

**Lab Manual- Spring boot Annotation @Component**

**Prepared for**:

**Date:** 18th June 2024

**Prepared by:**

Document Name: Lab Manual **Document Number** SDLab300

**Contributor:**

Contents

[1. Objective 3](#_Toc171528535)

[2. Creating a Spring Boot Project 3](#_Toc171528536)

[3. Import Spring Boot Project in IntelliJ 8](#_Toc171528537)

[4. Create Hello-world class in IntelliJ 11](#_Toc171528538)

[5. Execute Spring Boot Application in IntelliJ 14](#_Toc171528539)

# Objective

Creating a Spring Boot project for a "Hello World" application is a great way to get started with Spring Boot. Here's a step-by-step guide:

### Prerequisites

1. **Java Development Kit (JDK)**: Ensure you have JDK 8 or later installed.
2. **Maven**: Make sure Maven is installed (optional, as Spring Initializr can generate a Maven project for you).

This exercise takes approximately **30** minutes.

.

# Creating a Spring Boot Project

**Step 1:** Open the Spring initializr [https://start.spring.io](https://start.spring.io/).

**Step 2:** Provide the **Group** and **Artifact** name. We have provided Group name **com.bank** and Artifact **as below**

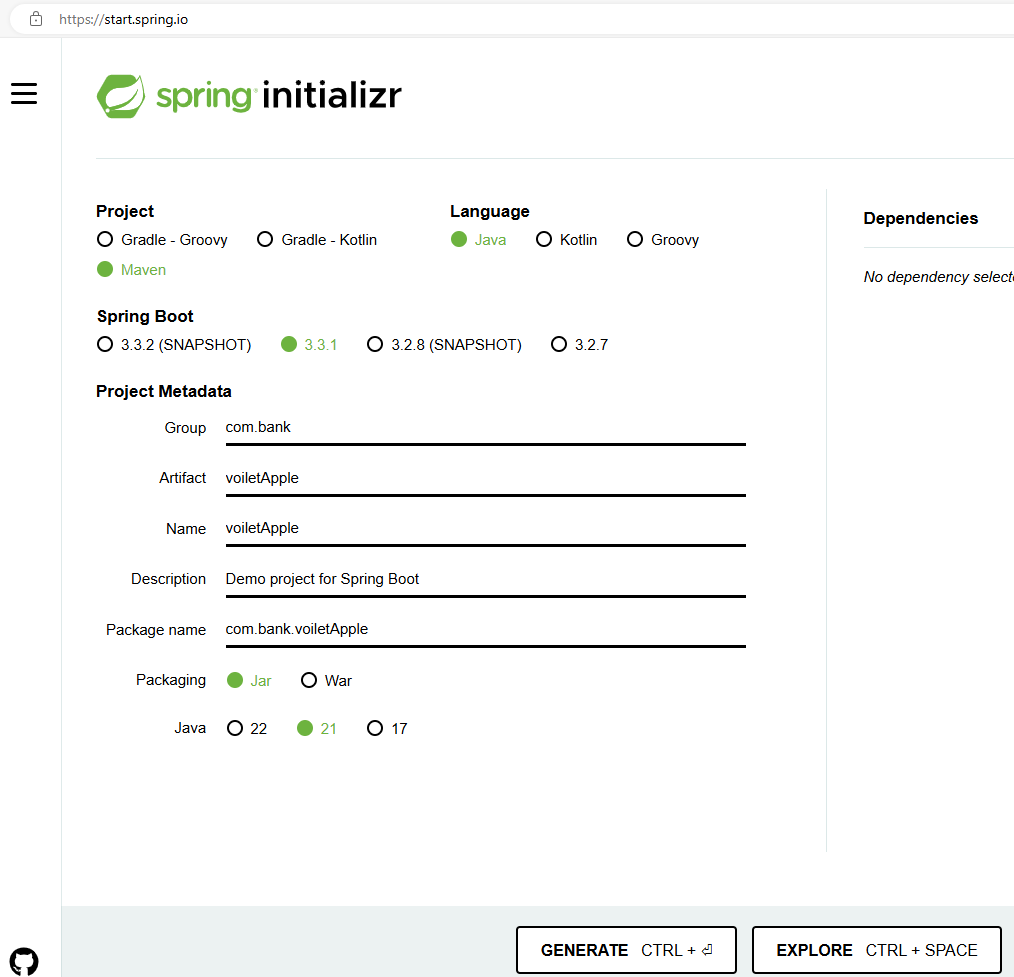
**Group** : com.bank

**Artifact** : voiletApple

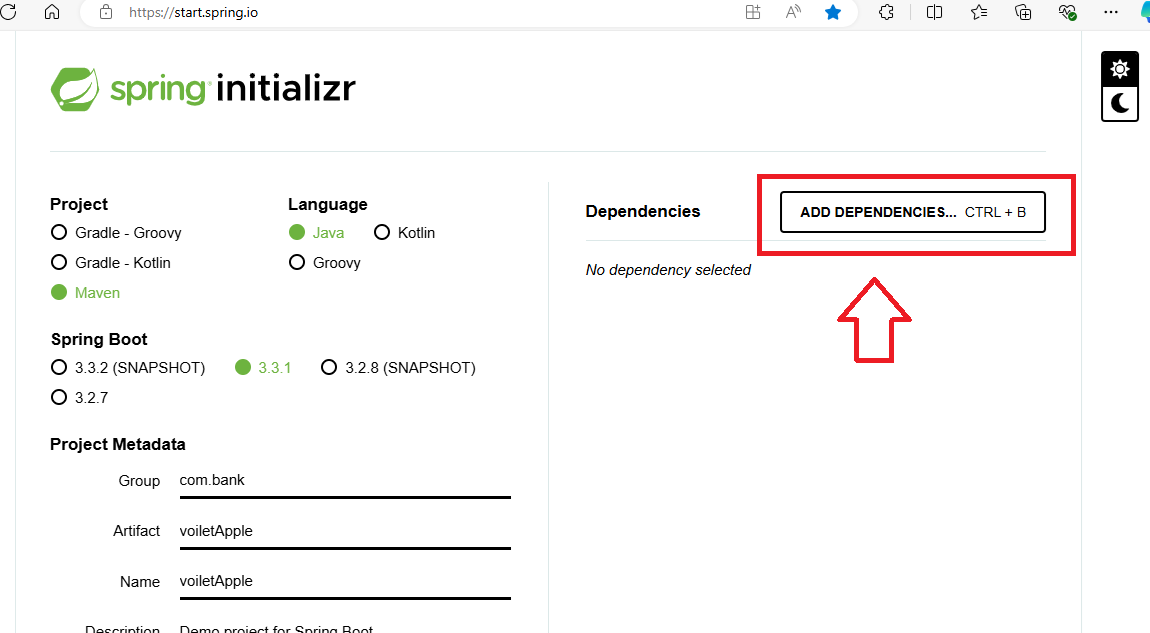
**Name** : voiletApple

**Description** : Demo project for Spring Boot

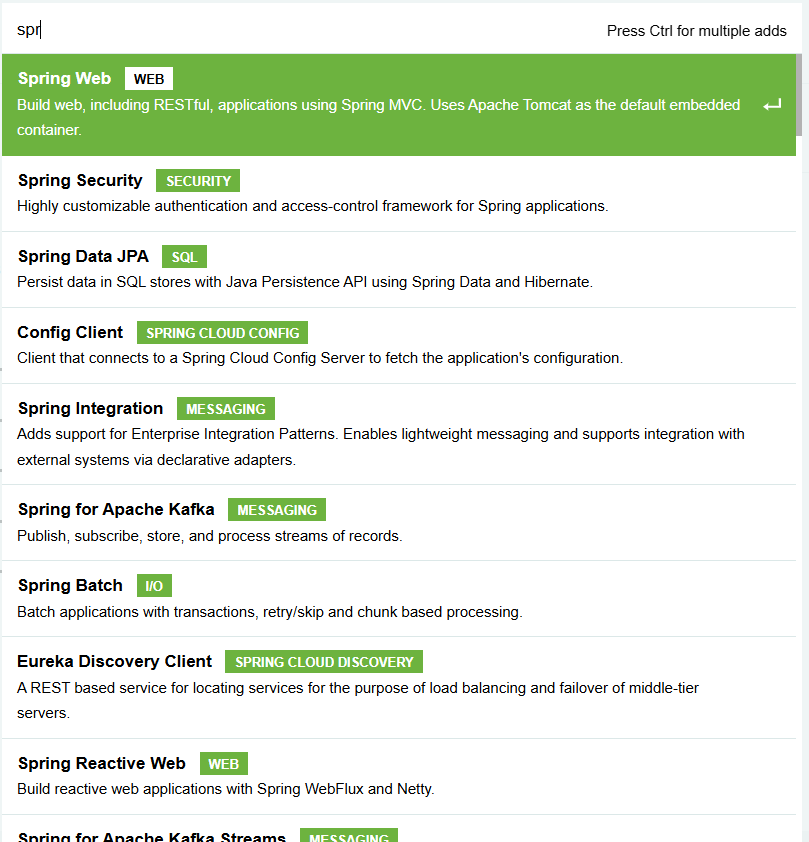
**PackageName** : com.bank.voiletApple



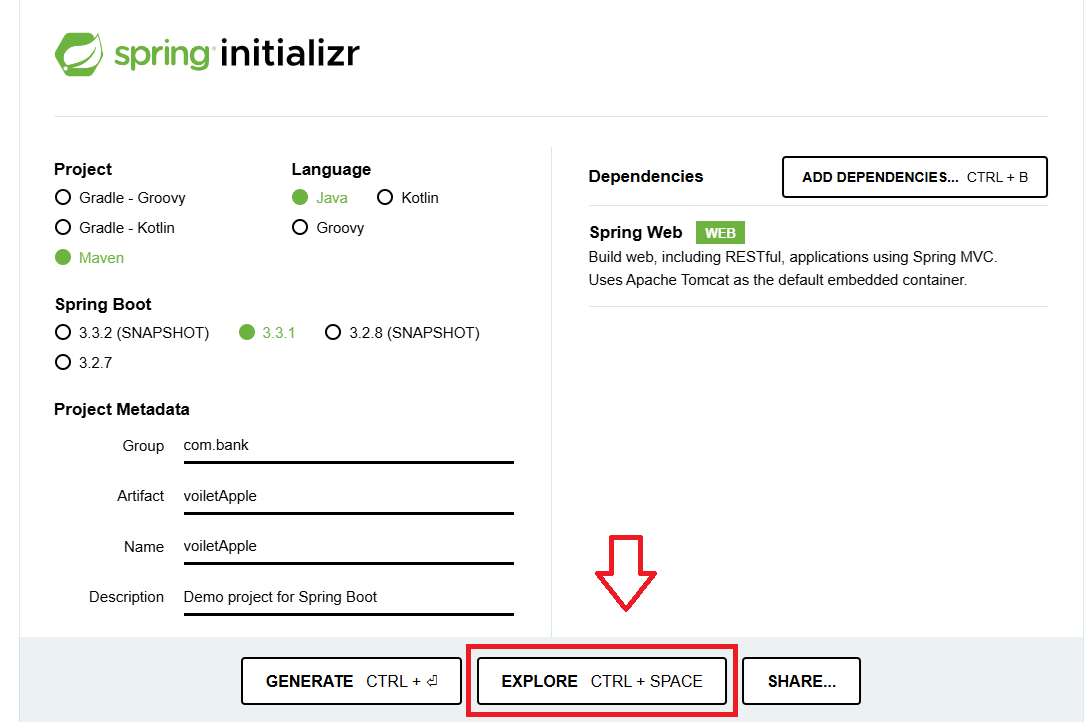
**Step 3:** Now click on the **Add** **Dependencies** button.



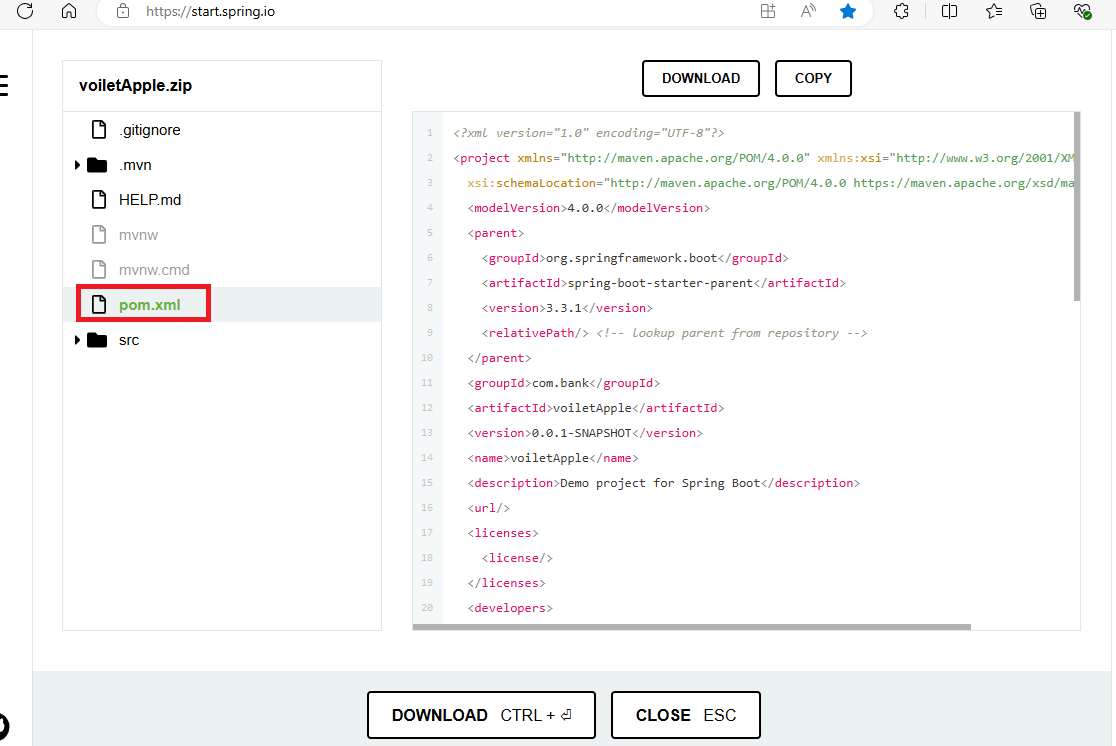
**Step 4:** Select **Spring Web** from drop downlist.



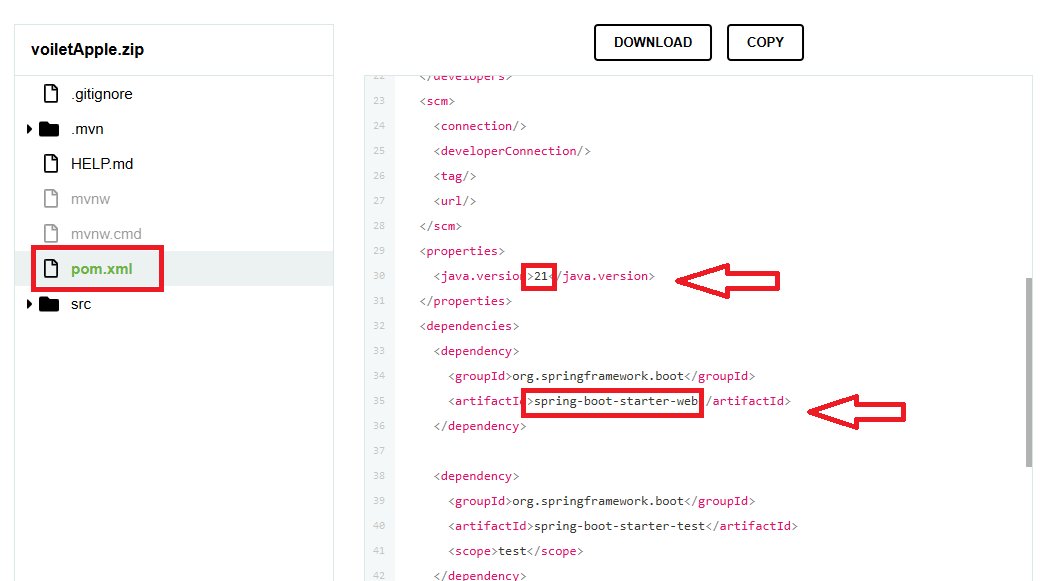
**Step 5:** Now Click **Explore** Button to review the configuration.



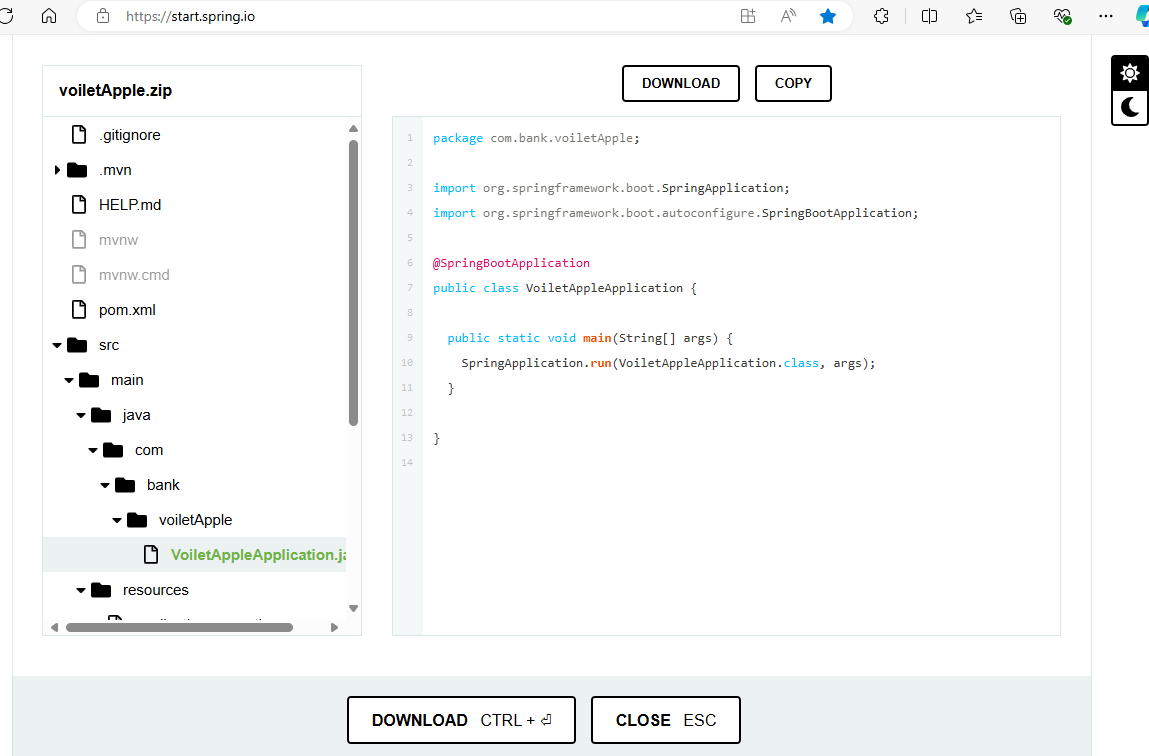
**Step 6:** Check **POM.XML**



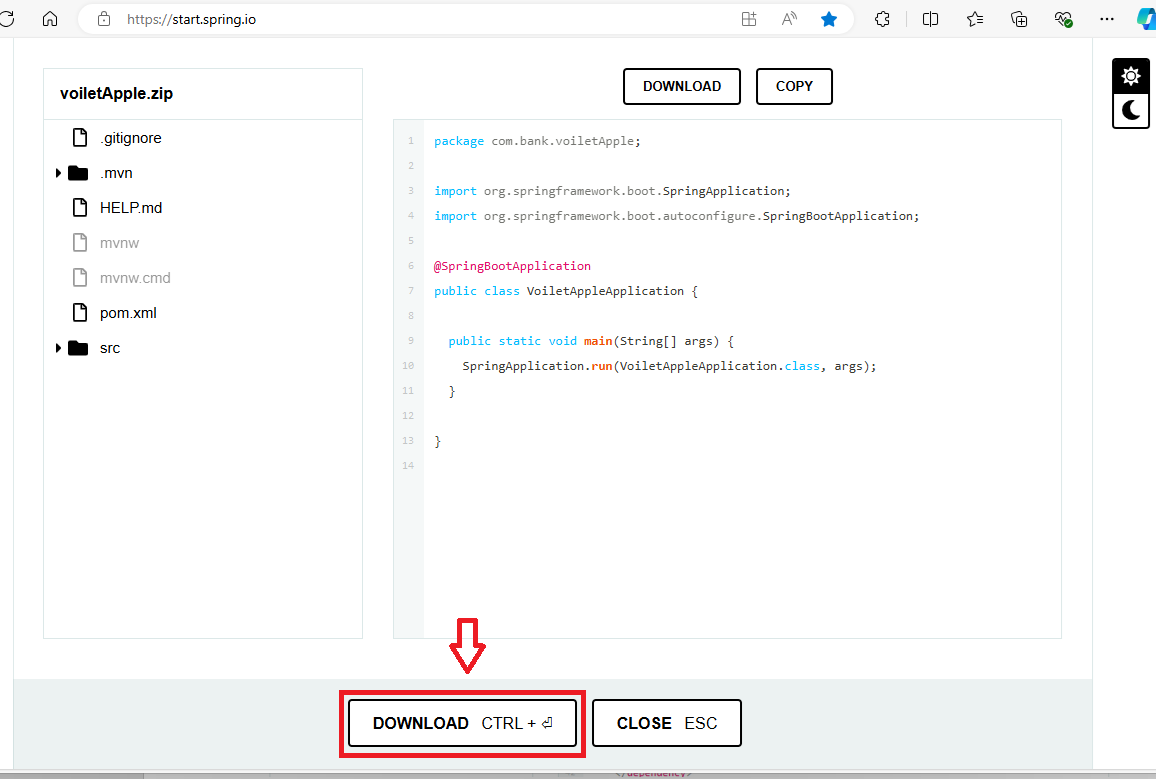
**Step 7:** Note **Java Version** and **Dependencies**



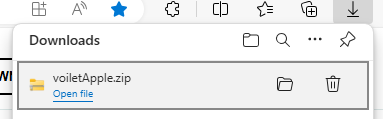
**Step 8:** Check default source code



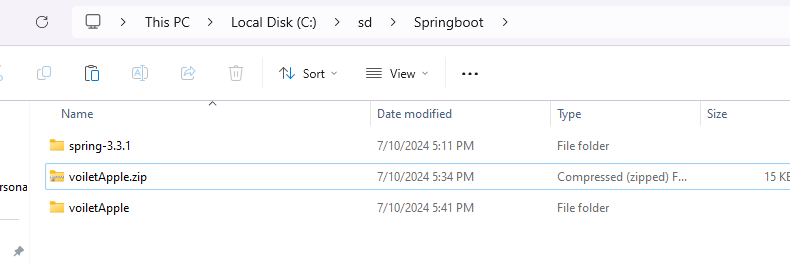
**Step 9: Click on download to download the code**



**Step 10:** Code should download now

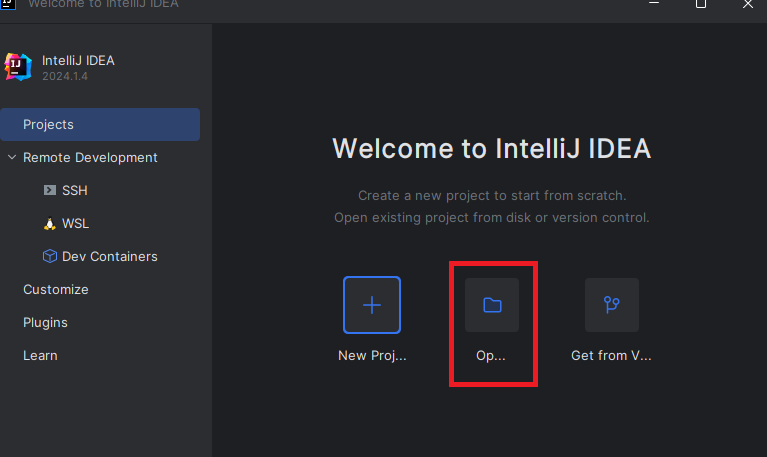


**Step 11: Extract** the project to your Projet directory

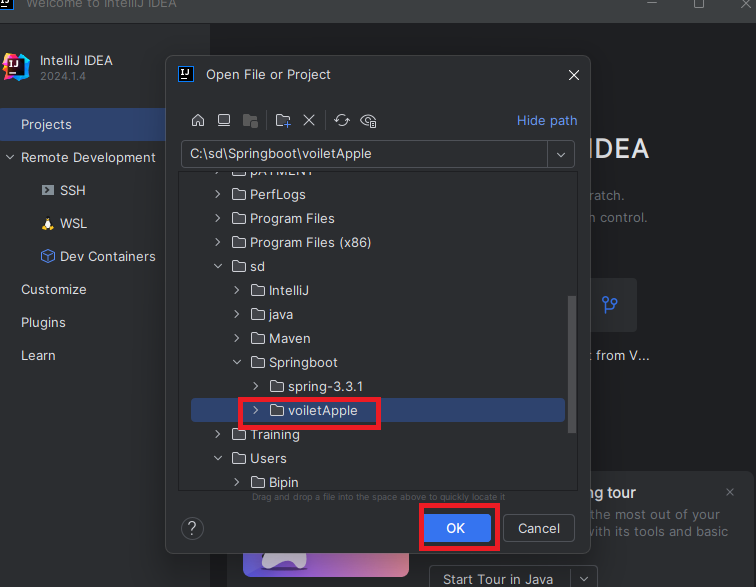


# Import Spring Boot Project in IntelliJ

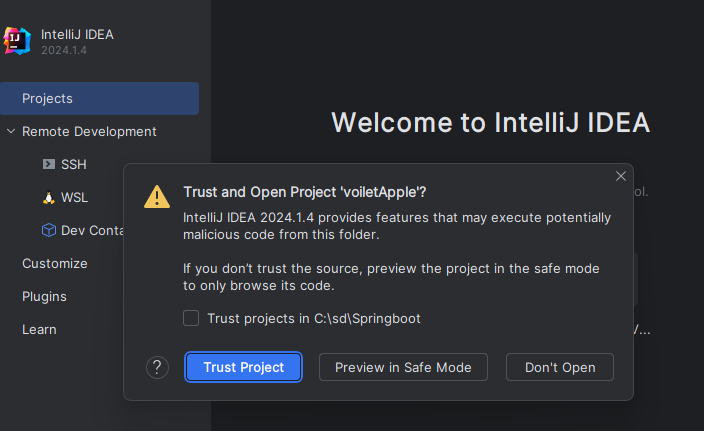
* Click open project



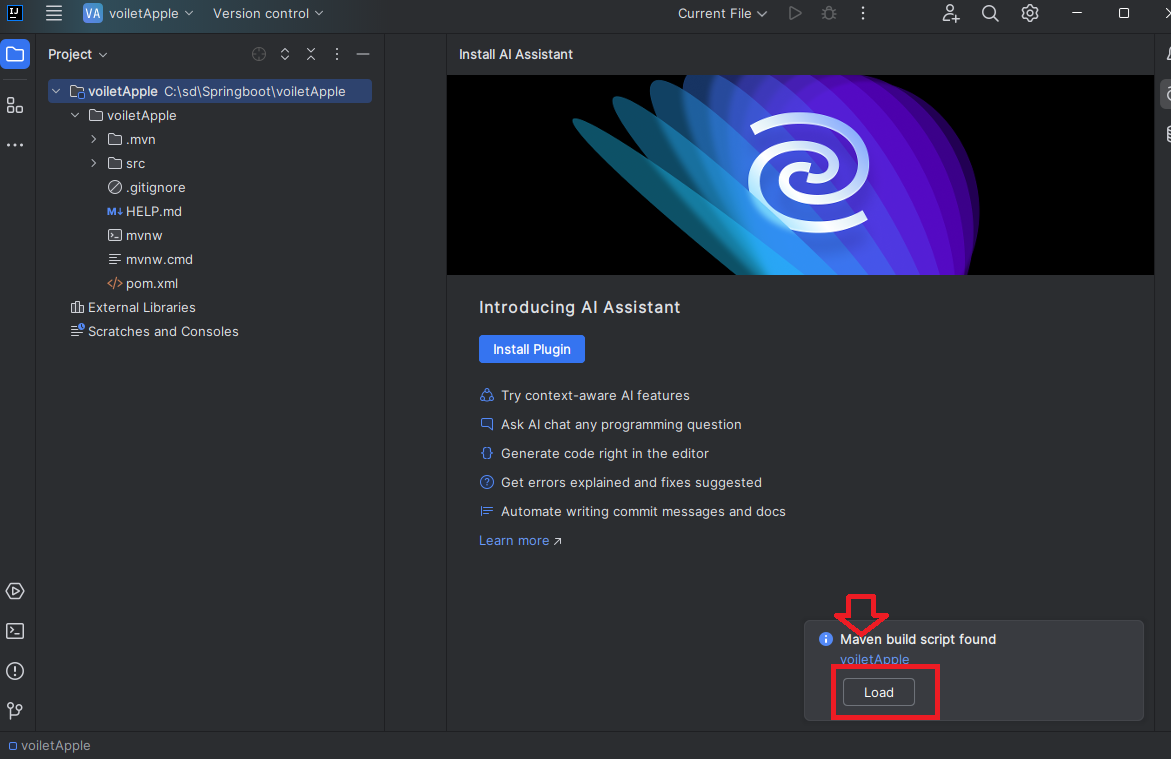
* Select your extract project and click **OK**



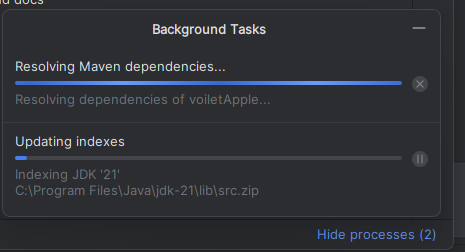
* If ask click **Trust project**



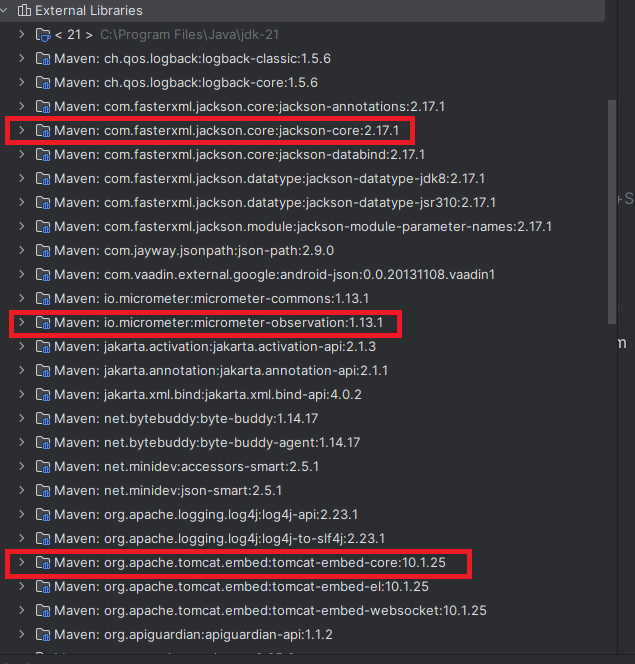
* If ask **Load** the Maven Build Script



* It may takes couple of Minutes to download and Load the library

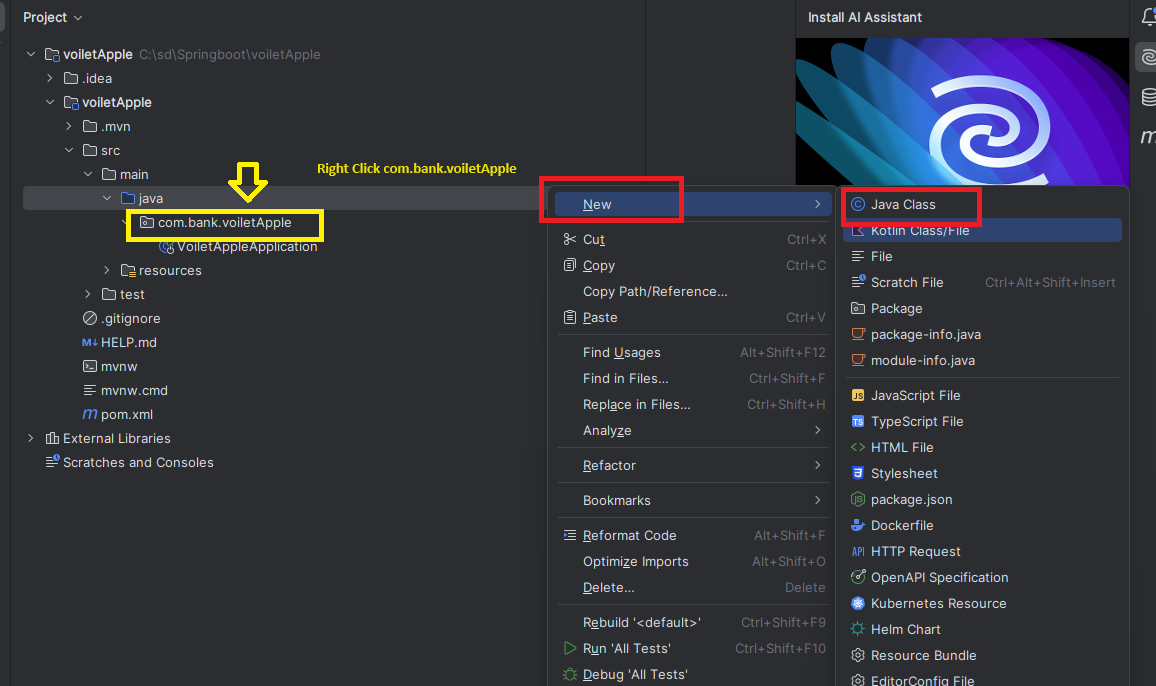


* If you expand the dependencies you can see the **jakson** ( Json conversion ) , **Micrometer** for observation and embded **Tomcat**

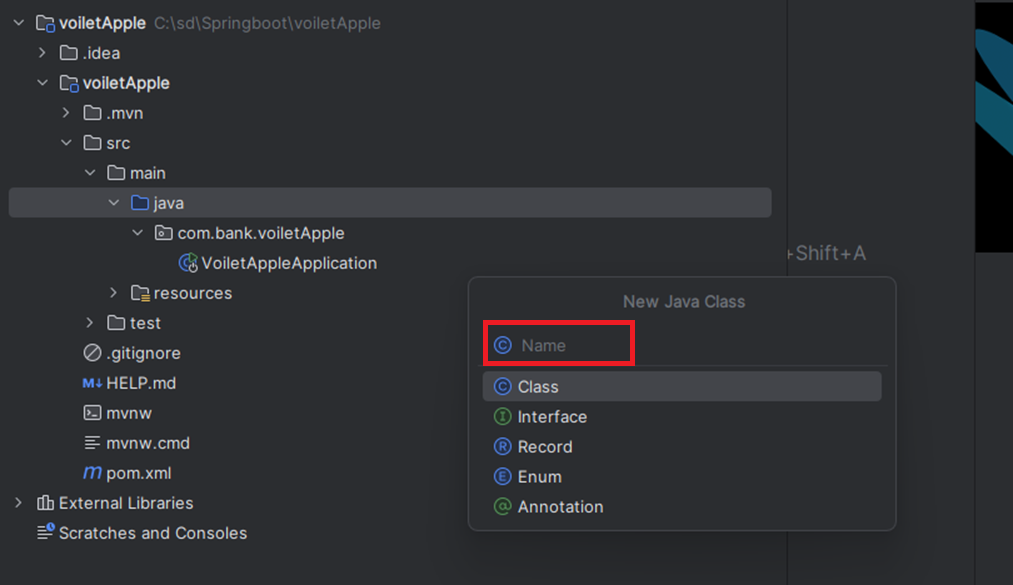


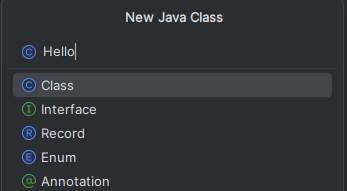
# Create Hello-world class in IntelliJ

* Right Click the Application –New—Java Class



* Type **Hello** in Class Name and Press **enter** to create the class



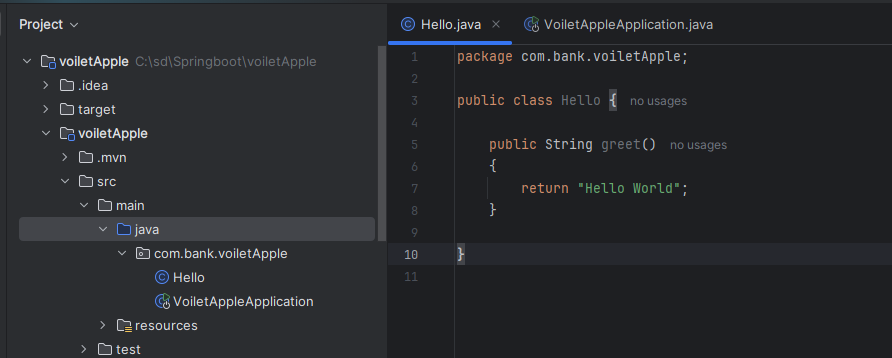


* Note the **class** created



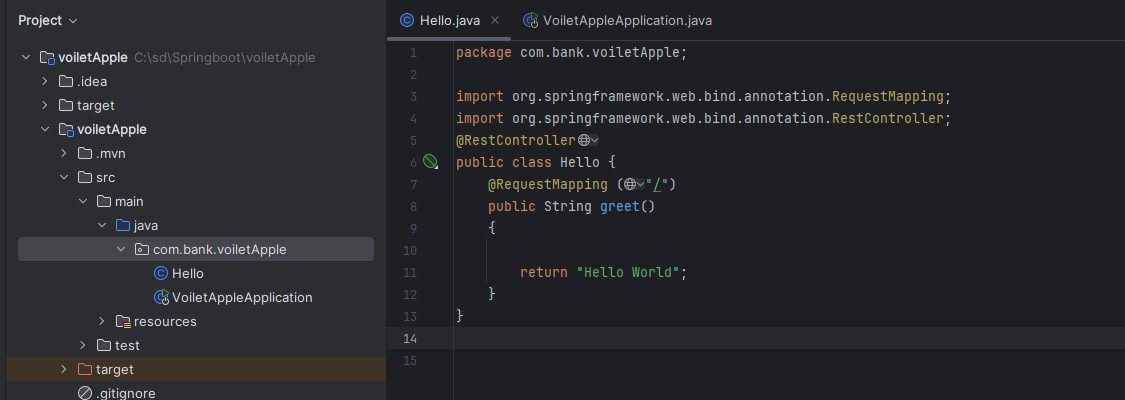
* Type Below Code to Print Hello World

public String greet()  
{  
 return "Hello World";  
}



* Type Below Annotation to receive Http Request **@RestController** and You Notice It automatically import related library
* Type the **@RequestMapping** ("/")and You Notice It automatically import related library

import org.springframework.web.bind.annotation.RequestMapping;  
import org.springframework.web.bind.annotation.RestController;  
@RestController  
public class Hello {  
 @RequestMapping ("/")  
 public String greet()  
 {  
   
 return "Hello World";  
 }  
}



# Execute Spring Boot Application in IntelliJ

