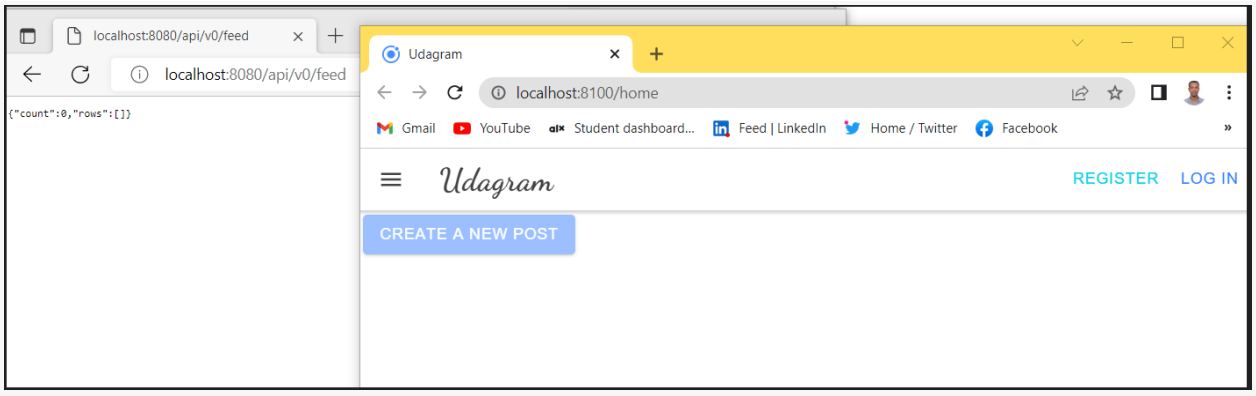
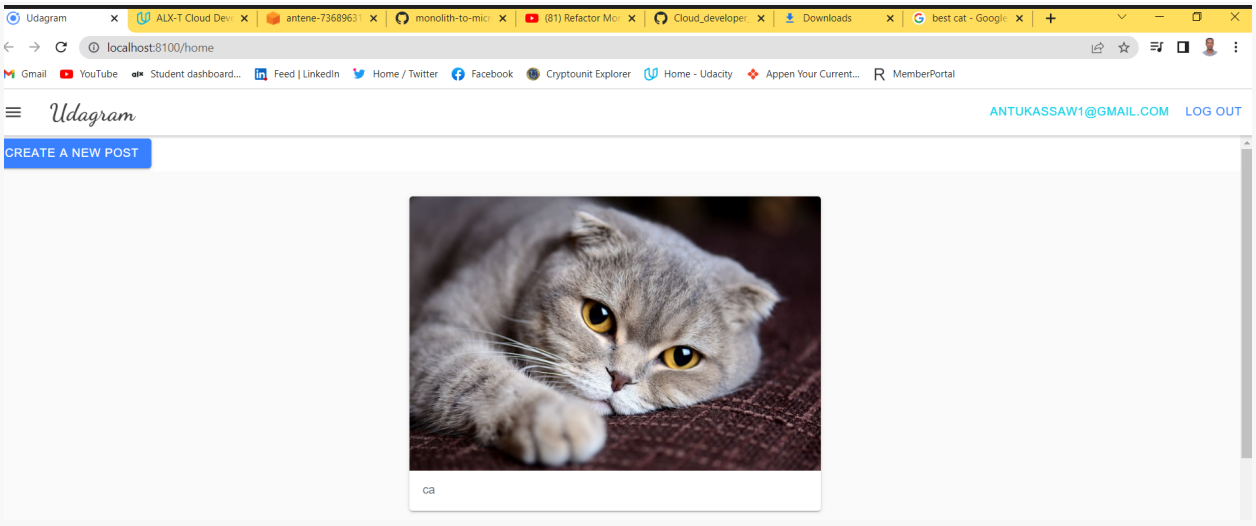
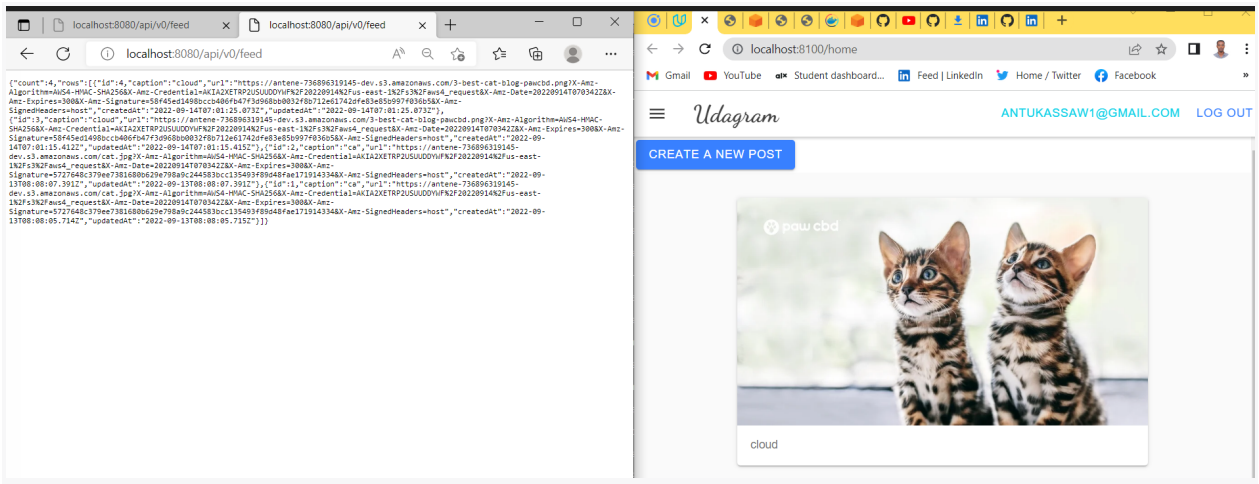
Images



Create post

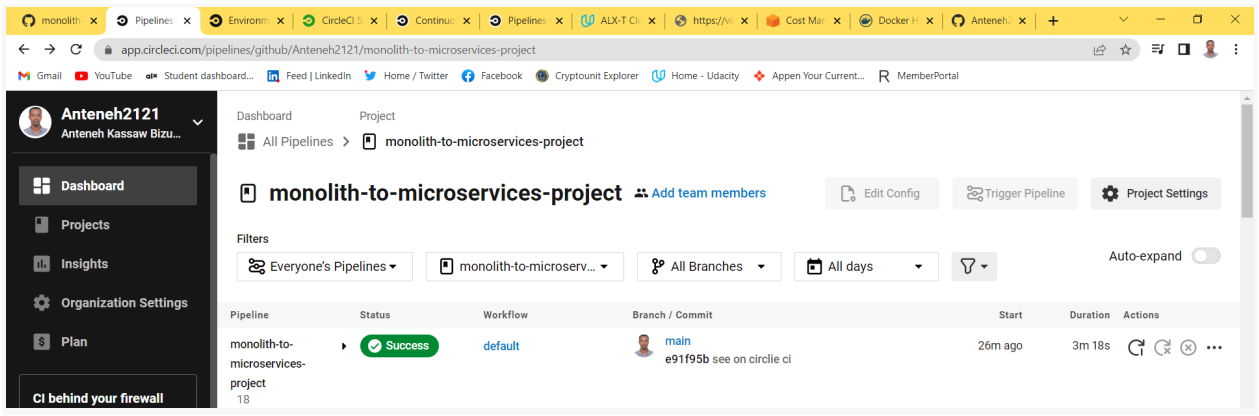


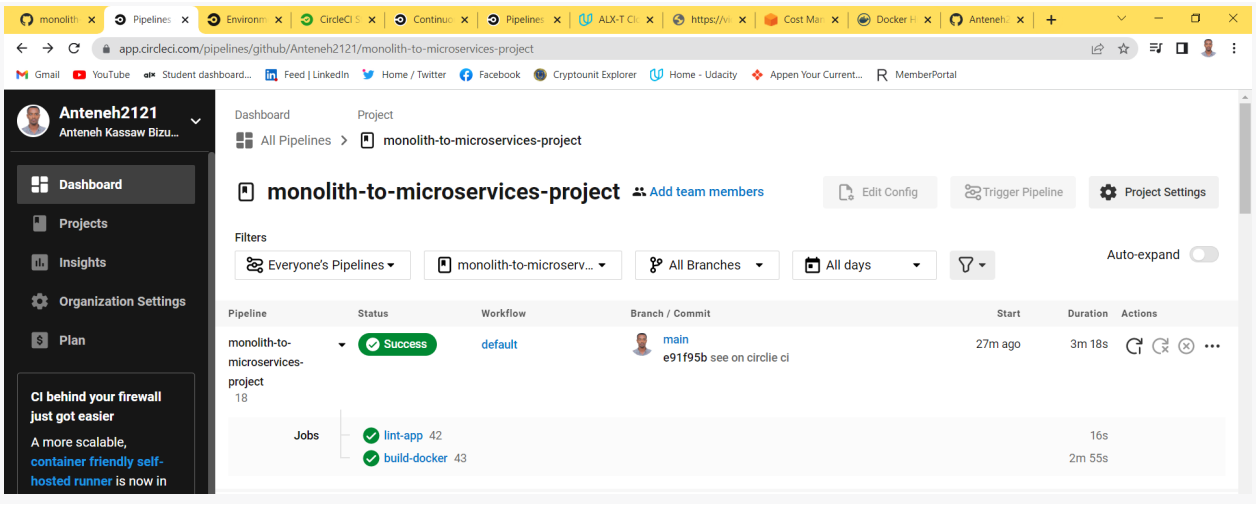
post images to S3

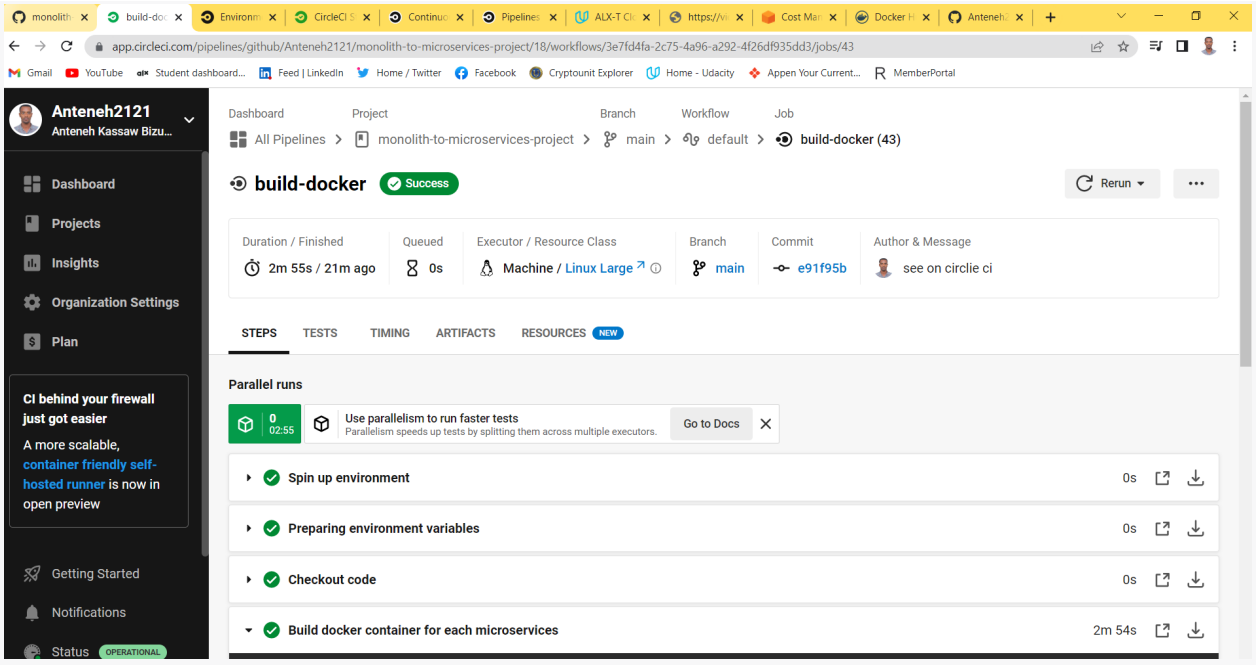


DockerHub showing images that you have pushed

Circle ci







`Docker images`

```
hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project (main)
$ docker images
REPOSITORY          TAG       IMAGE ID       CREATED          SIZE
udagram-frontend    local     688b73c51a8a   19 minutes ago   41MB
udagram-api-user    latest    652eb60d2436   16 hours ago     1.12GB
udagram-api-feed    latest    3bd1abcff054   16 hours ago     1.12GB
reverseproxy        latest    e6197299bc64   18 hours ago     23.5MB
```

```
hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project (main)
$ docker images
REPOSITORY            TAG       IMAGE ID       CREATED          SIZE
udagram-frontend      local     688b73c51a8a   19 minutes ago   41MB
udagram-api-user      latest    652eb60d2436   16 hours ago     1.12GB
udagram-api-feed      latest    3bd1abcff054   16 hours ago     1.12GB
reverseproxy          latest    e6197299bc64   18 hours ago     23.5MB
```

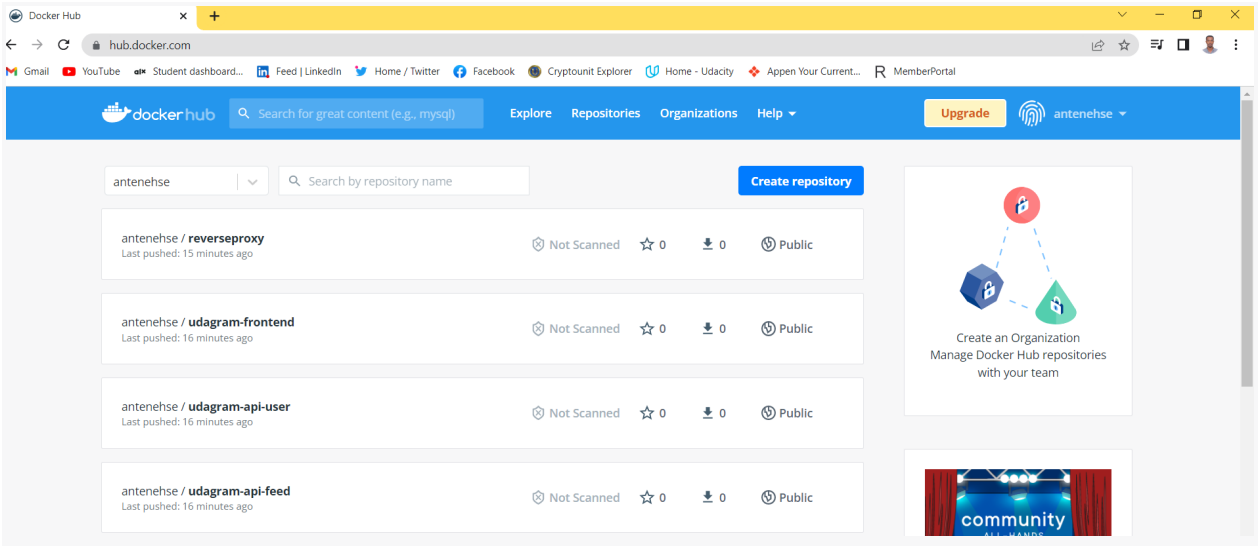
`kubectl get nodes`

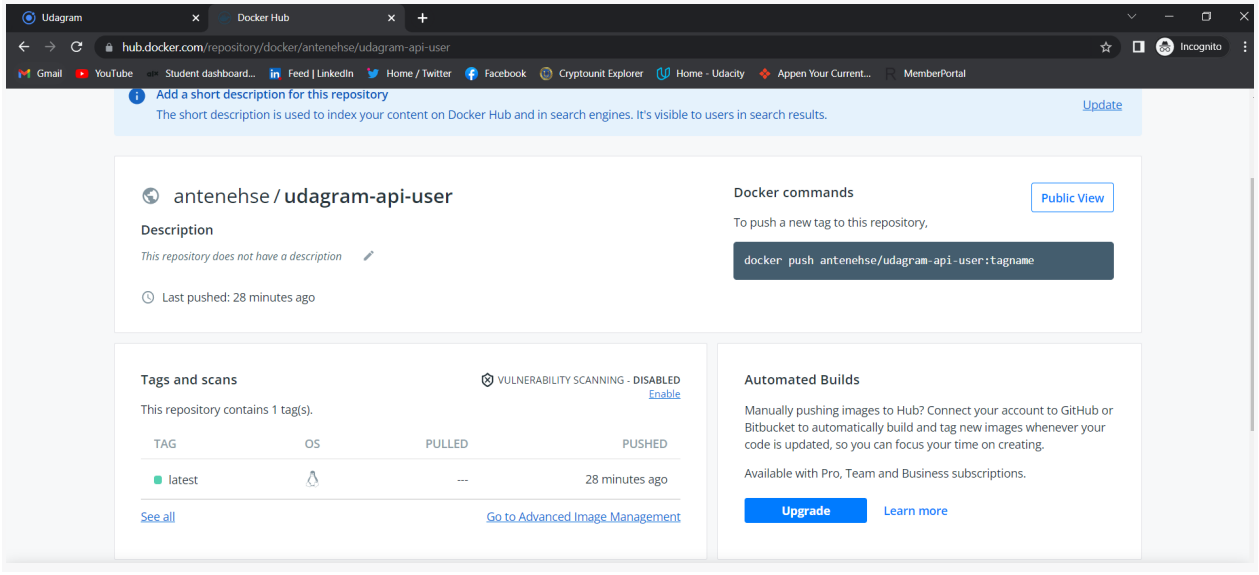
```
MINGW64:/c/Users/hp/Desktop/project3/monolith-to-microservices-project

hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project (main)
$ kubectl get nodes
NAME                                        STATUS   ROLES    AGE    VERSION
ip-192-168-2-27.us-east-2.compute.internal     Ready    <none>   155m   v1.22.12-eks-ba74326
ip-192-168-46-216.us-east-2.compute.internal   Ready    <none>   152m   v1.22.12-eks-ba74326

hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project (main)
$
```

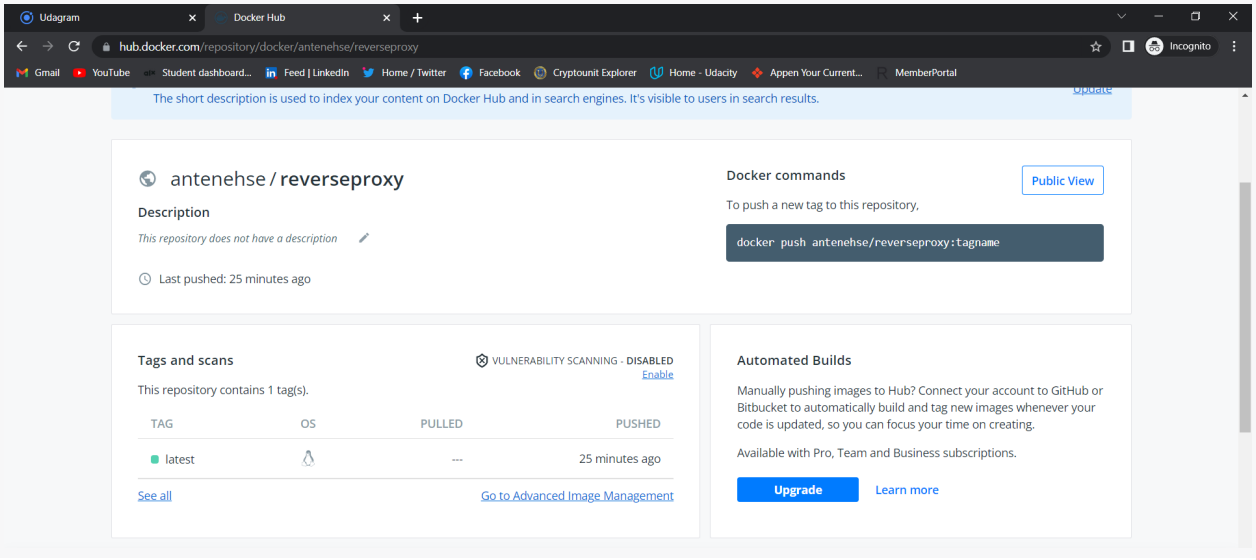
 # Apply env variables and secrets

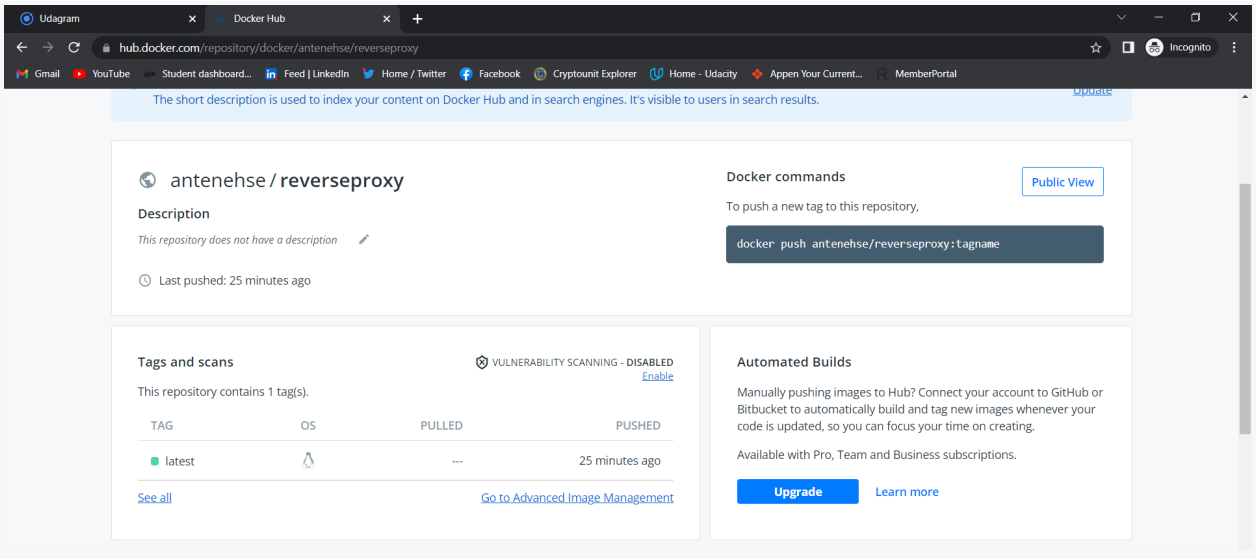
```
hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project (main)
$ cd deployment

hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$ kubectl apply -f aws-secret.yaml
secret/mysecret created

hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$ kubectl apply -f env-secret.yaml
secret/env-secret created

hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$ kubectl apply -f env-configmap.yaml
configmap/env-config created

hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$
```

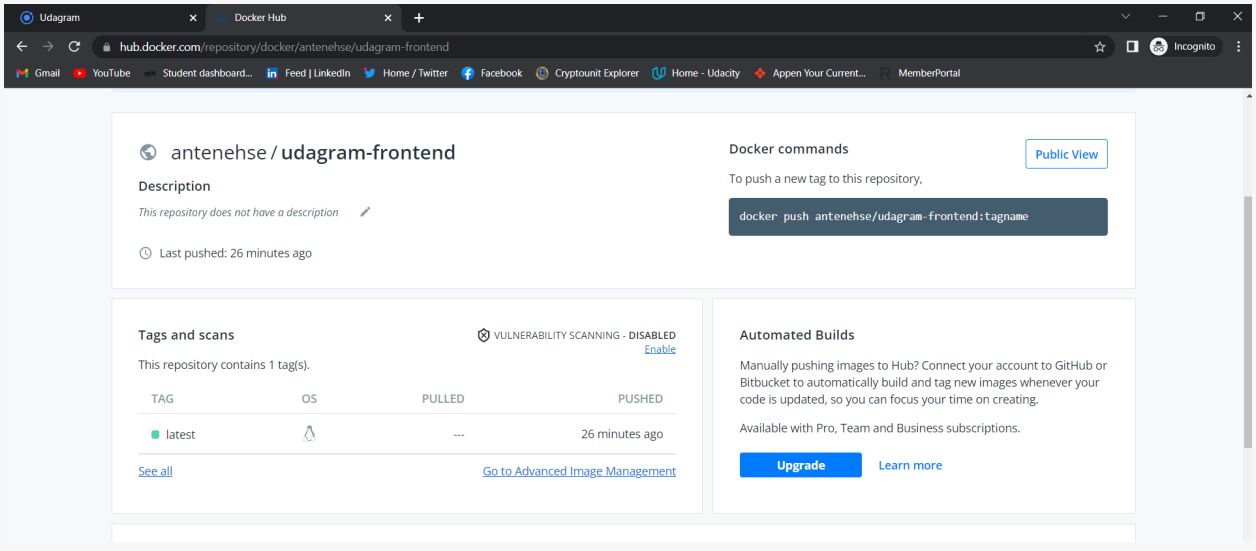
DockerHub repositary


Docker Hub
hub.docker.com
Gmail
YouTube
Student dashboard...
Feed | LinkedIn
Home / Twitter
Facebook
Cryptounit Explorer
Home - Udacity
Appen Your Current...
MemberPortal
docker hub
Search for great content (e.g., mysql)
Explore
Repositories
Organizations
Help
Upgrade
antenehse
antenehse
Search by repository name
Create repository
antenehse / reverseproxy
Last pushed: 15 minutes ago
Not Scanned
0
0
Public
antenehse / udagram-frontend
Last pushed: 16 minutes ago
Not Scanned
0
0
Public
antenehse / udagram-api-user
Last pushed: 16 minutes ago
Not Scanned
0
0
Public
antenehse / udagram-api-feed
Last pushed: 16 minutes ago
Not Scanned
0
0
Public
Create an Organization
Manage Docker Hub repositories
with your team
community

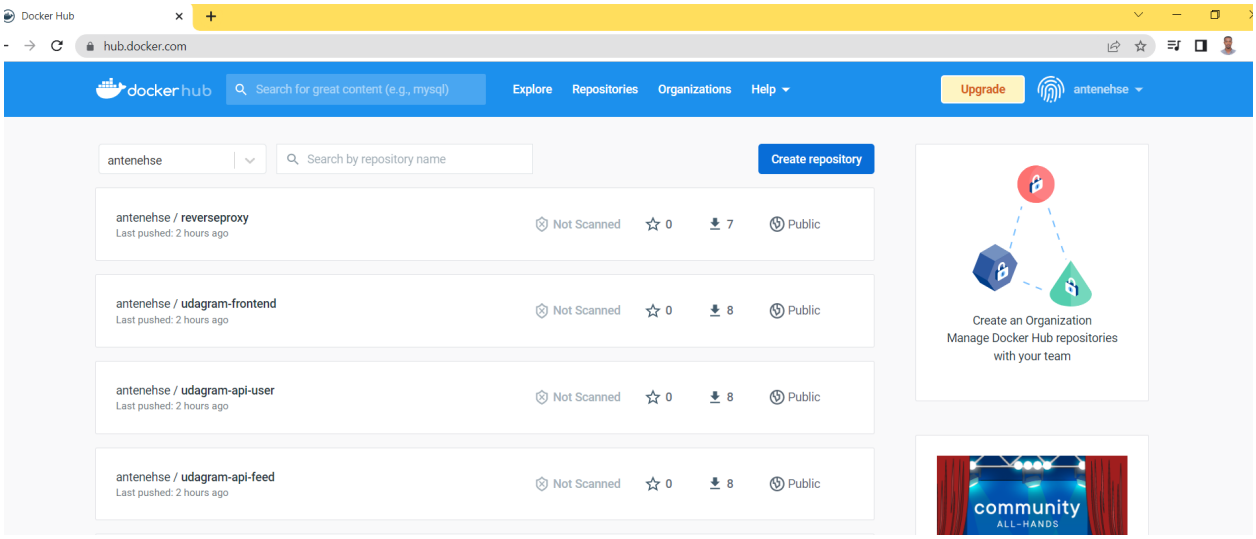

Udagram
Docker Hub
hub.docker.com/repository/docker/antenehse/udagram-api-user
Incognito
Gmail
YouTube
Student dashboard...
Feed | LinkedIn
Home / Twitter
Facebook
Cryptounit Explorer
Home - Udacity
Appen Your Current...
MemberPortal
Add a short description for this repository
The short description is used to index your content on Docker Hub and in search engines. It's visible to users in search results.
Update
antenehse / udagram-api-user
Description
This repository does not have a description
Last pushed: 28 minutes ago
Docker commands
Public View
To push a new tag to this repository,
docker push antenehse/udagram-api-user:tagname
Tags and scans
VULNERABILITY SCANNING - DISABLED
Enable
This repository contains 1 tag(s).
TAG
OS
PULLED
PUSHED
latest
---
28 minutes ago
See all
Go to Advanced Image Management
Automated Builds
Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.
Available with Pro, Team and Business subscriptions.
Upgrade
Learn more


Udagram
Docker Hub
hub.docker.com/repository/docker/antenehse/reverseproxy
Incognito
Gmail
YouTube
Student dashboard...
Feed | LinkedIn
Home / Twitter
Facebook
Cryptounit Explorer
Home - Udacity
Appen Your Current...
MemberPortal
The short description is used to index your content on Docker Hub and in search engines. It's visible to users in search results.
Update
antenehse / reverseproxy
Description
This repository does not have a description
Last pushed: 25 minutes ago
Docker commands
Public View
To push a new tag to this repository,
docker push antenehse/reverseproxy:tagname
Tags and scans
VULNERABILITY SCANNING - DISABLED
Enable
This repository contains 1 tag(s).
TAG
OS
PULLED
PUSHED
latest
---
25 minutes ago
See all
Go to Advanced Image Management
Automated Builds
Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.
Available with Pro, Team and Business subscriptions.
Upgrade
Learn more


Udagram
Docker Hub
hub.docker.com/repository/docker/antenehse/reverseproxy
Incognito
Gmail
YouTube
Student dashboard...
Feed | LinkedIn
Home / Twitter
Facebook
Cryptounit Explorer
Home - Udacity
Appen Your Current...
MemberPortal
The short description is used to index your content on Docker Hub and in search engines. It's visible to users in search results.
Update
antenehse / reverseproxy
Description
This repository does not have a description
Last pushed: 25 minutes ago
Docker commands
Public View
To push a new tag to this repository,
docker push antenehse/reverseproxy:tagname
Tags and scans
VULNERABILITY SCANNING - DISABLED
Enable
This repository contains 1 tag(s).
TAG
OS
PULLED
PUSHED
latest
---
25 minutes ago
See all
Go to Advanced Image Management
Automated Builds
Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.
Available with Pro, Team and Business subscriptions.
Upgrade
Learn more




```
# Deployments - Double check the Dockerhub image
```




```
# Kubernetes pods are deployed properly
```

`kubectl get pods`

```
hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$ kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
backend-feed-5489db5cff-2r8rs       1/1     Running   0          37s
backend-feed-5489db5cff-p4v78       1/1     Running   0          37s
backend-user-c5cfb57cb-rgsps        1/1     Running   0          26s
backend-user-c5cfb57cb-znqf4        1/1     Running   0          26s
frontend-69cdb8c4b5-r4pdr           1/1     Running   0          3h43m
frontend-69cdb8c4b5-wn8pn           1/1     Running   0          3h43m
reverseproxy-7877b8bcfc-b9rp7       1/1     Running   0          3h57m
reverseproxy-7877b8bcfc-qqhm7       1/1     Running   0          3h57m

hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$
```

`kubectl describe`

```
hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$ kubectl get deployments
NAME           READY   UP-TO-DATE   AVAILABLE   AGE
backend-feed   2/2     2            2           22s
backend-user   2/2     2            2           11s
frontend       2/2     2            2           3h42m
reverseproxy   2/2     2            2           3h57m

hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$ kubectl get services
NAME                 TYPE           CLUSTER-IP      EXTERNAL-IP                                                                PORT(S)        AGE
backend-feed         ClusterIP      10.100.84.131   <none>                                                                     8080/TCP       5h18m
backend-user         ClusterIP      10.100.96.130   <none>                                                                     8080/TCP       5h17m
frontend             ClusterIP      10.100.47.58    <none>                                                                     80/TCP         5h16m
kubernetes           ClusterIP      10.100.0.1      <none>                                                                     443/TCP        10h
publicfrontend       LoadBalancer   10.100.30.144   aeb3a2944348441ef987ea6db9a56279-806172751.us-east-2.elb.amazonaws.com     80:31891/TCP   145m
publicreverseproxy   LoadBalancer   10.100.54.6     a86ffb135af064d0481fb6c1619589a5-151079703.us-east-2.elb.amazonaws.com     80:31783/TCP   143m
reverseproxy         ClusterIP      10.100.96.160   <none>                                                                     8080/TCP       5h15m

hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$ kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
backend-feed-5489db5cff-2r8rs       1/1     Running   0          37s
backend-feed-5489db5cff-p4v78       1/1     Running   0          37s
backend-user-c5cfb57cb-rgsps        1/1     Running   0          26s
backend-user-c5cfb57cb-znqf4        1/1     Running   0          26s
frontend-69cdb8c4b5-r4pdr           1/1     Running   0          3h43m
frontend-69cdb8c4b5-wn8pn           1/1     Running   0          3h43m
reverseproxy-7877b8bcfc-b9rp7       1/1     Running   0          3h57m
reverseproxy-7877b8bcfc-qqhm7       1/1     Running   0          3h57m

hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$
```

```
hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$ kubectl get pods
NAME                                READY   STATUS    RESTARTS      AGE
backend-feed-794498579b-ghgn9       1/1     Running   0             14s
backend-feed-794498579b-ng4jf       1/1     Running   0             14s
backend-feed-794498579b-p4xhk       1/1     Running   0             7s
backend-user-667bc765f-4fqc4        1/1     Running   0             37s
backend-user-667bc765f-fpvbr        1/1     Running   1 (9s ago)    52s
backend-user-667bc765f-hrr7l        1/1     Running   1 (8s ago)    52s
frontend-679bcff998-k9j9j           1/1     Running   0             150m
frontend-679bcff998-m5ldn           1/1     Running   0             150m
reverseproxy-7877b8bcfc-9rvpl       1/1     Running   0             3h50m
reverseproxy-7877b8bcfc-pg7dl       1/1     Running   0             3h50m
```

```
kubectl describe services
```

```
hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$ kubectl describe services
Name:              backend-feed
Namespace:         default
Labels:            service=backend-feed
Annotations:       <none>
Selector:          service=backend-feed
Type:              ClusterIP
IP Family Policy:  SingleStack
IP Families:       IPv4
IP:                10.100.84.131
IPs:               10.100.84.131
Port:              8080  8080/TCP
TargetPort:        8080/TCP
Endpoints:         <none>
Session Affinity:  None
Events:            <none>


Name:              backend-user
Namespace:         default
Labels:            service=backend-user
Annotations:       <none>
Selector:          service=backend-user
Type:              ClusterIP
IP Family Policy:  SingleStack
IP Families:       IPv4
IP:                10.100.96.130
IPs:               10.100.96.130
Port:              8080  8080/TCP
TargetPort:        8080/TCP
Endpoints:         <none>
Session Affinity:  None
Events:            <none>


Name:              frontend
Namespace:         default
Labels:            run=frontend
Annotations:       <none>
Selector:          run=frontend
Type:              ClusterIP
IP Family Policy:  SingleStack
IP Families:       IPv4
IP:                10.100.47.58
IPs:               10.100.47.58
Port:              <unset>  80/TCP
TargetPort:        80/TCP
Endpoints:         192.168.12.234:80,192.168.90.214:80
Session Affinity:  None
Events:            <none>


Name:              kubernetes
Namespace:         default
```

```
Name:              kubernetes
Namespace:         default
Labels:            component=apiserver
                   provider=kubernetes
Annotations:       <none>
Selector:          <none>
Type:              ClusterIP
IP Family Policy:  SingleStack
IP Families:       IPv4
IP:                10.100.0.1
IPs:               10.100.0.1
Port:              https  443/TCP
TargetPort:        443/TCP
Endpoints:         192.168.191.191:443,192.168.99.29:443
Session Affinity:  None
Events:            <none>


Name:                     publicfrontend
Namespace:                default
Labels:                   <none>
Annotations:              <none>
Selector:                 run=frontend
Type:                     LoadBalancer
IP Family Policy:         SingleStack
IP Families:              IPv4
IP:                       10.100.30.144
IPs:                      10.100.30.144
LoadBalancer Ingress:     aeb3a2944348441ef987ea6db9a56279-806172751.us-east-2.elb.amazonaws.com
Port:                     <unset>  80/TCP
TargetPort:               80/TCP
NodePort:                 <unset>  31891/TCP
Endpoints:                192.168.12.234:80,192.168.90.214:80
Session Affinity:         None
External Traffic Policy:  Cluster
Events:                   <none>


Name:                     publicreverseproxy
Namespace:                default
Labels:                   <none>
Annotations:              <none>
Selector:                 run=reverseproxy
Type:                     LoadBalancer
IP Family Policy:         SingleStack
IP Families:              IPv4
IP:                       10.100.54.6
IPs:                      10.100.54.6
LoadBalancer Ingress:     a86ffb135af064d0481fb6c1619589a5-151079703.us-east-2.elb.amazonaws.com
Port:                     <unset>  80/TCP
TargetPort:               80/TCP
NodePort:                 <unset>  31783/TCP
Endpoints:                192.168.18.212:80,192.168.8.68:80
Session Affinity:         None
External Traffic Policy:  Cluster
Events:                   <none>
```

```
Name:              reverseproxy
Namespace:         default
Labels:            service=reverseproxy
Annotations:       <none>
Selector:          service=reverseproxy
Type:              ClusterIP
IP Family Policy:  SingleStack
IP Families:       IPv4
IP:                10.100.96.160
IPs:               10.100.96.160
Port:              8080  8080/TCP
TargetPort:        8080/TCP
Endpoints:         <none>
Session Affinity:  None
Events:            <none>

hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$
```

`kubectl describe hpa`

```
hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$ kubectl get hpa
NAME            REFERENCE                   TARGETS    MINPODS   MAXPODS   REPLICAS   AGE
backend-feed    Deployment/backend-feed     388%/70%   3         5         5          74m
backend-user    Deployment/backend-user     351%/70%   3         5         5          74m
```

`kubectl describe hpa`

```
hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$ kubectl describe hpa
Name:                                                  backend-feed
Namespace:                                             default
Labels:                                                <none>
Annotations:                                           <none>
CreationTimestamp:                                     Fri, 16 Sep 2022 14:23:44 -0700
Reference:                                             Deployment/backend-feed
Metrics:                                               ( current / target )
  resource cpu on pods  (as a percentage of request):  476% (953m) / 70%
Min replicas:                                          3
Max replicas:                                          5
Deployment pods:                                       5 current / 5 desired
Conditions:
  Type            Status  Reason                  Message
  ----            ------  ------                  -------
  AbleToScale     True    SucceededGetScale       the HPA controller was able to get the target's current scale
  ScalingActive   False   FailedGetResourceMetric  the HPA was unable to compute the replica count: failed to get cpu utilization: unable to get metrics for resource cpu: no metrics returned from resource metrics API
  ScalingLimited  True    TooManyReplicas         the desired replica count is more than the maximum replica count
Events:
  Type     Reason                   Age                     From                       Message
  ----     ------                   ----                    ----                       -------
  Warning  FailedGetResourceMetric  3m22s (x543 over 3h17m)  horizontal-pod-autoscaler  failed to get cpu utilization: unable to get metrics for resource cpu: no metrics returned from resource metrics API


Name:                                                  backend-user
Namespace:                                             default
Labels:                                                <none>
Annotations:                                           <none>
CreationTimestamp:                                     Fri, 16 Sep 2022 14:24:25 -0700
Reference:                                             Deployment/backend-user
Metrics:                                               ( current / target )
  resource cpu on pods  (as a percentage of request):  496% (993m) / 70%
Min replicas:                                          3
Max replicas:                                          5
Deployment pods:                                       5 current / 5 desired
Conditions:
  Type            Status  Reason                  Message
  ----            ------  ------                  -------
  AbleToScale     True    SucceededGetScale       the HPA controller was able to get the target's current scale
  ScalingActive   False   FailedGetResourceMetric  the HPA was unable to compute the replica count: failed to get cpu utilization: unable to get metrics for resource cpu: no metrics returned from resource metrics API
  ScalingLimited  True    TooManyReplicas         the desired replica count is more than the maximum replica count
Events:
  Type     Reason                   Age                     From                       Message
  ----     ------                   ----                    ----                       -------
  Warning  FailedGetResourceMetric  2m38s (x566 over 3h17m)  horizontal-pod-autoscaler  failed to get cpu utilization: unable to get metrics for resource cpu: no metrics returned from resource metrics API


Name:                                                  frontend
Namespace:                                             default
Labels:                                                <none>
Annotations:                                           <none>
CreationTimestamp:                                     Fri, 16 Sep 2022 17:41:15 -0700
Reference:                                             Deployment/frontend
```

```
Name:                                                  frontend
Namespace:                                             default
Labels:                                                <none>
Annotations:                                           <none>
CreationTimestamp:                                     Fri, 16 Sep 2022 17:41:15 -0700
Reference:                                             Deployment/frontend
Metrics:                                               ( current / target )
  resource cpu on pods  (as a percentage of request):  0% (1m) / 70%
Min replicas:                                          3
Max replicas:                                          5
Deployment pods:                                       3 current / 3 desired
Conditions:
  Type            Status  Reason              Message
  ----            ------  ------              -------
  AbleToScale     True    ScaleDownStabilized  recent recommendations were higher than current one, applying the highest recent recommendation
  ScalingActive   True    ValidMetricFound     the HPA was able to successfully calculate a replica count from cpu resource utilization (percentage of request)
  ScalingLimited  True    TooFewReplicas       the desired replica count is less than the minimum replica count
Events:
  Type    Reason             Age   From                       Message
  ----    ------             ----  ----                       -------
  Normal  SuccessfulRescale  56s   horizontal-pod-autoscaler  New size: 3; reason: Current number of replicas below Spec.MinReplicas


Name:                                                  reverseproxy
Namespace:                                             default
Labels:                                                <none>
Annotations:                                           <none>
CreationTimestamp:                                     Fri, 16 Sep 2022 17:41:45 -0700
Reference:                                             Deployment/reverseproxy
Metrics:                                               ( current / target )
  resource cpu on pods  (as a percentage of request):  0% (0) / 70%
Min replicas:                                          3
Max replicas:                                          5
Deployment pods:                                       3 current / 3 desired
Conditions:
  Type            Status  Reason              Message
  ----            ------  ------              -------
  AbleToScale     True    ScaleDownStabilized  recent recommendations were higher than current one, applying the highest recent recommendation
  ScalingActive   True    ValidMetricFound     the HPA was able to successfully calculate a replica count from cpu resource utilization (percentage of request)
  ScalingLimited  True    TooFewReplicas       the desired replica count is less than the minimum replica count
Events:
  Type    Reason             Age   From                       Message
  ----    ------             ----  ----                       -------
  Normal  SuccessfulRescale  27s   horizontal-pod-autoscaler  New size: 3; reason: Current number of replicas below Spec.MinReplicas

hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$
```

kubectl **get** hpa

```
hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$ kubectl get hpa
NAME           REFERENCE                  TARGETS    MINPODS   MAXPODS   REPLICAS   AGE
backend-feed   Deployment/backend-feed    421%/70%   3         5         5          3h33m
backend-user   Deployment/backend-user    414%/70%   3         5         5          3h32m
frontend       Deployment/frontend        0%/70%     3         5         3          16m
reverseproxy   Deployment/reverseproxy    0%/70%     3         5         3          15m

hp@ET-27608 MINGW64 ~/Desktop/project3/monolith-to-microservices-project/deployment (main)
$
```