Exercise 2: Hello World RESTful Web Service:

**Solution:**

Create a new project in IntelliJ with maven.Input the correct groupid and dependencies.

**SpringLearnApplication.java:**

package com.cognizant;  
  
import org.springframework.boot.SpringApplication;  
import org.springframework.boot.autoconfigure.SpringBootApplication;  
  
@SpringBootApplication  
public class SpringLearnApplication {  
 public static void main(String[] args) {  
 SpringApplication.*run*(SpringLearnApplication.class, args);  
 }  
}

**HelloController.java:**

package com.cognizant.controller;  
  
import org.springframework.web.bind.annotation.GetMapping;  
import org.springframework.web.bind.annotation.RestController;  
import org.slf4j.Logger;  
import org.slf4j.LoggerFactory;  
  
@RestController  
public class HelloController {  
  
 private static final Logger *logger* = LoggerFactory.*getLogger*(HelloController.class);  
  
 @GetMapping("/hello")  
 public String sayHello() {  
 *logger*.info("START - sayHello() method called");  
  
 String response = "Hello World!!";  
  
 *logger*.info("END - sayHello() method completed");  
 return response;  
 }  
}

**HelloControllerTest.java:**

package controller;  
  
import com.cognizant.controller.HelloController;  
import org.junit.jupiter.api.Test;  
import org.springframework.beans.factory.annotation.Autowired;  
import org.springframework.boot.test.autoconfigure.web.servlet.WebMvcTest;  
import org.springframework.test.web.servlet.MockMvc;  
  
import static org.springframework.test.web.servlet.request.MockMvcRequestBuilders.*get*;  
import static org.springframework.test.web.servlet.result.MockMvcResultMatchers.*content*;  
import static org.springframework.test.web.servlet.result.MockMvcResultMatchers.*status*;  
  
@WebMvcTest(HelloController.class)  
class HelloControllerTest {  
  
 @Autowired  
 private MockMvc mockMvc;  
  
 @Test  
 void testSayHello() throws Exception {  
 mockMvc.perform(*get*("/hello"))  
 .andExpect(*status*().isOk())  
 .andExpect(*content*().string("Hello World!!"));  
 }  
}

application.properties:

server.port=8083  
logging.level.com.cognizant.springlearn=INFO  
logging.pattern.console=%d{yyyy-MM-dd HH:mm:ss} - %msg%n

**pom.xml:**

<?xml version="1.0" encoding="UTF-8"?>  
<project xmlns="http://maven.apache.org/POM/4.0.0"  
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"  
 xsi:schemaLocation="http://maven.apache.org/POM/4.0.0  
 http://maven.apache.org/xsd/maven-4.0.0.xsd">  
 <modelVersion>4.0.0</modelVersion>  
  
 <groupId>com.cognizant</groupId>  
 <artifactId>spring-learn</artifactId>  
 <version>1.0.0</version>  
 <packaging>jar</packaging>  
  
 <name>spring-learn</name>  
 <description>Spring Boot Hello World REST Service</description>  
  
 <parent>  
 <groupId>org.springframework.boot</groupId>  
 <artifactId>spring-boot-starter-parent</artifactId>  
 <version>3.2.0</version>  
 <relativePath/>  
 </parent>  
  
 <properties>  
 <java.version>17</java.version>  
 </properties>  
  
 <dependencies>  
 <dependency>  
 <groupId>org.springframework.boot</groupId>  
 <artifactId>spring-boot-starter-web</artifactId>  
 </dependency>  
  
 <dependency>  
 <groupId>org.springframework.boot</groupId>  
 <artifactId>spring-boot-starter-test</artifactId>  
 <scope>test</scope>  
 </dependency>  
 </dependencies>  
  
 <build>  
 <plugins>  
 <plugin>  
 <groupId>org.springframework.boot</groupId>  
 <artifactId>spring-boot-maven-plugin</artifactId>  
 </plugin>  
 </plugins>  
 </build>  
</project>

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AI-generated content may be incorrect.