Docker Assignment

[Github link : https://github.com/shubham8596/DockerAssignment]

Software/Plugins/Language Used :

- Java
- Spring Boot
- Mysql
- Postman
- Docker
- STS (Spring Tool Suite)

Implementation :

- Created Spring boot maven project.
- Added required dependencies in pom.xml. E.g mysql dependency.
- Created Controller, Service, POJO classes and Repository Interface.
- In services, added CRUD Operations.
- Implemented response message handling.
- Added configuration for mysql database and hibernate in ‘application.properties’ file.
- Then ‘Maven clean’ and ‘Maven Install’ to create ‘war’ file.
- Write Dockerfile which contain all code and mysql.

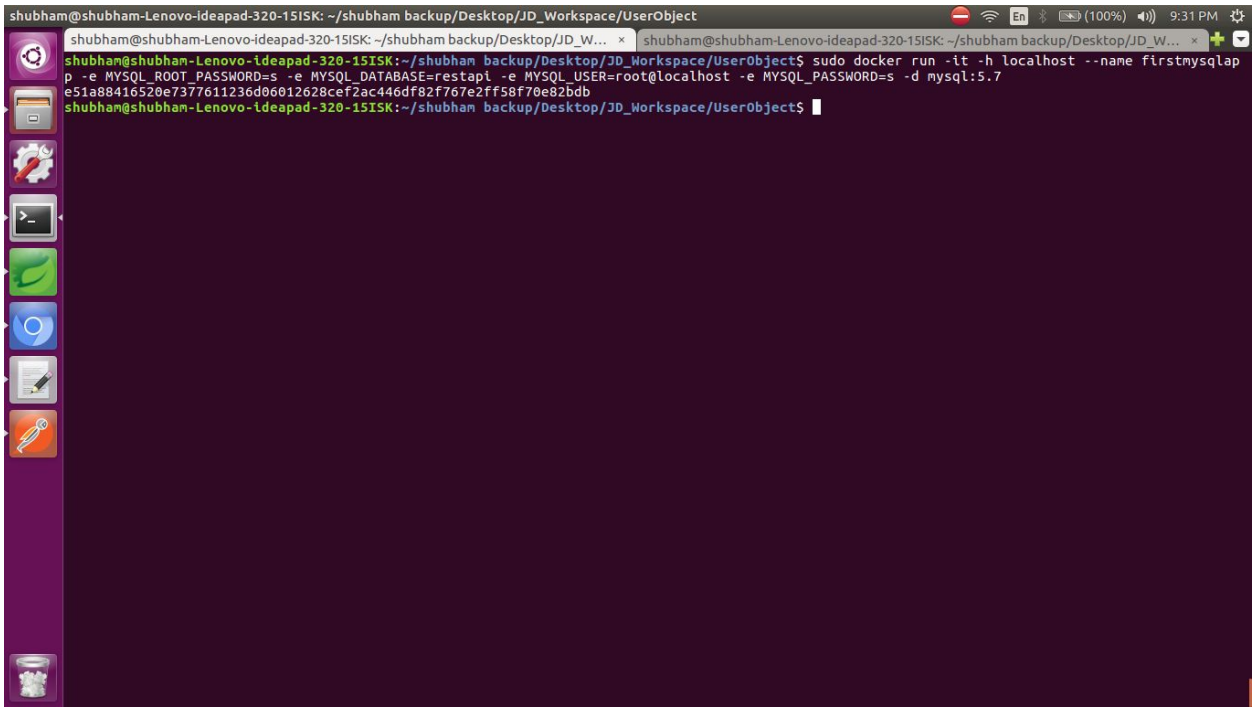
Steps to run code :

- Pull Mysql image :

  sudo docker pull mysql:5.7

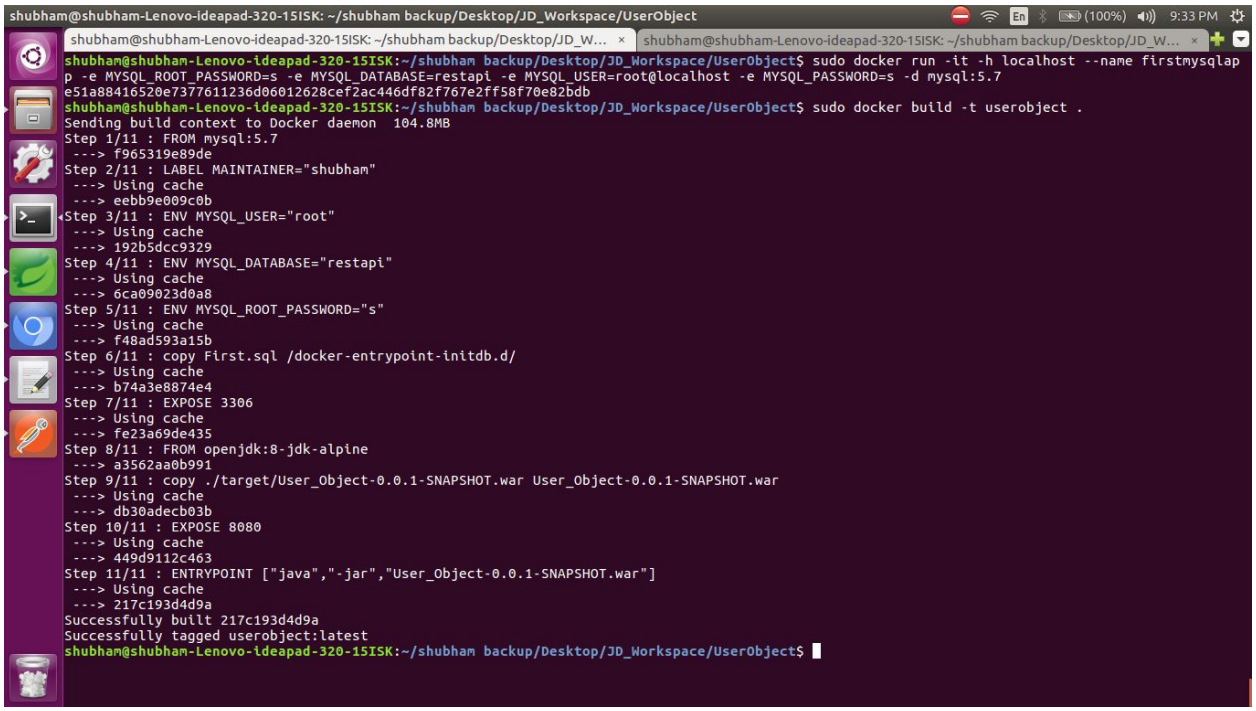
- Run Mysql Container :

sudo docker run -it -h localhost --name firstmysqlapp -e MYSQL_ROOT_PASSWORD=s -e MYSQL_DATABASE=restapi -e MYSQL_USER=root@localhost -e MYSQL_PASSWORD=s -d mysql:5.7



- Build Dockerfile :

sudo docker build -t userobject .



- Run Dockerfile :

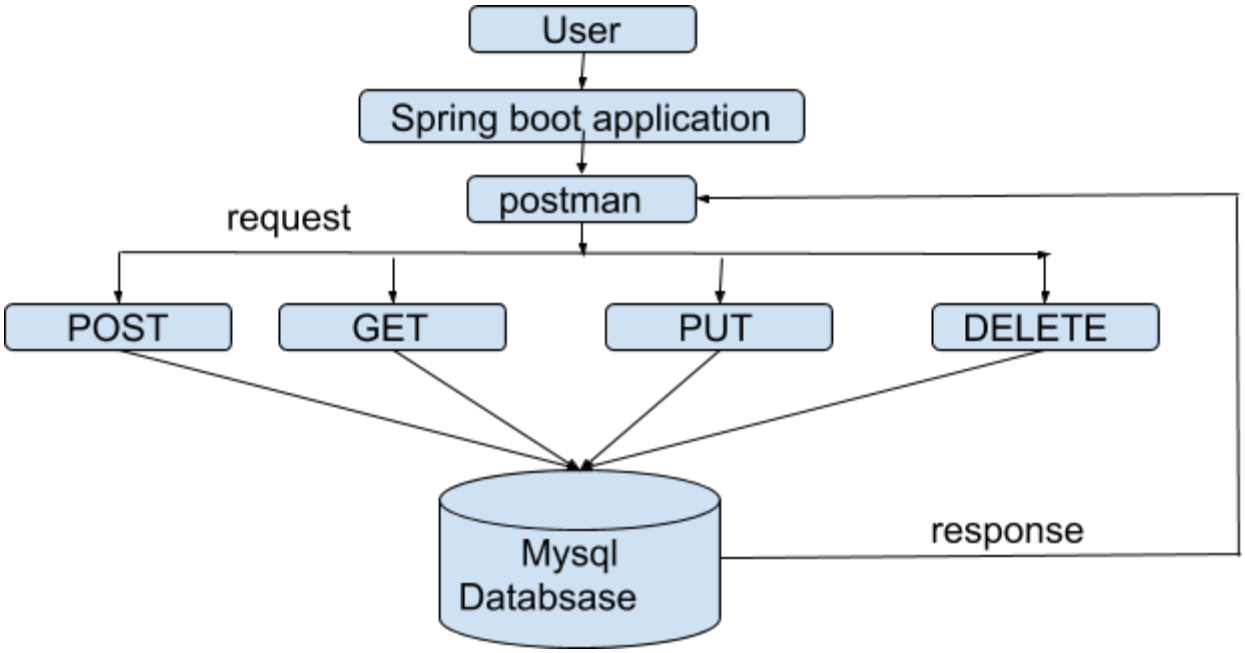
sudo docker run -it -p 8080:8080 --link firstmysqlapp userobject:latest

```
shubham@shubham-Lenovo-ideapad-320-15ISK: ~/shubham backup/Desktop/JD_Workspace/UserObject
Successfully built 217c193d4d9a
Successfully tagged userobject:latest
shubham@shubham-Lenovo-ideapad-320-15ISK:~/shubham backup/Desktop/JD_Workspace/UserObject$ sudo docker run -it -p 8080:8080 --link firstmysqlap
p userobject:latest

  .   ____          _            __ _ _
 /\\ / ___'_ __ _ _(_)_ __  __ _ \ \ \ \
( ( )\___ | '_ | '_| | '_ \/ _` | \ \ \ \
 \\/  ___)| |_)| | | | | || (_| |  ) ) ) )
  '  |____| .__|_| |_|_| |_\__, | / / / /
 =========|_|==============|___/=/_/_/_/
 :: Spring Boot ::  (v2.2.0.BUILD-SNAPSHOT)

2020-05-07 16:05:05.840  INFO 1 --- [           main] com.example.demo1.UserApplication        : Starting UserApplication v0.0.1-SNAPSHOT on b3
1296e3948e with PID 1 (/User_Object-0.0.1-SNAPSHOT.war started by root in /)
2020-05-07 16:05:05.861  INFO 1 --- [           main] com.example.demo1.UserApplication        : No active profile set, falling back to default
 profiles: default
2020-05-07 16:05:08.455  INFO 1 --- [           main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data repositories in DEFA
ULT mode.
2020-05-07 16:05:08.838  INFO 1 --- [           main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 34
2ms. Found 1 repository interfaces.
2020-05-07 16:05:09.637  INFO 1 --- [           main] trationDelegate$BeanPostProcessorChecker : Bean 'org.springframework.transaction.annotati
on.ProxyTransactionManagementConfiguration' of type [org.springframework.transaction.annotation.ProxyTransactionManagementConfiguration] is not
 eligible for getting processed by all BeanPostProcessors (for example: not eligible for auto-proxying)
2020-05-07 16:05:10.550  INFO 1 --- [           main] o.s.b.w.embedded.tomcat.TomcatWebServer  : Tomcat initialized with port(s): 8080 (http)
2020-05-07 16:05:10.587  INFO 1 --- [           main] o.apache.catalina.core.StandardService   : Starting service [Tomcat]
2020-05-07 16:05:10.588  INFO 1 --- [           main] org.apache.catalina.core.StandardEngine  : Starting Servlet engine: [Apache Tomcat/9.0.27
]
2020-05-07 16:05:12.985  INFO 1 --- [           main] o.a.c.c.C.[Tomcat].[localhost].[/]       : Initializing Spring embedded WebApplicationCon
text
2020-05-07 16:05:12.985  INFO 1 --- [           main] o.s.web.context.ContextLoader            : Root WebApplicationContext: initialization com
pleted in 6665 ms
2020-05-07 16:05:13.369  INFO 1 --- [           main] o.hibernate.jpa.internal.util.LogHelper  : HHH000204: Processing PersistenceUnitInfo [nam
e: default]
2020-05-07 16:05:13.666  INFO 1 --- [           main] org.hibernate.Version                    : HHH000412: Hibernate Core {5.4.6.Final}
2020-05-07 16:05:14.108  INFO 1 --- [           main] o.hibernate.annotations.common.Version   : HCANN000001: Hibernate Commons Annotations {5.
1.0.Final}
2020-05-07 16:05:14.334  INFO 1 --- [           main] com.zaxxer.hikari.HikariDataSource       : HikariPool-1 - Starting...
2020-05-07 16:05:14.385  INFO 1 --- [           main] com.zaxxer.hikari.HikariDataSource       : HikariPool-1 - Start completed.
2020-05-07 16:05:14.934  INFO 1 --- [           main] org.hibernate.dialect.Dialect            : HHH000400: Using dialect: org.hibernate.dialec
t.MySQL8Dialect
Hibernate:
```

Flow Diagram :



********** THANKS **********