

Name - Anup Kore

Topic – Springboot+MYSQL Containerization using docker network

Date – 25-04-2023

Building a docker image for a springboot application and docker network creation

```
C:\Windows\System32\cmd.exe

D:\Project For Deployment\Project_for_deployment>docker build -t spring-boot-docker-full-final.jar .
[+] Building 4.7s (7/7) FINISHED
=> [internal] load build definition from Dockerfile 0.2s
=> => transferring dockerfile: 287B 0.1s
=> [internal] load .dockerignore 0.1s
=> => transferring context: 2B 0.0s
=> [internal] load metadata for docker.io/library/openjdk:17 2.6s
=> CACHED [1/2] FROM docker.io/library/openjdk:17@sha256:528707081fdb9562eb819128a9f85ae7fe000e2fbaeaf9f87662e7b 0.0s
=> [internal] load build context 0.7s
=> => transferring context: 43.74MB 0.7s
=> [2/2] ADD target/spring-boot-docker-full-final.jar spring-boot-docker-full-final.jar 0.6s
=> exporting to image 0.4s
=> => exporting layers 0.3s
=> => writing image sha256:285a9618ff5a8ea1044234cdf2b30093cf6b117838a4140a917576def20ecf1 0.0s
=> => naming to docker.io/library/spring-boot-docker-full-final.jar 0.0s

D:\Project For Deployment\Project_for_deployment>docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
spring-boot-docker-full-final.jar latest 285a9618ff5a 22 seconds ago 515MB
spring-boot-docker-full-final.jar latest 147a7ced2eb0 7 hours ago 515MB
mini-spring-boot.jar latest 047bdaa2d308 26 hours ago 492MB
project_for_deployment-server latest bc1bde1946ca 28 hours ago 515MB
spring-boot-docker.jar latest e525a5fcd8fc 29 hours ago 515MB
mysql 8.0.33 8189e588b0e8 6 days ago 564MB
mysql latest 8189e588b0e8 6 days ago 564MB
openjdk latest 71260f256d19 2 months ago 470MB
hello-world latest feb5d9fea6a5 19 months ago 13.3kB

D:\Project For Deployment\Project_for_deployment>docker network create con-7
ceaa69c2840505ae3e5903d5be5768a99b65ae5e87ce935c5303c00e8d98a14a

D:\Project For Deployment\Project_for_deployment>
D:\Project For Deployment\Project_for_deployment>docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
ec056399a5b9 mysql "docker-entrypoint.s..." 33 minutes ago Up 33 minutes 33060/tcp, 0.0.0.0:3308->3306/tcp mysqldb

D:\Project For Deployment\Project_for_deployment>
D:\Project For Deployment\Project_for_deployment>docker network connect con-7 mysqldb

D:\Project For Deployment\Project_for_deployment>
D:\Project For Deployment\Project_for_deployment>
```

```
C:\Windows\System32\cmd.exe

"GlobalIPv6PrefixLen": 0,
"IPAddress": "172.17.0.2",
"IPPrefixLen": 16,
"IPv6Gateway": "",
"MacAddress": "02:42:ac:11:00:02",
"Networks": {
  "bridge": {
    "IPAMConfig": null,
    "Links": null,
    "Aliases": null,
    "NetworkID": "004a9920e9f6b0eca14b10cdbc8cb4ecf93d37d5041a03b86faee910f02b7ba",
    "EndpointID": "1d0f006c5a9abba5cc0ddbd4b34c4a248e67a3cfabdf65c9e3af32446d801fce",
    "Gateway": "172.17.0.1",
    "IPAddress": "172.17.0.2",
    "IPPrefixLen": 16,
    "IPv6Gateway": "",
    "GlobalIPv6Address": "",
    "GlobalIPv6PrefixLen": 0,
    "MacAddress": "02:42:ac:11:00:02",
    "DriverOpts": null
  },
  "con-7": {
    "IPAMConfig": {},
    "Links": null,
    "Aliases": [
      "ec056399a5b9"
    ],
    "NetworkID": "ceaa69c2840505ae3e5903d5be5768a99b65ae5e87ce935c5303c00e8d98a14a",
    "EndpointID": "0862ac80f54470220c0b1f516944757f29f49dcd9a9bf174eea25dd6c4cca929",
    "Gateway": "172.22.0.1",
    "IPAddress": "172.22.0.2",
    "IPPrefixLen": 16,
    "IPv6Gateway": "",
    "GlobalIPv6Address": "",
    "GlobalIPv6PrefixLen": 0,
    "MacAddress": "02:42:ac:16:00:02",
    "DriverOpts": {}
  }
}
}
```

```
C:\Windows\System32\cmd.exe - docker run -p 9090:8080 --name spring-boot-docker-full-final.jar --net con-7 -e MYSQL_HOST=mysqldb -e MYSQL_USER=root -e MYSQL_PASSWORD=sept22 -e MYSQL_PORT=3306 spring-bo...

D:\Project For Deployment\Project_for_deployment>
D:\Project For Deployment\Project_for_deployment>docker rm spring-boot-docker-full-final.jar
Error: No such container: spring-boot-docker-full-final.jar

D:\Project For Deployment\Project_for_deployment>
D:\Project For Deployment\Project_for_deployment>docker run -p 9090:8080 --name spring-boot-docker-full-final.jar --net con-7 -e MYSQL_HOST=mysqldb -e MYSQL_USER=root -e MYSQL_PASSWORD=sept22 -e MYSQL_PORT=3306 spring-boot-docker-full-final.jar

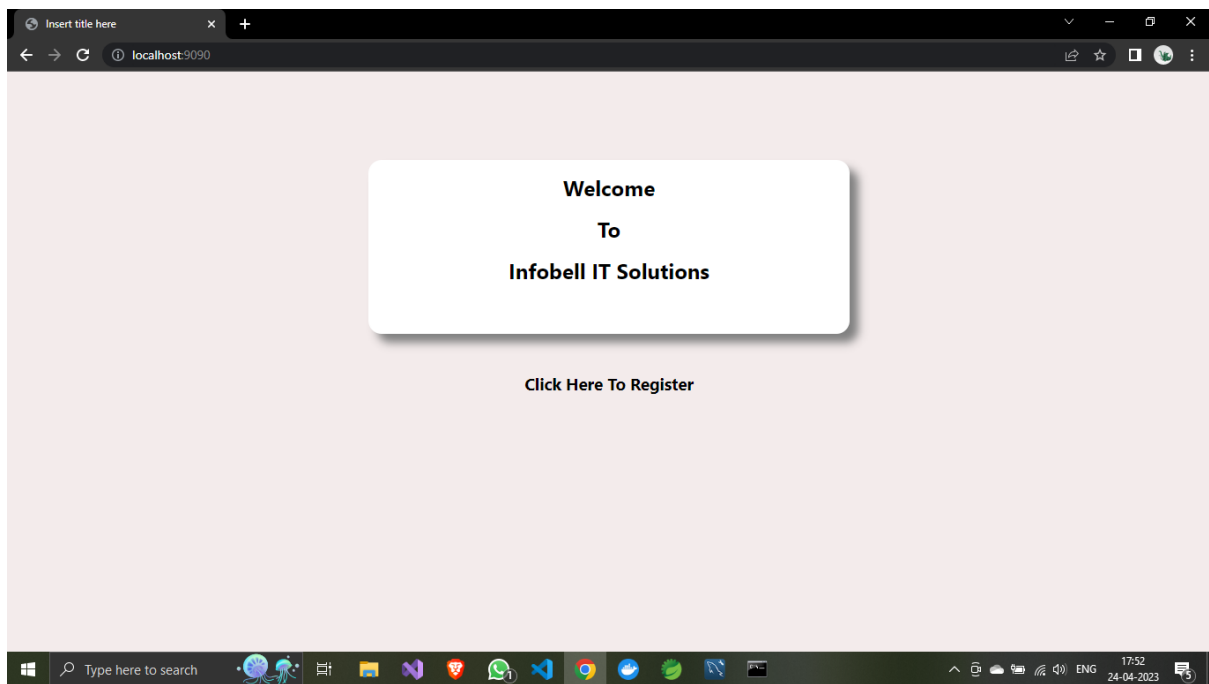
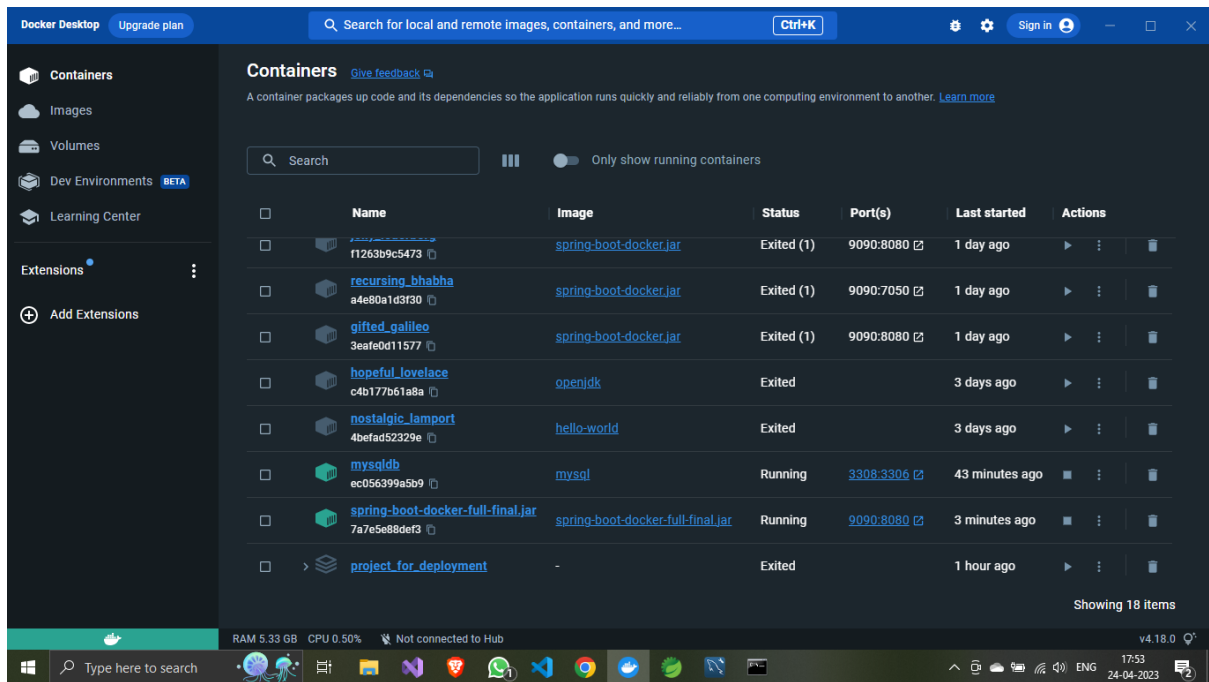
=====
:: Spring Boot :: (v3.0.6)

2023-04-24T12:20:57.911Z INFO 1 --- [main] c.e.d.ProjectForDeploymentApplication : Starting ProjectForDeploymentApplication v0.0.1-SNAPSHOT using Java 17
2023-04-24T12:20:57.918Z INFO 1 --- [main] c.e.d.ProjectForDeploymentApplication : No active profile set, falling back to 1 default profile: "default"
2023-04-24T12:20:59.215Z INFO 1 --- [main] s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA repositories in DEFAULT mode.
2023-04-24T12:20:59.332Z INFO 1 --- [main] s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 100 ms. Found 1 JPA repository interfaces.
2023-04-24T12:21:00.593Z INFO 1 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s): 8080 (http)
2023-04-24T12:21:00.618Z INFO 1 --- [main] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2023-04-24T12:21:00.620Z INFO 1 --- [main] o.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/10.1.8]
2023-04-24T12:21:00.767Z INFO 1 --- [main] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring embedded WebApplicationContext
2023-04-24T12:21:00.772Z INFO 1 --- [main] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed in 2751 ms
2023-04-24T12:21:01.033Z INFO 1 --- [main] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting...
2023-04-24T12:21:01.682Z INFO 1 --- [main] com.zaxxer.hikari.pool.HikariPool : HikariPool-1 - Added connection com.mysql.cj.jdbc.ConnectionImpl@2a551a63
2023-04-24T12:21:01.687Z INFO 1 --- [main] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start completed.
2023-04-24T12:21:01.769Z INFO 1 --- [main] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing PersistenceUnitInfo [name: default]
2023-04-24T12:21:01.892Z INFO 1 --- [main] org.hibernate.Version : HHH000412: Hibernate ORM core version 6.1.7.Final
2023-04-24T12:21:02.615Z INFO 1 --- [main] SQL dialect : HHH000400: Using dialect: org.hibernate.dialect.MySQLDialect
2023-04-24T12:21:03.764Z INFO 1 --- [main] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000490: Using JtaPlatform implementation: [org.hibernate.engine.transaction.jta.platform.internal.NoJtaPlatform]
2023-04-24T12:21:03.779Z INFO 1 --- [main] j.LocalContainerEntityManagerFactoryBean : Initialized JPA EntityManagerFactory for persistence unit 'default'
2023-04-24T12:21:04.973Z INFO 1 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8080 (http) with context path ''
2023-04-24T12:21:05.007Z INFO 1 --- [main] c.e.d.ProjectForDeploymentApplication : Started ProjectForDeploymentApplication in 8.029 seconds (process running for 9.542)
```

```
Command Prompt
Microsoft Windows [Version 10.0.19045.2846]
(c) Microsoft Corporation. All rights reserved.

C:\Users\LENOVO>docker ps
CONTAINER ID   IMAGE                                COMMAND                  CREATED        STATUS        PORTS                               NAMES
7a7e5e88def3   spring-boot-docker-full-final.jar   "java -jar /spring-b..." 3 minutes ago  Up 3 minutes  0.0.0.0:9090->8080/tcp              spring-boot-docker-full
ec056399a5b9   mysql                                "docker-entrypoint.s..." 44 minutes ago Up 44 minutes  33060/tcp, 0.0.0.0:3308->3306/tcp   mysqldb

C:\Users\LENOVO>
C:\Users\LENOVO>
```



User Registration x +

localhost:9090/Registration

### Registration Form

Full Name:

Yashwant Rathor

Please Enter Your Email ID

yash@gmail.com

Please Enter Your Contact

8698995577

Register

Type here to search

10:04 25-04-2023

localhost:9090/list x +

localhost:9090/list

UID	Full Name	Email	Contact
1	Anup	y@gmail.com	9146738994
2	Shubham Bal	shubh@gmail.com	51425689
3	Yashwant Rathor	yash@gmail.com	8698995577

Type here to search

10:08 25-04-2023