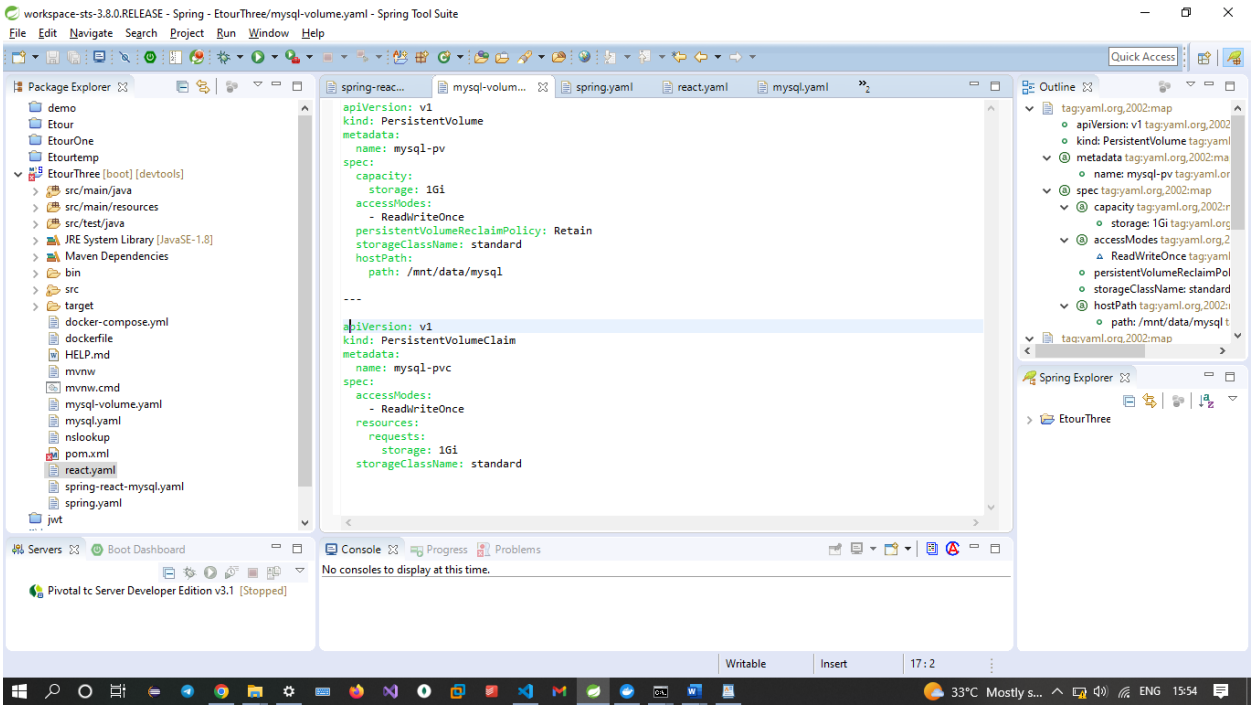
Kubernetes project deployment:

Start minikube. This will create image,volume and conainer of minikube.

```
C:\Windows\System32\cmd.exe - kubectl  port-forward svc/busy-williams 3000:80
Microsoft Windows [Version 10.0.19044.1288]
(c) Microsoft Corporation. All rights reserved.

C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>minikube start
* minikube v1.30.1 on Microsoft Windows 10 Enterprise N 10.0.19044.1288 Build 19044.1288
* Using the docker driver based on existing profile
* Starting control plane node minikube in cluster minikube
* Pulling base image ...
* Restarting existing docker container for "minikube" ...
* Preparing Kubernetes v1.26.3 on Docker 23.0.2 ...
* Configuring bridge CNI (Container Networking Interface) ...
* Verifying Kubernetes components...
  - Using image gcr.io/k8s-minikube/storage-provisioner:v5
* Enabled addons: storage-provisioner, default-storageclass
* Done! kubectl is now configured to use "minikube" cluster and "default" namespace by default
```

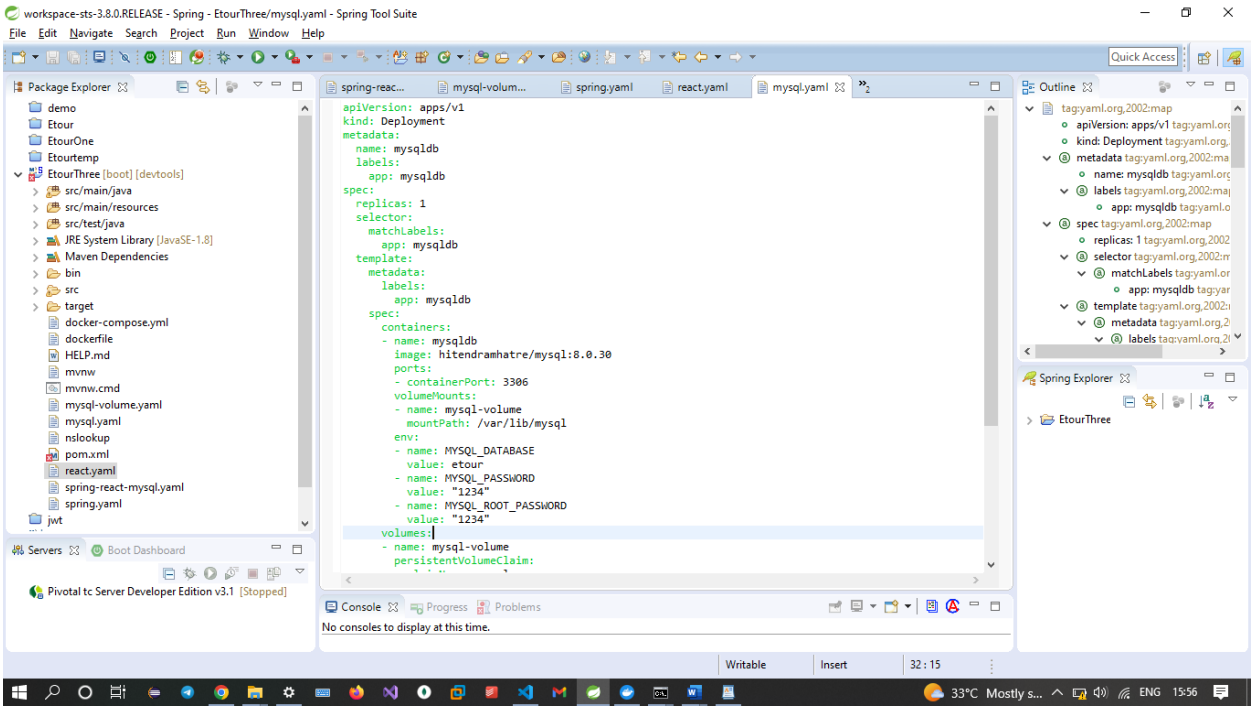
Create a yaml file for persistentVolume and persistentVolumeClaim. And deploy it using

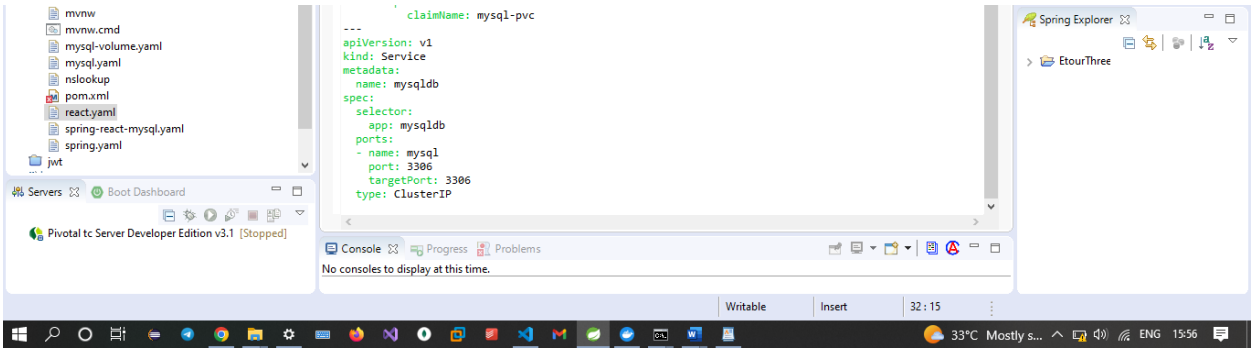



```
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get pvc
No resources found in default namespace.

C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl apply -f mysql-volume.yaml
persistentvolume/mysql-pv created
persistentvolumeclaim/mysql-pvc created
```

Create a yaml file for frontend, backend and middleware.

1. Backend (MySQL)





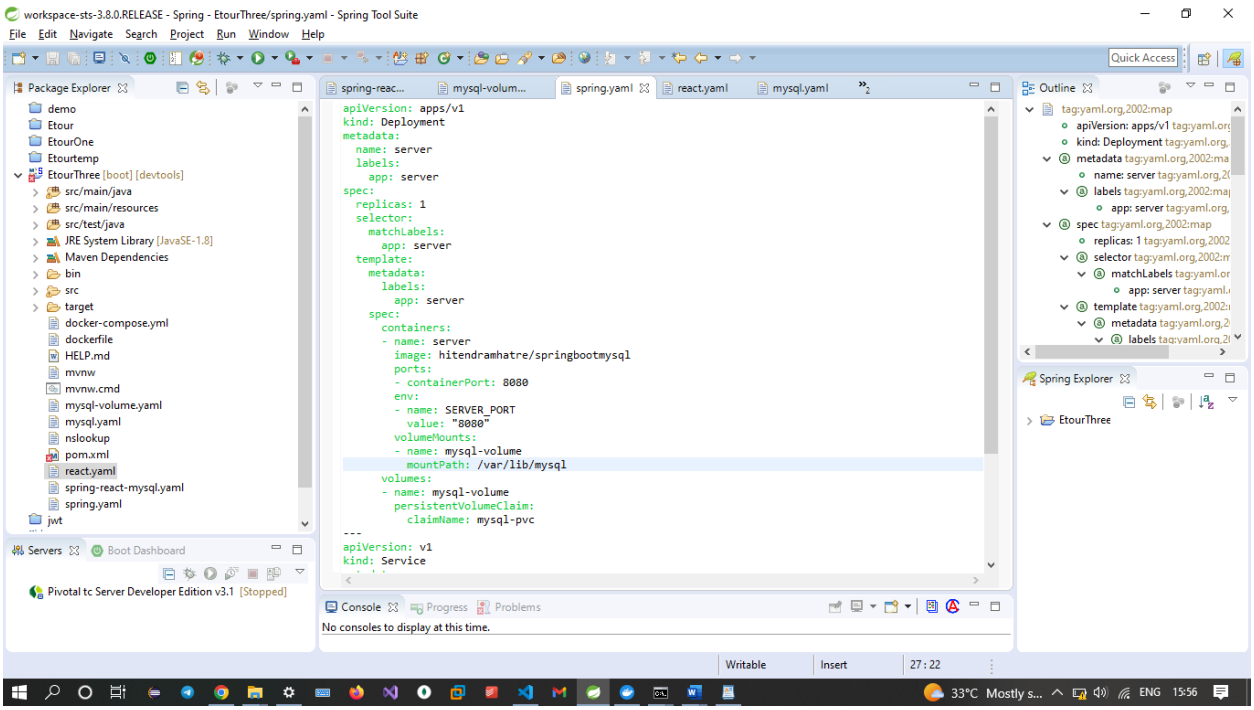

```
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl apply -f mysql.yaml
service/mysqldb created
```

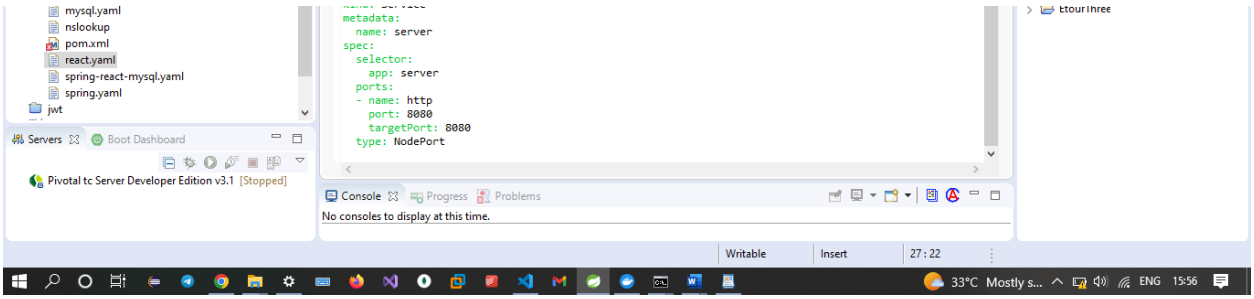
```
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get pods
NAME                       READY   STATUS    RESTARTS   AGE
mysqldb-66c6b99788-dm8rh   1/1     Running   0          2m34s

C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl describe pods mysqldb-66c6b99788-dm8rh
Name:             mysqldb-66c6b99788-dm8rh
Namespace:        default
Priority:         0
Service Account:  default
Node:             minikube/192.168.49.2
Start Time:       Tue, 02 May 2023 13:54:35 +0530
Labels:           app=mysqldb
                  pod-template-hash=66c6b99788
Annotations:      <none>
Status:           Running
IP:               10.244.0.4
IPs:
  IP:           10.244.0.4
Controlled By:  ReplicaSet/mysqldb-66c6b99788
Containers:
  mysqldb:
    Container ID:   docker://5c573f98a3b246fc0c04d61eb26117f78107152943d5cb3d509e68fcb9427c9a
    Image:          hitendramhatre/mysql:8.0.30
    Image ID:       docker-pullable://hitendramhatre/mysql@sha256:f90d1aeb92a5c7b3a4178a3052d8bc27b1f52a811aacb27b619c10b778b9f281
    Port:           3306/TCP
    Host Port:      0/TCP
    State:          Running
      Started:      Tue, 02 May 2023 13:55:31 +0530
    Ready:          True
    Restart Count:  0
    Environment:
      MYSQL_DATABASE:       etour
      MYSQL_PASSWORD:       1234
      MYSQL_ROOT_PASSWORD:  1234
    Mounts:
```

C:\Windows\System32\cmd.exe - kubectl port-forward svc/busy-williams 3000:80

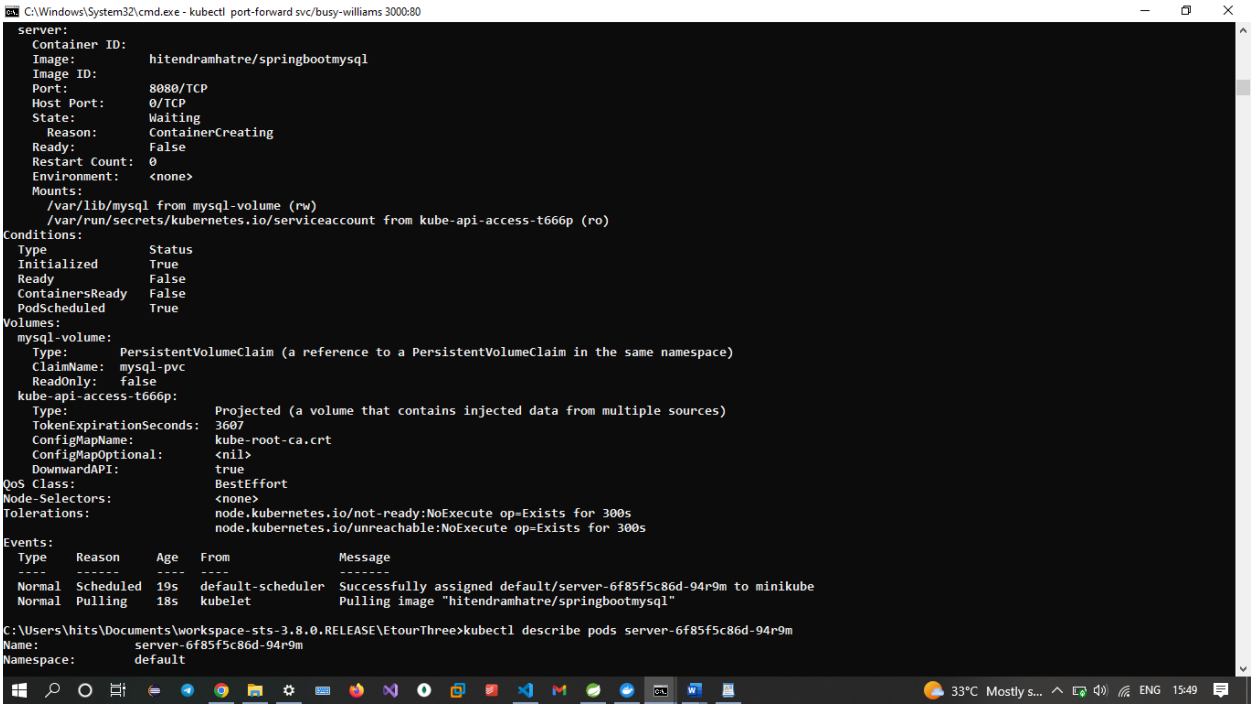
```
    Mounts:
      /var/lib/mysql from mysql-volume (rw)
      /var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-t64v5 (ro)
Conditions:
  Type              Status
  Initialized       True
  Ready             True
  ContainersReady   True
  PodScheduled      True
Volumes:
  mysql-volume:
    Type:       PersistentVolumeClaim (a reference to a PersistentVolumeClaim in the same namespace)
    ClaimName:  mysql-pvc
    ReadOnly:   false
  kube-api-access-t64v5:
    Type:                    Projected (a volume that contains injected data from multiple sources)
    TokenExpirationSeconds:  3607
    ConfigMapName:           kube-root-ca.crt
    ConfigMapOptional:       <nil>
    DownwardAPI:             true
QoS Class:                   BestEffort
Node-Selectors:              <none>
Tolerations:                 node.kubernetes.io/not-ready:NoExecute op=Exists for 300s
                             node.kubernetes.io/unreachable:NoExecute op=Exists for 300s
Events:
  Type     Reason            Age    From               Message
  ----     ------            ----   ----               -------
  Warning  FailedScheduling  2m39s  default-scheduler  0/1 nodes are available: persistentvolumeclaim "mysql-pvc" not found. preemption: 0/1 nodes are available: 1 No p
reemption victims found for incoming pod..
  Warning  FailedScheduling  77s    default-scheduler  0/1 nodes are available: persistentvolumeclaim "mysql-pvc" not found. preemption: 0/1 nodes are available: 1 No p
reemption victims found for incoming pod..
  Normal   Scheduled         75s    default-scheduler  Successfully assigned default/mysqldb-66c6b99788-dm8rh to minikube
  Normal   Pulling           74s    kubelet            Pulling image "hitendramhatre/mysql:8.0.30"
  Normal   Pulled            24s    kubelet            Successfully pulled image "hitendramhatre/mysql:8.0.30" in 50.6928117s (50.6928316s including waiting)
  Normal   Created           19s    kubelet            Created container mysqldb
  Normal   Started           19s    kubelet            Started container mysqldb
```

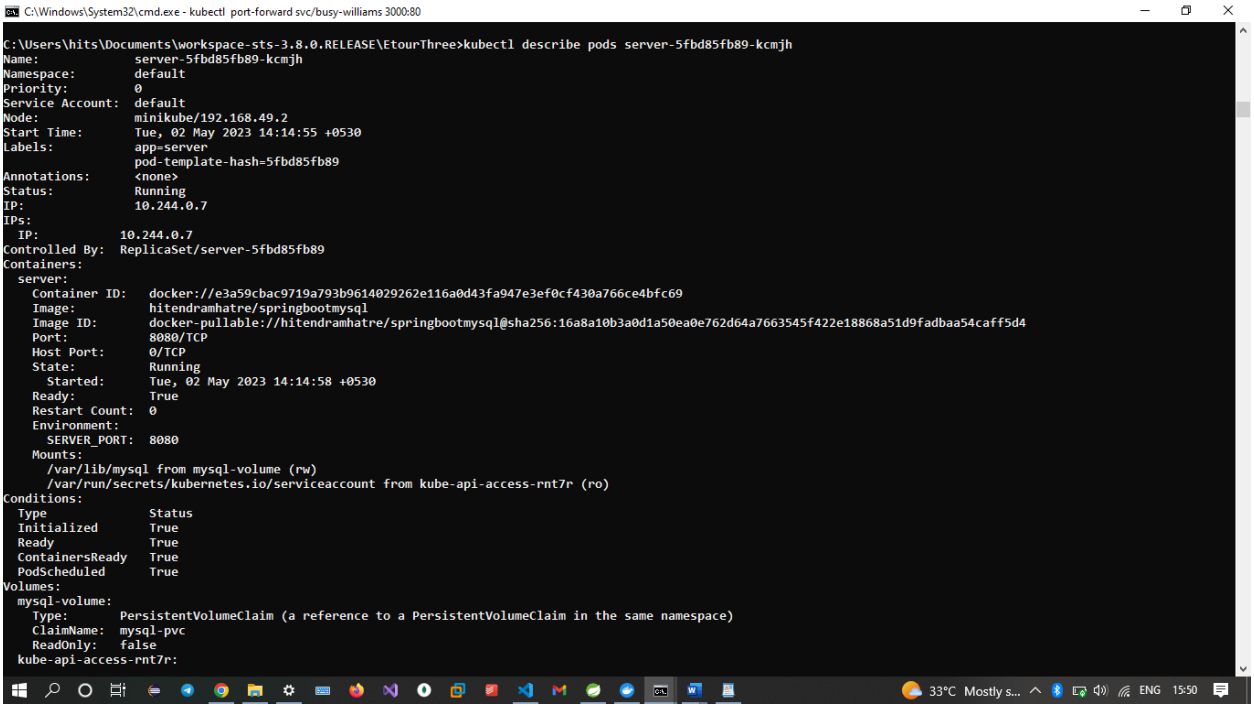
2. Middleware (SpringBoot)

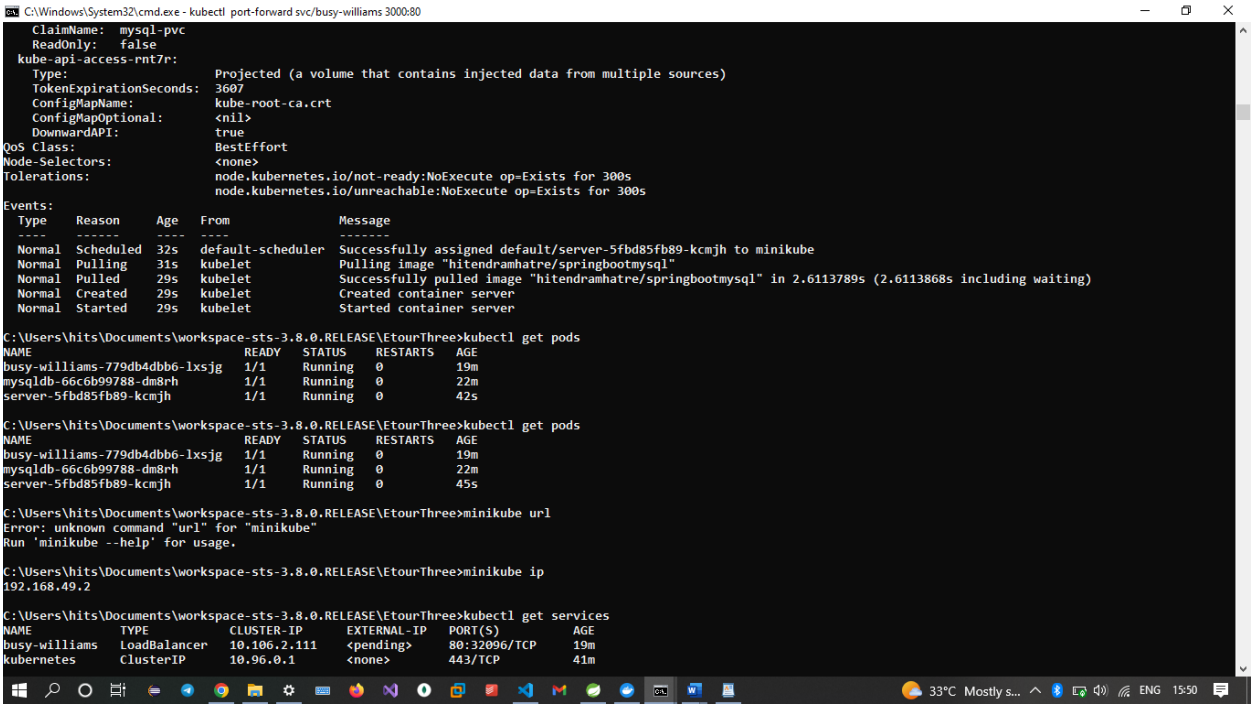


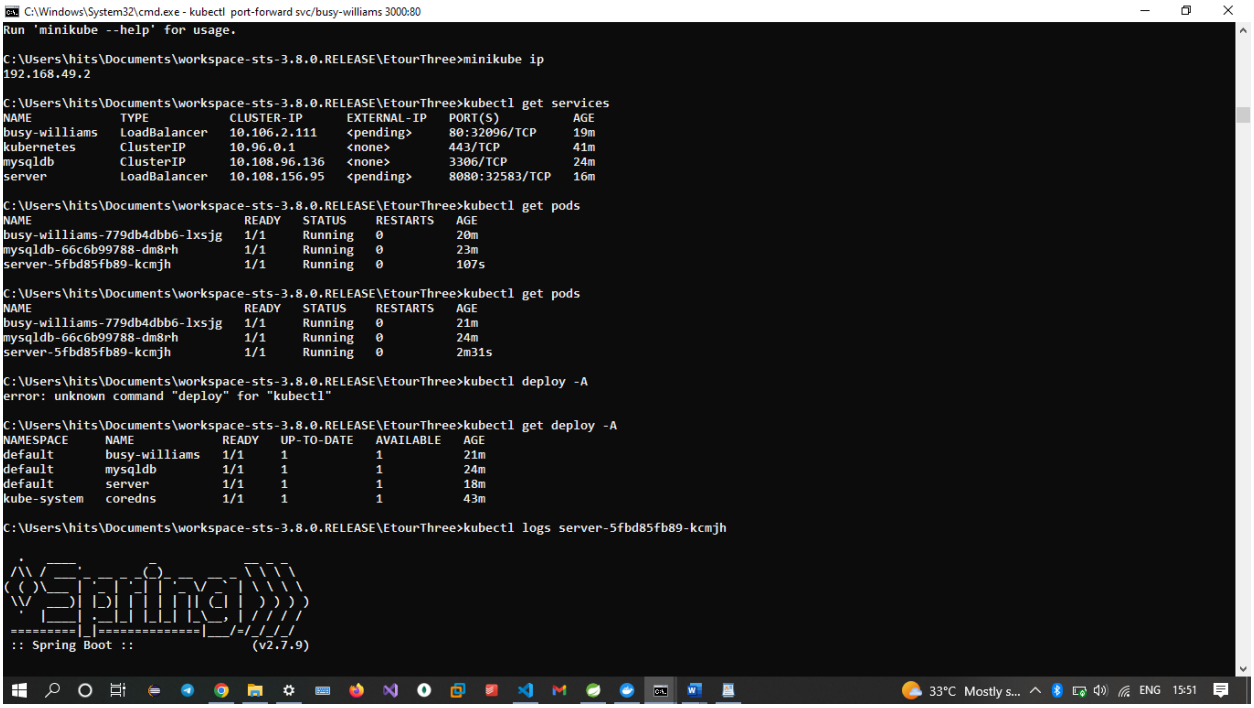


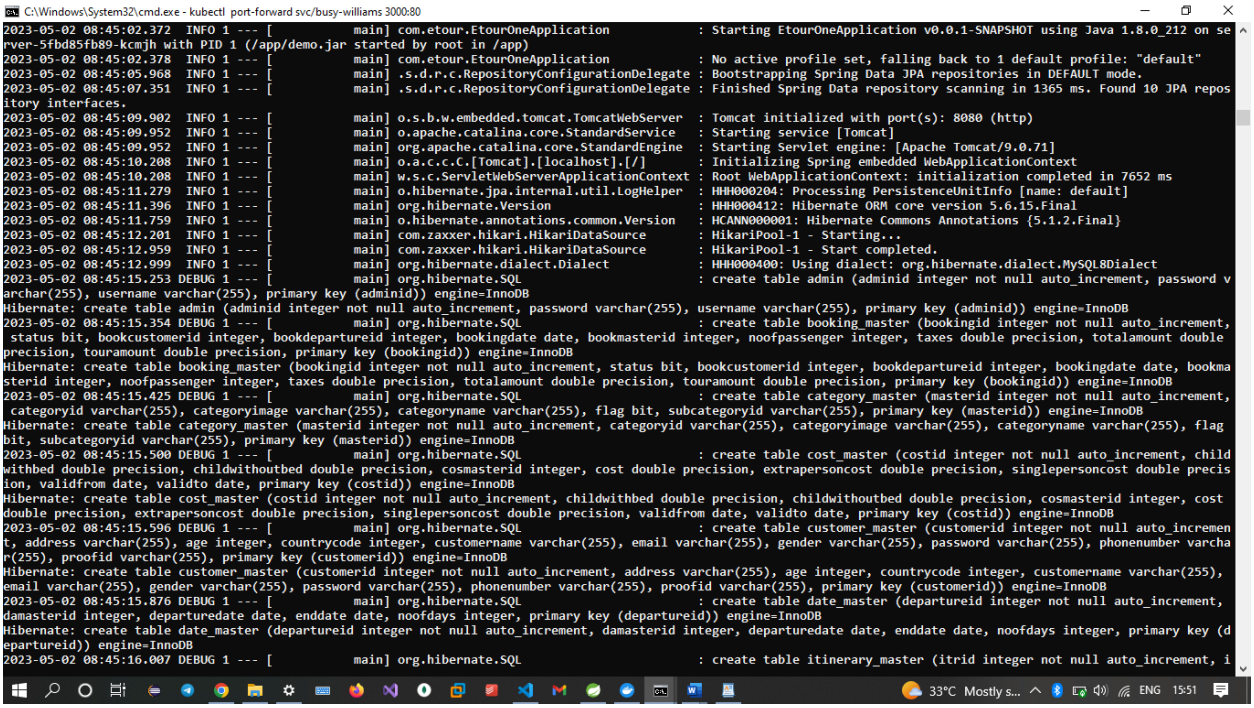

```
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl apply -f spring.yaml
deployment.apps/server created
service/server created

C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get pods
NAME                          READY   STATUS              RESTARTS   AGE
busy-williams-779db4dbb6-lxsjg   1/1     Running             0          3m22s
mysqldb-66c6b99788-dm8rh      1/1     Running             0          6m19s
server-6f85f5c86d-94r9m       0/1     ContainerCreating   0          4s

C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl describe pods server-6f85f5c86d-94r9m
Name:             server-6f85f5c86d-94r9m
Namespace:        default
Priority:         0
Service Account:  default
Node:             minikube/192.168.49.2
Start Time:       Tue, 02 May 2023 13:59:25 +0530
Labels:           app=server
```

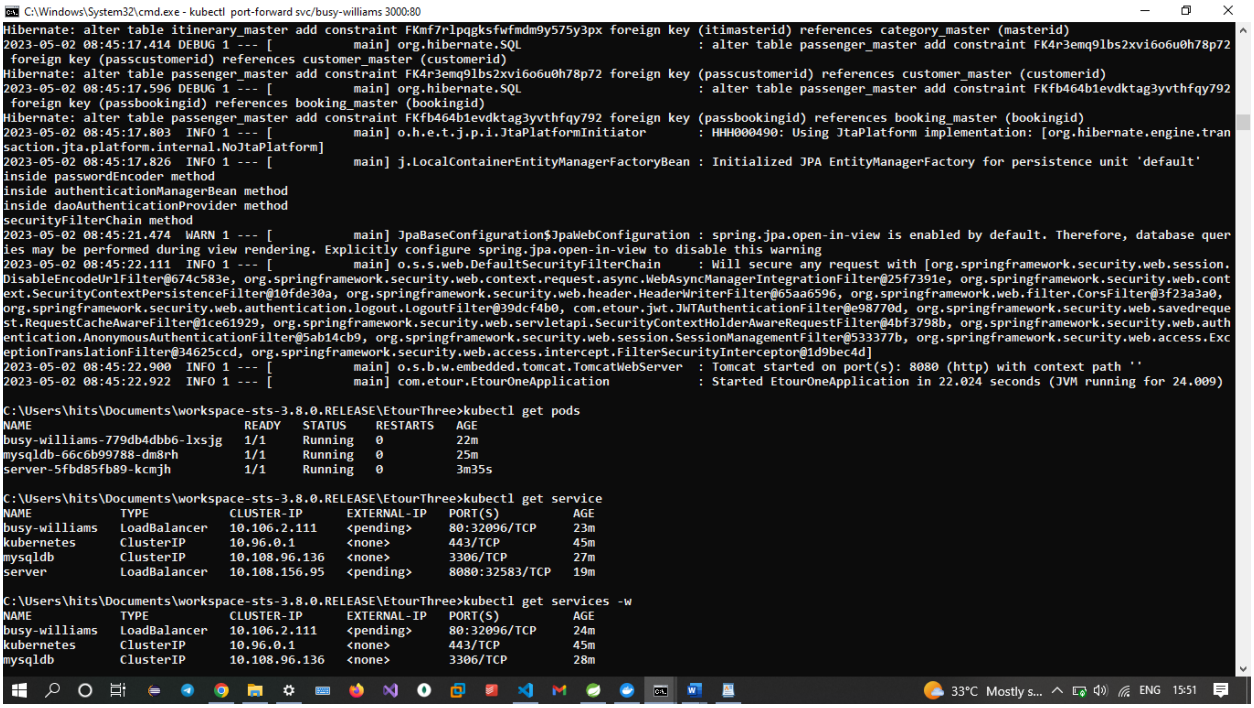

C:\Windows\System32\cmd.exe - kubectl port-forward svc/busy-williams 3000:80
server:
Container ID:
Image: hitendramhatre/springbootmysql
Image ID:
Port: 8080/TCP
Host Port: 0/TCP
State: Waiting
Reason: ContainerCreating
Ready: False
Restart Count: 0
Environment: <none>
Mounts:
/var/lib/mysql from mysql-volume (rw)
/var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-t666p (ro)
Conditions:
Type Status
Initialized True
Ready False
ContainersReady False
PodScheduled True
Volumes:
mysql-volume:
Type: PersistentVolumeClaim (a reference to a PersistentVolumeClaim in the same namespace)
ClaimName: mysql-pvc
ReadOnly: false
kube-api-access-t666p:
Type: Projected (a volume that contains injected data from multiple sources)
TokenExpirationSeconds: 3607
ConfigMapName: kube-root-ca.crt
ConfigMapOptional: <nil>
DownwardAPI: true
QoS Class: BestEffort
Node-Selectors: <none>
Tolerations: node.kubernetes.io/not-ready:NoExecute op=Exists for 300s
node.kubernetes.io/unreachable:NoExecute op=Exists for 300s
Events:
Type Reason Age From Message
Normal Scheduled 19s default-scheduler Successfully assigned default/server-6f85f5c86d-94r9m to minikube
Normal Pulling 18s kubelet Pulling image "hitendramhatre/springbootmysql"
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl describe pods server-6f85f5c86d-94r9m
Name: server-6f85f5c86d-94r9m
Namespace: default
33°C Mostly s...
ENG
15:49


C:\Windows\System32\cmd.exe - kubectl port-forward svc/busy-williams 3000:80
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl describe pods server-5fbd85fb89-kcmjh
Name: server-5fbd85fb89-kcmjh
Namespace: default
Priority: 0
Service Account: default
Node: minikube/192.168.49.2
Start Time: Tue, 02 May 2023 14:14:55 +0530
Labels: app=server
pod-template-hash=5fbd85fb89
Annotations: <none>
Status: Running
IP: 10.244.0.7
IPs:
IP: 10.244.0.7
Controlled By: ReplicaSet/server-5fbd85fb89
Containers:
server:
Container ID: docker://e3a59cbac9719a793b9614029262e116a0d43fa947e3ef0cf430a766ce4bfc69
Image: hitendramhatre/springbootmysql
Image ID: docker-pullable://hitendramhatre/springbootmysql@sha256:16a8a10b3a0d1a50ea0e762d64a7663545f422e18868a51d9fadbaa54caff5d4
Port: 8080/TCP
Host Port: 0/TCP
State: Running
Started: Tue, 02 May 2023 14:14:58 +0530
Ready: True
Restart Count: 0
Environment:
SERVER_PORT: 8080
Mounts:
/var/lib/mysql from mysql-volume (rw)
/var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-rnt7r (ro)
Conditions:
Type Status
Initialized True
Ready True
ContainersReady True
PodScheduled True
Volumes:
mysql-volume:
Type: PersistentVolumeClaim (a reference to a PersistentVolumeClaim in the same namespace)
ClaimName: mysql-pvc
ReadOnly: false
kube-api-access-rnt7r:
33°C Mostly s...
ENG
15:50

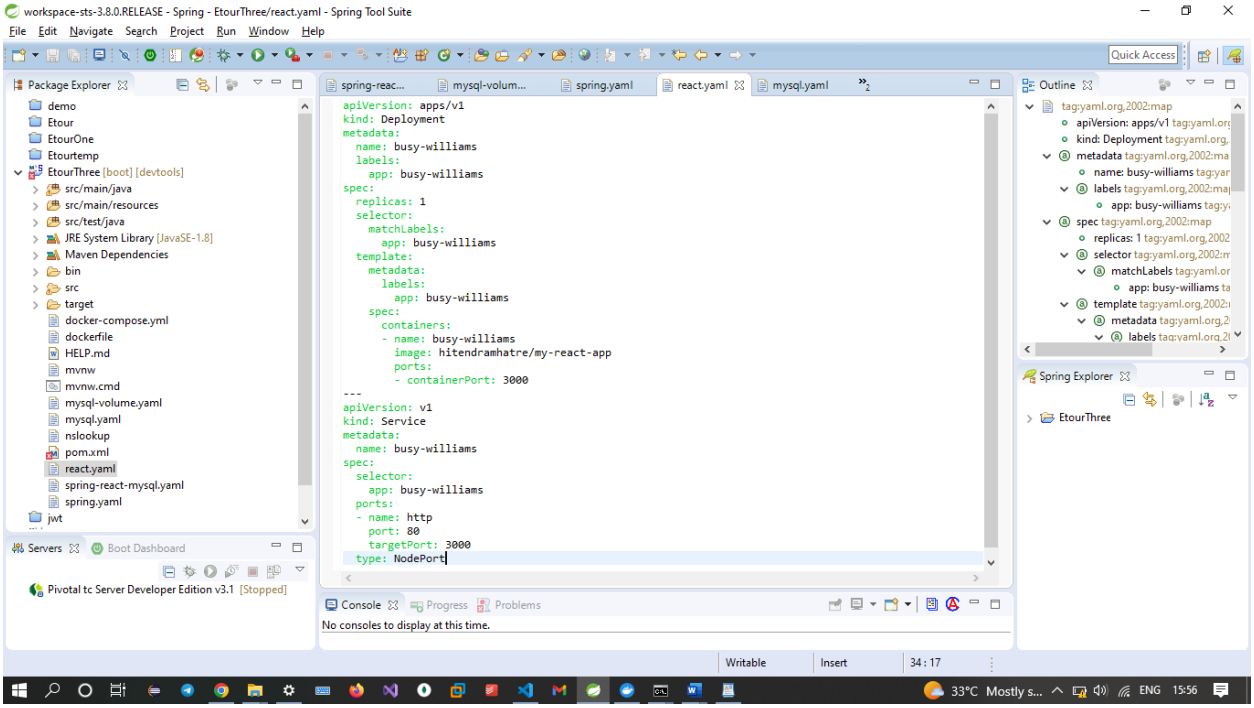

C:\Windows\System32\cmd.exe - kubectl port-forward svc/busy-williams 3000:80
ClaimName: mysql-pvc
ReadOnly: false
kube-api-access-rnt7r:
Type: Projected (a volume that contains injected data from multiple sources)
TokenExpirationSeconds: 3607
ConfigMapName: kube-root-ca.crt
ConfigMapOptional: <nil>
DownwardAPI: true
QoS Class: BestEffort
Node-Selectors: <none>
Tolerations: node.kubernetes.io/not-ready:NoExecute op=Exists for 300s
node.kubernetes.io/unreachable:NoExecute op=Exists for 300s
Events:
Type Reason Age From Message
Normal Scheduled 32s default-scheduler Successfully assigned default/server-5fbd85fb89-kcmjh to minikube
Normal Pulling 31s kubelet Pulling image "hitendramhatre/springbootmysql"
Normal Pulled 29s kubelet Successfully pulled image "hitendramhatre/springbootmysql" in 2.6113789s (2.6113868s including waiting)
Normal Created 29s kubelet Created container server
Normal Started 29s kubelet Started container server
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get pods
NAME READY STATUS RESTARTS AGE
busy-williams-779db4dbb6-lxsjg 1/1 Running 0 19m
mysqldb-66c6b99788-dm8rh 1/1 Running 0 22m
server-5fbd85fb89-kcmjh 1/1 Running 0 42s
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get pods
NAME READY STATUS RESTARTS AGE
busy-williams-779db4dbb6-lxsjg 1/1 Running 0 19m
mysqldb-66c6b99788-dm8rh 1/1 Running 0 22m
server-5fbd85fb89-kcmjh 1/1 Running 0 45s
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>minikube url
Error: unknown command "url" for "minikube"
Run 'minikube --help' for usage.
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>minikube ip
192.168.49.2
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get services
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
busy-williams LoadBalancer 10.106.2.111 <pending> 80:32096/TCP 19m
kubernetes ClusterIP 10.96.0.1 <none> 443/TCP 41m
33°C Mostly s... ENG 15:50


C:\Windows\System32\cmd.exe - kubectl port-forward svc/busy-williams 3000:80
Run 'minikube --help' for usage.
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>minikube ip
192.168.49.2
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get services
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
busy-williams LoadBalancer 10.106.2.111 <pending> 80:32096/TCP 19m
kubernetes ClusterIP 10.96.0.1 <none> 443/TCP 41m
mysqldb ClusterIP 10.108.96.136 <none> 3306/TCP 24m
server LoadBalancer 10.108.156.95 <pending> 8080:32583/TCP 16m
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get pods
NAME READY STATUS RESTARTS AGE
busy-williams-779db4dbb6-lxsjg 1/1 Running 0 20m
mysqldb-66c6b99788-dm8rh 1/1 Running 0 23m
server-5fbd85fb89-kcmjh 1/1 Running 0 107s
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get pods
NAME READY STATUS RESTARTS AGE
busy-williams-779db4dbb6-lxsjg 1/1 Running 0 21m
mysqldb-66c6b99788-dm8rh 1/1 Running 0 24m
server-5fbd85fb89-kcmjh 1/1 Running 0 2m31s
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl deploy -A
error: unknown command "deploy" for "kubectl"
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get deploy -A
NAMESPACE NAME READY UP-TO-DATE AVAILABLE AGE
default busy-williams 1/1 1 1 21m
default mysqldb 1/1 1 1 24m
default server 1/1 1 1 18m
kube-system coredns 1/1 1 1 43m
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl logs server-5fbd85fb89-kcmjh
:: Spring Boot :: (v2.7.9)
33°C Mostly s... ENG 15:51

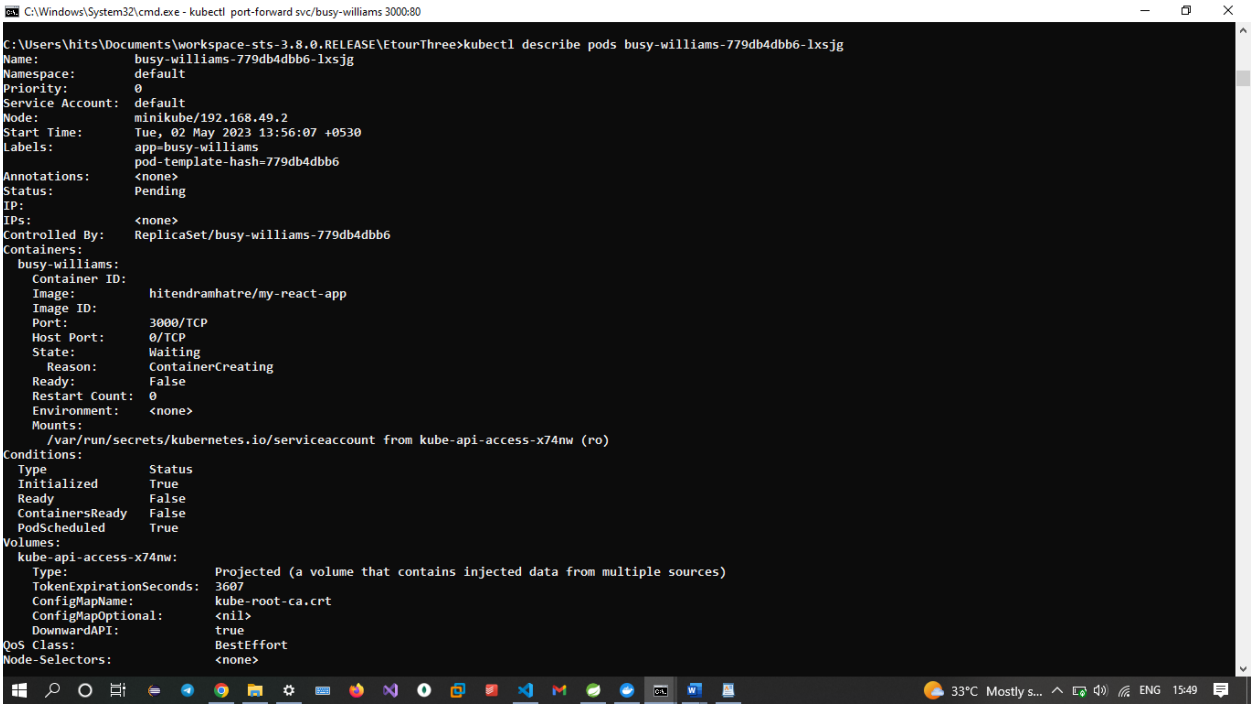

C:\Windows\System32\cmd.exe - kubectl port-forward svc/busy-williams 3000:80
2023-05-02 08:45:02.372 INFO 1 --- [main] com.etour.EtourOneApplication : Starting EtourOneApplication v0.0.1-SNAPSHOT using Java 1.8.0_212 on server-5fbd85fb89-kcmjh with PID 1 (/app/demo.jar started by root in /app)
2023-05-02 08:45:02.378 INFO 1 --- [main] com.etour.EtourOneApplication : No active profile set, falling back to 1 default profile: "default"
2023-05-02 08:45:05.968 INFO 1 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Bootstrapping Spring Data JPA repositories in DEFAULT mode.
2023-05-02 08:45:07.351 INFO 1 --- [main] .s.d.r.c.RepositoryConfigurationDelegate : Finished Spring Data repository scanning in 1365 ms. Found 10 JPA repository interfaces.
2023-05-02 08:45:09.902 INFO 1 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat initialized with port(s): 8080 (http)
2023-05-02 08:45:09.952 INFO 1 --- [main] o.apache.catalina.core.StandardService : Starting service [Tomcat]
2023-05-02 08:45:09.952 INFO 1 --- [main] org.apache.catalina.core.StandardEngine : Starting Servlet engine: [Apache Tomcat/9.0.71]
2023-05-02 08:45:10.208 INFO 1 --- [main] o.a.c.c.C.[Tomcat].[localhost].[/] : Initializing Spring embedded WebApplicationContext
2023-05-02 08:45:10.208 INFO 1 --- [main] w.s.c.ServletWebServerApplicationContext : Root WebApplicationContext: initialization completed in 7652 ms
2023-05-02 08:45:11.279 INFO 1 --- [main] o.hibernate.jpa.internal.util.LogHelper : HHH000204: Processing PersistenceUnitInfo [name: default]
2023-05-02 08:45:11.396 INFO 1 --- [main] org.hibernate.Version : HHH000412: Hibernate ORM core version 5.6.15.Final
2023-05-02 08:45:11.759 INFO 1 --- [main] o.hibernate.annotations.common.Version : HCANN000001: Hibernate Commons Annotations {5.1.2.Final}
2023-05-02 08:45:12.201 INFO 1 --- [main] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Starting...
2023-05-02 08:45:12.959 INFO 1 --- [main] com.zaxxer.hikari.HikariDataSource : HikariPool-1 - Start completed.
2023-05-02 08:45:12.999 INFO 1 --- [main] org.hibernate.dialect.Dialect : HHH000400: Using dialect: org.hibernate.dialect.MySQL8Dialect
2023-05-02 08:45:15.253 DEBUG 1 --- [main] org.hibernate.SQL : create table admin (adminid integer not null auto_increment, password varchar(255), username varchar(255), primary key (adminid)) engine=InnoDB
Hibernate: create table admin (adminid integer not null auto_increment, password varchar(255), username varchar(255), primary key (adminid)) engine=InnoDB
2023-05-02 08:45:15.354 DEBUG 1 --- [main] org.hibernate.SQL : create table booking_master (bookingid integer not null auto_increment, status bit, bookcustomerid integer, bookdepartureid integer, bookingdate date, bookmasterid integer, noofpassenger integer, taxes double precision, totalamount double precision, touramount double precision, primary key (bookingid)) engine=InnoDB
Hibernate: create table booking_master (bookingid integer not null auto_increment, status bit, bookcustomerid integer, bookdepartureid integer, bookingdate date, bookmasterid integer, noofpassenger integer, taxes double precision, totalamount double precision, touramount double precision, primary key (bookingid)) engine=InnoDB
2023-05-02 08:45:15.425 DEBUG 1 --- [main] org.hibernate.SQL : create table category_master (masterid integer not null auto_increment, categoryid varchar(255), categoryimage varchar(255), categoryname varchar(255), flag bit, subcategoryid varchar(255), primary key (masterid)) engine=InnoDB
Hibernate: create table category_master (masterid integer not null auto_increment, categoryid varchar(255), categoryimage varchar(255), categoryname varchar(255), flag bit, subcategoryid varchar(255), primary key (masterid)) engine=InnoDB
2023-05-02 08:45:15.500 DEBUG 1 --- [main] org.hibernate.SQL : create table cost_master (costid integer not null auto_increment, childwithbed double precision, childwithoutbed double precision, cosmasterid integer, cost double precision, extrapersoncost double precision, singlepersoncost double precision, validfrom date, validto date, primary key (costid)) engine=InnoDB
Hibernate: create table cost_master (costid integer not null auto_increment, childwithbed double precision, childwithoutbed double precision, cosmasterid integer, cost double precision, extrapersoncost double precision, singlepersoncost double precision, validfrom date, validto date, primary key (costid)) engine=InnoDB
2023-05-02 08:45:15.596 DEBUG 1 --- [main] org.hibernate.SQL : create table customer_master (customerid integer not null auto_increment, address varchar(255), age integer, countrycode integer, customername varchar(255), email varchar(255), gender varchar(255), password varchar(255), phonenumber varchar(255), proofid varchar(255), primary key (customerid)) engine=InnoDB
Hibernate: create table customer_master (customerid integer not null auto_increment, address varchar(255), age integer, countrycode integer, customername varchar(255), email varchar(255), gender varchar(255), password varchar(255), phonenumber varchar(255), proofid varchar(255), primary key (customerid)) engine=InnoDB
2023-05-02 08:45:15.876 DEBUG 1 --- [main] org.hibernate.SQL : create table date_master (departureid integer not null auto_increment, damasterid integer, departuredate date, enddate date, noofdays integer, primary key (departureid)) engine=InnoDB
Hibernate: create table date_master (departureid integer not null auto_increment, damasterid integer, departuredate date, enddate date, noofdays integer, primary key (departureid)) engine=InnoDB
2023-05-02 08:45:16.007 DEBUG 1 --- [main] org.hibernate.SQL : create table itinerary_master (itrid integer not null auto_increment, i
33°C Mostly s... ENG 15:51

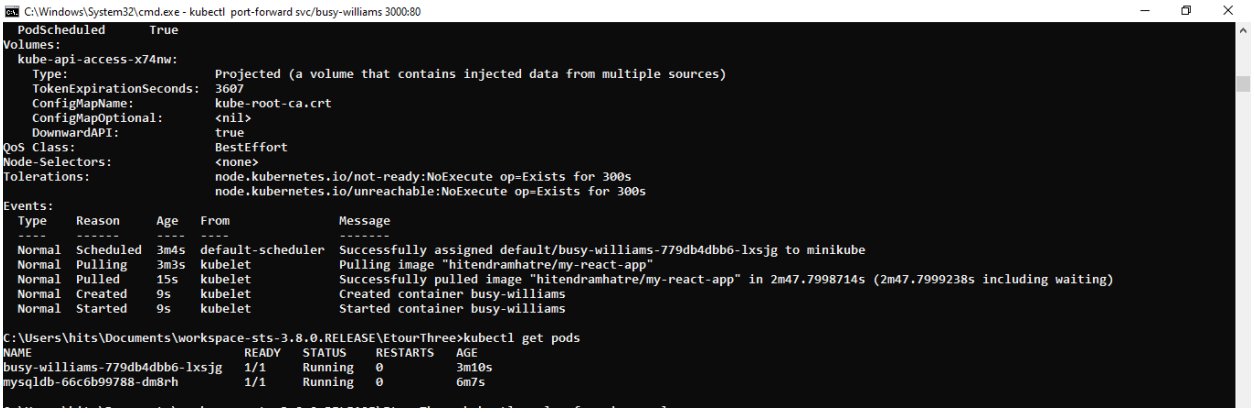

C:\Windows\System32\cmd.exe - kubectl port-forward svc/busy-williams 3000:80
Hibernate: alter table itinerary_master add constraint FKmf7rlpqgksfwfmdm9y575y3px foreign key (itimasterid) references category_master (masterid)
2023-05-02 08:45:17.414 DEBUG 1 --- [main] org.hibernate.SQL : alter table passenger_master add constraint FK4r3emq9lbs2xvi6o6u0h78p72 foreign key (passcustomerid) references customer_master (customerid)
Hibernate: alter table passenger_master add constraint FK4r3emq9lbs2xvi6o6u0h78p72 foreign key (passcustomerid) references customer_master (customerid)
2023-05-02 08:45:17.596 DEBUG 1 --- [main] org.hibernate.SQL : alter table passenger_master add constraint FKfb464b1evdktag3yvthfqy792 foreign key (passbookingid) references booking_master (bookingid)
Hibernate: alter table passenger_master add constraint FKfb464b1evdktag3yvthfqy792 foreign key (passbookingid) references booking_master (bookingid)
2023-05-02 08:45:17.803 INFO 1 --- [main] o.h.e.t.j.p.i.JtaPlatformInitiator : HHH000490: Using JtaPlatform implementation: [org.hibernate.engine.transaction.jta.platform.internal.NoJtaPlatform]
2023-05-02 08:45:17.826 INFO 1 --- [main] j.LocalContainerEntityManagerFactoryBean : Initialized JPA EntityManagerFactory for persistence unit 'default'
inside passwordEncoder method
inside authenticationManagerBean method
inside daoAuthenticationProvider method
securityFilterChain method
2023-05-02 08:45:21.474 WARN 1 --- [main] JpaBaseConfiguration$JpaWebConfiguration : spring.jpa.open-in-view is enabled by default. Therefore, database queries may be performed during view rendering. Explicitly configure spring.jpa.open-in-view to disable this warning
2023-05-02 08:45:22.111 INFO 1 --- [main] o.s.s.web.DefaultSecurityFilterChain : Will secure any request with [org.springframework.security.web.session.DisableEncodeUrlFilter@674c583e, org.springframework.security.web.context.request.async.WebAsyncManagerIntegrationFilter@25f7391e, org.springframework.security.web.context.SecurityContextPersistenceFilter@10fde30a, org.springframework.security.web.header.HeaderWriterFilter@65aa6596, org.springframework.web.filter.CorsFilter@3f23a3a0, org.springframework.security.web.authentication.logout.LogoutFilter@39dcf4b0, com.etour.jwt.JWTAuthenticationFilter@e98770d, org.springframework.security.web.savedrequest.RequestCacheAwareFilter@1ce61929, org.springframework.security.web.servletapi.SecurityContextHolderAwareRequestFilter@4bf3798b, org.springframework.security.web.authentication.AnonymousAuthenticationFilter@5ab14cb9, org.springframework.security.web.session.SessionManagementFilter@533377b, org.springframework.security.web.access.ExceptionTranslationFilter@34625ccd, org.springframework.security.web.access.intercept.FilterSecurityInterceptor@1d9bec4d]
2023-05-02 08:45:22.900 INFO 1 --- [main] o.s.b.w.embedded.tomcat.TomcatWebServer : Tomcat started on port(s): 8080 (http) with context path ''
2023-05-02 08:45:22.922 INFO 1 --- [main] com.etour.EtourOneApplication : Started EtourOneApplication in 22.024 seconds (JVM running for 24.009)
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get pods
NAME READY STATUS RESTARTS AGE
busy-williams-779db4dbb6-lxsjg 1/1 Running 0 22m
mysqldb-66c6b99788-dm8rh 1/1 Running 0 25m
server-5fbd85fb89-kcmjh 1/1 Running 0 3m35s
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get service
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
busy-williams LoadBalancer 10.106.2.111 <pending> 80:32096/TCP 23m
kubernetes ClusterIP 10.96.0.1 <none> 443/TCP 45m
mysqldb ClusterIP 10.108.96.136 <none> 3306/TCP 27m
server LoadBalancer 10.108.156.95 <pending> 8080:32583/TCP 19m
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get services -w
NAME TYPE CLUSTER-IP EXTERNAL-IP PORT(S) AGE
busy-williams LoadBalancer 10.106.2.111 <pending> 80:32096/TCP 24m
kubernetes ClusterIP 10.96.0.1 <none> 443/TCP 45m
mysqldb ClusterIP 10.108.96.136 <none> 3306/TCP 28m
33°C Mostly s... ENG 15:51

3. Frontend (React)




```
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl apply -f react.yaml
deployment.apps/busy-williams created
service/busy-williams created
```


C:\Windows\System32\cmd.exe - kubectl port-forward svc/busy-williams 3000:80
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl describe pods busy-williams-779db4dbb6-lxsjg
Name: busy-williams-779db4dbb6-lxsjg
Namespace: default
Priority: 0
Service Account: default
Node: minikube/192.168.49.2
Start Time: Tue, 02 May 2023 13:56:07 +0530
Labels: app=busy-williams
pod-template-hash=779db4dbb6
Annotations: <none>
Status: Pending
IP:
IPs: <none>
Controlled By: ReplicaSet/busy-williams-779db4dbb6
Containers:
busy-williams:
Container ID:
Image: hitendramhatre/my-react-app
Image ID:
Port: 3000/TCP
Host Port: 0/TCP
State: Waiting
Reason: ContainerCreating
Ready: False
Restart Count: 0
Environment: <none>
Mounts:
/var/run/secrets/kubernetes.io/serviceaccount from kube-api-access-x74nw (ro)
Conditions:
Type Status
Initialized True
Ready False
ContainersReady False
PodScheduled True
Volumes:
kube-api-access-x74nw:
Type: Projected (a volume that contains injected data from multiple sources)
TokenExpirationSeconds: 3607
ConfigMapName: kube-root-ca.crt
ConfigMapOptional: <nil>
DownwardAPI: true
QoS Class: BestEffort
Node-Selectors: <none>
33°C Mostly s... ENG 15:49


C:\Windows\System32\cmd.exe - kubectl port-forward svc/busy-williams 3000:80
PodScheduled True
Volumes:
kube-api-access-x74nw:
Type: Projected (a volume that contains injected data from multiple sources)
TokenExpirationSeconds: 3607
ConfigMapName: kube-root-ca.crt
ConfigMapOptional: <nil>
DownwardAPI: true
QoS Class: BestEffort
Node-Selectors: <none>
Tolerations: node.kubernetes.io/not-ready:NoExecute op=Exists for 300s
node.kubernetes.io/unreachable:NoExecute op=Exists for 300s
Events:
Type Reason Age From Message
Normal Scheduled 3m4s default-scheduler Successfully assigned default/busy-williams-779db4dbb6-lxsjg to minikube
Normal Pulling 3m3s kubelet Pulling image "hitendramhatre/my-react-app"
Normal Pulled 15s kubelet Successfully pulled image "hitendramhatre/my-react-app" in 2m47.7998714s (2m47.7999238s including waiting)
Normal Created 9s kubelet Created container busy-williams
Normal Started 9s kubelet Started container busy-williams
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get pods
NAME READY STATUS RESTARTS AGE
busy-williams-779db4dbb6-lxsjg 1/1 Running 0 3m10s
mysqldb-66c6b99788-dm8rh 1/1 Running 0 6m7s

C:\Windows\System32\cmd.exe - kubectl port-forward svc/busy-williams 3000:80

```
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl apply -f spring.yaml
deployment.apps/server unchanged
service/server configured

C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl apply -f react.yaml
deployment.apps/busy-williams unchanged
service/busy-williams configured

C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get pods
NAME                             READY   STATUS    RESTARTS   AGE
busy-williams-779db4dbb6-lxsjg   1/1     Running   0          30m
mysqldb-66c6b99788-dm8rh         1/1     Running   0          33m
server-5fbd85fb89-kcmjh          1/1     Running   0          11m

C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get pods
NAME                             READY   STATUS    RESTARTS   AGE
busy-williams-779db4dbb6-lxsjg   1/1     Running   0          30m
mysqldb-66c6b99788-dm8rh         1/1     Running   0          33m
server-5fbd85fb89-kcmjh          1/1     Running   0          11m

C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get pods
NAME                             READY   STATUS    RESTARTS   AGE
busy-williams-779db4dbb6-lxsjg   1/1     Running   0          30m
mysqldb-66c6b99788-dm8rh         1/1     Running   0          33m
server-5fbd85fb89-kcmjh          1/1     Running   0          11m

C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get pods
NAME                             READY   STATUS    RESTARTS   AGE
busy-williams-779db4dbb6-lxsjg   1/1     Running   0          30m
mysqldb-66c6b99788-dm8rh         1/1     Running   0          33m
server-5fbd85fb89-kcmjh          1/1     Running   0          11m

C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get services
NAME            TYPE        CLUSTER-IP      EXTERNAL-IP   PORT(S)          AGE
busy-williams   NodePort    10.106.2.111    <none>        80:32096/TCP     30m
kubernetes      ClusterIP   10.96.0.1       <none>        443/TCP          52m
mysqldb         ClusterIP   10.108.96.136   <none>        3306/TCP         34m
server          NodePort    10.108.156.95   <none>        8080:32583/TCP   27m

C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl get pods
NAME                             READY   STATUS    RESTARTS   AGE
busy-williams-779db4dbb6-lxsjg   1/1     Running   0          37m
mysqldb-66c6b99788-dm8rh         1/1     Running   0          40m
```

33°C Mostly s... ENG 15:51

Forward port to localhost.

C:\Windows\System32\cmd.exe - kubectl port-forward svc/busy-williams 3000:80

```
C:\Users\hits\Documents\workspace-sts-3.8.0.RELEASE\EtourThree>kubectl port-forward svc/busy-williams 3000:80
Forwarding from 127.0.0.1:3000 -> 3000
Forwarding from [::1]:3000 -> 3000
Handling connection for 3000
Handling connection for 3000
Handling connection for 3000
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```

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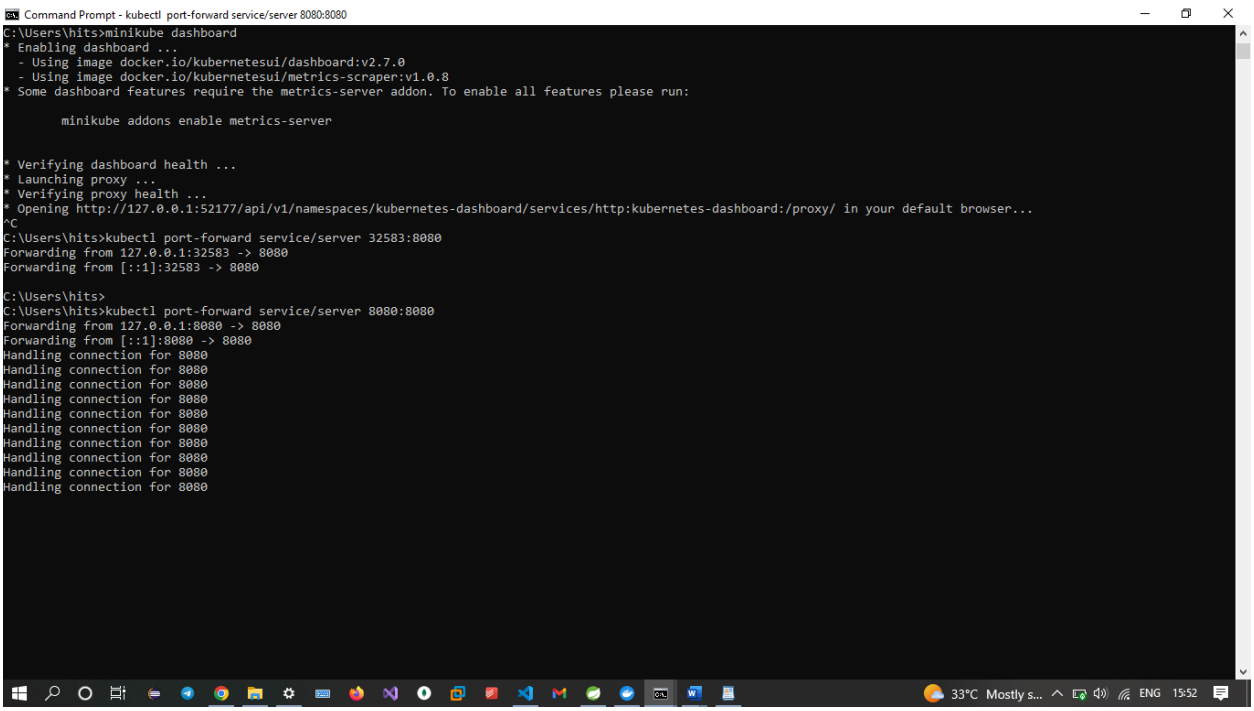
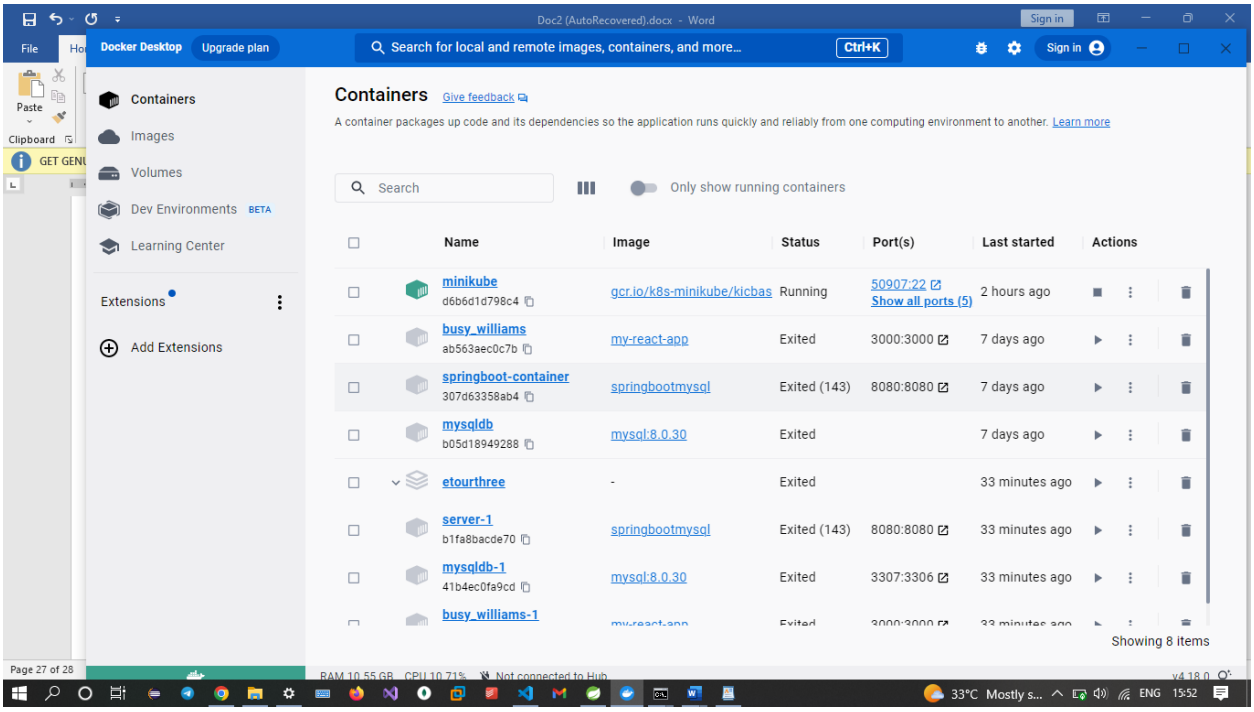
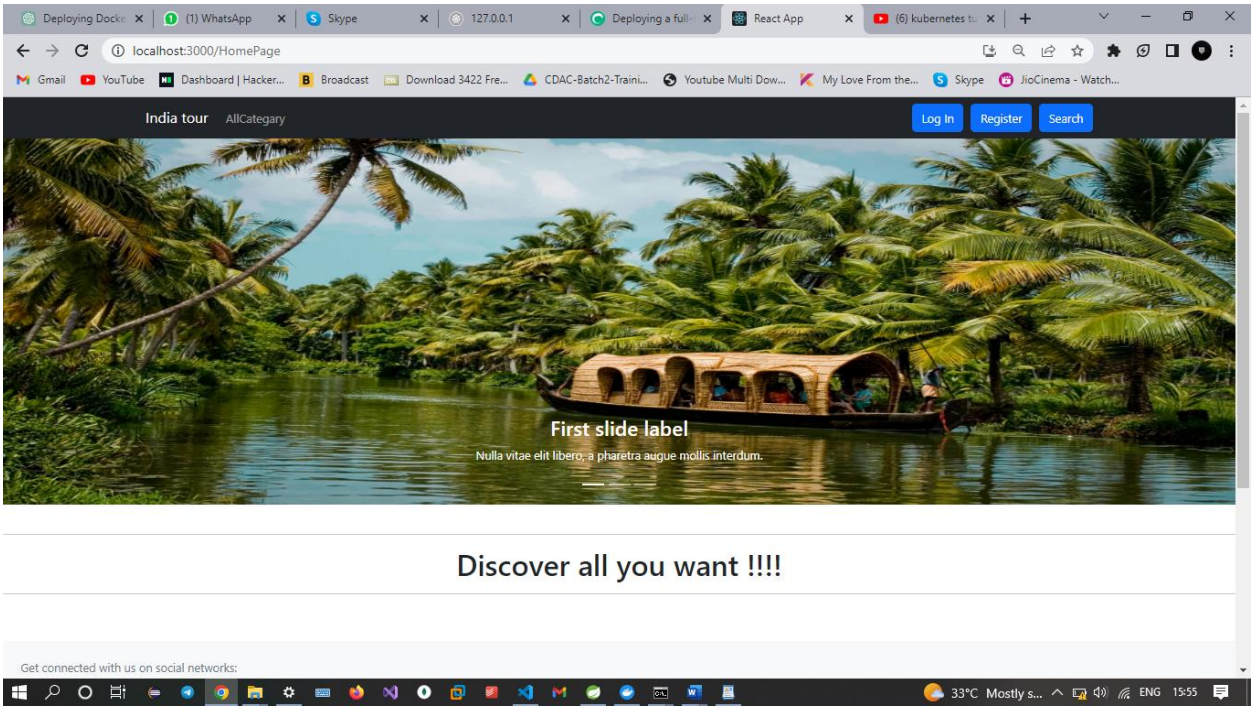


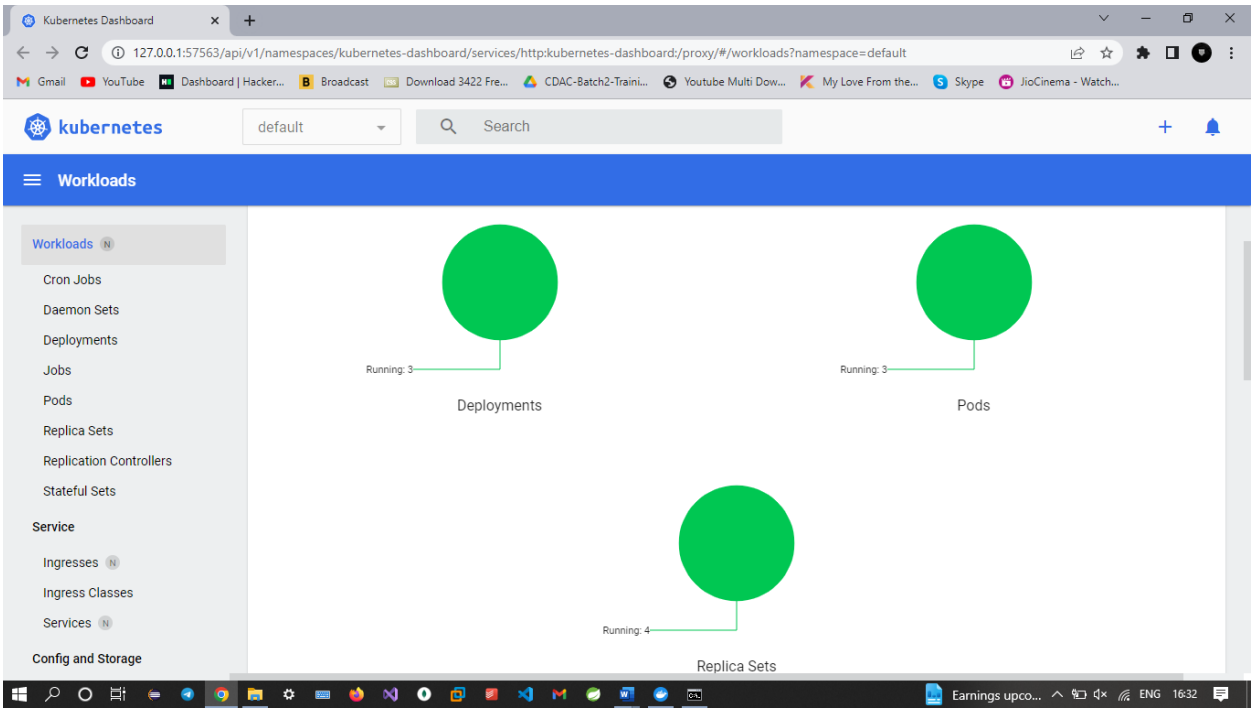
Minikube Container running in docker

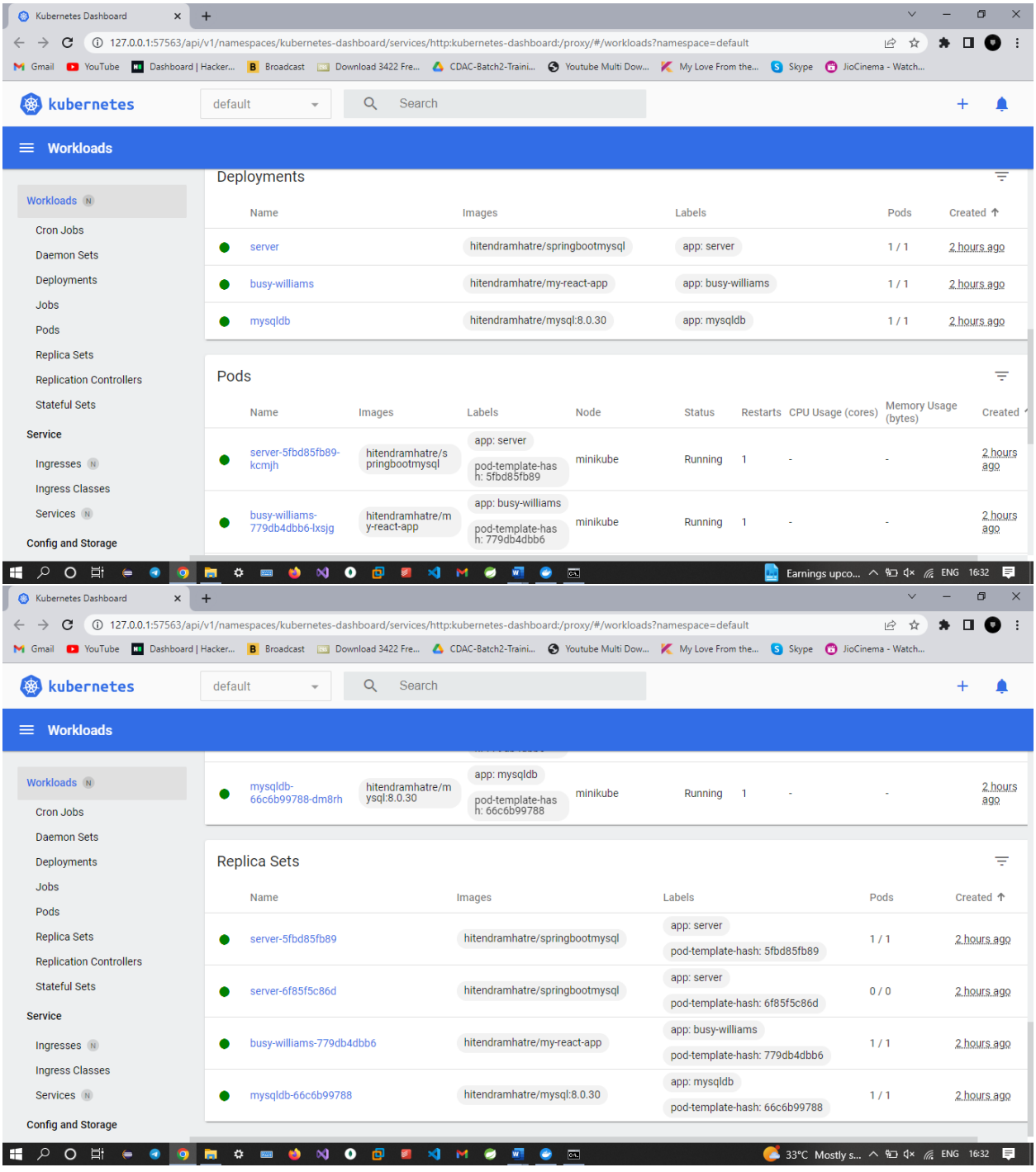


Website is working on localhost.



Minikube dashboard showing running




Kubernetes Dashboard
127.0.0.1:57563/api/v1/namespaces/kubernetes-dashboard/services/http:kubernetes-dashboard:/proxy/#/workloads?namespace=default
kubernetes
default
Search
Workloads
Deployments
Name Images Labels Pods Created
server hitendramhatre/springbootmysql app: server 1 / 1 2 hours ago
busy-williams hitendramhatre/my-react-app app: busy-williams 1 / 1 2 hours ago
mysqldb hitendramhatre/mysql:8.0.30 app: mysqldb 1 / 1 2 hours ago
Pods
Name Images Labels Node Status Restarts CPU Usage (cores) Memory Usage (bytes) Created
server-5fbd85fb89-kcmjh hitendramhatre/springbootmysql app: server pod-template-hash: 5fbd85fb89 minikube Running 1 - - 2 hours ago
busy-williams-779db4dbb6-lxsjg hitendramhatre/my-react-app app: busy-williams pod-template-hash: 779db4dbb6 minikube Running 1 - - 2 hours ago
mysqldb-66c6b99788-dm8rh hitendramhatre/mysql:8.0.30 app: mysqldb pod-template-hash: 66c6b99788 minikube Running 1 - - 2 hours ago
Replica Sets
Name Images Labels Pods Created
server-5fbd85fb89 hitendramhatre/springbootmysql app: server pod-template-hash: 5fbd85fb89 1 / 1 2 hours ago
server-6f85f5c86d hitendramhatre/springbootmysql app: server pod-template-hash: 6f85f5c86d 0 / 0 2 hours ago
busy-williams-779db4dbb6 hitendramhatre/my-react-app app: busy-williams pod-template-hash: 779db4dbb6 1 / 1 2 hours ago
mysqldb-66c6b99788 hitendramhatre/mysql:8.0.30 app: mysqldb pod-template-hash: 66c6b99788 1 / 1 2 hours ago
Cron Jobs
Daemon Sets
Deployments
Jobs
Pods
Replica Sets
Replication Controllers
Stateful Sets
Service
Ingresses
Ingress Classes
Services
Config and Storage