# Basic Spring Project - IntelliJ

1. IntelliJ : Download **community edition** for respective OS
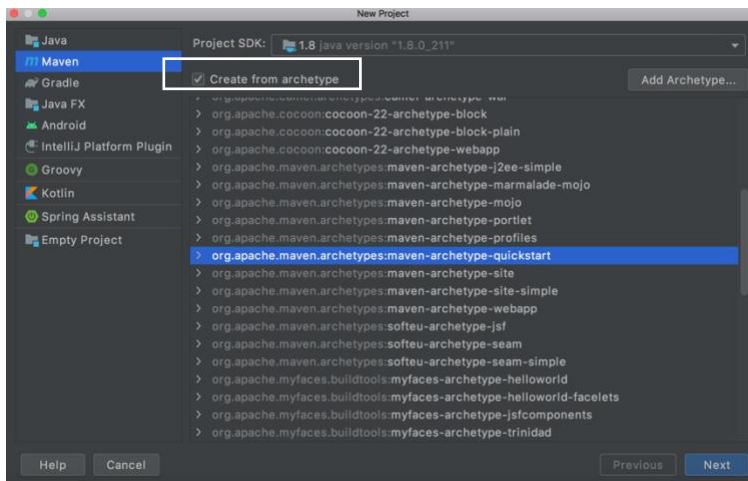   https://www.jetbrains.com/idea/download/#section=windows

**Maven Project: IntelliJ**
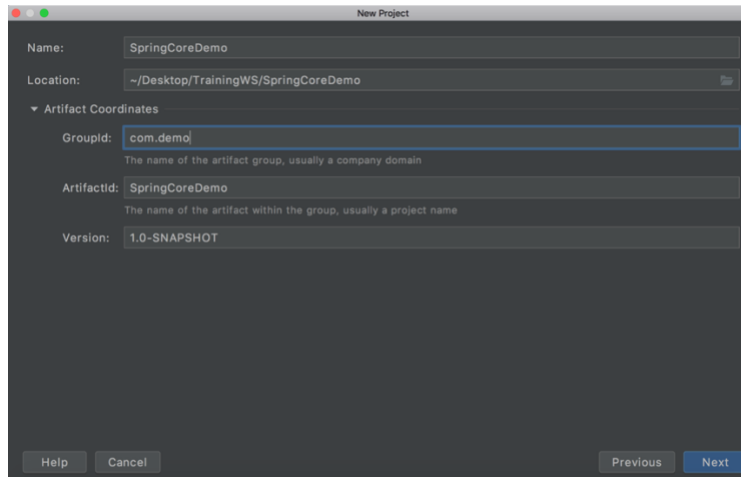
      **a.** QuickStart Maven Project

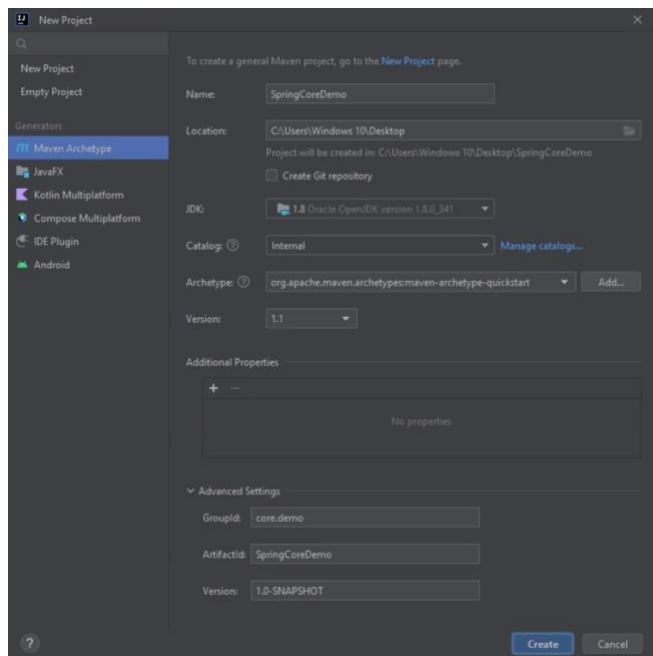Open IntelliJ and select New Project [MAC]
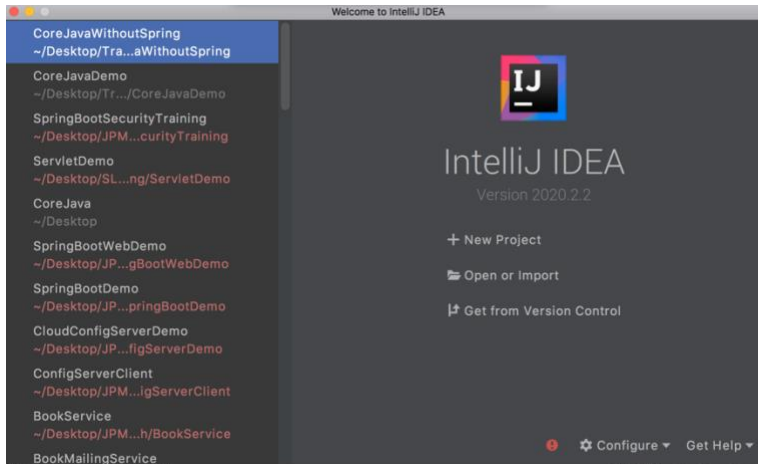


Select maven , tick the **checkbox** and select the archetype as highlighted:



Click next  and enter the project name. Click on Artifact Coordinates and change the group id. Rest keep the defaults and click next -> next -> Finish

FOR WINDOWS:

Once the project is created update the java version in pom.xml file as follows:

1. JDK 8 and below : Just update the version with the one installed on your machine as follows

```
14
15    <properties>
16       <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
17       <maven.compiler.source>1.8</maven.compiler.source>
18       <maven.compiler.target>1.8</maven.compiler.target>
19    </properties>
20
```

2. For JDK 9 and beyond : Update the version and also update the compiler plugin as follows:

<java.version>17</java.version>

```
14
15    <properties>
16       <project.build.sourceEncoding>UTF-8</project.build.sourceEncoding>
17          <java.version>11</java.version>
18    </properties>
```

To update the compiler plugin , add release as shown below:

```
42       <plugin>
43          <artifactId>maven-compiler-plugin</artifactId>
44          <version>3.8.0</version>
45          <configuration>
46             <release>11</release>
47          </configuration>
48       </plugin>
```

If the above plugin is not there, then add it as shown below within the <build> tag.

**The <build> tag will be in the last just before the closing </project> tag**

```
<build>
     <pluginManagement>
          <plugins>
          <plugin>
                  <groupId>org.apache.maven.plugins</groupId>
                  <artifactId>maven-compiler-plugin</artifactId>
                  <version>3.13.0</version>
                  <configuration>
                         <release>17</release>
                  </configuration>
          </plugin>
          </plugins>
     </pluginManagement>
  </build>
```
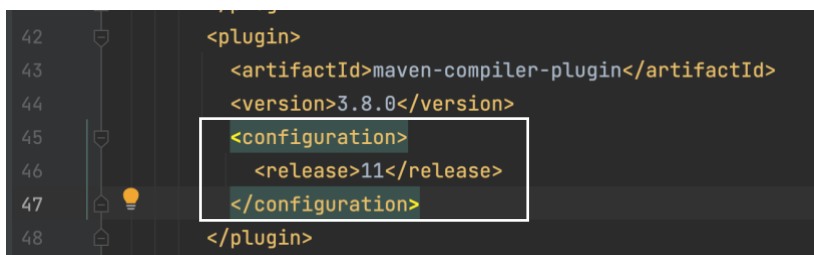
```
<build>
    <pluginManagement><!-- lock down plugins versions to avoid using
        <plugins>
            <plugin>
                <artifactId>maven-compiler-plugin</artifactId>
                <version>3.8.0</version>
                <configuration>
                    <release>11</release>
                </configuration>
            </plugin>
        </plugins>
    </pluginManagement>
</build>
```

3. Next step is to add below in properties tag:
   `<spring.version> 6.2.6</spring-version>`

4. Next step is to add spring dependencies as follows within the <dependencies> tag

```
<dependency>
        <groupId>org.springframework</groupId>
        <artifactId>spring-context</artifactId>
        <version>${spring.version}</version>
</dependency>
```

Once dependencies are added, click on Maven tab on the right side of the editor and reload maven project as shown below: