;
        this.authorName = authorName;
    }

    public int getId() {
        return id;
    }

    public String getCourseName() {
        return courseName;
    }

    public String getAuthorName() {
        return authorName;
    }

    @Override
    public String toString() {
        return "Course [id=" + id + ", courseName=" + courseName + ",
authorName=" + authorName + "]";
    }

}
```

Output:


localhost:8080/courses
localhost:8080/courses
[
{
"id": 1,
"courseName": "JAVA MASTERY",
"authorName": "MOSH HAMEDANI"
},
{
"id": 2,
"courseName": "PYTHON MASTERY",
"authorName": "MOSH HAMEDANI"
},
{
"id": 3,
"courseName": "C++ MASTERY",
"authorName": "MOSH HAMEDANI"
}
]