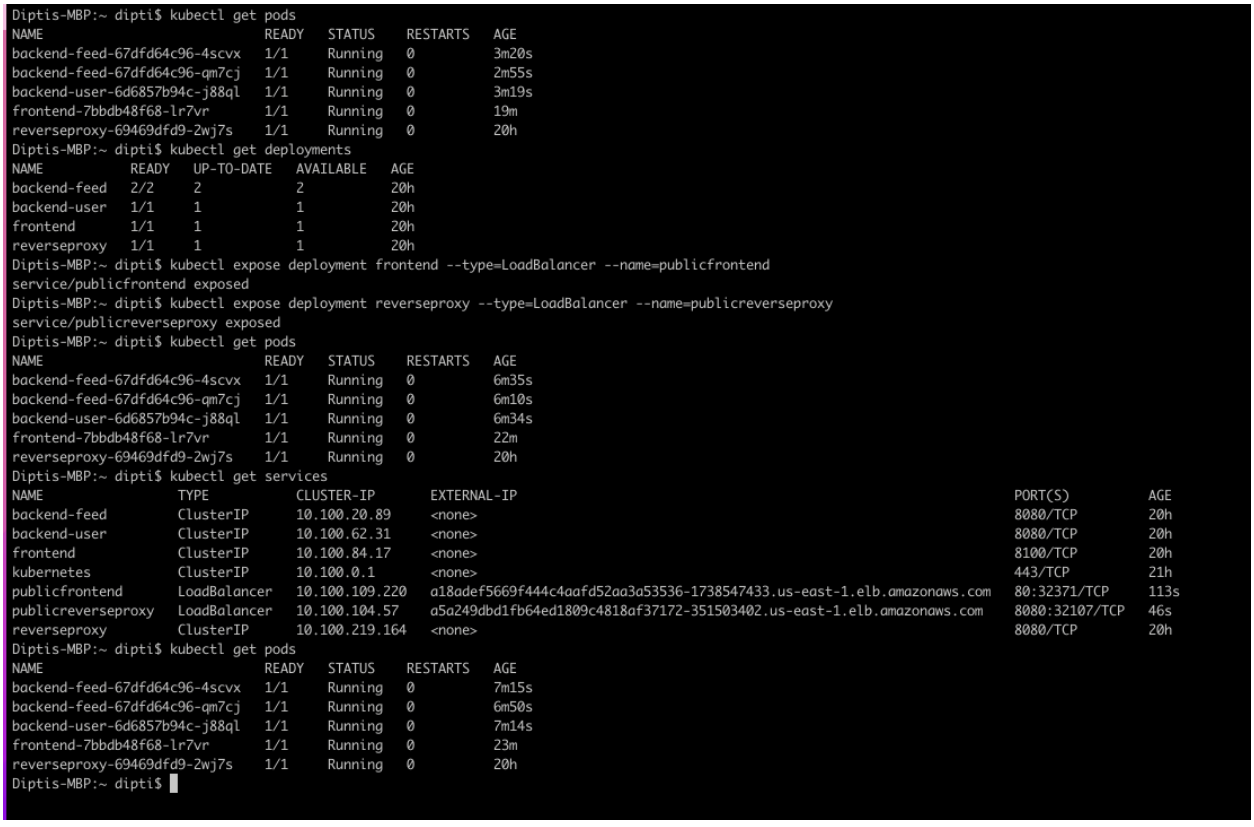
kubectl get pods

```
Diptis-MBP:~ dipti$ kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
backend-feed-67dfd64c96-4scvx       1/1     Running   0          3m20s
backend-feed-67dfd64c96-qm7cj       1/1     Running   0          2m55s
backend-user-6d6857b94c-j88ql       1/1     Running   0          3m19s
frontend-7bbdb48f68-lr7vr           1/1     Running   0          19m
reverseproxy-69469dfd9-2wj7s        1/1     Running   0          20h
Diptis-MBP:~ dipti$
```



```
Diptis-MBP:~ dipti$ kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
backend-feed-67dfd64c96-4scvx       1/1     Running   0          3m20s
backend-feed-67dfd64c96-qm7cj       1/1     Running   0          2m55s
backend-user-6d6857b94c-j88ql       1/1     Running   0          3m19s
frontend-7bbdb48f68-lr7vr           1/1     Running   0          19m
reverseproxy-69469dfd9-2wj7s        1/1     Running   0          20h
Diptis-MBP:~ dipti$ kubectl get deployments
NAME           READY   UP-TO-DATE   AVAILABLE   AGE
backend-feed   2/2     2            2           20h
backend-user   1/1     1            1           20h
frontend       1/1     1            1           20h
reverseproxy   1/1     1            1           20h
Diptis-MBP:~ dipti$ kubectl expose deployment frontend --type=LoadBalancer --name=publicfrontend
service/publicfrontend exposed
Diptis-MBP:~ dipti$ kubectl expose deployment reverseproxy --type=LoadBalancer --name=publicreverseproxy
service/publicreverseproxy exposed
Diptis-MBP:~ dipti$ kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
backend-feed-67dfd64c96-4scvx       1/1     Running   0          6m35s
backend-feed-67dfd64c96-qm7cj       1/1     Running   0          6m10s
backend-user-6d6857b94c-j88ql       1/1     Running   0          6m34s
frontend-7bbdb48f68-lr7vr           1/1     Running   0          22m
reverseproxy-69469dfd9-2wj7s        1/1     Running   0          20h
Diptis-MBP:~ dipti$ kubectl get services
NAME                TYPE           CLUSTER-IP       EXTERNAL-IP                                                              PORT(S)          AGE
backend-feed        ClusterIP      10.100.20.89     <none>                                                                   8080/TCP         20h
backend-user        ClusterIP      10.100.62.31     <none>                                                                   8080/TCP         20h
frontend            ClusterIP      10.100.84.17     <none>                                                                   8100/TCP         20h
kubernetes          ClusterIP      10.100.0.1       <none>                                                                   443/TCP          21h
publicfrontend      LoadBalancer   10.100.109.220   a18adef5669f444c4aafd52aa3a53536-1738547433.us-east-1.elb.amazonaws.com   80:32371/TCP     113s
publicreverseproxy  LoadBalancer   10.100.104.57    a5a249dbd1fb64ed1809c4818af37172-351503402.us-east-1.elb.amazonaws.com    8080:32107/TCP   46s
reverseproxy        ClusterIP      10.100.219.164   <none>                                                                   8080/TCP         20h
Diptis-MBP:~ dipti$ kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
backend-feed-67dfd64c96-4scvx       1/1     Running   0          7m15s
backend-feed-67dfd64c96-qm7cj       1/1     Running   0          6m50s
backend-user-6d6857b94c-j88ql       1/1     Running   0          7m14s
frontend-7bbdb48f68-lr7vr           1/1     Running   0          23m
reverseproxy-69469dfd9-2wj7s        1/1     Running   0          20h
Diptis-MBP:~ dipti$
```

kubectl describe services

```
Diptis-MBP:~ dipti$ kubectl describe services
Name:              backend-feed
Namespace:         default
Labels:            <none>
Annotations:       <none>
Selector:          app=backend-feed
Type:              ClusterIP
IP Family Policy:  SingleStack
IP Families:       IPv4
IP:                10.100.20.89
IPs:               10.100.20.89
Port:              <unset>  8080/TCP
TargetPort:        8080/TCP
Endpoints:         192.168.103.65:8080,192.168.127.143:8080
Session Affinity:  None
Events:            <none>


Name:              backend-user
Namespace:         default
Labels:            <none>
Annotations:       <none>
Selector:          app=backend-user
Type:              ClusterIP
IP Family Policy:  SingleStack
IP Families:       IPv4
IP:                10.100.62.31
IPs:               10.100.62.31
Port:              <unset>  8080/TCP
TargetPort:        8080/TCP
Endpoints:         192.168.127.201:8080
Session Affinity:  None
Events:            <none>


Name:              frontend
Namespace:         default
Labels:            <none>
Annotations:       <none>
Selector:          app=frontend
Type:              ClusterIP
IP Family Policy:  SingleStack
IP Families:       IPv4
IP:                10.100.84.17
IPs:               10.100.84.17
Port:              <unset>  8100/TCP
TargetPort:        80/TCP
Endpoints:         192.168.115.168:80
Session Affinity:  None
Events:            <none>
```

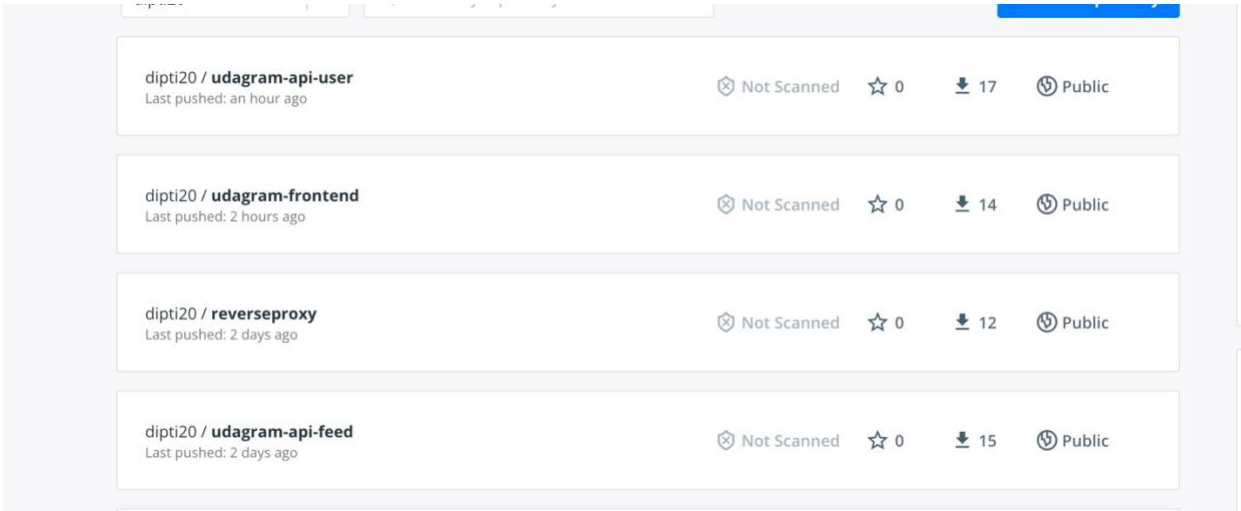
```
Name:              kubernetes
Namespace:         default
Labels:            component=apiserver
                   provider=kubernetes
Annotations:       <none>
Selector:          <none>
Type:              ClusterIP
IP Family Policy:  SingleStack
IP Families:       IPv4
IP:                10.100.0.1
IPs:               10.100.0.1
Port:              https  443/TCP
TargetPort:        443/TCP
Endpoints:         192.168.108.252:443,192.168.85.106:443
Session Affinity:  None
Events:            <none>


Name:                     publicfrontend
Namespace:                default
Labels:                   <none>
Annotations:              <none>
Selector:                 app=frontend
Type:                     LoadBalancer
IP Family Policy:         SingleStack
IP Families:              IPv4
IP:                       10.100.109.220
IPs:                      10.100.109.220
LoadBalancer Ingress:     a18adef5669f444c4aafd52aa3a53536-1738547433.us-east-1.elb.amazonaws.com
Port:                     <unset>  80/TCP
TargetPort:               80/TCP
NodePort:                 <unset>  32371/TCP
Endpoints:                192.168.115.168:80
Session Affinity:         None
External Traffic Policy:  Cluster
Events:
  Type     Reason                   Age                   From                Message
  ----     ------                   ----                  ----                -------
  Warning  UnAvailableLoadBalancer  4m46s                 service-controller  There are no available nodes for LoadBalancer
  Normal   UpdatedLoadBalancer      101s (x3 over 4m51s)  service-controller  Updated load balancer with new hosts
```

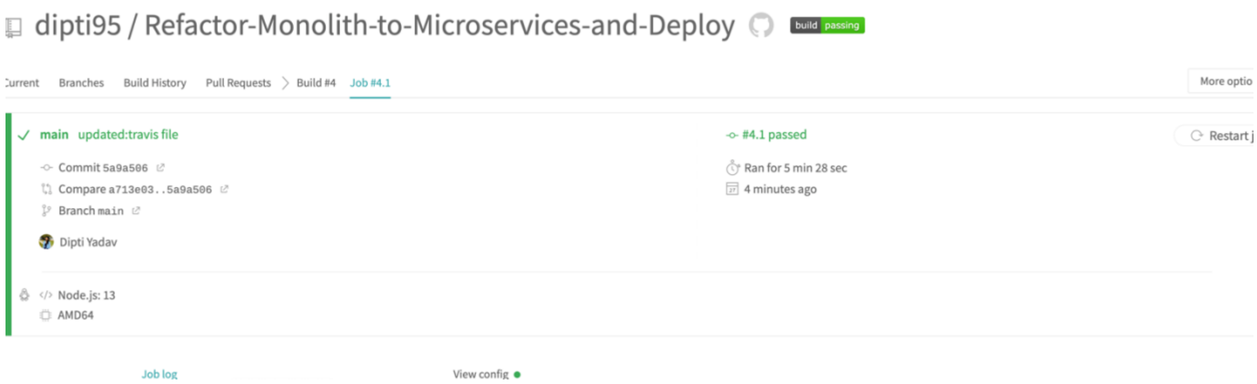
```
Name:                     publicreverseproxy
Namespace:                default
Labels:                   service=reverseproxy
Annotations:              <none>
Selector:                 app=reverseproxy
Type:                     LoadBalancer
IP Family Policy:         SingleStack
IP Families:              IPv4
IP:                       10.100.104.57
IPs:                      10.100.104.57
LoadBalancer Ingress:     a5a249dbd1fb64ed1809c4818af37172-351503402.us-east-1.elb.amazonaws.com
Port:                     <unset>  8080/TCP
TargetPort:               8080/TCP
NodePort:                 <unset>  32107/TCP
Endpoints:                192.168.6.249:8080
Session Affinity:         None
External Traffic Policy:  Cluster
Events:
  Type     Reason                  Age                  From                Message
  ----     ------                  ----                 ----                -------
  Warning  UnAvailableLoadBalancer  4m45s                service-controller  There are no available nodes for LoadBalancer
  Normal   UpdatedLoadBalancer      101s (x3 over 4m51s)  service-controller  Updated load balancer with new hosts


Name:              reverseproxy
Namespace:         default
Labels:            <none>
Annotations:       <none>
Selector:          app=reverseproxy
Type:              ClusterIP
IP Family Policy:  SingleStack
IP Families:       IPv4
IP:                10.100.219.164
IPs:               10.100.219.164
Port:              <unset>  8080/TCP
TargetPort:        8080/TCP
Endpoints:         192.168.6.249:8080
Session Affinity:  None
Events:            <none>
Diptis-MBP:~ dipti$
```

Docker hub



Travis build



Kubectl logs

```
Diptis-MBP:~ dipti$ kubectl logs -f   backend-feed-67dfd64c96-rb6nj

> udagram-api@2.0.0 prod /usr/src/app
> tsc && node ./www/server.js

Initialize database connection...
Executing (default): CREATE TABLE IF NOT EXISTS "FeedItem" ("id"   SERIAL , "caption" VARCHAR(255), "url" VARCHAR(255), "createdAt" TIMESTAMP WITH TIME ZONE, "updatedAt" TIMESTAMP WITH TIME ZONE, PRIMARY KEY ("id
"));
Executing (default): SELECT i.relname AS name, ix.indisprimary AS primary, ix.indisunique AS unique, ix.indkey AS indkey, array_agg(a.attnum) as column_indexes, array_agg(a.attname) AS column_names, pg_get_indexd
ef(ix.indexrelid) AS definition FROM pg_class t, pg_class i, pg_index ix, pg_attribute a WHERE t.oid = ix.indrelid AND i.oid = ix.indexrelid AND a.attrelid = t.oid AND t.relkind = 'r' and t.relname = 'FeedItem' G
ROUP BY i.relname, ix.indexrelid, ix.indisprimary, ix.indisunique, ix.indkey ORDER BY i.relname;
server running http://localhost:8100
press CTRL+C to stop server
Executing (default): SELECT count(*) AS "count" FROM "FeedItem" AS "FeedItem";
Executing (default): SELECT "id", "caption", "url", "createdAt", "updatedAt" FROM "FeedItem" AS "FeedItem" ORDER BY "FeedItem"."id" DESC;
Executing (default): SELECT count(*) AS "count" FROM "FeedItem" AS "FeedItem";
Executing (default): SELECT "id", "caption", "url", "createdAt", "updatedAt" FROM "FeedItem" AS "FeedItem" ORDER BY "FeedItem"."id" DESC;
Executing (default): SELECT count(*) AS "count" FROM "FeedItem" AS "FeedItem";
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Executing (default): SELECT "id", "caption", "url", "createdAt", "updatedAt" FROM "FeedItem" AS "FeedItem" ORDER BY "FeedItem"."id" DESC;
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Executing (default): SELECT "id", "caption", "url", "createdAt", "updatedAt" FROM "FeedItem" AS "FeedItem" ORDER BY "FeedItem"."id" DESC;
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Executing (default): SELECT "id", "caption", "url", "createdAt", "updatedAt" FROM "FeedItem" AS "FeedItem" ORDER BY "FeedItem"."id" DESC;
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Executing (default): SELECT count(*) AS "count" FROM "FeedItem" AS "FeedItem";
Executing (default): SELECT "id", "caption", "url", "createdAt", "updatedAt" FROM "FeedItem" AS "FeedItem" ORDER BY "FeedItem"."id" DESC;
```

Kubectl describe hpa

```
Diptis-MBP:~ dipti$ kubectl get hpa
NAME          REFERENCE                 TARGETS   MINPODS   MAXPODS   REPLICAS   AGE
backend-feed   Deployment/backend-feed   0%/49%    1         3         1          8m43s
backend-user   Deployment/backend-user   0%/10%    1         3         1          7m3s
Diptis-MBP:~ dipti$ kubectl describe hpa
Name:                                                  backend-feed
Namespace:                                             default
Labels:                                                <none>
Annotations:                                           <none>
CreationTimestamp:                                     Fri, 05 Aug 2022 17:22:44 -0400
Reference:                                             Deployment/backend-feed
Metrics:                                               ( current / target )
  resource cpu on pods  (as a percentage of request):  0% (0) / 49%
Min replicas:                                          1
Max replicas:                                          3
Deployment pods:                                       1 current / 1 desired
Conditions:
  Type            Status  Reason            Message
  ----            ------  ------            -------
  AbleToScale     True    ReadyForNewScale  recommended size matches current size
  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  3m51s  horizontal-pod-autoscaler  New size: 1; reason: All metrics below target


Name:                                                  backend-user
Namespace:                                             default
Labels:                                                <none>
Annotations:                                           <none>
CreationTimestamp:                                     Fri, 05 Aug 2022 17:24:24 -0400
Reference:                                             Deployment/backend-user
Metrics:                                               ( current / target )
  resource cpu on pods  (as a percentage of request):  0% (0) / 10%
Min replicas:                                          1
Max replicas:                                          3
Deployment pods:                                       1 current / 1 desired
Conditions:
  Type            Status  Reason            Message
  ----            ------  ------            -------
  AbleToScale     True    ReadyForNewScale  recommended size matches current size
  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:           <none>
Diptis-MBP:~ dipti$
```