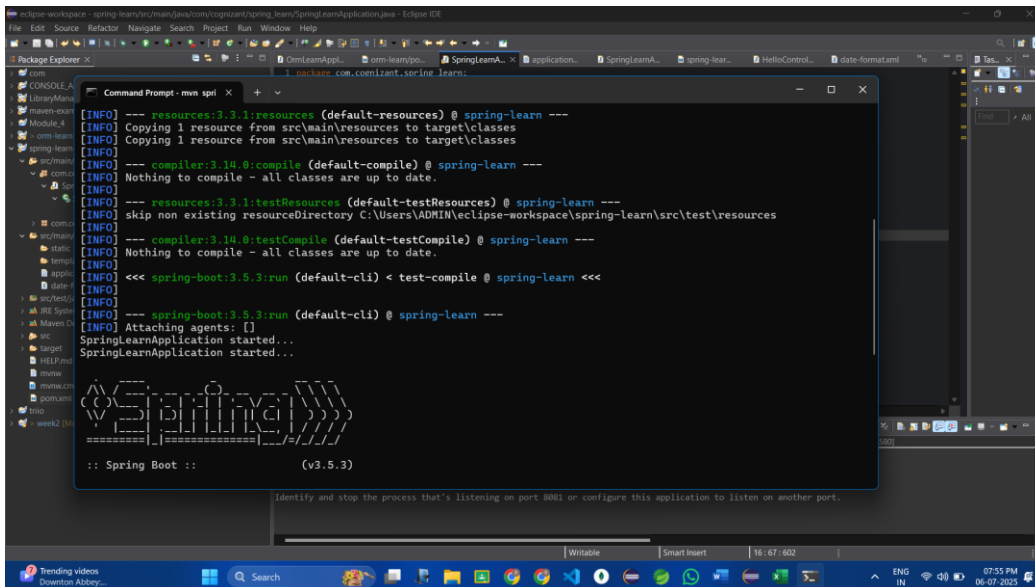
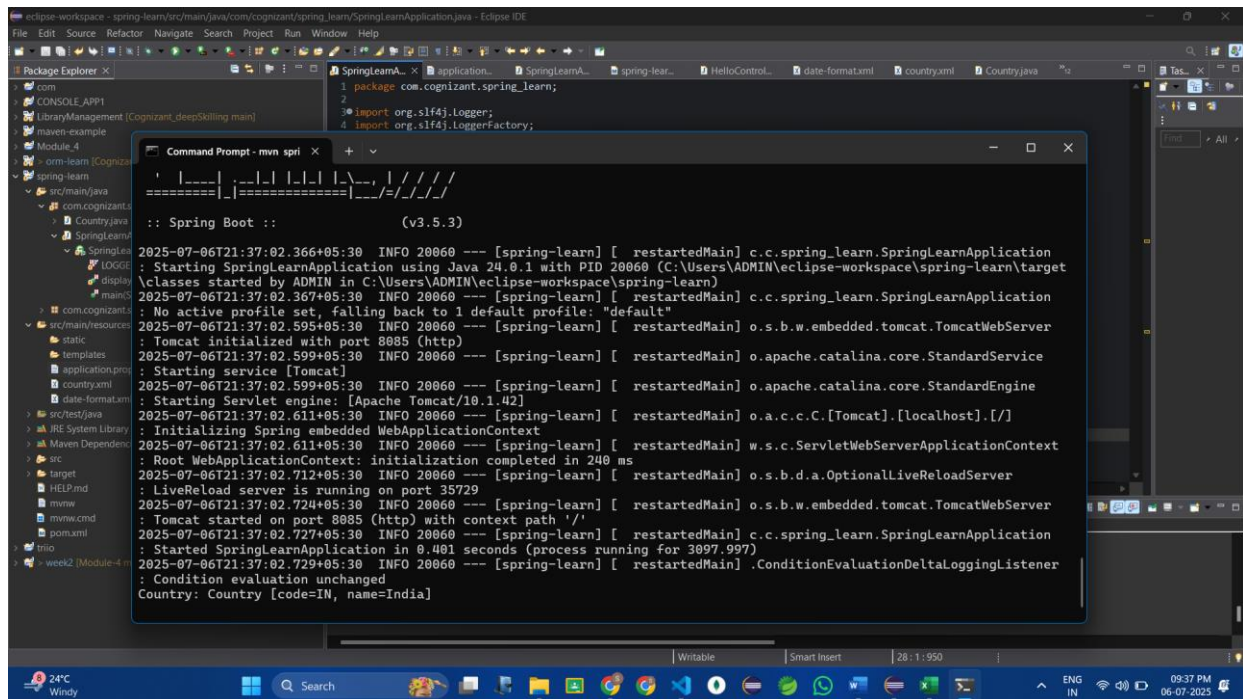


## WEEK -04

# 1) Create a Spring Web Project using Maven



## 2) Spring Core – Load Country from Spring Configuration XML



The screenshot shows the Eclipse IDE with a Spring Boot application running. The Package Explorer on the left shows the project structure. The main editor displays the `Country.java` file. A Command Prompt window is open, showing the output of the `mvn spring` command. The logs indicate that the application is running on port 8085 and has loaded the country data from the configuration XML.

```
2025-07-06T21:37:02.366+05:30 INFO 20060 --- [spring-learn] [ restartedMain] c.c.spring_learn.SpringLearnApplication : Starting SpringLearnApplication using Java 20.0.1 with PID 20060 (C:\Users\ADMIN\workspace\spring-learn\target\classes started by ADMIN in C:\Users\ADMIN\workspace\spring-learn)
2025-07-06T21:37:02.367+05:30 INFO 20060 --- [spring-learn] [ restartedMain] c.c.spring_learn.SpringLearnApplication : No active profile set, falling back to 1 default profile: "default"
2025-07-06T21:37:02.595+05:30 INFO 20060 --- [spring-learn] [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port 8085 (http)
2025-07-06T21:37:02.599+05:30 INFO 20060 --- [spring-learn] [ restartedMain] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2025-07-06T21:37:02.611+05:30 INFO 20060 --- [spring-learn] [ restartedMain] o.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/10.1.42]
2025-07-06T21:37:02.611+05:30 INFO 20060 --- [spring-learn] [ restartedMain] w.s.c.ServletWebServerApplicationContext : Initializing Spring embedded WebApplicationContext
2025-07-06T21:37:02.712+05:30 INFO 20060 --- [spring-learn] [ restartedMain] o.s.b.d.a.OptionalLiveReloadServer : LiveReload server is running on port 35729
2025-07-06T21:37:02.724+05:30 INFO 20060 --- [spring-learn] [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port 8085 (http) with context path '/'
2025-07-06T21:37:02.727+05:30 INFO 20060 --- [spring-learn] [ restartedMain] c.c.spring_learn.SpringLearnApplication : Started SpringLearnApplication in 0.401 seconds (process running for 3097.997)
2025-07-06T21:37:02.729+05:30 INFO 20060 --- [spring-learn] [ restartedMain] .ConditionEvaluationDeltaLoggingListener : Condition evaluation unchanged
Country: Country [code=IN, name=India]
```

## 3) Hello World RESTful Web Service



## 4) REST - Country Web Service

The screenshot shows a web browser at `localhost:8002/country` displaying the response: `{ "code": "IN", "name": "India" }`. The Eclipse IDE in the background shows the `CountryController.java` file with the following code:

```
1 age com.cognizant.spring_learn.controller;
2
30 rt com.cognizant.spring_learn.Country;
4 rt org.slf4j.Logger;
5 rt org.slf4j.LoggerFactory;
6 rt org.springframework.context.ApplicationContext;
7 rt org.springframework.context.support.ClassPathXmlApplicationContext;
8 rt org.springframework.web.bind.annotation.RequestMapping;
9 rt org.springframework.web.bind.annotation.RestController;
10
11 tController
12 ic class CountryController {
13
14 private static final Logger LOGGER = LoggerFactory.getLogger(C
15
16 @RequestMapping("/country")
17 public Country getCountryIndia() {
18     LOGGER.info("START: getCountryIndia()");
19     ApplicationContext context = new ClassPathXmlApplicationCo
20     Country country = (Country) context.getBean("countryIndia"
21     LOGGER.info("END: getCountryIndia()");
22     return country;
23 }
24
25
```

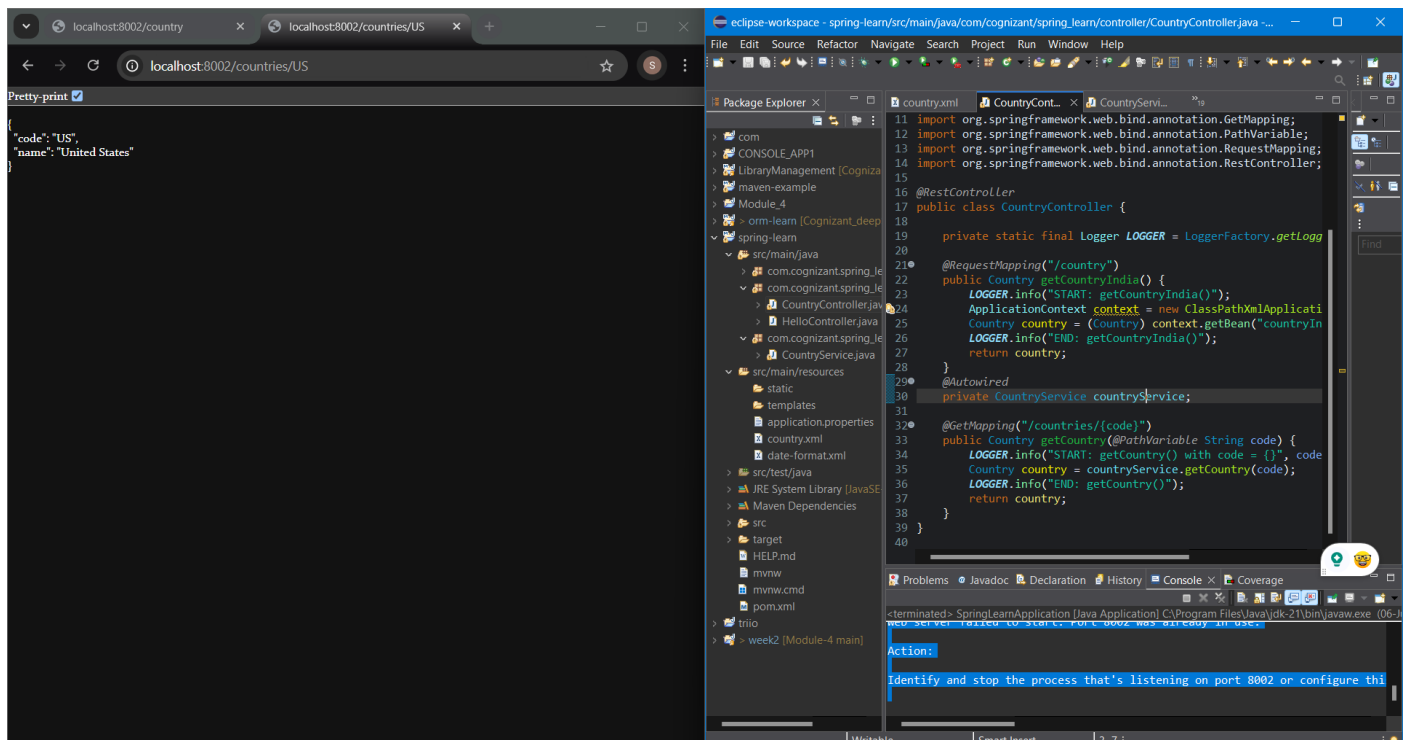
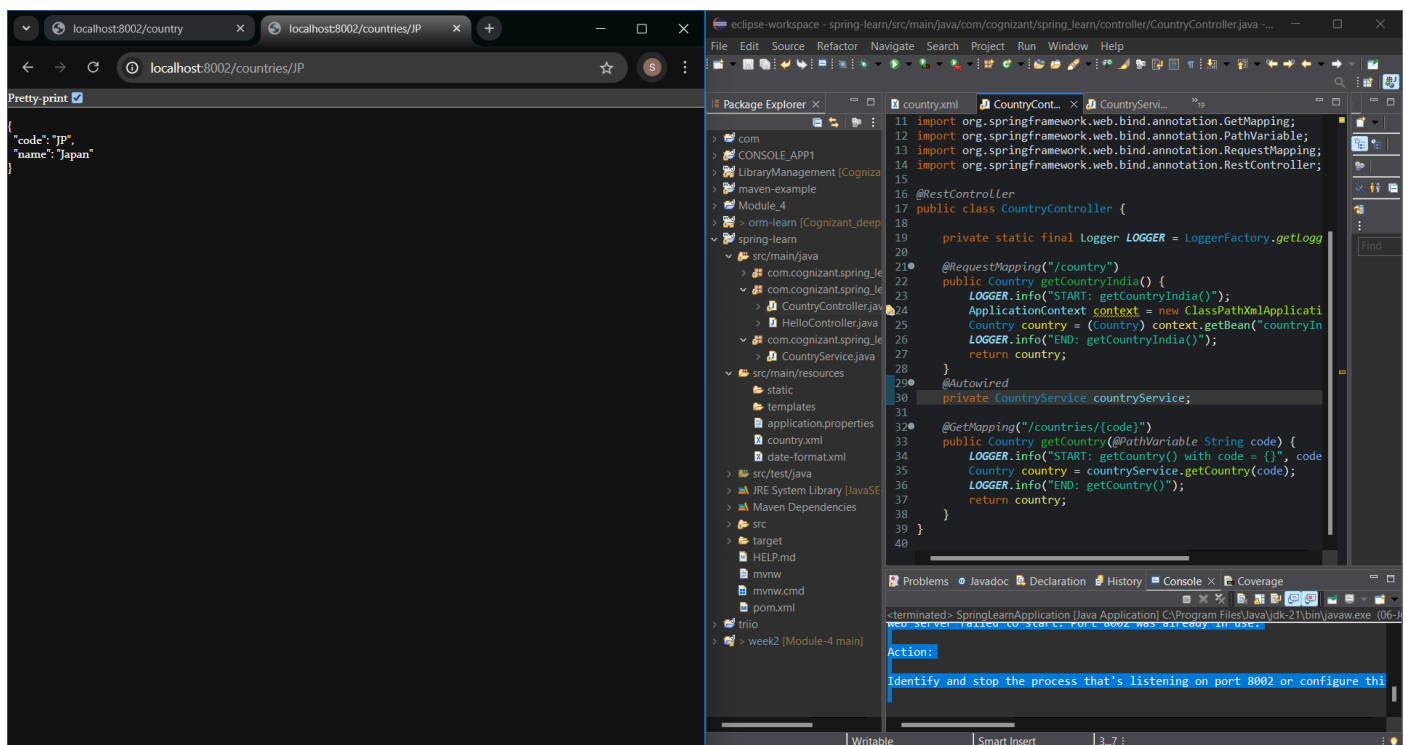
The console shows the application terminated: `SpringLearnApplication [Java Application] C:\Program Files\Java\jdk-21\bin\javaw.exe (06-J`. The Action pane displays: `Identify and stop the process that's listening on port 8002 or configure thi`.

The screenshot shows a web browser at `localhost:8002/country` displaying the response: `{ "code": "US", "name": "United States" }`. The Eclipse IDE in the background shows the `CountryController.java` file with the following code:

```
1 age com.cognizant.spring_learn.controller;
2
30 rt com.cognizant.spring_learn.Country;
4 rt org.slf4j.Logger;
5 rt org.slf4j.LoggerFactory;
6 rt org.springframework.context.ApplicationContext;
7 rt org.springframework.context.support.ClassPathXmlApplicationContext;
8 rt org.springframework.web.bind.annotation.RequestMapping;
9 rt org.springframework.web.bind.annotation.RestController;
10
11 tController
12 ic class CountryController {
13
14 private static final Logger LOGGER = LoggerFactory.getLogger(C
15
16 @RequestMapping("/country")
17 public Country getCountryIndia() {
18     LOGGER.info("START: getCountryIndia()");
19     ApplicationContext context = new ClassPathXmlApplicationCo
20     Country country = (Country) context.getBean("countryUS", C
21     LOGGER.info("END: getCountryIndia()");
22     return country;
23 }
24
25
```

The console shows the application terminated: `SpringLearnApplication [Java Application] C:\Program Files\Java\jdk-21\bin\javaw.exe (06-J`. The Action pane displays: `Identify and stop the process that's listening on port 8002 or configure thi`.

## 5) REST - Get country based on country code



## 6) Create authentication service that returns JWT

