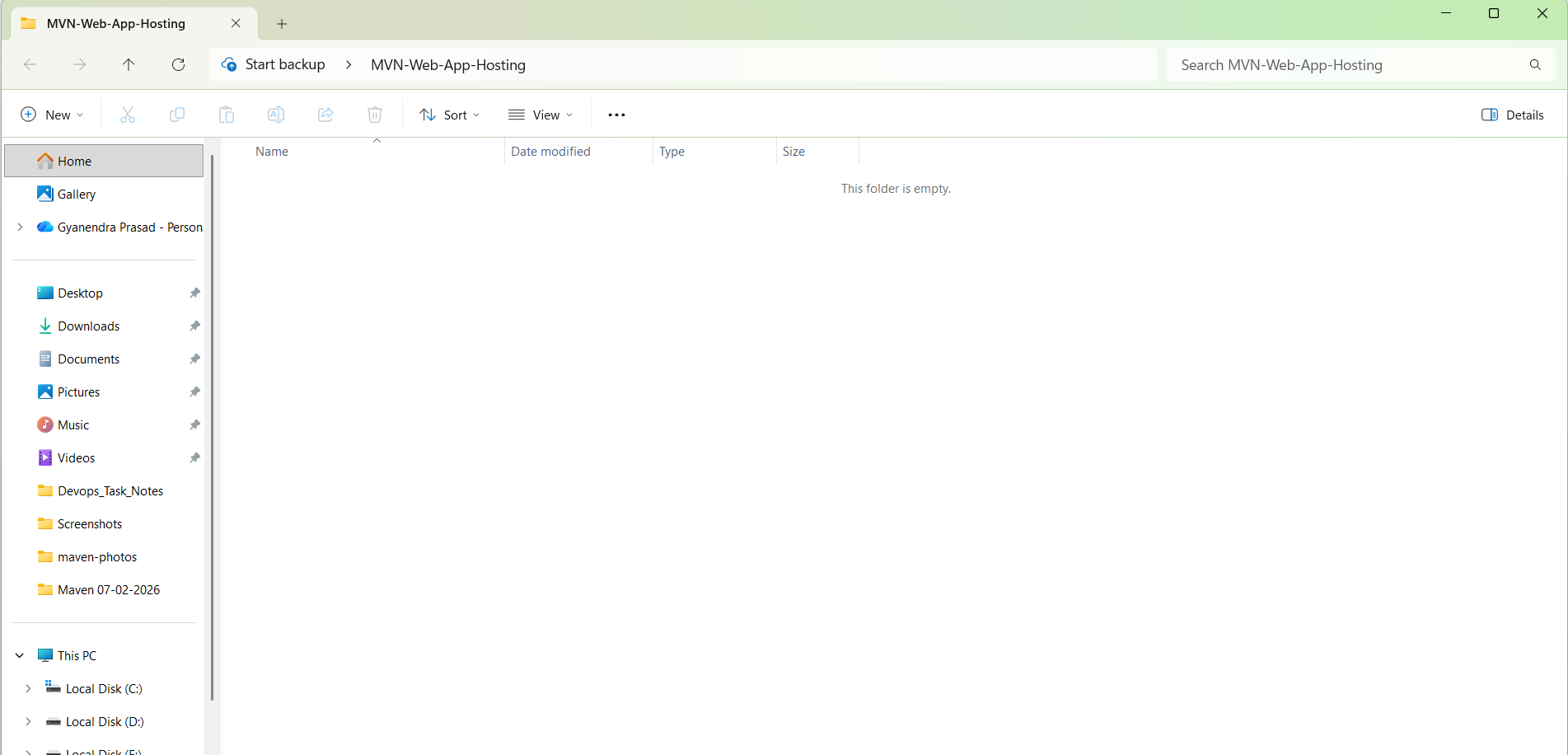
# DAY-1 Maven

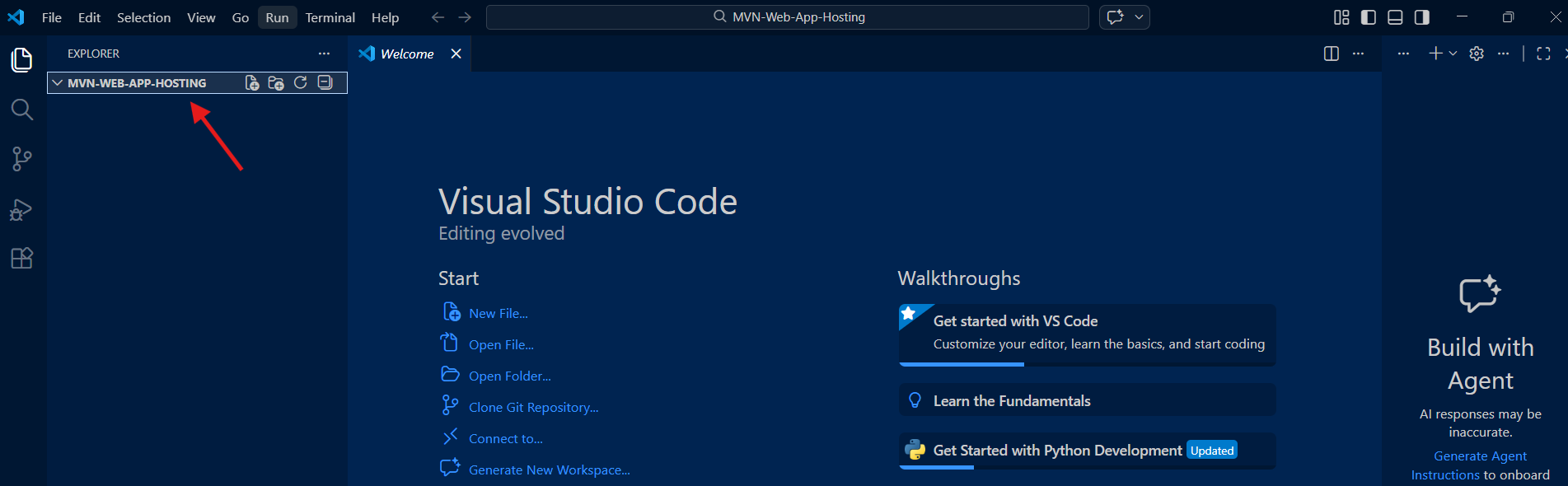
**How to create a maven Web-Application project.**

Steps-

1. Create folder in side your local machine named it as MVN-Web-App-Hosting.



1. Open the VS-Code and open the folder inside.



1. I want to create a Web- application so enter this command inside the terminal.

- Now click the toggle pannel and open the terminal inside the vs code.

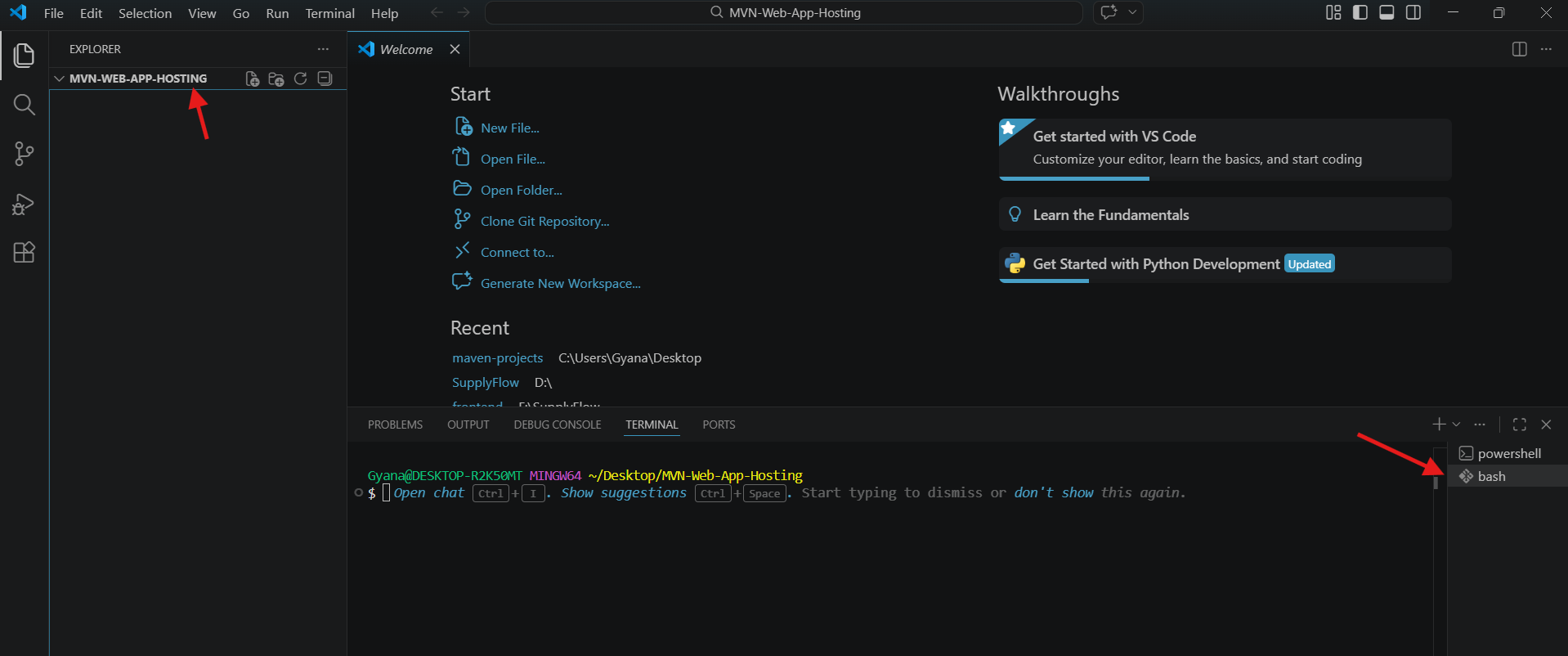
-First change the terminal from Powershell to Git bash then enter the command.

Syntax:

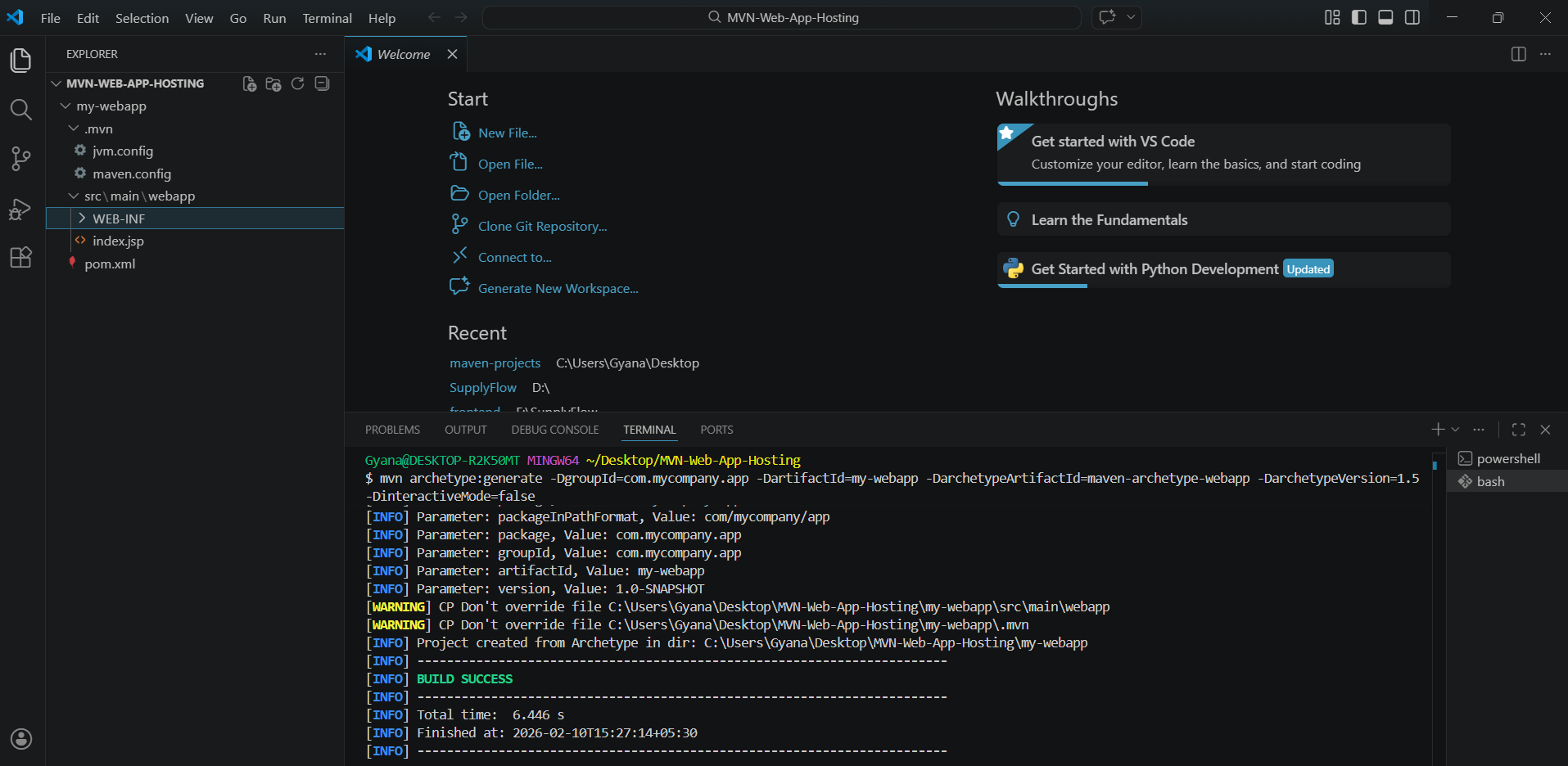
**mvn archetype:generate -DgroupId=com.mycompany.app -DartifactId=my-webapp -DarchetypeArtifactId=maven-archetype-webapp -DinteractiveMode=false**

ex:

**mvn archetype:generate -DgroupId=com.TCS -DartifactId=Web-app-01 -DarchetypeArtifactId=maven-archetype-quickstart -DarchetypeVersion=1.5 -DinteractiveMode=false**

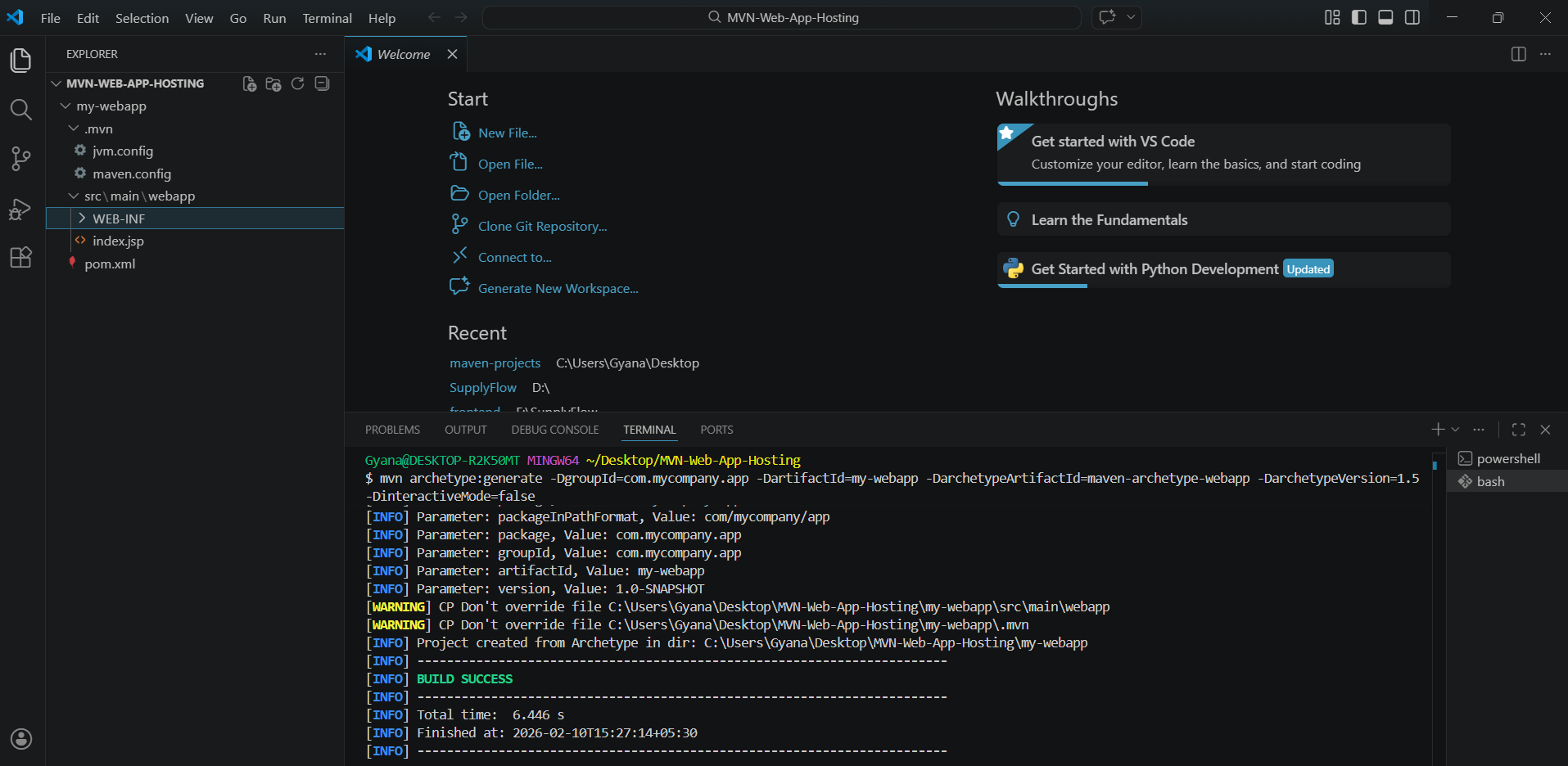


1. After hitting this command it will crate a Web-Application inside the MVN-Web-App-Hosting main project folder.

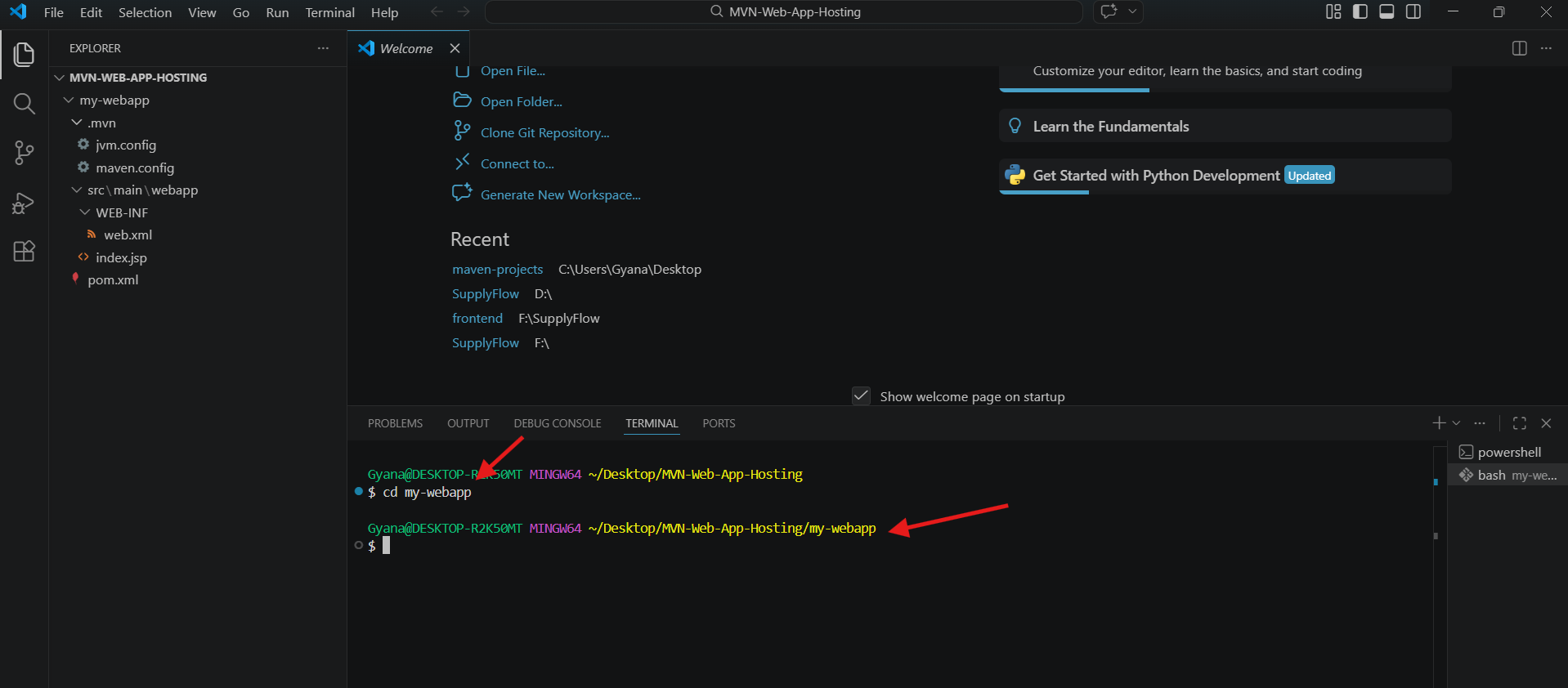


* You can see the project name called my-webapp got created with files and folders.

1. See the folder structure of the project which is nothing but the project structure of java.

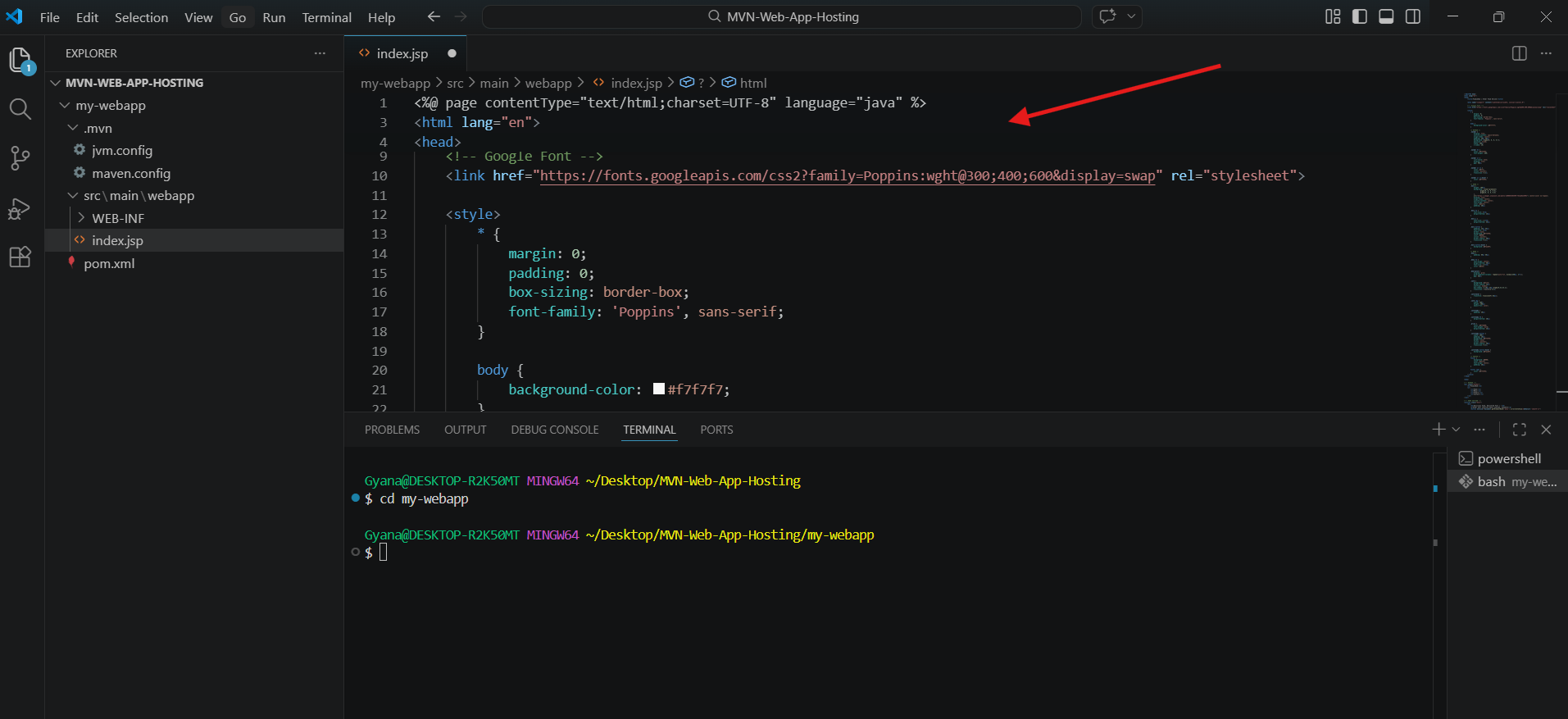


1. Now as a devops engineer our work is to execute the Maven goal.
2. Go inside the project folder **my-webapp** because every time the **maven goals** is to execute **inside the project folder.**



1. We will perform maven goals but before that we have to set up the projects and add codes inside the index.jsp

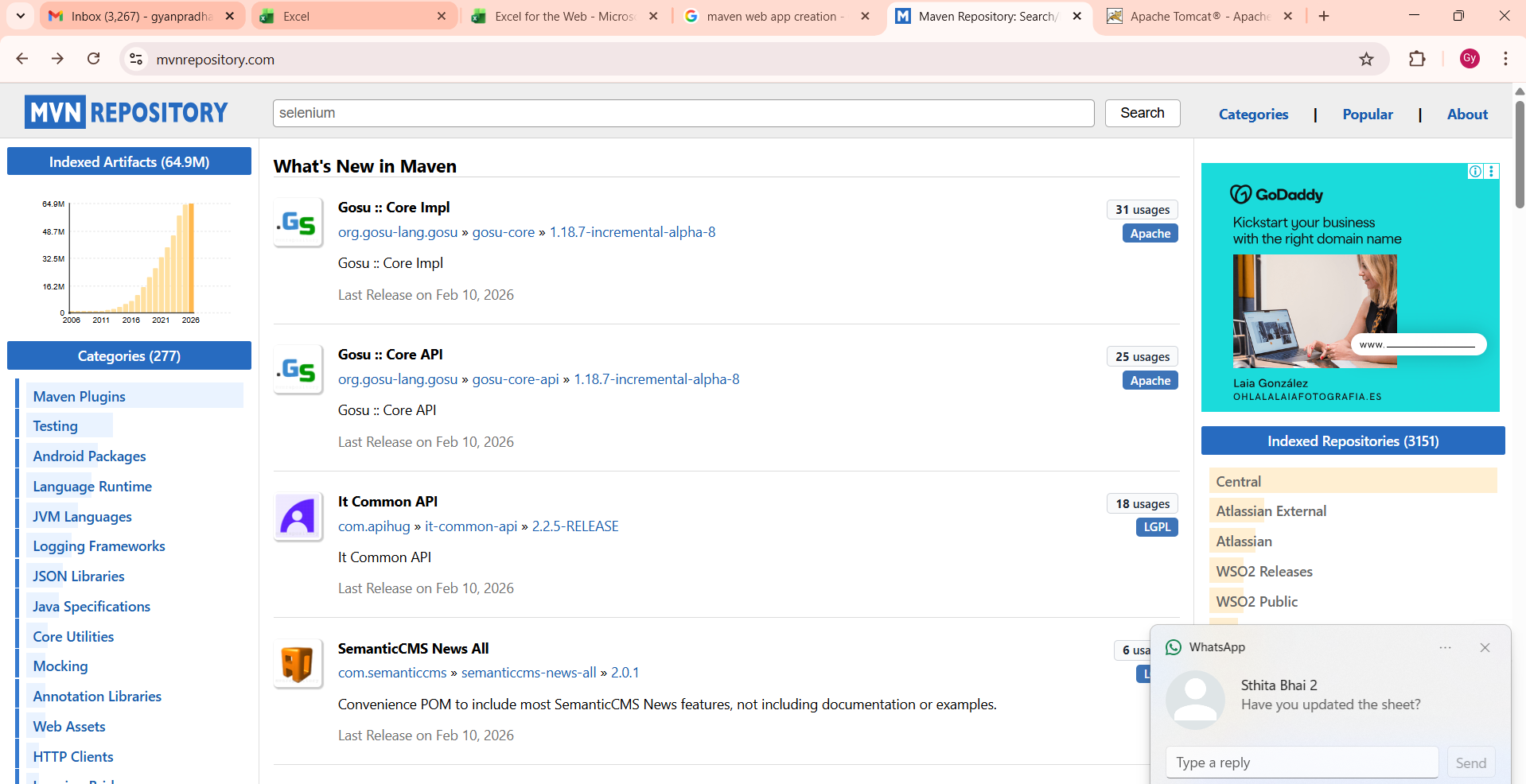
* Now added the web application code inside the **index.jsp.**



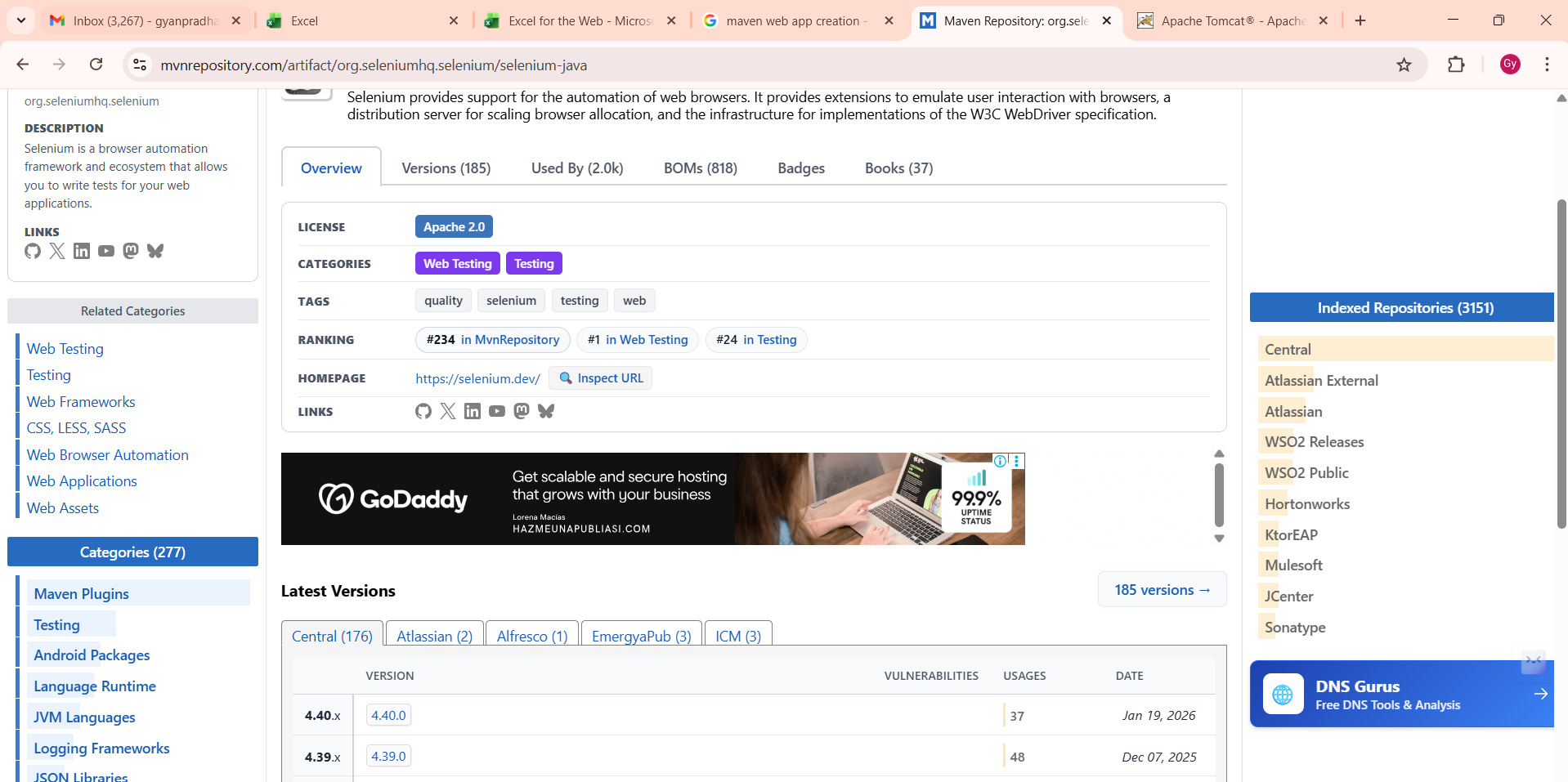
1. Now adding the dependencies in the pom.xml.

**How to add the dependencies in the Project.**

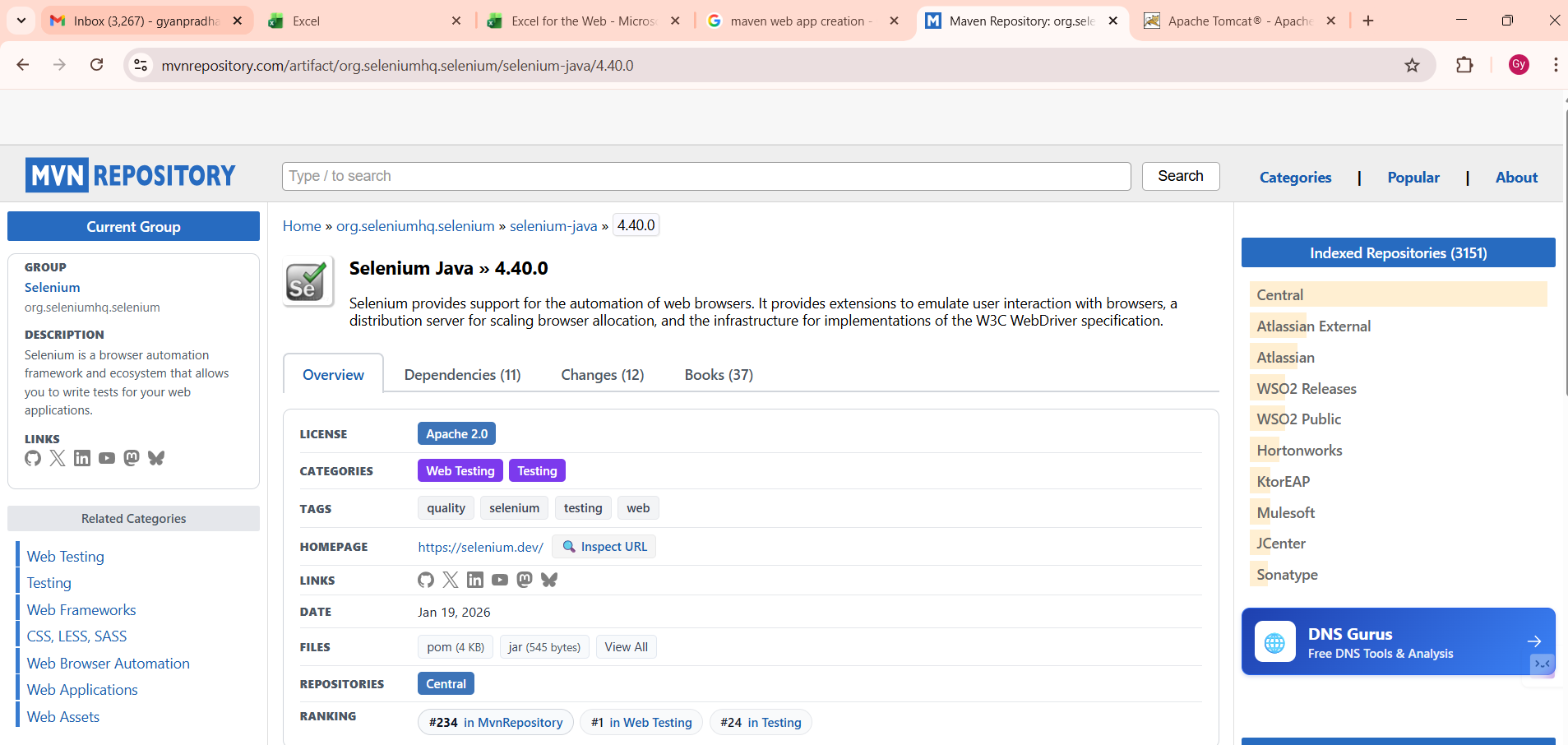
* Visit the web site which is the maven central repository: [**https://mvnrepository.com/**](https://mvnrepository.com/)

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* I am adding the selenium dependencies in the projects that’s why searched the selenium and selected the selenium java : [**https://mvnrepository.com/artifact/org.seleniumhq.selenium/selenium-java**](https://mvnrepository.com/artifact/org.seleniumhq.selenium/selenium-java)

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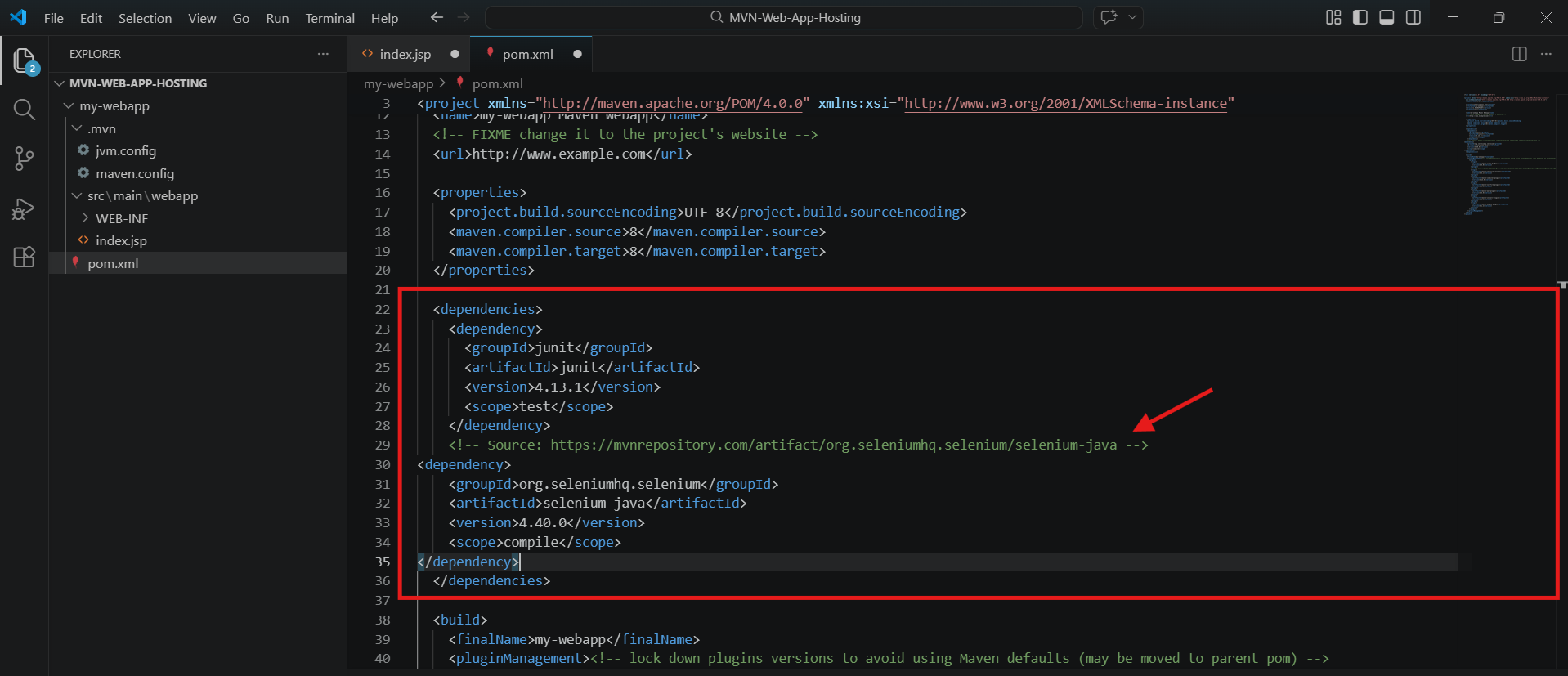
* Selecting the latest version of Selenium Java 4.40.0

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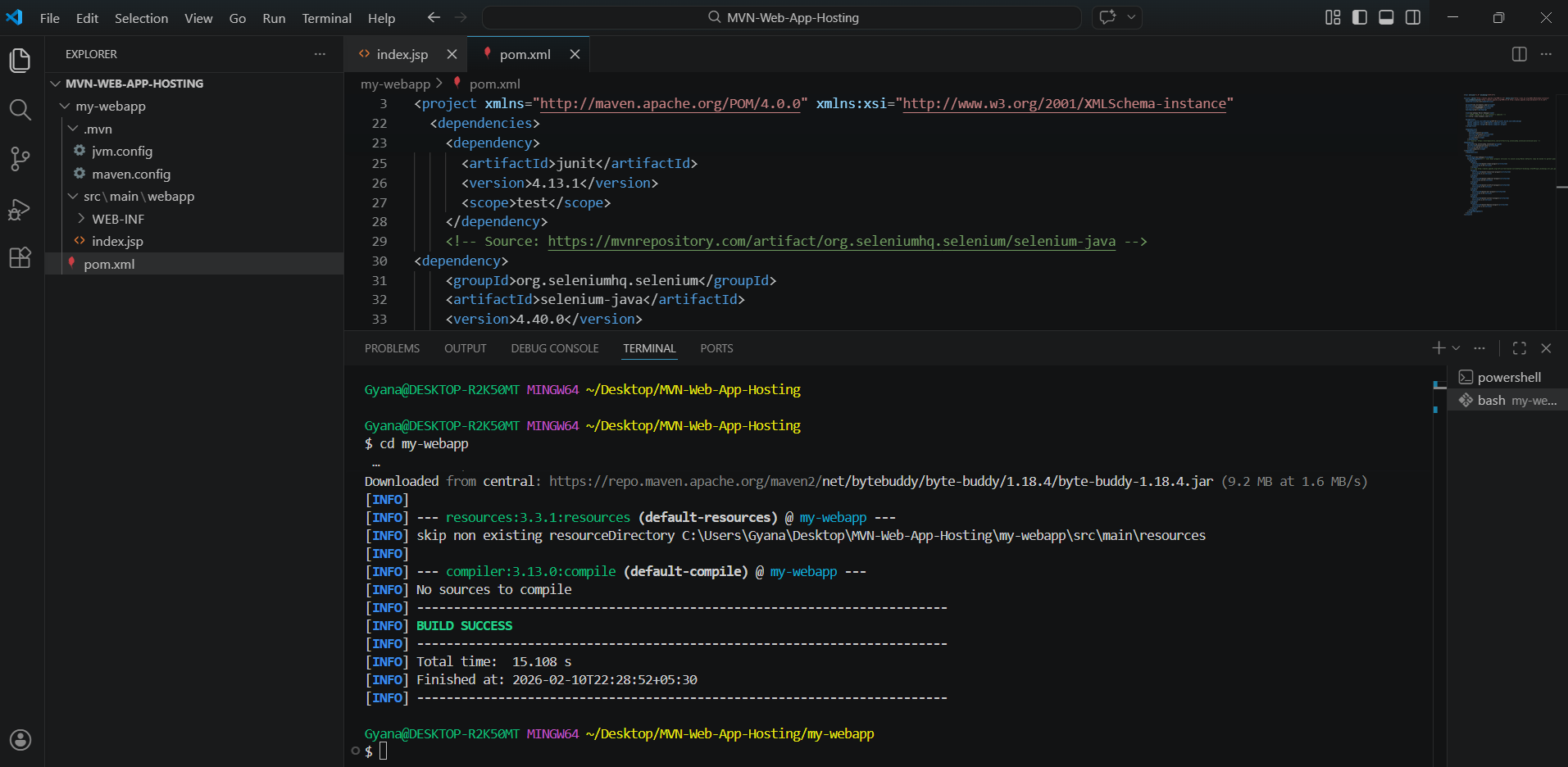
* Then will copy the dependency from here having the scope “compile”



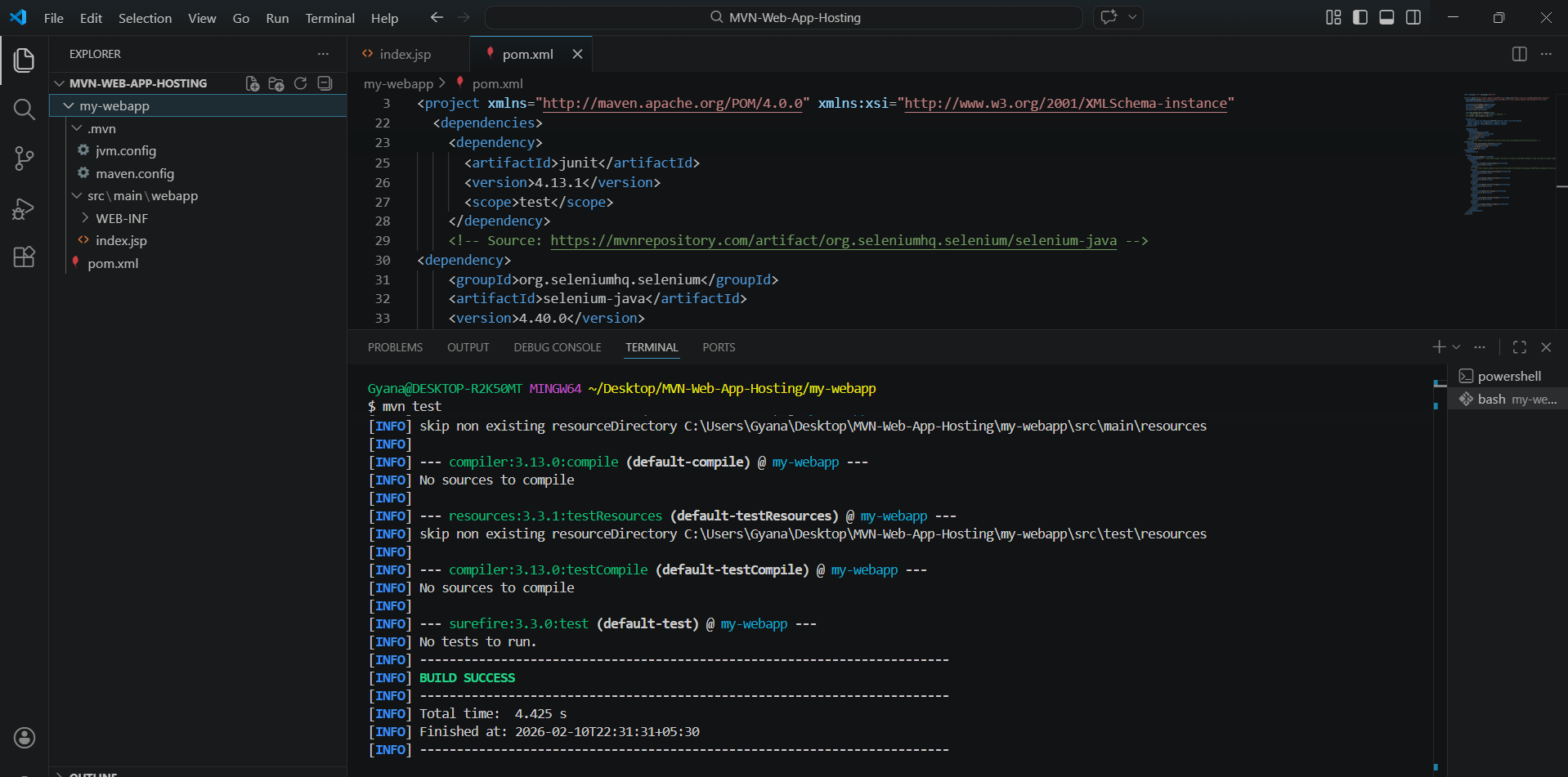
1. Now added the selenium dependency in the **pom.xml** file.
2. Before that it has the dependency having group id **junit.**



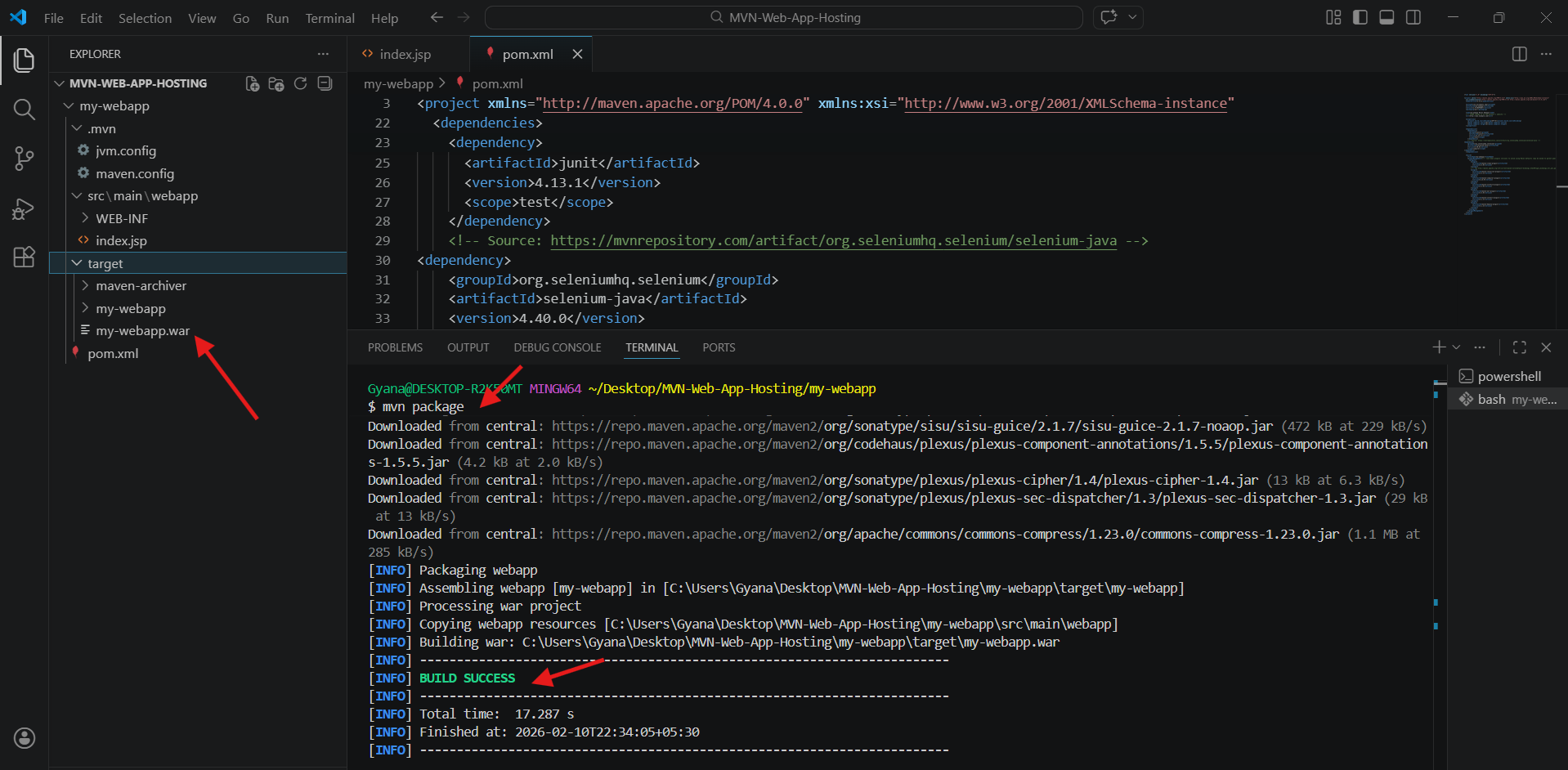
1. Use the command **mvn compile** to compile the java code.



1. After compilation we will test our code.
2. The next maven goal will be : **mvn test** which will test my code that my code is correct or not.
3. If it will show BUILD SUCCESS then or code tested successfully

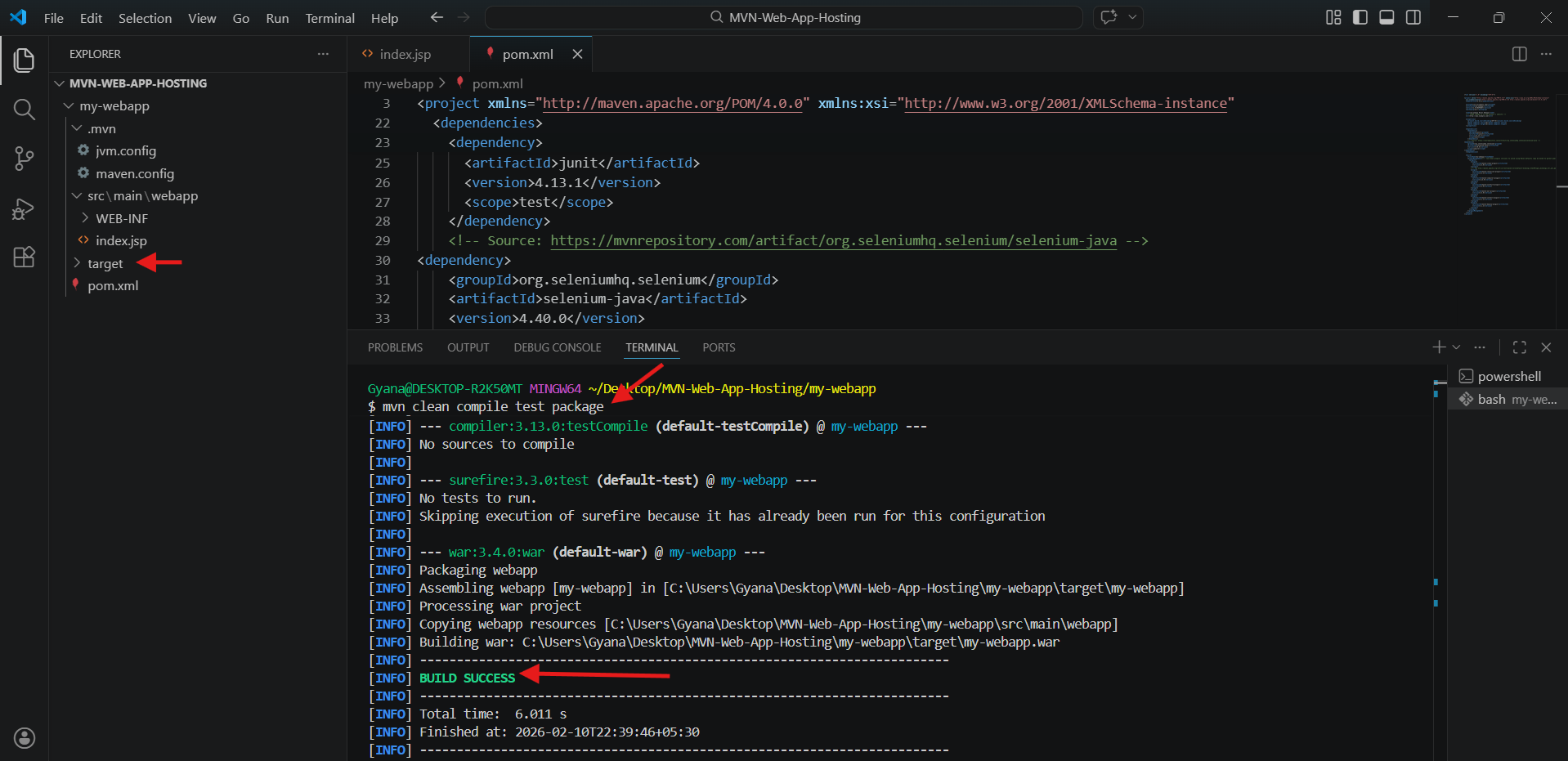
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1. Now will package our code using maven goal: **mvn package.**
2. When it appear the **Build success** a target file will be created having the **.war** file.

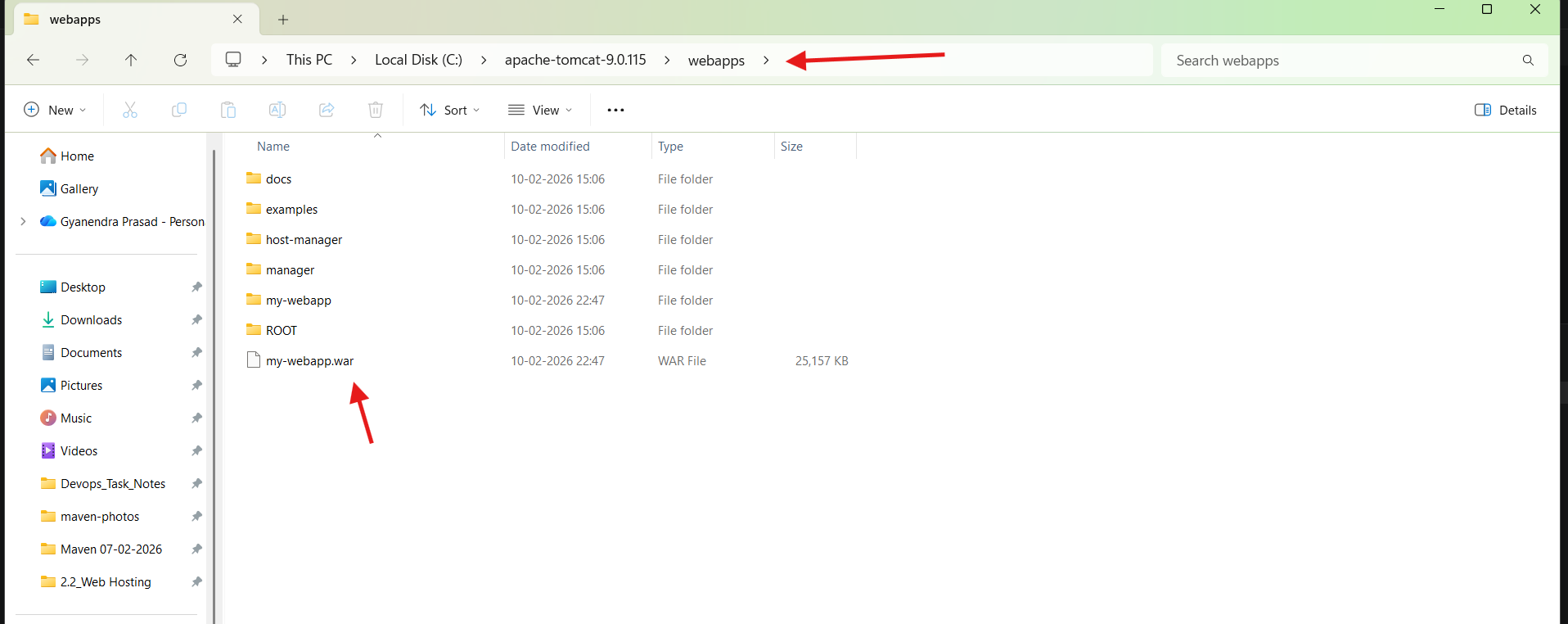
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1. All these maven goals we can do in one line by using: **mvn clean compile test package.**

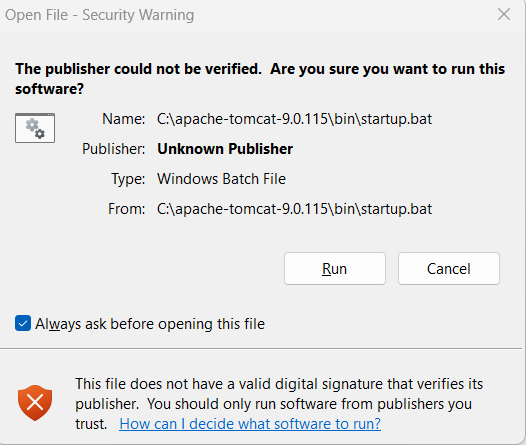
* This command will execute all the goals at a time one after another.
* The **mvn clean** command will delete all the environment and the compile ,test and package command will execute again and a new target folder will create again.



1. Now to host our application through tomcat we need to copy the **.war** file and paste it to the **webapps folder.**



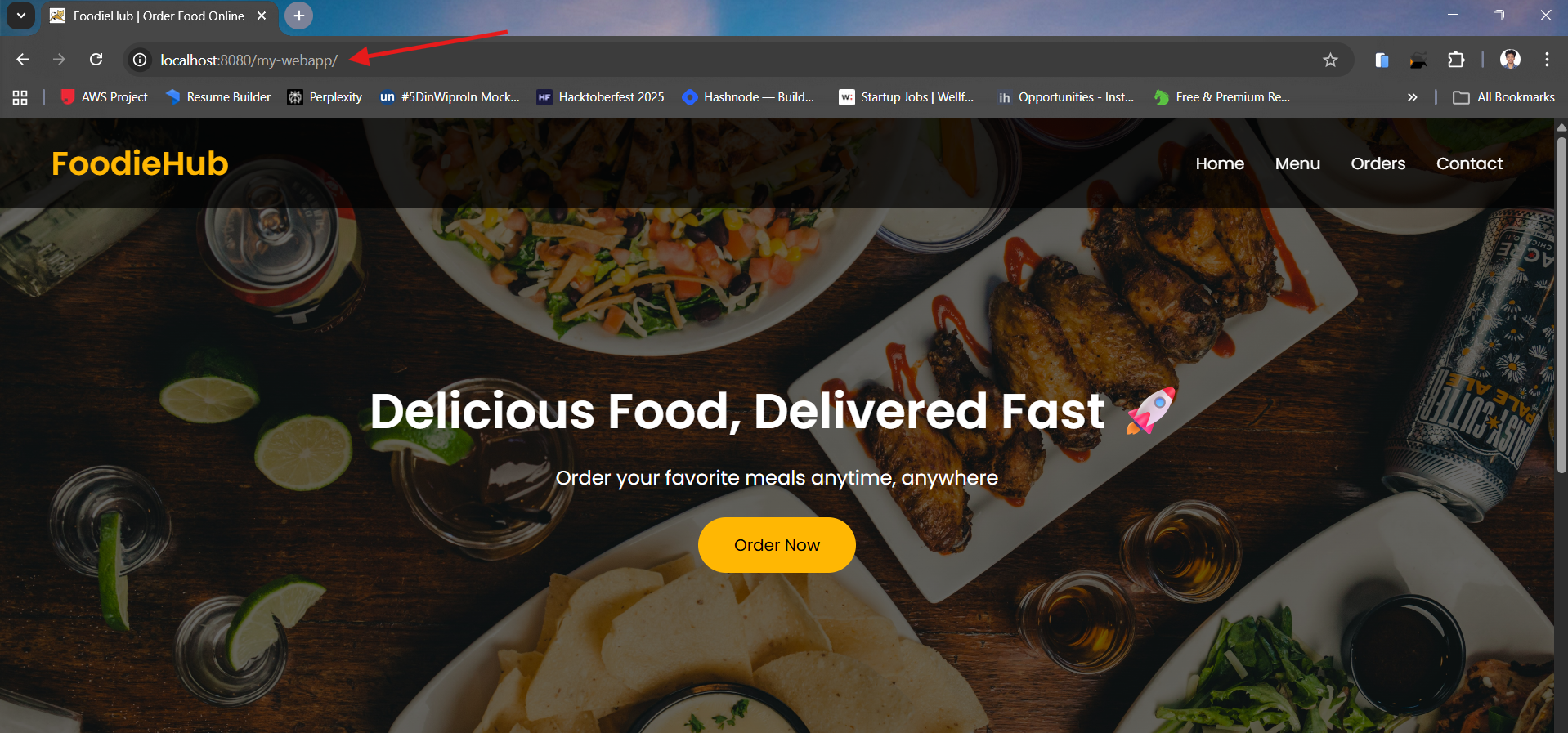
1. Now we have to run the tomcat server.
2. To run the apache tomcat open the **bin** folder inside the **apache-tomcat-9.0.115.**
3. Go inside the **bin** folder there will be **startup batch file** there double click it then tomcat will run.

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* Click run then tomcat will run.

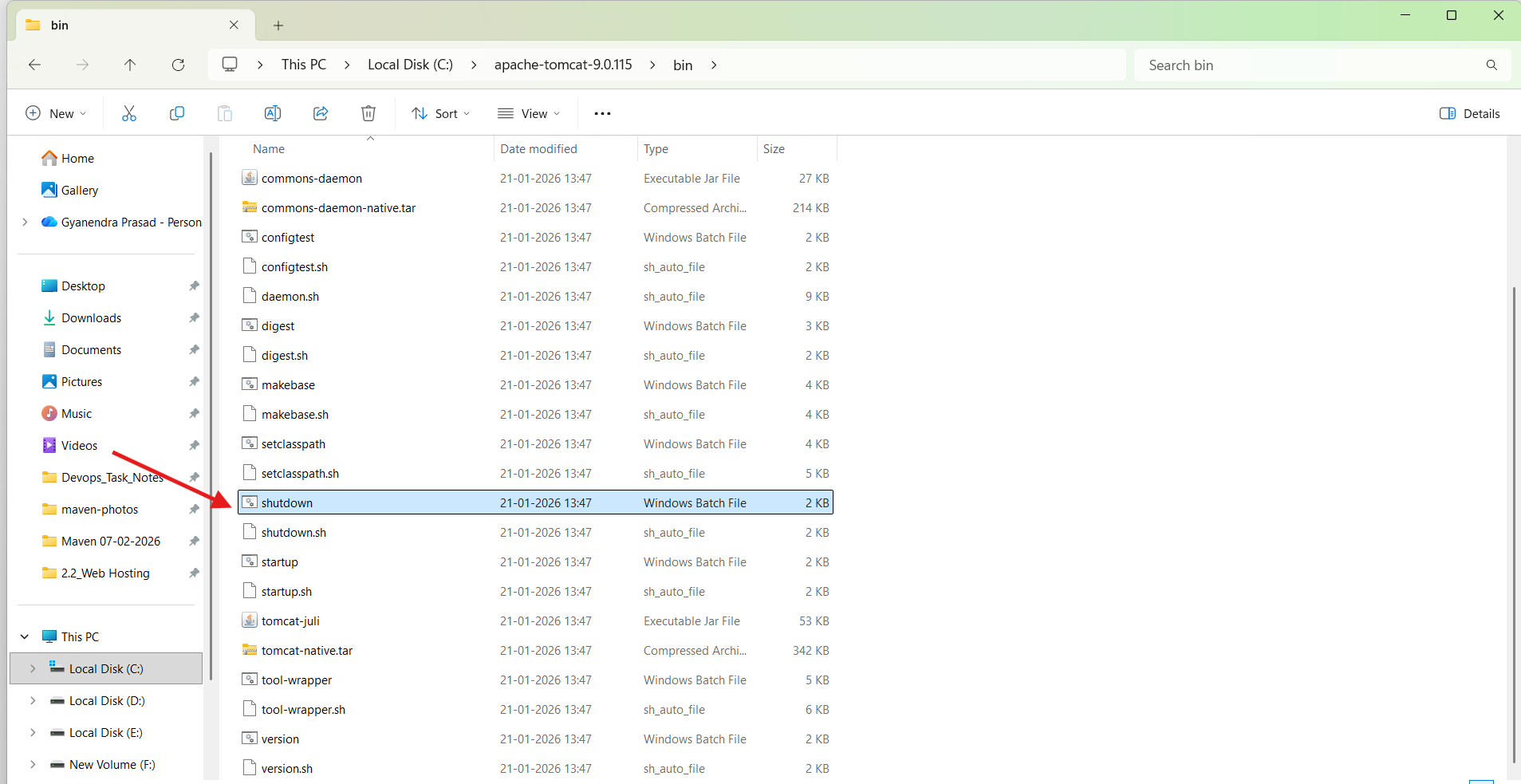


1. Now open browser type: **localhost:8080/your-web-application** to run the web application.
2. I am running my application using : **localhost:8080/my-webapp.**



Web application hosted successfully.

* If we terminate the tomcat server then our web application hosting will be closed.
* To close the tomcat open the **bin folder** inside the **apache-tomcat-9.0.115** folder inside the c-drive.
* Look a **shutdown** batch file will be there just double click it and the **tomcat server** will terminate.



* Web application hosting closed.

