Hello World RESTful Web Service Implementation

1. Controller Implementation

package com.cognizant.springlearn.controller;

import org.slf4j.Logger;

import org.slf4j.LoggerFactory;

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

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

@RestController

public class HelloController {

private static final Logger LOGGER = LoggerFactory.getLogger(HelloController.class);

@GetMapping("/hello")

public String sayHello() {

LOGGER.info("Start");

String response = "Hello World!!";

LOGGER.info("End");

return response;

}

}

2. Expected Behavior

Browser Test (Chrome)

Open Chrome and navigate to: http://localhost:8083/hello

You should see the text: Hello World!!

To view HTTP headers:

Open Developer Tools (F12)

Go to Network tab

Refresh the page

Click on the "hello" request

View Headers section

Postman Test

Create a new GET request to: http://localhost:8083/hello

Send the request

You should see the response body: Hello World!!

Click on the "Headers" tab to view response headers

3. HTTP Header Analysis

Response Headers You Should See:

Content-Type: text/plain;charset=UTF-8

Content-Length: 13

Date: [current date and time]

Key Headers Explanation:

Content-Type: Indicates the media type of the resource (text/plain)

Content-Length: The size of the response body in bytes

Date: The date and time the message was sent

4. Additional Configuration

If you need to run on port 8083, add this to application.properties:

properties

server.port=8083

5. Logging Output

When you call the service, you should see logs like:

2023-07-15 12:34:56.789 INFO 12345 --- [nio-8083-exec-1] c.c.s.controller.HelloController : Start

2023-07-15 12:34:56.790 INFO 12345 --- [nio-8083-exec-1] c.c.s.controller.HelloController : End

6. Testing Verification Checklist

Browser Test:

✅ Response displays "Hello World!!"

✅ Status code is 200 OK

✅ Content-Type header is text/plain

Postman Test:

✅ Response body matches exactly "Hello World!!"

✅ Headers tab shows proper response headers

✅ No extra whitespace in response

Logging:

✅ "Start" log appears before processing

✅ "End" log appears after processing

✅ No errors in console