LAB EXAM 7 AWS EKS

Create Cluster using eksctl

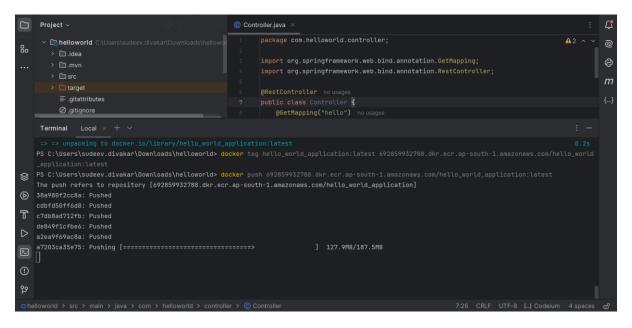

Simple Hello World Spring Boot Application

Create AWS ECR repository

```
C:\Users\sudeev.divakar>aws ecr create-repository --repository-name hello_world_application
-----------------------------------------------------------------------------------------------
|                                         CreateRepository                                      |
+---------------------------------------------------------------------------------------------+
||                                        repository                                         ||
|+------------------------+--------------------------------------------------------------------+|
||  createdAt             |  2025-02-28T15:54:19.253000+05:30                                ||
||  imageTagMutability    |  MUTABLE                                                         ||
||  registryId            |  692859932788                                                    ||
||  repositoryArn         |  arn:aws:ecr:ap-south-1:692859932788:repository/hello_world_application ||
||  repositoryName        |  hello_world_application                                         ||
||  repositoryUri         |  692859932788.dkr.ecr.ap-south-1.amazonaws.com/hello_world_application ||
|+------------------------+--------------------------------------------------------------------+|
|||                                  encryptionConfiguration                               |||
||+----------------------------------------------------------+---------------------------+||
|||  encryptionType                                          |  AES256                   |||
||+----------------------------------------------------------+---------------------------+||
|||                                 imageScanningConfiguration                             |||
||+----------------------------------------------------------+---------------------------+||
|||  scanOnPush                                              |  False                    |||
||+----------------------------------------------------------+---------------------------+||

C:\Users\sudeev.divakar>aws ecr get-login-password --region ap-south-1 | docker login --username AWS --password-stdin 69
2859932788.dkr.ecr.ap-south-1.amazonaws.com
Login Succeeded
```

Dockerize application and push onto AWS ECR


```
PS C:\Users\sudeev.divakar\Downloads\helloworld> kubectl apply -f deployment.yaml
deployment.apps/hello-world-application created
PS C:\Users\sudeev.divakar\Downloads\helloworld> kubectl apply -f service.yaml
service/hello-world-service created
```

```
PS C:\Users\sudeev.divakar\Downloads\helloworld> kubectl get pods
NAME                                         READY   STATUS    RESTARTS       AGE
hello-world-application-67db74dddb-cpwvb     1/1     Running   0              14s
hello-world-application-67db74dddb-vflbb     1/1     Running   8 (6m8s ago)   17m
```

```
PS C:\Users\sudeev.divakar\Downloads\helloworld> kubectl get svc
NAME                  TYPE           CLUSTER-IP      EXTERNAL-IP                                                              PORT(S)        AGE
hello-world-service   LoadBalancer   10.100.50.179   adfe8d3471fd044bab08d99529bd91e9-916693709.ap-south-1.elb.amazonaws.com  80:30099/TCP   18m
kubernetes            ClusterIP      10.100.0.1      <none>                                                                   443/TCP        65m
PS C:\Users\sudeev.divakar\Downloads\helloworld>
```

Hello World