

# Spring Rest Hands on (XML Configuration)

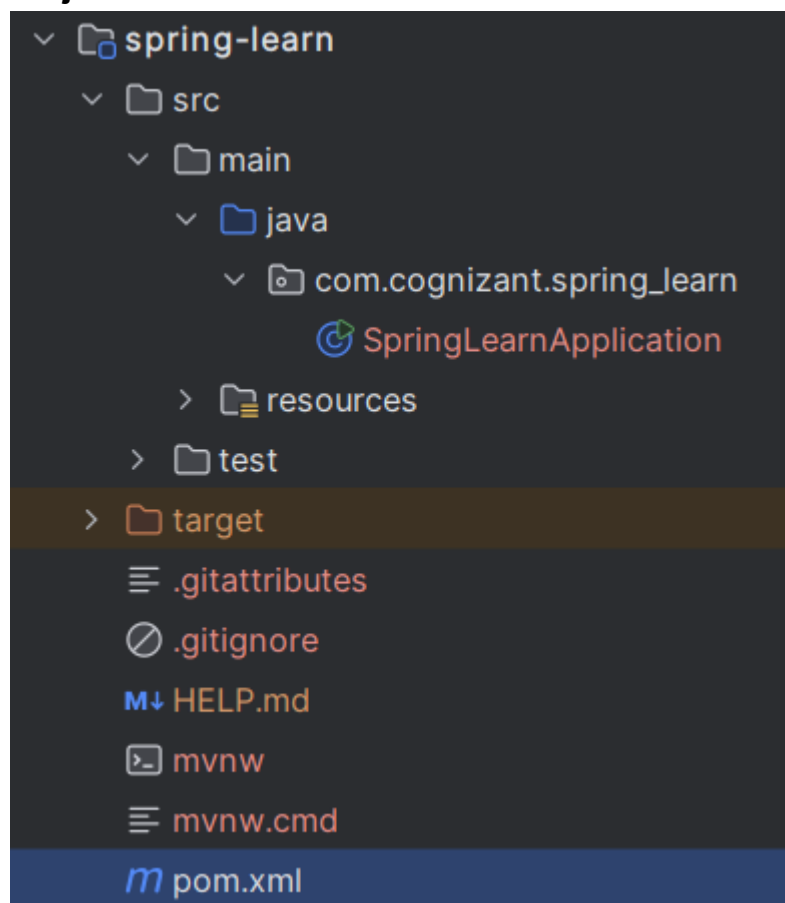
Source Code: [Here](#)

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## Exercise-1: Create a Spring Web Project using Maven

### Output:

Project Structure:



Dependency Tree:

```

[INFO] --- dependency:3.8.1:tree (default-cli) @ spring-learn ---
[INFO] com.cognizant:spring-learn:jar:0.0.1-SNAPSHOT
[INFO] +- org.springframework.boot:spring-boot-starter-web:jar:3.5.3:compile
[INFO] | +- org.springframework.boot:spring-boot-starter:jar:3.5.3:compile
[INFO] | | +- org.springframework.boot:spring-boot-starter-logging:jar:3.5.3:compile
[INFO] | | | +- ch.qos.logback:logback-classic:jar:1.5.18:compile
[INFO] | | | | \- ch.qos.logback:logback-core:jar:1.5.18:compile
[INFO] | | +- org.apache.logging.log4j:log4j-to-slf4j:jar:2.24.3:compile
[INFO] | | | \- org.apache.logging.log4j:log4j-api:jar:2.24.3:compile
[INFO] | | \- org.slf4j:jul-to-slf4j:jar:2.0.17:compile
[INFO] | +- jakarta.annotation:jakarta.annotation-api:jar:2.1.1:compile
[INFO] | \- org.yaml:snakeyaml:jar:2.4:compile
[INFO] +- org.springframework.boot:spring-boot-starter-json:jar:3.5.3:compile
[INFO] | +- com.fasterxml.jackson.core:jackson-databind:jar:2.19.1:compile
[INFO] | | +- com.fasterxml.jackson.core:jackson-annotations:jar:2.19.1:compile
[INFO] | | \- com.fasterxml.jackson.core:jackson-core:jar:2.19.1:compile
[INFO] | +- com.fasterxml.jackson.datatype:jackson-datatype-jdk8:jar:2.19.1:compile
[INFO] | +- com.fasterxml.jackson.datatype:jackson-datatype-jsr310:jar:2.19.1:compile
[INFO] | \- com.fasterxml.jackson.module:jackson-module-parameter-names:jar:2.19.1:compile
[INFO] +- org.springframework.boot:spring-boot-starter-tomcat:jar:3.5.3:compile
[INFO] | +- org.apache.tomcat.embed:tomcat-embed-core:jar:10.1.42:compile
[INFO] | +- org.apache.tomcat.embed:tomcat-embed-el:jar:10.1.42:compile
[INFO] | \- org.apache.tomcat.embed:tomcat-embed-websocket:jar:10.1.42:compile
[INFO] +- org.springframework:spring-web:jar:6.2.8:compile
[INFO] | +- org.springframework:spring-beans:jar:6.2.8:compile
[INFO] | \- io.micrometer:micrometer-observation:jar:1.15.1:compile
[INFO] | \- io.micrometer:micrometer-commons:jar:1.15.1:compile
[INFO] \- org.springframework:spring-webmvc:jar:6.2.8:compile
[INFO] +- org.springframework:spring-aop:jar:6.2.8:compile
[INFO] +- org.springframework:spring-context:jar:6.2.8:compile
[INFO] \- org.springframework:spring-expression:jar:6.2.8:compile
[INFO] +- org.springframework.boot:spring-boot-devtools:jar:3.5.3:runtime (optional)
[INFO] | +- org.springframework.boot:spring-boot:jar:3.5.3:compile
[INFO] | \- org.springframework.boot:spring-boot-autoconfigure:jar:3.5.3:compile
[INFO] \- org.springframework.boot:spring-boot-starter-test:jar:3.5.3:test
[INFO] +- org.springframework.boot:spring-boot-test:jar:3.5.3:test
[INFO] +- org.springframework.boot:spring-boot-test-autoconfigure:jar:3.5.3:test
[INFO] +- com.jayway.jsonpath:json-path:jar:2.9.0:test
[INFO] | \- org.slf4j:slf4j-api:jar:2.0.17:compile
[INFO] +- jakarta.xml.bind:jakarta.xml.bind-api:jar:4.0.2:test
[INFO] | \- jakarta.activation:jakarta.activation-api:jar:2.1.3:test
[INFO] +- net.minidev:json-smart:jar:2.5.2:test
[INFO] | \- net.minidev:accessors-smart:jar:2.5.2:test
[INFO] | \- org.ow2.asm:asm:jar:9.7.1:test
[INFO] +- org.assertj:assertj-core:jar:3.27.3:test
[INFO] | \- net.bytebuddy:byte-buddy:jar:1.17.6:test
[INFO] +- org.awaitility:awaitility:jar:4.2.2:test
[INFO] +- org.hamcrest:hamcrest:jar:3.0:test
[INFO] +- org.junit.jupiter:junit-jupiter:jar:5.12.2:test
[INFO] | +- org.junit.jupiter:junit-jupiter-api:jar:5.12.2:test
[INFO] | | +- org.opentest4j:opentest4j:jar:1.3.0:test
[INFO] | | +- org.junit.platform:junit-platform-commons:jar:1.12.2:test
[INFO] | | \- org.apiguardian:apiguardian-api:jar:1.1.2:test
[INFO] | +- org.junit.jupiter:junit-jupiter-params:jar:5.12.2:test
[INFO] | \- org.junit.jupiter:junit-jupiter-engine:jar:5.12.2:test
[INFO] | \- org.junit.platform:junit-platform-engine:jar:1.12.2:test
[INFO] +- org.mockito:mockito-core:jar:5.17.0:test
[INFO] | +- net.bytebuddy:byte-buddy-agent:jar:1.17.6:test
[INFO] | \- org.objenesis:objenesis:jar:3.3:test
[INFO] +- org.mockito:mockito-junit-jupiter:jar:5.17.0:test
[INFO] +- org.skyscreamer:jsonassert:jar:1.5.3:test
[INFO] | \- com.vaadin.external.google:android-json:jar:0.0.20131108.vaadin1:test
[INFO] +- org.springframework:spring-core:jar:6.2.8:compile
[INFO] | \- org.springframework:spring-jcl:jar:6.2.8:compile
[INFO] +- org.springframework:spring-test:jar:6.2.8:test
[INFO] \- org.xmlunit:xmlunit-core:jar:2.10.2:test
[INFO] BUILD SUCCESS

```

## XML Configuration:

```

<properties>
  <java.version>21</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-devtools</artifactId>
    <scope>runtime</scope>
    <optional>true</optional>
  </dependency>
  <dependency>
    <groupId>org.springframework.boot</groupId>
    <artifactId>spring-boot-starter-test</artifactId>
    <scope>test</scope>
  </dependency>
</dependencies>
```

---

## Exercise-2: Spring Core – Load SimpleDateFormat from Spring Configuration XML

### Code:

```
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://www.springframework.org/schema/beans
    http://www.springframework.org/schema/beans/spring-beans.xsd">

  <bean id="dateFormat" class="java.text.SimpleDateFormat">
    <constructor-arg value="dd/MM/yyyy" />
  </bean>
</beans>
```

```
package com.cognizant.spring_learn;

// Import all the required packages

@SpringBootApplication
public class SpringLearnApplication {
```

```

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

private static void displayDate(){
    ApplicationContext context = new
ClassPathXmlApplicationContext("date-format.xml");
    SimpleDateFormat dateFormat = context.getBean("dateFormat",
SimpleDateFormat.class);
    try{
        Date date = dateFormat.parse("31/12/2018");
        System.out.println(date);
        System.out.println("Parsed Date: " + date);
    }
    catch (Exception e){
        System.out.println("Failed to format date due to " + e);
    }
}
}

```

## Output:

```

Run SpringLearnApplication x
2025-07-09T12:18:10.880+05:30 INFO 15272 --- [spring-learn] [ restartedMain] c.c.spring_learn.SpringLearnApplication : Starting SpringLearnApplication using Java 21.0.4 with
2025-07-09T12:18:10.884+05:30 INFO 15272 --- [spring-learn] [ restartedMain] c.c.spring_learn.SpringLearnApplication : No active profile set, falling back to 1 default profile
2025-07-09T12:18:10.962+05:30 INFO 15272 --- [spring-learn] [ restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : Devtools property defaults active! Set 'spring.devtools.restart.enabled' to 'true' to enable restart
2025-07-09T12:18:10.962+05:30 INFO 15272 --- [spring-learn] [ restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : For additional web related logging consider setting the system property 'spring.devtools.web-console.enabled' to 'true'
2025-07-09T12:18:12.243+05:30 INFO 15272 --- [spring-learn] [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port 8080 (http)
2025-07-09T12:18:12.267+05:30 INFO 15272 --- [spring-learn] [ restartedMain] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2025-07-09T12:18:12.267+05:30 INFO 15272 --- [spring-learn] [ restartedMain] o.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/10.1.42]
2025-07-09T12:18:12.313+05:30 INFO 15272 --- [spring-learn] [ restartedMain] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring embedded WebApplicationContext
2025-07-09T12:18:12.314+05:30 INFO 15272 --- [spring-learn] [ restartedMain] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: Initialization completed
2025-07-09T12:18:12.771+05:30 INFO 15272 --- [spring-learn] [ restartedMain] o.s.b.d.a.OptionalLiveReloadServer : LiveReload server is running on port 35729
2025-07-09T12:18:12.833+05:30 INFO 15272 --- [spring-learn] [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port 8080 (http) with context path ''
2025-07-09T12:18:12.850+05:30 INFO 15272 --- [spring-learn] [ restartedMain] c.c.spring_learn.SpringLearnApplication : Started SpringLearnApplication in 2.569 seconds (process running for 3.07)
Mon Dec 31 00:00:00 IST 2018
Parsed Date: Mon Dec 31 00:00:00 IST 2018

```