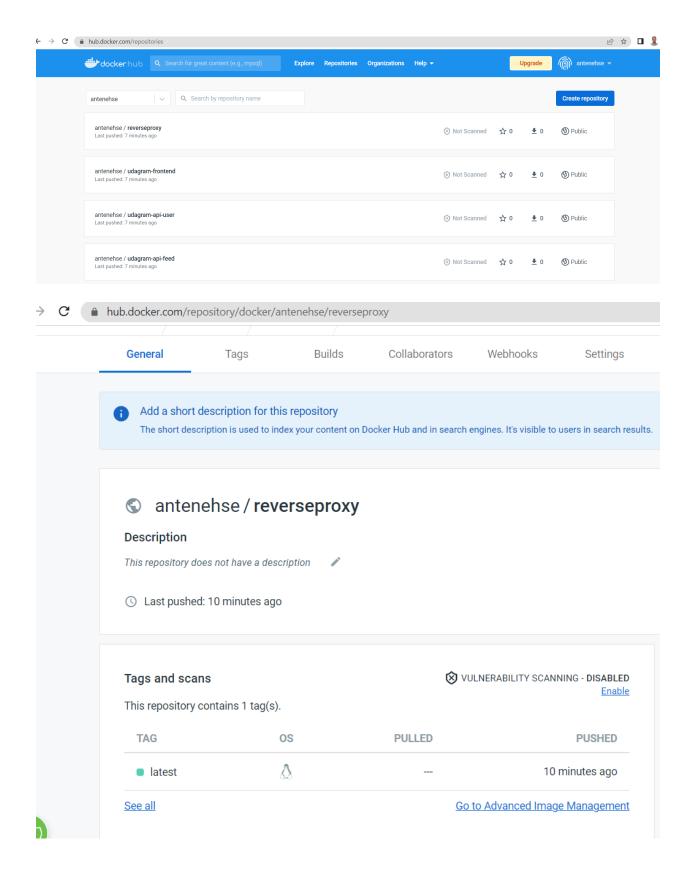
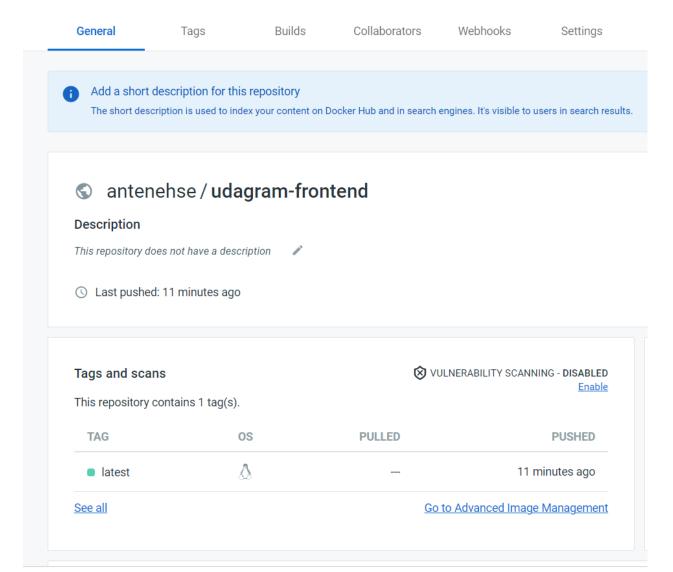
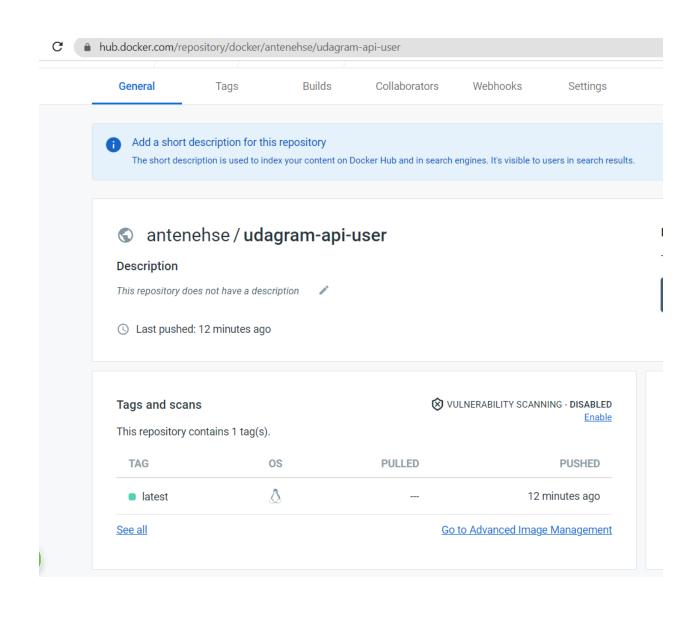
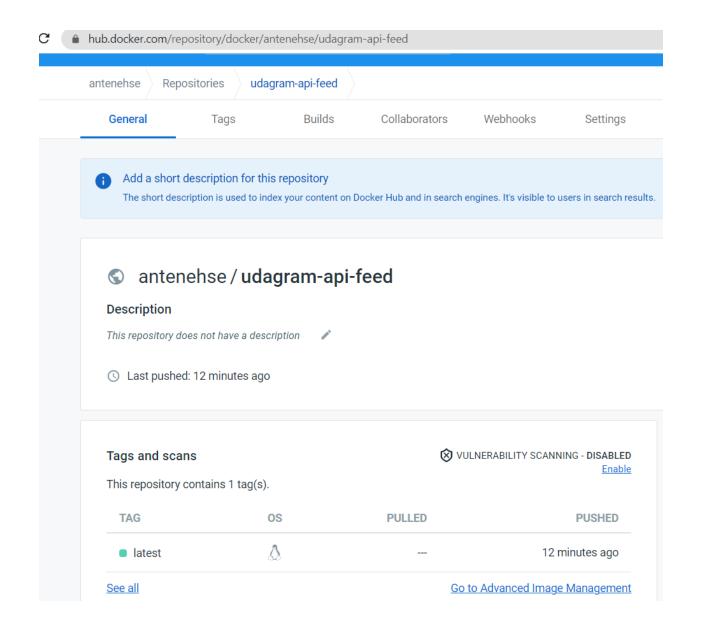
Docker images in your repository in DockerHub

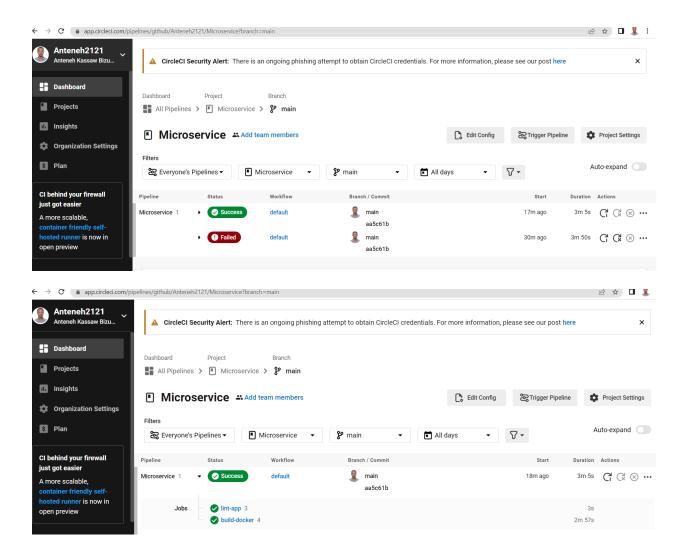


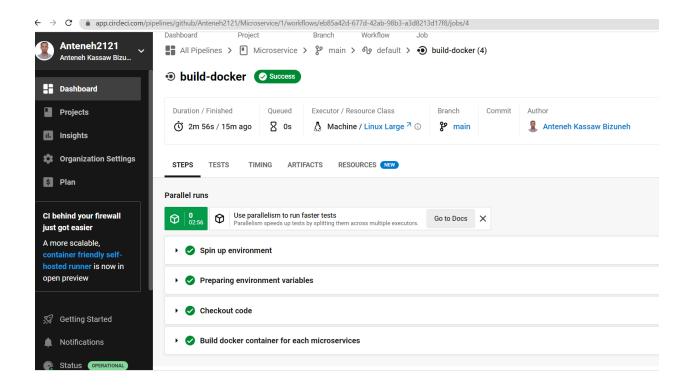


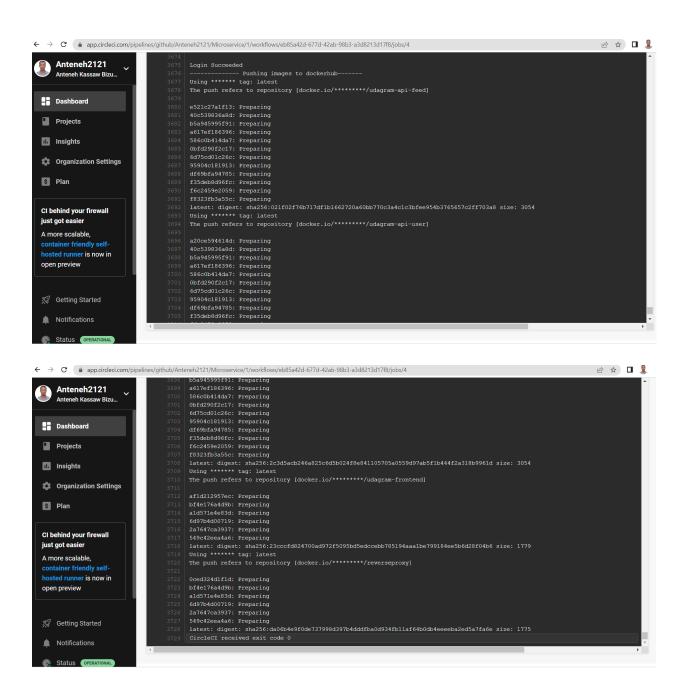




TravisCI build pipeline showing successful build jobs







Kubernetes kubectl get pods output

```
hp@ET-27608 MINGW64 ~/Desktop/project3/Microservice/deplyment (main)
$ kubectl get pods
NAME
                                  READY
                                           STATUS
                                                     RESTARTS
                                                                    AGE
backend-feed-7bc58f6dcb-csbd9
                                  1/1
                                           Running
                                                                    6s
                                                     0
                                  1/1
backend-feed-7bc58f6dcb-fktd2
                                           Running
                                                     0
                                                                     3s
                                  1/1
backend-user-67c44cd647-8sj4q
                                                     1 (15s ago)
                                                                     75s
                                           Running
backend-user-67c44cd647-gkjfc
                                  1/1
                                                       (13s ago)
                                           Running
                                                     1
                                                                    73s
frontend-75db855b87-8v8cb
                                  1/1
                                           Running
                                                                    11m
frontend-75db855b87-m6252
                                  1/1
                                           Running
                                                     0
                                                                    11m
reverseproxy-7c8bbd75c4-ppxg7
                                  1/1
                                           Running
                                                     3
                                                        (21m ago)
                                                                    22m
reverseproxy-7c8bbd75c4-x97t4
                                  1/1
                                           Running
                                                        (21m ago)
                                                                    22m
hp@ET-27608 MINGW64 ~/Desktop/project3/Microservice/deplyment (main)
p@ET-27608 MINGW64 ~/Desktop/project3/Microservice/deplyment (main)
$ kubectl get pods
NAME
                                READY
                                        STATUS
                                                  RESTARTS
                                                                AGE
backend-feed-76c9858588-gztg6
                                1/1
                                        Running
                                                                26s
                                                  0
backend-feed-76c9858588-vtr5q
                                1/1
                                        Running
                                                  0
                                                                24s
backend-user-7cbd499f75-f2jst
                                1/1
                                        Running
                                                  0
                                                                11s
backend-user-7cbd499f75-rwf9p
                                1/1
                                        Running
                                                                9s
frontend-65554cd4f5-n45rj
                                1/1
                                                  0
                                                                25h
                                        Running
frontend-65554cd4f5-pq7jf
                                                                25h
                                1/1
                                                  0
                                        Running
reverseproxy-7c8bbd75c4-ppxg7
                                                  3
                                                    (26h ago)
                                                                26h
                                1/1
                                        Running
everseproxy-7c8bbd75c4-x97t4
                                1/1
                                        Running
                                                  3
                                                    (26h ago)
                                                                26h
```

Kubernetes kubectl describe services output

```
hp@ET-27608 MINGW64 ~/Desktop/project3/Microservice/deplyment (main) $ kubectl describe services
Name:
                                 backend-feed
Namespace:
                                 default
Labels:
Annotations:
                                 service=backend-feed
                                <none>
service=backend-feed
Selector:
                                Service=backend
ClusterIP
SingleStack
IPv4
10.100.227.230
10.100.227.230
8080 8080/TCP
8080/TCP
Type:
IP Family Policy:
IP Families:
IP:
IPs:
Port:
TargetPort:
Endpoints:
Session Affinity:
                                 <none>
                                None
 Events:
                                 <none>
Name:
Namespace:
                                backend-user
                                 default
Labels:
Annotations:
                                 service=backend-user
                                service=backend-user
<none>
service=backend-user
ClusterIP
SingleStack
IPv4
10.100.99.118
10.100.99.118
8080 8080/TCP
8080/TCP
902 168 33 7-8080 107
Selector:
Type:
IP Family Policy:
IP Families:
IPs:
Port:
TargetPort:
Endpoints:
Session Affinity:
Events:
                                 192.168.33.7:8080,192.168.38.27:8080,192.168.4.193:8080
                                None
<none>
Name:
                                 frontend
Namespace:
Labels:
Annotations:
                                 default
                                 service=frontend
                                 <none>
Selector:
                                 service=frontend
                                service=frontend
ClusterIP
SingleStack
IPv4
10.100.151.69
10.100.151.69
8100 8100/TCP
80/TCP
192.168.1.37:80,192.168.11.243:80,192.168.35.152:80
Type:
IP Family Policy:
IP Families:
IPs:
Port:
TargetPort:
Endpoints:
Session Affinity:
                                 None
 Events:
                                 <none>
                                 kubernetes
Name:
Namespace:
                                 default
                                component=apiserver
provider=kubernetes
  abels:
```

```
Endpoints:
Session Affinity:
                         192.168.1.37:80,192.168.11.243:80,192.168.35.152:80
                         None
                         <none>
Events:
                         kubernetes
Name:
Namespace:
                         default
                         component=apiserver
provider=kubernetes
Labels:
Annotations:
                         <none>
Selector:
                         <none>
Type:
IP Family Policy:
IP Families:
                         ClusterIP
                         SingleStack
                         IPv4
10.100.0.1
10.100.0.1
https 443/TCP
IP:
IP:
Port:
                         443/TCP
192.168.102.115:443,192.168.128.166:443
TargetPort:
Endpoints:
Session Affinity:
                         None
<none>
Events:
Name:
                                  publicfrontend
Namespace:
                                  default
Labels:
Annotations:
                                  service=frontend
                                  <none>
app=frontend
LoadBalancer
Selector:
Type:
IP Family Policy:
IP Families:
                                  SingleStack
                                  TPV4

10.100.41.227

10.100.41.227

a7c725c6ba4514a1bb67987bb7fa47f9-599922655.us-east-2.elb.amazonaws.com
IP:
IPs:
LoadBalancer Ingress:
Port:
                                   <unset> 80/TCP
TargetPort:
                                  80/TCP
                                  NodePort:
Endpoints:
Session Affinity:
External Traffic Policy:
                                  None
                                  Cluster
 Events:
                                  <none>
                                  publicreverseproxy
default
Name:
Namespace:
Labels:
Annotations:
                                  service=reverseproxy
                                   <none>
 Selector:
                                  app=reverseproxy
                                  app=reverseproxy
LoadBalancer
SingleStack
IPv4
10.100.252.191
10.100.252.191
alcce38d4be444e66a186c06df52dffc-662956085.us-east-2.elb.amazonaws.com
IP Family Policy:
IP Families:
IP:
 LoadBalancer Ingress:
```

accessuabe=9494900a152017C=002930003.us=east=2.e1b.a
<unset> 8080/TCP
8080/TCP
<unset> 31839/TCP
192.168.25.89:8080,192.168.33.42:8080,192.168.55.204:8080

Port: TargetPort: NodePort: Endpoints:

```
publicreverseproxy
 lamespace:
                                  default
abels:
                                  service=reverseproxy
Annotations:
                                  <none>
                                  app=reverseproxy
LoadBalancer
SingleStack
Selector:
Type:
IP Family Policy:
IP Families:
                                  TPv4

10.100.252.191

10.100.252.191

alcce38d4be444e66a186c06df52dffc-662956085.us-east-2.elb.amazonaws.com
IP:
IPs:
LoadBalancer Ingress:
                                  <unset> 8080/TCP
ort:
TargetPort:
                                  8080/TCP
                                  cunset> 31839/TCP
192.168.25.89:8080,192.168.33.42:8080,192.168.55.204:8080
NodePort:
Endpoints:
Gession Affinity:
External Traffic Policy:
                                  Cluster
Events:
                                  <none>
Name:
                         reverseproxy
Namespace:
                         default
_abels:
                         service=reverseproxy
Annotations:
                        <none>
service=reverseproxy
ClusterIP
SingleStack
IPv4
Selector:
Type:
IP Family Policy:
IP Families:
                         10.100.229.158
10.100.229.158
8080 8080/TCP
8080/TCP
IPs:
Port:
TargetPort:
Endpoints:
                         192.168.25.89:8080,192.168.33.42:8080,192.168.55.204:8080
Session Affinity:
                        None
 p@ET-27608 MINGW64 ~/Desktop/project3/Microservice/deplyment (main)
```

Kubernetes kubectl describe hpa output

Kubectl get hpa

```
F-27608 MINGW64 ~/Desktop/project3/Microservice/deplyment (main)
$ kubectl get hpa
NAME
                                                                                   MAXPODS
                  REFERENCE
                                                   TARGETS
                                                                       MINPODS
                                                                                                REPLICAS
                                                                                                              AGE
                  Deployment/backend-feed
Deployment/backend-user
Deployment/frontend
                                                   <unknown>/70%
<unknown>/70%
<unknown>/70%
backend-feed
                                                                                                              39m
backend-user
                                                                                                              39m
frontend
                                                                                                              39m
                  Deployment/reverseproxy
                                                   <unknown>/70%
                                                                                                              38m
reverseproxy
 p@ET-27608 MINGW64 ~/Desktop/project3/Microservice/deplyment (main)
```

kubectl describe hpa

```
the HPA controller was able to get the target's current scale the HPA was unable to compute the replica count: failed to get cpu utilization: unable to get metrics for resource cpu: unable to fetch f resource (ept pods.metrics.kss.io)
                                                                                                                                  horizontal-pod-autoscaler New size: 3; reason: Current number of replicas below Spec.MinReplicas
horizontal-pod-autoscaler failed to get cpu utilization: unable to get metrics, so resource cpu; unable to fetch metrics from resource
herrics.kas.jo
horizontal-pod-autoscaler invalid metrics (1 invalid out of 1), first error is: failed to get cpu utilization: unable to get metrics forever could not find the requested resource (get pods.metrics.k8s.io)
                                                                                                                          <none>
Sat, 24 Sep 2022 12:02:32 -0700
Deployment/backend-user
                                                                                 horizontal-pod-autoscaler New size: 3; reason: Current number of replicas below Spec.MinReplicas

11s (x3 over 41s) horizontal-pod-autoscaler failed to get expect utilization: unable to get metrics for resource cpu: unable to fetch

escource (get pods.metrics.Res) hod-autoscaler invalid metrics (1 invalid out of 1), first error is: failed to get cpu utilization: un

estrics APL: the server could not find the requested resource (get pods.metrics.Res.io)
               True SucceededGetScale the HPA controller was able to get the target's current scale 
False FailedGetResourceMetric the HPA was unable to compute the replica count: failed to get cpu utilization: unable to get metrics for resource cpu: unable to fetch metrics from resource merver could not find the requested resource (cget pods.metrics.k8s.io)
                                                                                                                                   horizontal-pod-autoscaler New size: 3; reason: Current number of replicas below Spec.MinReplicas horizontal-pod-autoscaler failed to get cpu utilization: unable to get metrics for resource cpu: unable to fetch metrics from resource metrics API: etrics.k8s.io) horizontal-pod-autoscaler invalid metrics (1 invalid out of 1), first error is: failed to get cpu utilization: unable to get metrics for resource cpu: unable to fetch metrics from resource cpu: which is the requested resource (get pods.metrics.k8s.io)
                                                                                                                             From Message
horizontal-pod-autoscaler New size; 3; reason: Current number of replicas below Spec.MinReplicas
horizontal-pod-autoscaler New size; 3; reason: Current number of replicas below Spec.MinReplicas
horizontal-pod-autoscaler failed to get cpu utilization: unable to get metrics for resource cpu: unable to fetch metrics from resource metrics API:
smetrics.k8s.io)
s) horizontal-pod-autoscaler invalid metrics (1 invalid out of 1), first error is: failed to get cpu utilization: unable to get metrics for resource cp:
server could not find the requested resource (get pods.metrics.k8s.io)
                                                                                                                          connex
connex
sat, 24 sep 2022 12:03:07 -0700
Deployment/reverseproxy
( current / target )
cunknown> / 70%
                                                                                                                          3 current / 3 desired
The SucceededGetScale the HPA controller was able to get the target's current scale tive False FailedGetResourceMetric the HPA was unable to compute the replica count: failed to get cpu utilization: unable to get metrics for resource cpu: unable to fetch metrics from resource metres ever could not find the requested resource (get poss.metrics.k8s.io)
 SuccessfulRescale 23s horizontal-pod-autoscaler New size: 3; reason: Current number of replicas below Spec.MinReplicas
FailedGetResourceMetric 8s horizontal-pod-autoscaler failed to get cpu utilization: unable to get metrics for resource cpu: unable to fetch metrics from resource metr
the requested resource (get pods.metrics.k8s.io)
FailedComputeMetricsReplicas 8s horizontal-pod-autoscaler invalid metrics (1 invalid out of 1), first error is: failed to get cpu utilization: unable to get metrics for re
from resource metrics AFI: the server could not find the requested resource (get pods.metrics.k8s.io)
```

```
###ET-27608 MINGW64 -/Desktop/project3/Microservice/deplyment (main)
$ kubect1 get pods

### READY STATUS RESTARTS AGE

### Naming 0 24s

### Descend-red-76-0958588-grtg6

### Descend-red-76-095858-grtg6

### Descend-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-0958-grtg6-red-76-09
```

Processing Company of the Compan

hp@ET-27608 MINGW64 ~/Desktop/project3/Microservice/deplyment (main)