


Create a Spring Web Project using Maven

Follow steps below to create a project:

1. Go to <https://start.spring.io/>
2. Change Group as “com.cognizant”
3. Change Artifact Id as “spring-learn”
4. Select Spring Boot DevTools and Spring Web
5. Create and download the project as zip
6. Extract the zip in root folder to Eclipse Workspace
7. Build the project using ‘mvn clean package -
Dhttp.proxyHost=proxy.cognizant.com -Dhttp.proxyPort=6050 -
Dhttps.proxyHost=proxy.cognizant.com -Dhttps.proxyPort=6050 -
Dhttp.proxyUser=123456’ command in command line
8. Import the project in Eclipse "File > Import > Maven > Existing Maven
Projects > Click Browse and select extracted folder > Finish"
9. Include logs to verify if main() method of SpringLearnApplication.
10. Run the SpringLearnApplication class.



Project

☐ Gradle - Groovy
 ☒ Gradle - Kotlin
 ☒ Maven

Language

☒ Java
 ☐ Kotlin
 ☐ Groovy

Spring Boot

☐ 4.0.0 (SNAPSHOT)
 ☐ 3.5.4 (SNAPSHOT)
 ☒ 3.5.3
 ☐ 3.4.8 (SNAPSHOT)
 ☐ 3.4.7

Project Metadata

Group

Artifact

Name

Description

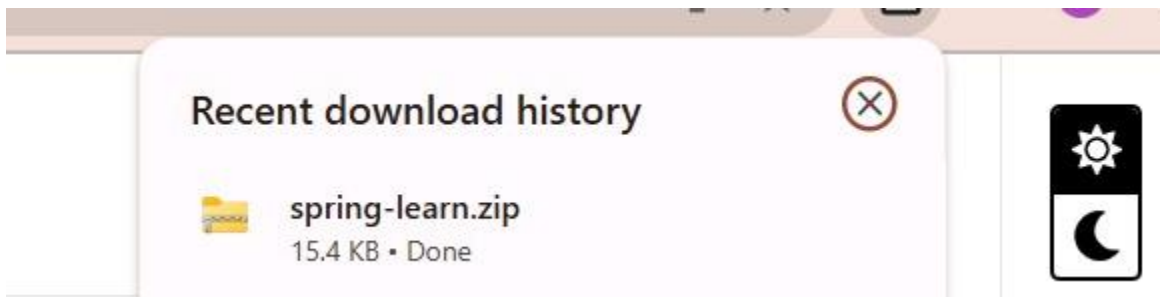
Package name

Dependencies ADD DEPENDENCIES... CTRL + B

Spring Boot DevTools DEVELOPER TOOLS
Provides fast application restarts, LiveReload, and configurations for enhanced development experience.

Spring Web WEB
Build web, including RESTful, applications using Spring MVC. Uses Apache Tomcat as the default embedded container.

GENERATE CTRL + G
EXPLORE CTRL + SPACE
..↓



SME to walk through the following aspects related to the project created:

1. src/main/java - Folder with application code

```
package com.cognizant.spring_learn;
```

```
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);
}
}

```



```

:: Spring Boot ::                (v3.5.3)

2025-07-13T11:38:54.168+05:30 INFO 5384 --- [spring-learn] [ restartedMain] c.c.spring_learn.SpringLearnApplication : Starting SpringLearnApplication using Java 17.0.12 with PID 53
2025-07-13T11:38:54.178+05:30 INFO 5384 --- [spring-learn] [ restartedMain] c.c.spring_learn.SpringLearnApplication : No active profile set, falling back to 1 default profile: "def
2025-07-13T11:38:54.337+05:30 INFO 5384 --- [spring-learn] [ restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : Devtools property defaults active! Set 'spring.devtools.add-pr
2025-07-13T11:38:54.337+05:30 INFO 5384 --- [spring-learn] [ restartedMain] .e.DevToolsPropertyDefaultsPostProcessor : For additional web related logging consider setting the 'loggi
2025-07-13T11:38:55.796+05:30 INFO 5384 --- [spring-learn] [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port 8080 (http)
2025-07-13T11:38:55.813+05:30 INFO 5384 --- [spring-learn] [ restartedMain] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2025-07-13T11:38:55.814+05:30 INFO 5384 --- [spring-learn] [ restartedMain] o.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/10.1.42]
2025-07-13T11:38:55.858+05:30 INFO 5384 --- [spring-learn] [ restartedMain] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring embedded WebApplicationContext
2025-07-13T11:38:55.859+05:30 INFO 5384 --- [spring-learn] [ restartedMain] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed in 1519 m
2025-07-13T11:38:56.376+05:30 INFO 5384 --- [spring-learn] [ restartedMain] o.s.b.d.a.OptionalLiveReloadServer : LiveReload server is running on port 35729
2025-07-13T11:38:56.441+05:30 INFO 5384 --- [spring-learn] [ restartedMain] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port 8080 (http) with context path '/'
2025-07-13T11:38:56.462+05:30 INFO 5384 --- [spring-learn] [ restartedMain] c.c.spring_learn.SpringLearnApplication : Started SpringLearnApplication in 3.047 seconds (process runni

```

2. src/main/resources - Folder for application configuration

spring.application.name=spring-learn

3. src/test/java - Folder with code for testing the application

```
package com.cognizant.spring_learn;
```

```
import org.junit.jupiter.api.Test;
```

```
import org.springframework.boot.test.context.SpringBootTest;
```

```
@SpringBootTest
```

```
class SpringLearnApplicationTests {
```

```
@Test
```

```
void contextLoads() {
```

```
}}
```

4. SpringLearnApplication.java - Walkthrough the main() method.

```
package com.cognizant.spring_learn;
```

```
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);
```

```
    }
```

```
}
```

5. Purpose of @SpringBootApplication annotation

The @SpringBootApplication annotation is a convenience annotation introduced by Spring Boot that combines three core annotations commonly used in Spring-based applications:

What it Includes Internally

@SpringBootApplication

// is equivalent to:

@Configuration

@EnableAutoConfiguration

@ComponentScan

6. pom.xml

1. Walkthrough all the configuration defined in XML file
2. Open 'Dependency Hierarchy' and show the dependency tree.

The screenshot shows the 'Dependency Hierarchy' window in an IDE. The window is titled 'Dependency Hierarchy [test]' and has a 'Filter' input field. The main area is divided into two panes: 'Dependency Hierarchy' on the left and 'Resolved Dependencies' on the right. The 'Dependency Hierarchy' pane shows a tree of dependencies starting with 'spring-boot-starter-web: 3.5.3 [compile]'. The 'Resolved Dependencies' pane shows a list of resolved dependencies including 'accessors-smart: 2.5.2 [test]', 'android-json: 0.0.20131108.vaadin1 [test]', 'apiguardian-api: 1.1.2 [test]', 'asm: 9.7.1 [test]', 'assertj-core: 3.27.3 [test]', 'awaitility: 4.2.2 [test]', 'byte-buddy: 1.17.6 [test]', 'byte-buddy-agent: 1.17.6 [test]', 'hamcrest: 3.0 [test]', 'jackson-annotations: 2.19.1 [compile]', 'jackson-core: 2.19.1 [compile]', 'jackson-databind: 2.19.1 [compile]', 'jackson-datatype-jdk8: 2.19.1 [compile]', 'jackson-datatype-jsr310: 2.19.1 [compile]', 'jackson-module-parameter-names: 2.19.1 [compile]', 'jakarta.activation-api: 2.1.3 [test]', 'jakarta.annotation-api: 2.1.1 [compile]', 'jakarta.xml.bind-api: 4.0.2 [test]', 'jsonassert: 1.5.3 [test]', 'json-path: 2.9.0 [test]', 'json-smart: 2.5.2 [test]', 'jul-to-slf4j: 2.0.17 [compile]', 'junit-jupiter: 5.12.2 [test]', 'junit-jupiter-api: 5.12.2 [test]', 'junit-jupiter-engine: 5.12.2 [test]', and 'junit-jupiter-params: 5.12.2 [test]'. The bottom status bar shows 'Overview Dependencies Dependency Hierarchy Effective POM pom.xml' and 'Writable Insert 61: 1 [1590]'.

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Dependency Hierarchy [test]

Filter:

Dependency Hierarchy

- micrometer-observation : 1.15.1 (managed from 1.14.8) [compile]
 - micrometer-commons : 1.15.1 [compile]
- spring-webmvc : 6.2.8 [compile]
- spring-aop : 6.2.8 [compile]
 - spring-beans : 6.2.8 [compile]
 - spring-core : 6.2.8 [compile]
 - spring-beans : 6.2.8 [compile]
- spring-context : 6.2.8 [compile]
 - spring-aop : 6.2.8 [compile]
 - spring-beans : 6.2.8 [compile]
 - spring-core : 6.2.8 [compile]
 - spring-expression : 6.2.8 [compile]
 - micrometer-observation : 1.15.1 (managed from 1.14.8) [compile]
 - spring-core : 6.2.8 [compile]
- spring-expression : 6.2.8 [compile]
 - spring-core : 6.2.8 [compile]
- spring-web : 6.2.8 [compile]
- spring-boot-devtools : 3.5.3 [runtime]
- spring-boot : 3.5.3 [compile]
 - spring-core : 6.2.8 [compile]
 - spring-context : 6.2.8 [compile]
- spring-boot-autoconfigure : 3.5.3 [compile]
 - spring-boot : 3.5.3 [compile]
- spring-boot-starter-test : 3.5.3 [test]
 - spring-boot-starter : 3.5.3 [test]
- spring-boot-test : 3.5.3 [test]
 - spring-boot : 3.5.3 [test]

Resolved Dependencies

- snakeyaml : 2.4 [compile]
- spring-aop : 6.2.8 [compile]
- spring-beans : 6.2.8 [compile]
- spring-boot : 3.5.3 [compile]
- spring-boot-autoconfigure : 3.5.3 [compile]
- spring-boot-devtools : 3.5.3 [runtime]
- spring-boot-starter : 3.5.3 [compile]
- spring-boot-starter-json : 3.5.3 [compile]
- spring-boot-starter-logging : 3.5.3 [compile]
- spring-boot-starter-test : 3.5.3 [test]
- spring-boot-starter-tomcat : 3.5.3 [compile]
- spring-boot-starter-web : 3.5.3 [compile]
- spring-boot-test : 3.5.3 [test]
- spring-boot-test-autoconfigure : 3.5.3 [test]
- spring-context : 6.2.8 [compile]
- spring-core : 6.2.8 [compile]
- spring-expression : 6.2.8 [compile]
- spring-jcl : 6.2.8 [compile]
- spring-test : 6.2.8 [test]
- spring-web : 6.2.8 [compile]
- spring-webmvc : 6.2.8 [compile]
- tomcat-embed-core : 10.1.42 [compile]
- tomcat-embed-el : 10.1.42 [compile]
- tomcat-embed-websocket : 10.1.42 [compile]
- xmlunit-core : 2.10.2 [test]

SUPERSET ID: 6407636

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