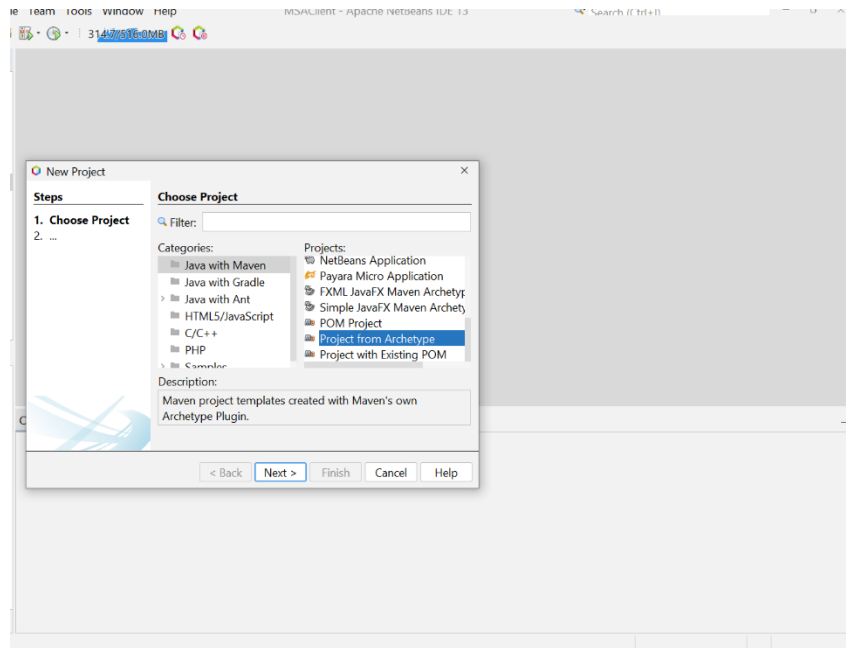
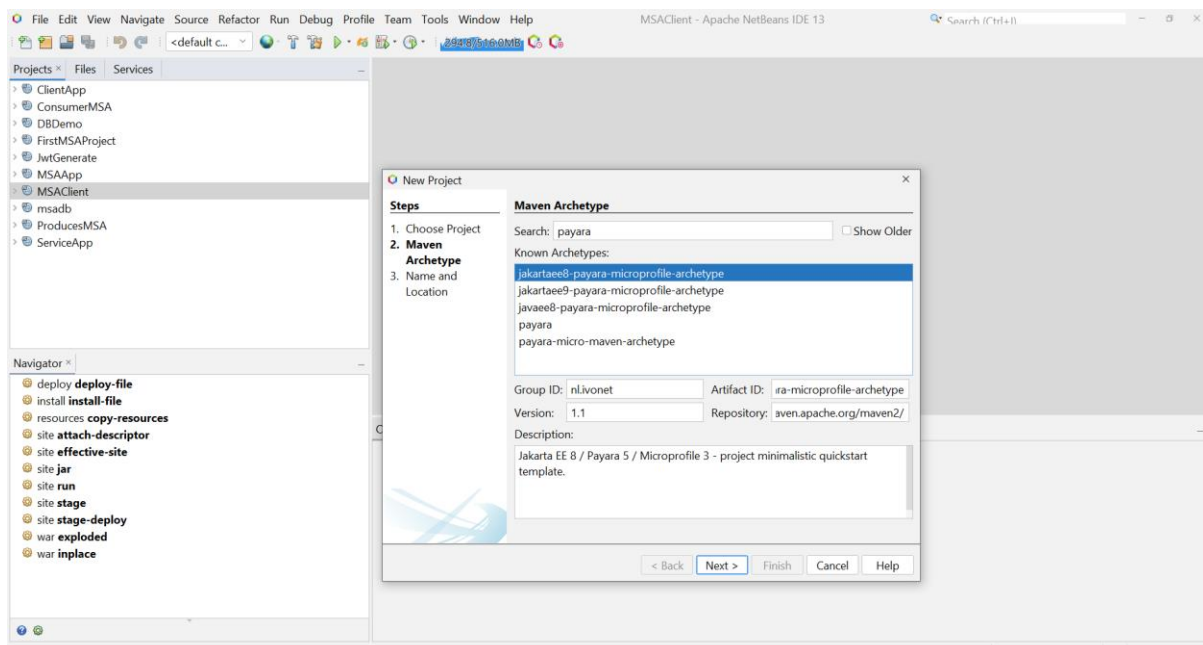


- Hello there Today I will show How to create and run payara-microprofile-archetype app in docker

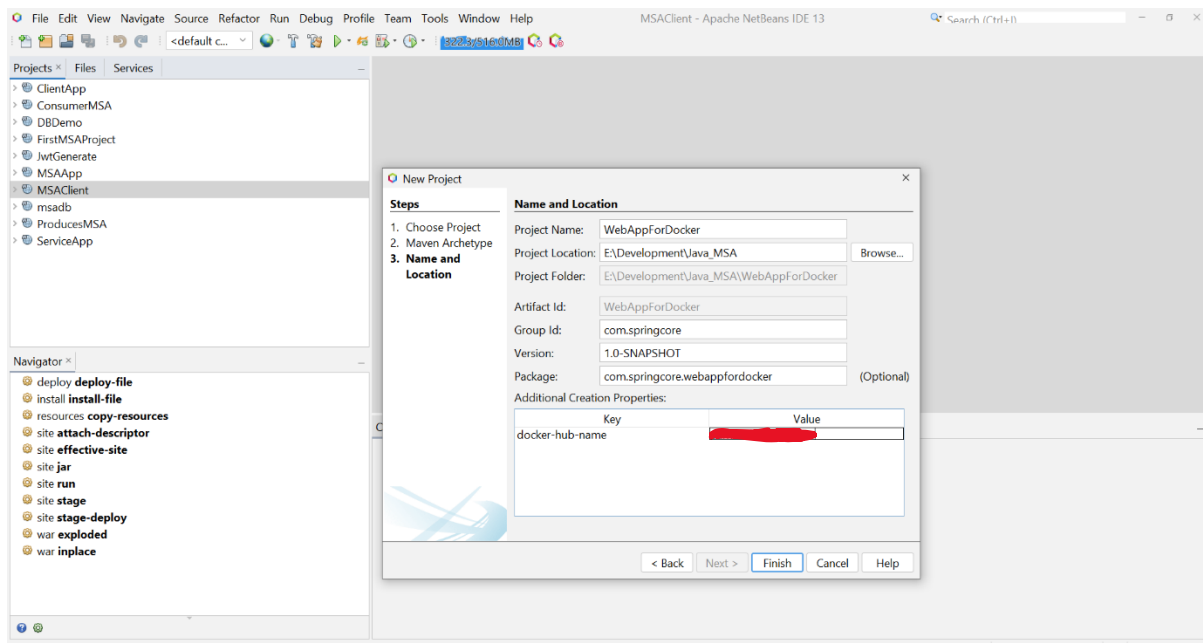
1) Create the project



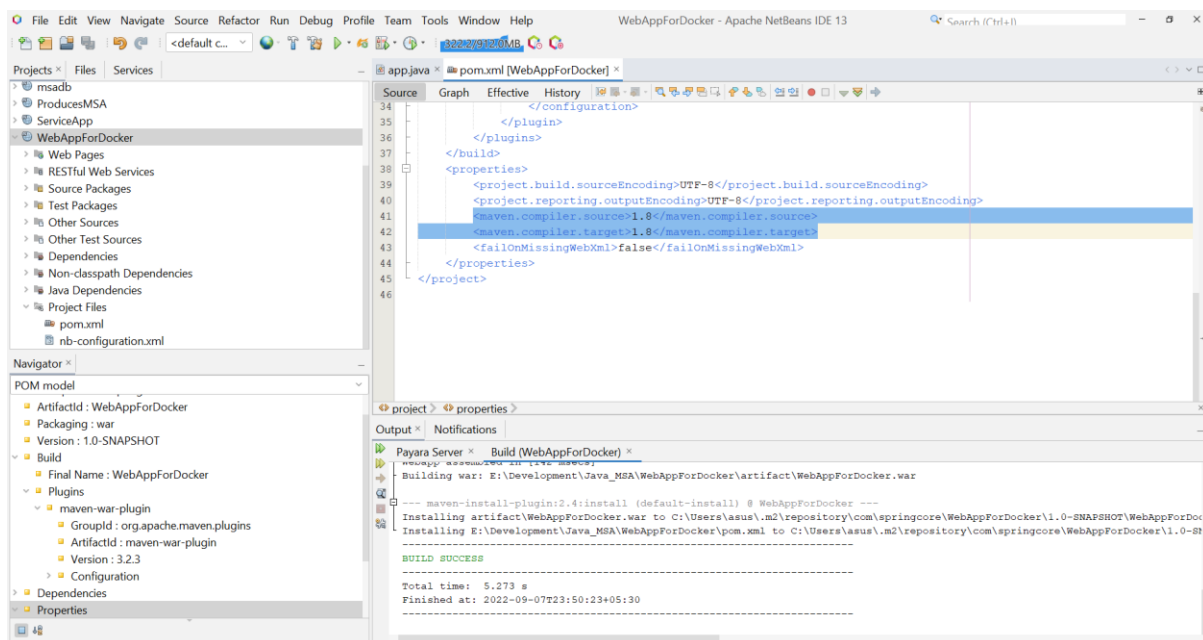
2) Search jakartae8-payara-microprofile-archetype

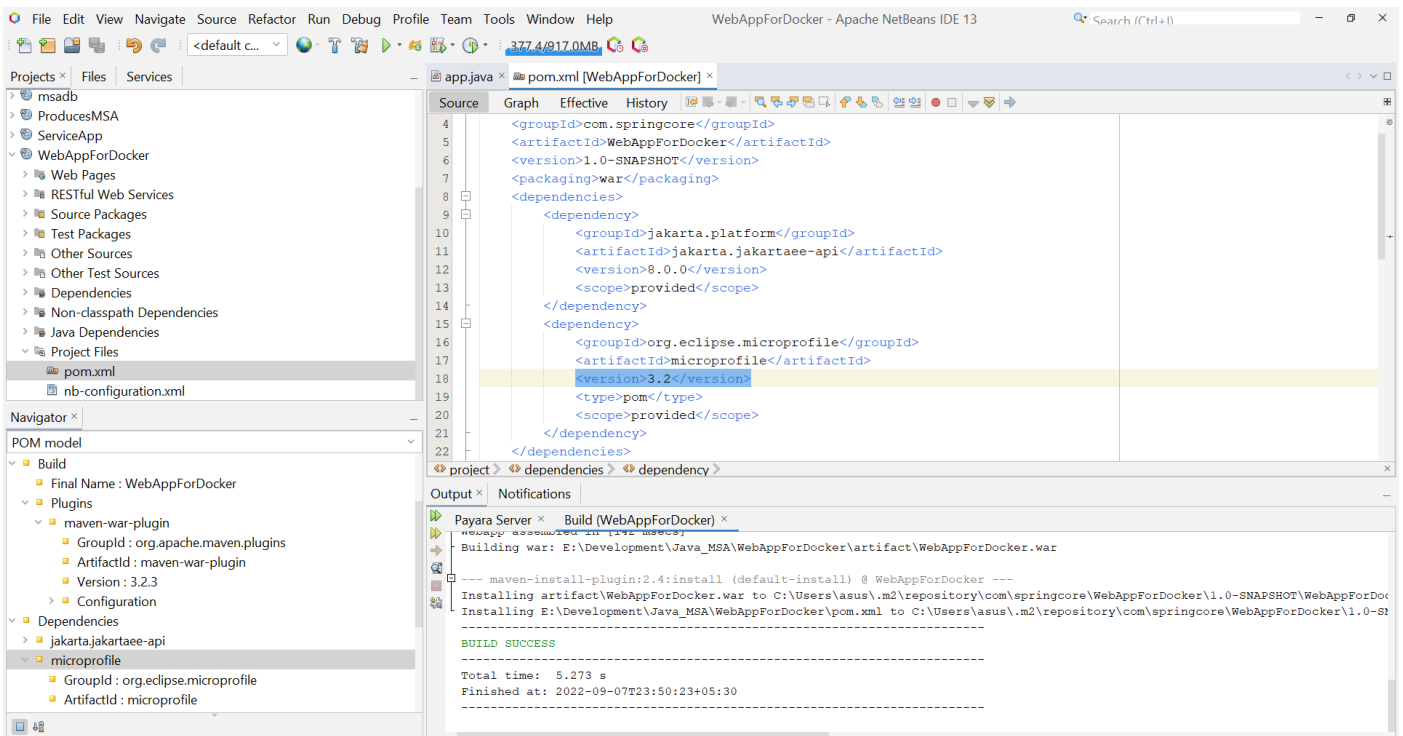


3) Enter project name and enter docker-hub-name

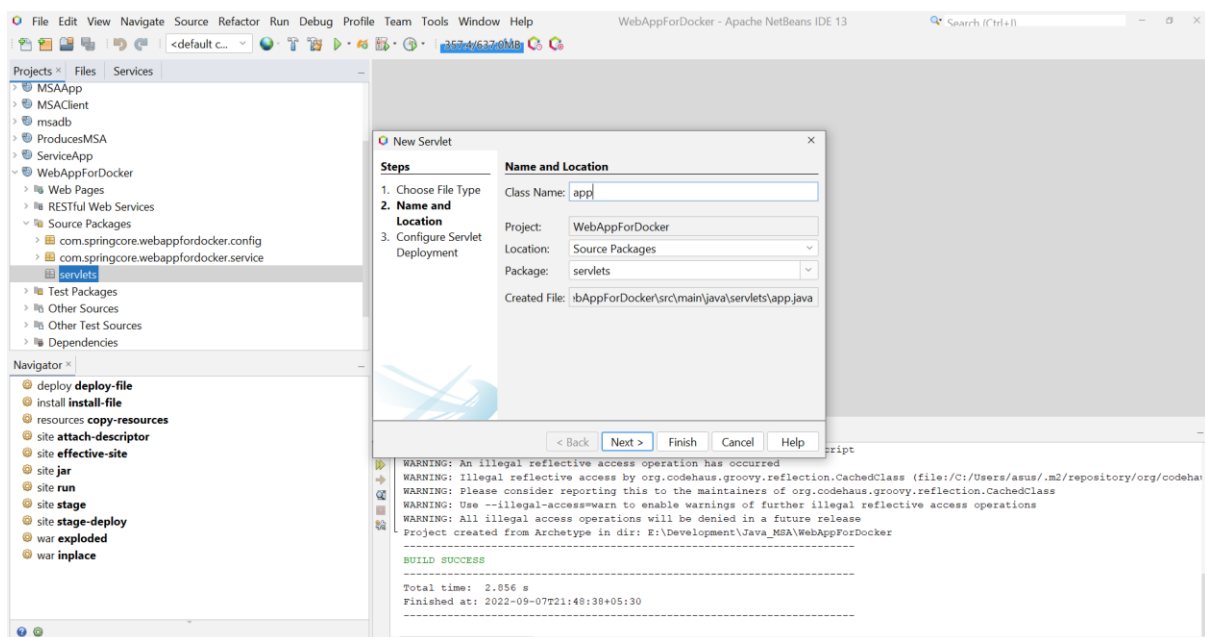


4) In project Directory Goto Project Files->pom.xml, Open pom.xml and make some changes described in following SS.

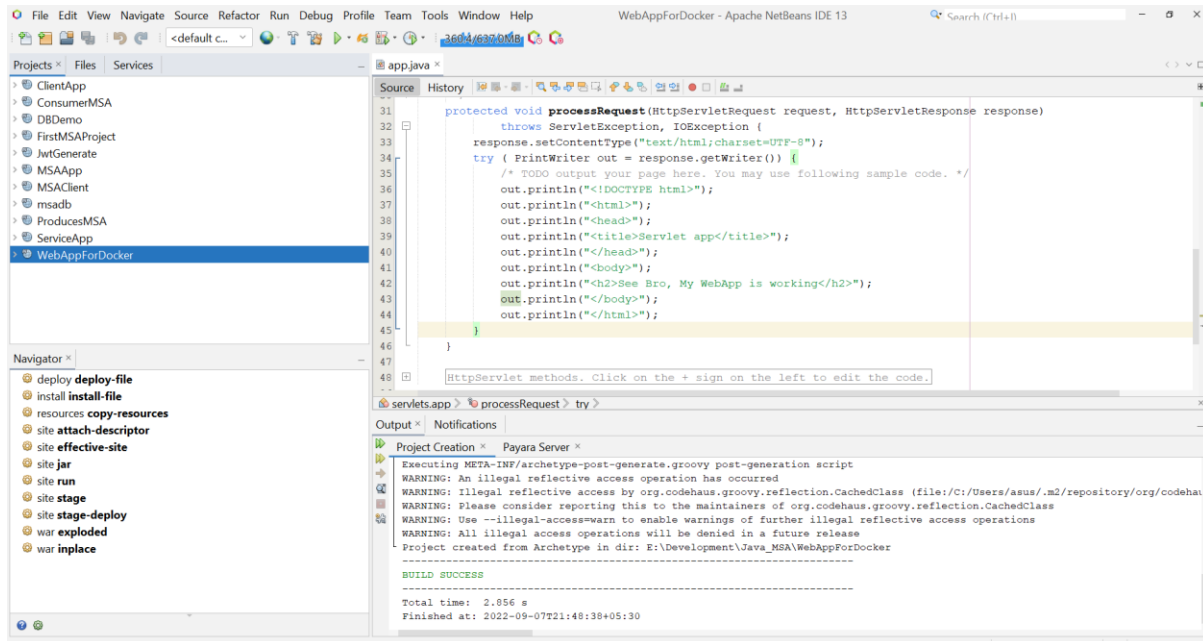




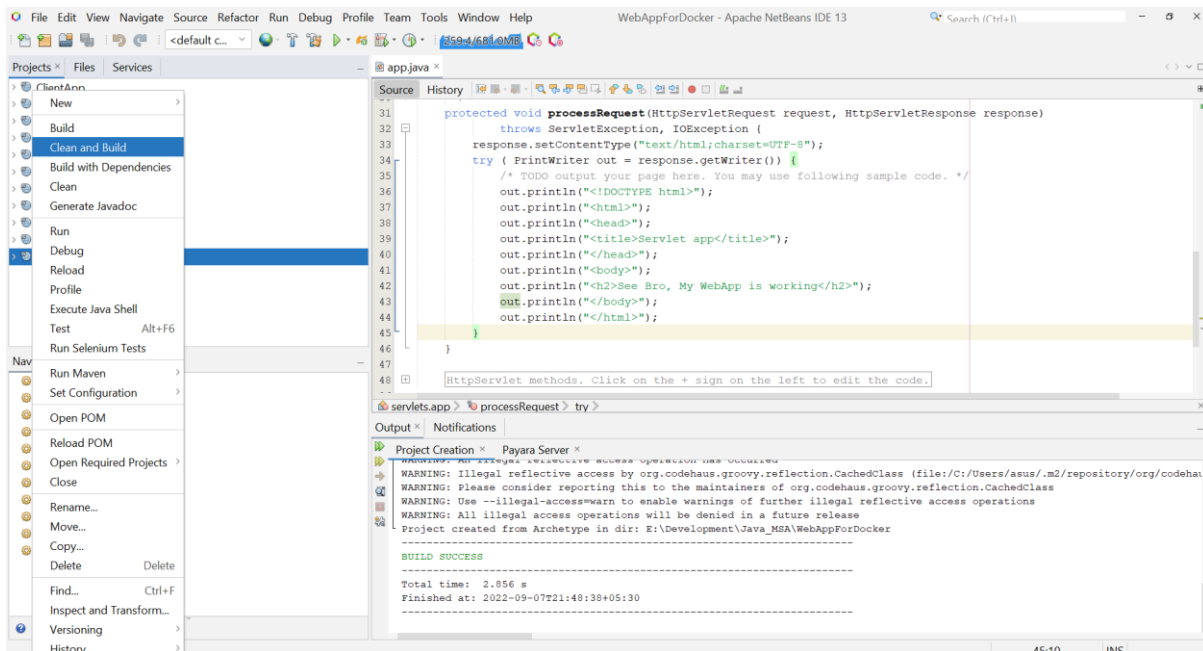
- 5) Create servlet, you can create servlet in any package and can give name of servlet however you want, In my case I created in servlet app in servlets package.



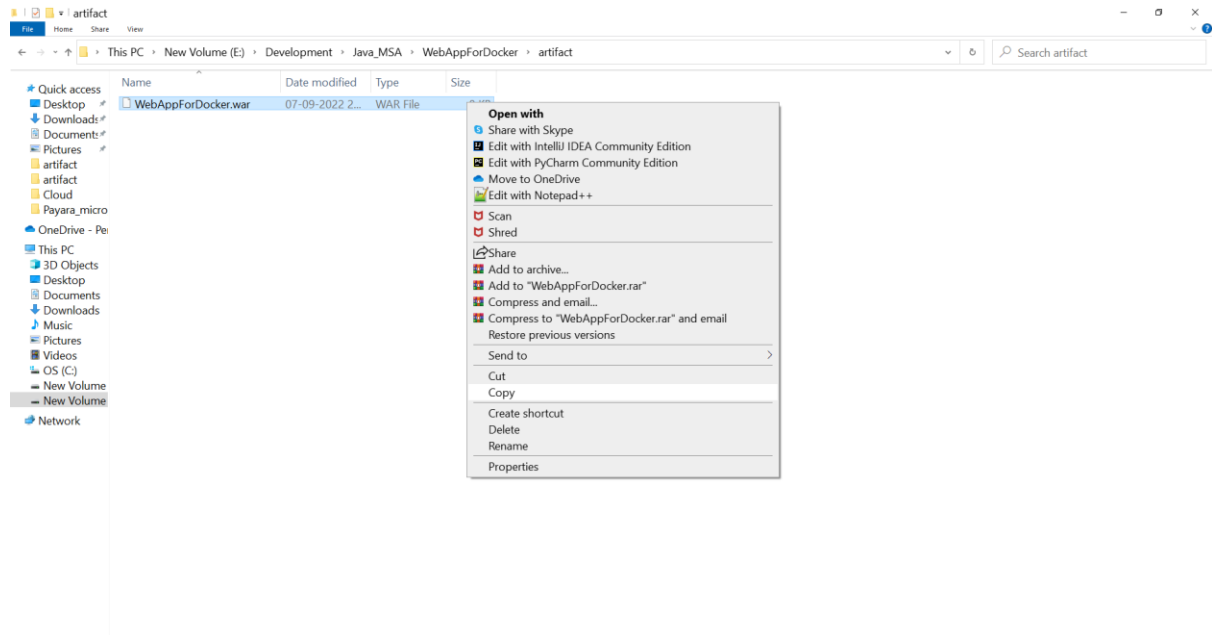
6) Add the Content, (You can add any content in servlet)



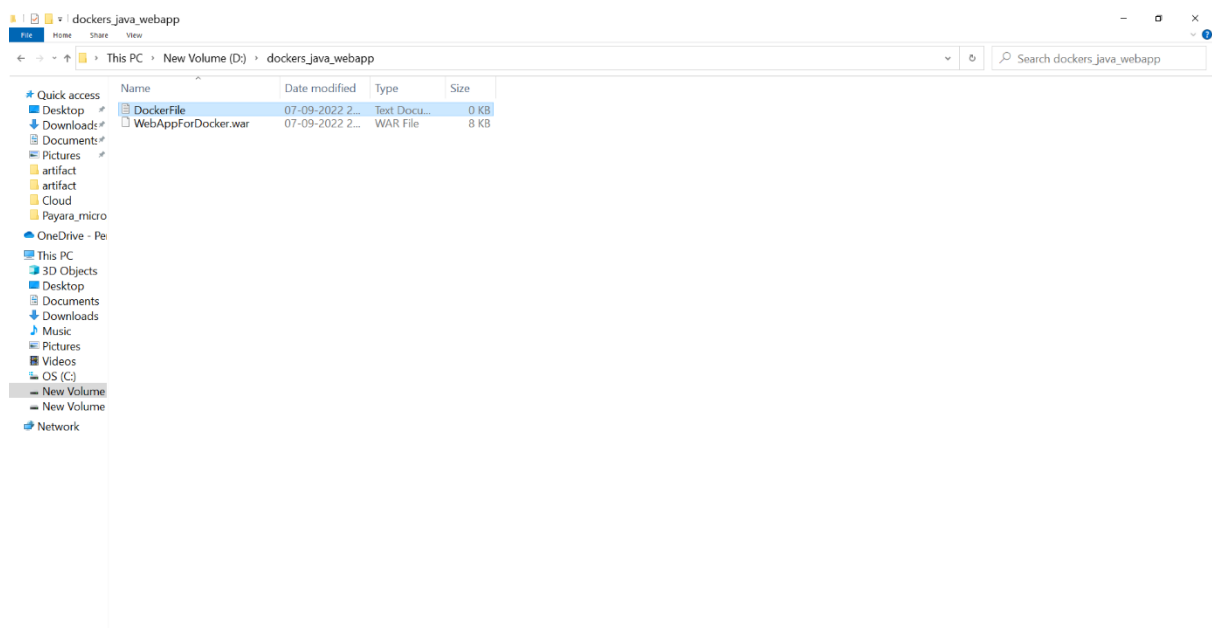
7) Right click on Project and click on **Clean and Build**



- 8) Goto the project directory where you've saved your project and open the project folder goto the artifact folder and copy war file

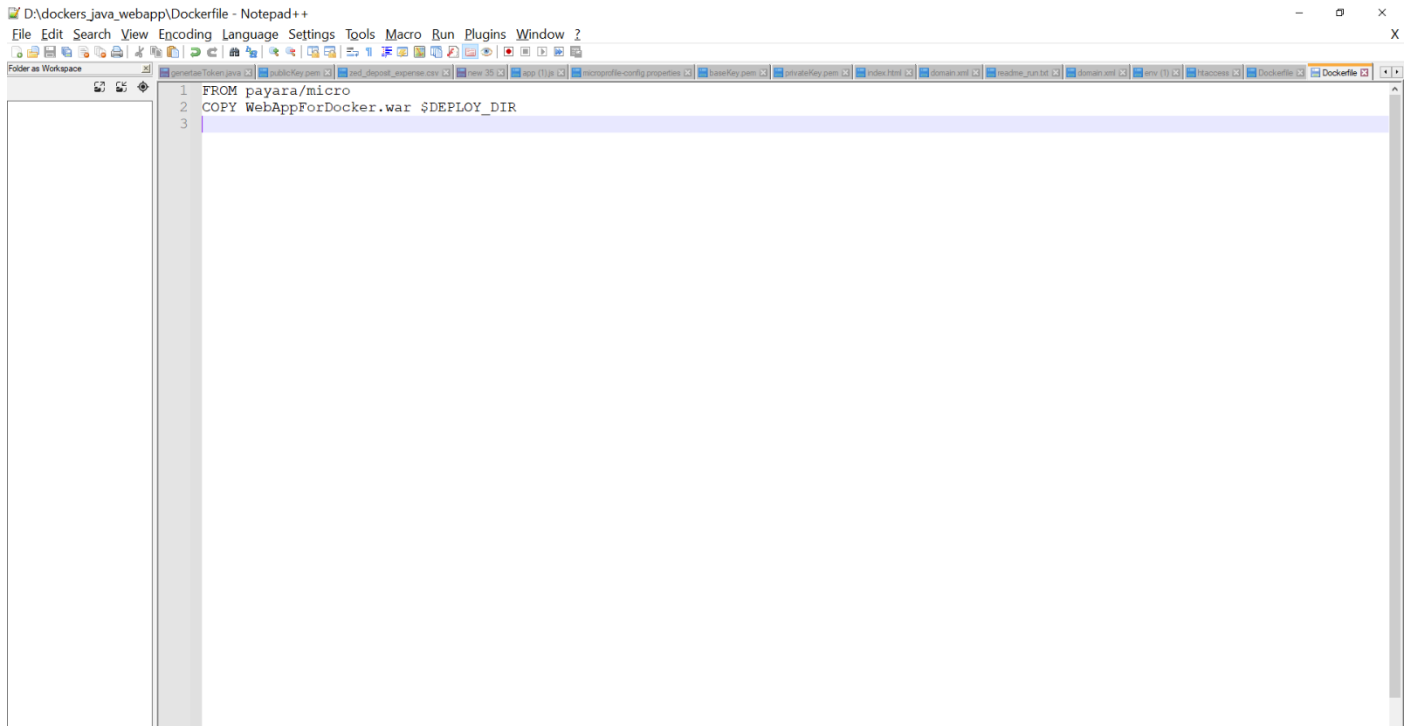


- 9) I would like to suggest you that create new blank folder and paste that war file and create one file Dockerfile. Remember file should not contain any extension like .txt, it should be without extension and name must be Dockerfile.



10) Open Dockerfile in your favourite text editor and Paste the following code

```
FROM payara/micro
COPY YourProjectName.war $DEPLOY_DIR
```



11) Alright guys take a breath, Now open terminal/command prompt copy paste the following line

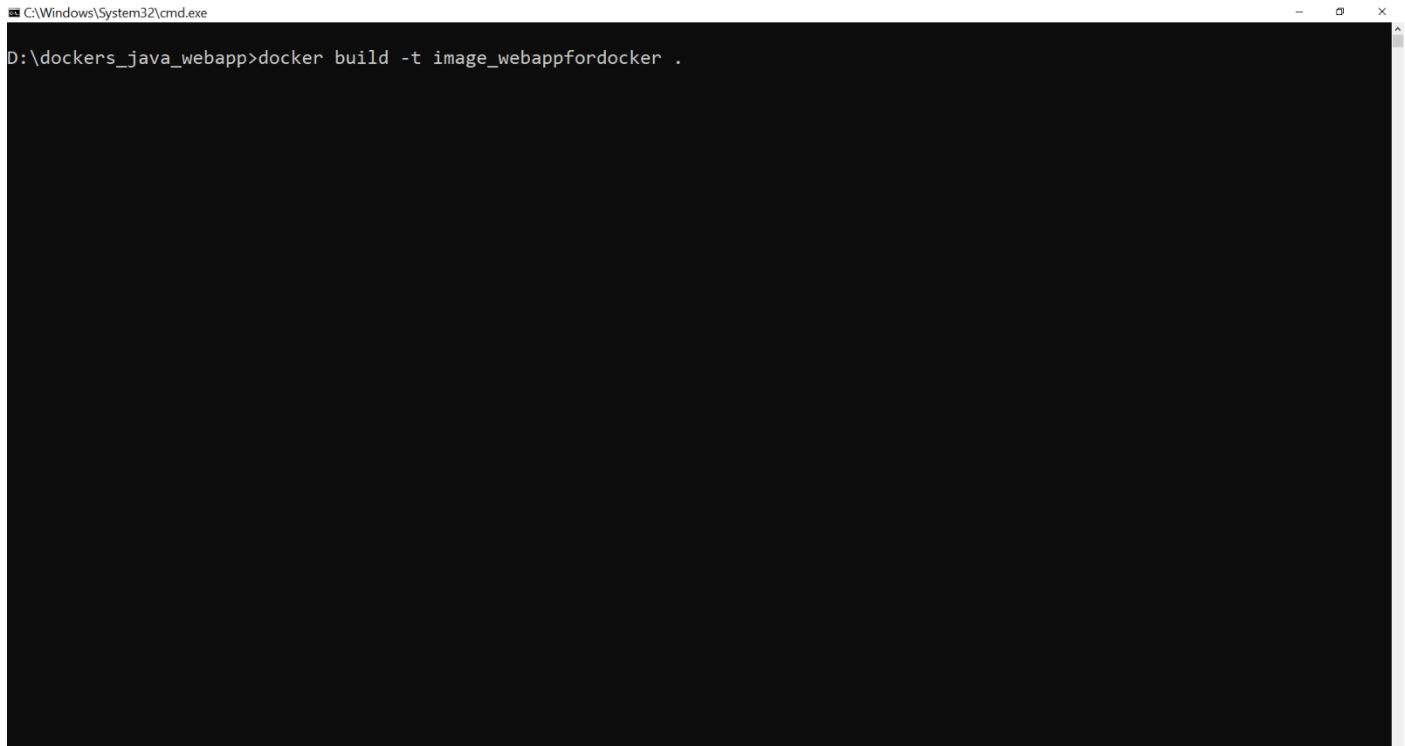
docker pull payara/micro

- **Have some coffee and wait and watch..... Once your image file is installed then goto that the folder(recently created blank folder) where we have war file and Dockerfile, Open command prompt at that location. Be careful while writing the commands.**

12) Now let's create image file, open cmd and write following command

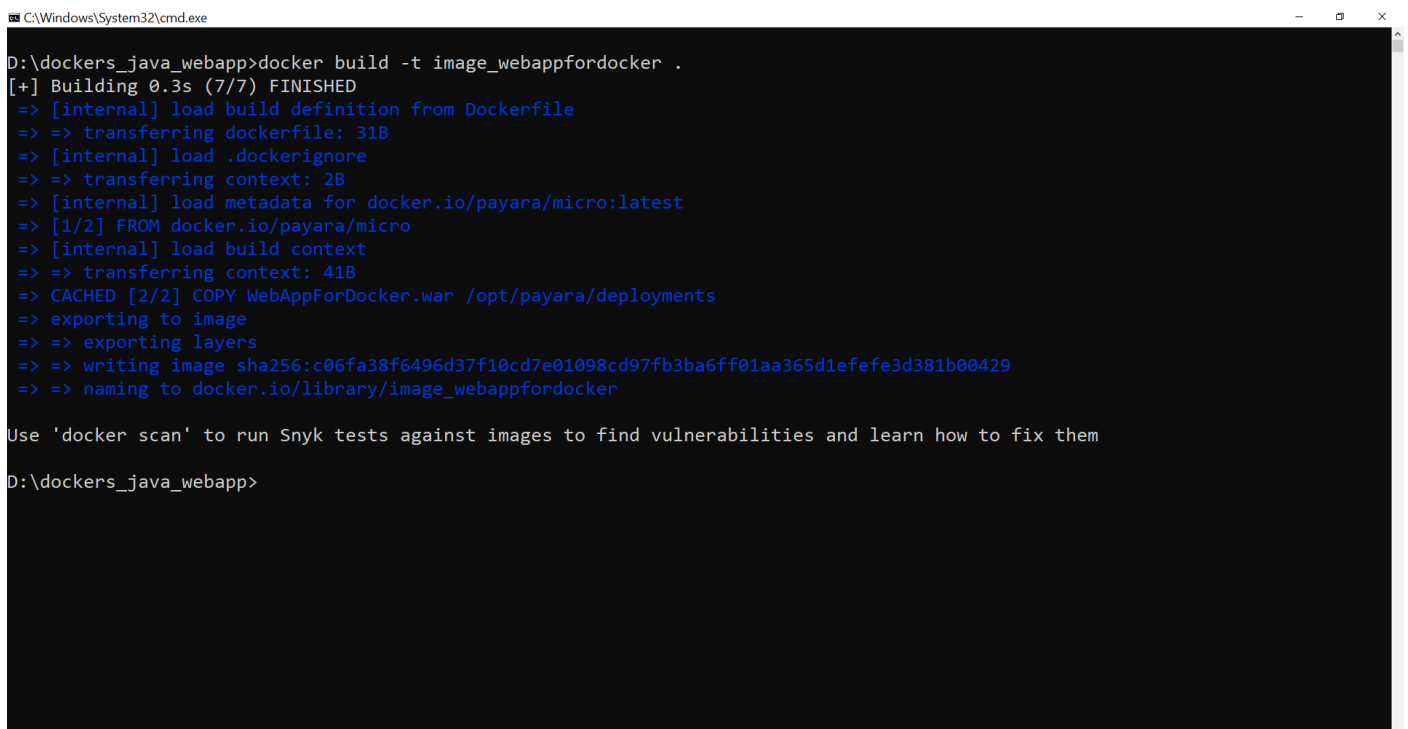
```
docker build -t imageName .
```

Note: Remember don't forget to add dot (.) at last



```
C:\Windows\System32\cmd.exe
D:\dockers_java_webapp>docker build -t image_webappfordocker .
```

13) Let's move on deploy in docker , means let's create container of that image file. Enter the following the command and watch.



```
C:\Windows\System32\cmd.exe
D:\dockers_java_webapp>docker build -t image_webappfordocker .
[+] Building 0.3s (7/7) FINISHED
=> [internal] load build definition from Dockerfile
=> => transferring dockerfile: 31B
=> [internal] load .dockerignore
=> => transferring context: 2B
=> [internal] load metadata for docker.io/payara/micro:latest
=> [1/2] FROM docker.io/payara/micro
=> [internal] load build context
=> => transferring context: 41B
=> CACHED [2/2] COPY WebAppForDocker.war /opt/payara/deployments
=> exporting to image
=> => exporting layers
=> => writing image sha256:c06fa38f6496d37f10cd7e01098cd97fb3ba6ff01aa365d1efefe3d381b00429
=> => naming to docker.io/library/image_webappfordocker

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
D:\dockers_java_webapp>
```

`docker run -p YourPortNumber:8080 --name containerName -d imageName`

```
C:\Windows\System32\cmd.exe
D:\dockers_java_webapp>docker run -p 8585:8080 --name container_webappfordocker -d image_webappfordocker
```

```
C:\Windows\System32\cmd.exe
D:\dockers_java_webapp>docker run -p 8585:8080 --name container_webappfordocker -d image_webappfordocker
f16d7dc1a348a57055ae6159fcdfe4f58382b5bf9e080d29c29eafc684cc234a
D:\dockers_java_webapp>
```


Congratulation guys, You did it. Let's run our app in browser. Open your favourite browser and enter the Url:

URL: localhost:portNumber/ProjectName/servletPath

In my case URL would be

URL : http://localhost:8585/WebAppForDocker/app

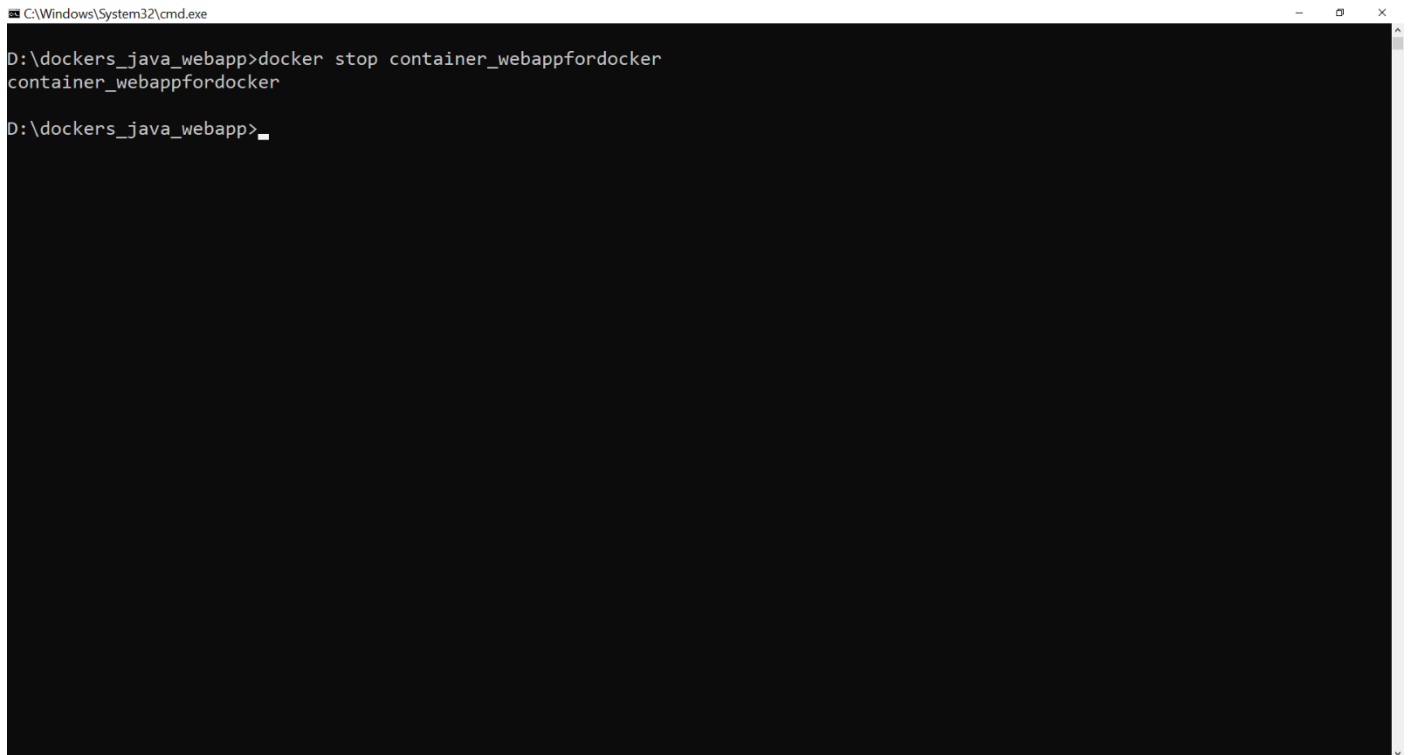


See Bro, My WebApp is working

Note : If you get some errors like 404 Not found then goto the pom.xml file in project and undo the changes and then again perform all the steps.

14) Let's stop the application in docker by entering the following command.

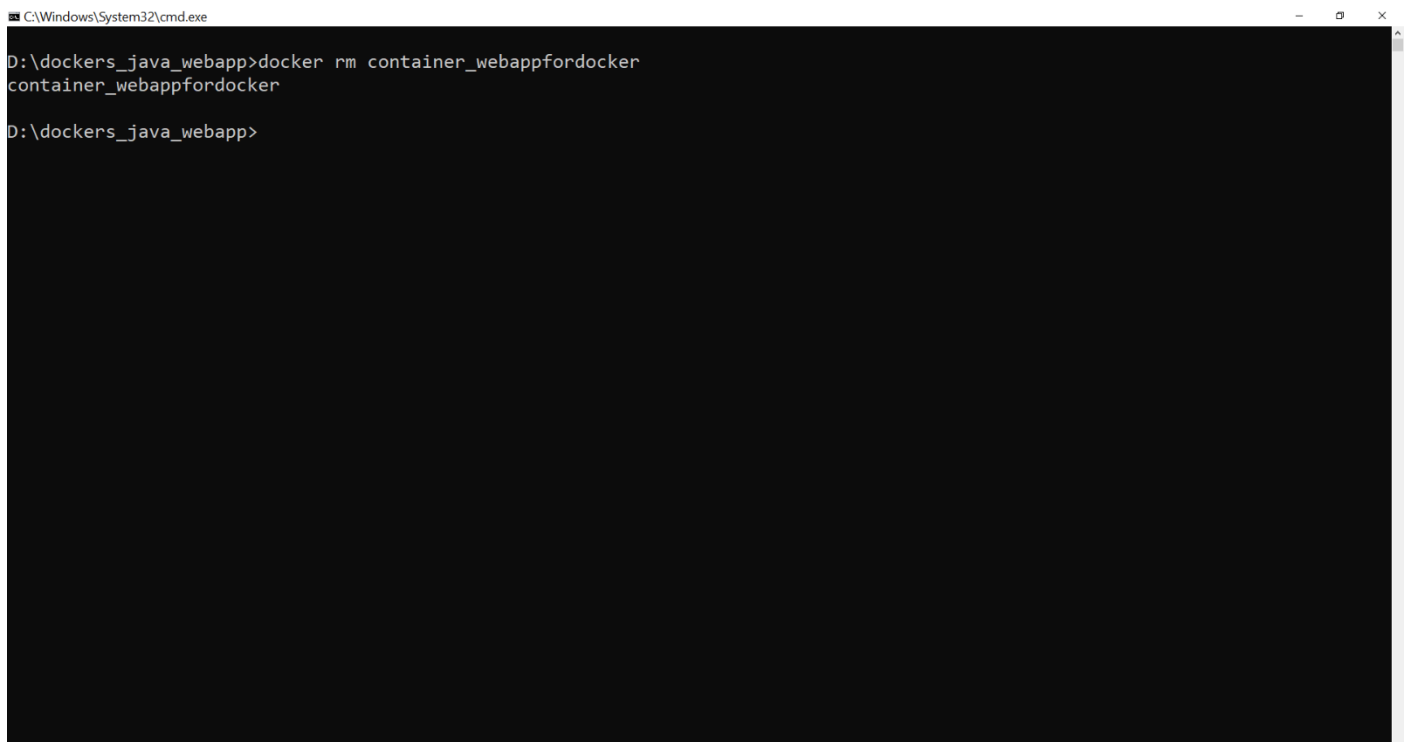
`docker stop containerName`



```
C:\Windows\System32\cmd.exe
D:\dockers_java_webapp>docker stop container_webappfordocker
container_webappfordocker
D:\dockers_java_webapp>
```

15) Remove the container

`docker rm containerName`



```
C:\Windows\System32\cmd.exe
D:\dockers_java_webapp>docker rm container_webappfordocker
container_webappfordocker
D:\dockers_java_webapp>
```

Happy Coding...