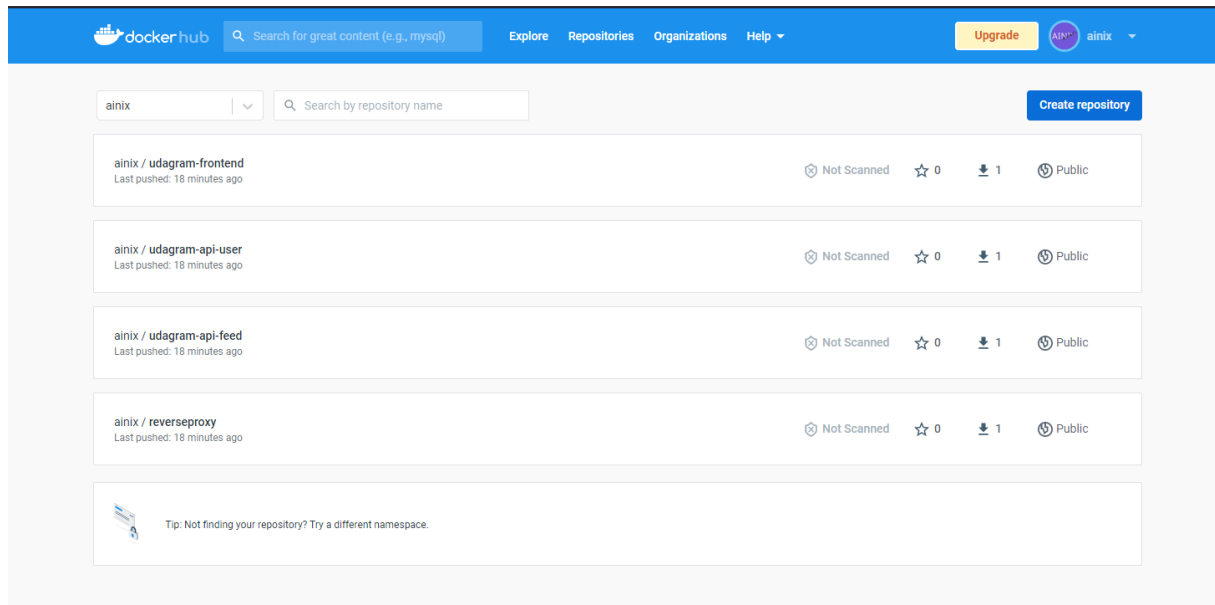
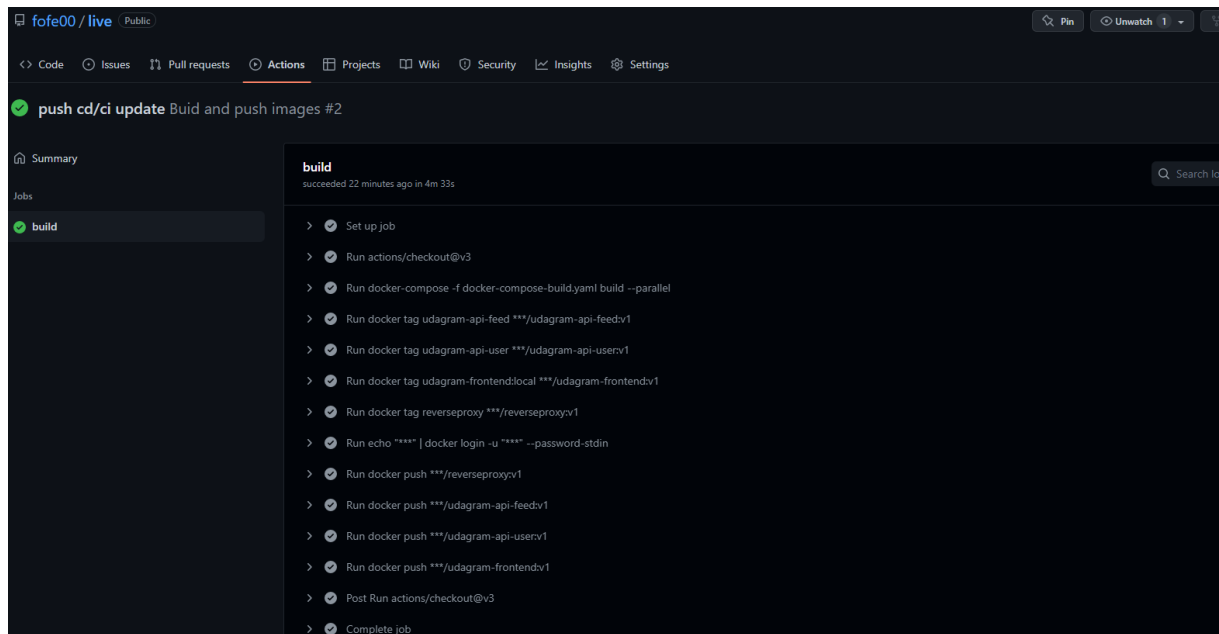


Projet #3

1. Capture de images dan dockerhub



2. Travail de construction github cd/ci



3. Kubectl get pods

```
C:\data\cloud-developer-master\live>kubectl get pods
NAME                                READY   STATUS    RESTARTS   AGE
feed-76664c9cd6-549hs              1/1     Running   0           23m
feed-76664c9cd6-ffst5              1/1     Running   0           23m
frontend-9d945786f-cgf5m           1/1     Running   0           18m
frontend-9d945786f-gsjvr           1/1     Running   0           18m
reverseproxy-5446fb6c54-hjtb7      1/1     Running   0           24m
reverseproxy-5446fb6c54-k6lkh      1/1     Running   0           24m
user-8485dd899b-6bp25              1/1     Running   0           23m
user-8485dd899b-s589n              1/1     Running   0           23m

C:\data\cloud-developer-master\live>
```

4. Kubectl describe services

```
C:\data\cloud-developer-master\live>kubectl describe services

Name: backend-feed
Namespace: default
Labels: <none>
Annotations: <none>
Selector: app=feed
Type: ClusterIP
IP Family Policy: SingleStack
IP Families: IPv4
IP: 10.100.78.158
IPs: 10.100.78.158
Port: <unset> 8080/TCP
TargetPort: 8080/TCP
Endpoints: 192.168.14.56:8080,192.168.17.236:8080,192.168.45.159:8080
Session Affinity: None
Events: <none>

Name: backend-user
Namespace: default
Labels: <none>
Annotations: <none>
Selector: app=user
Type: ClusterIP
IP Family Policy: SingleStack
IP Families: IPv4
IP: 10.100.47.36
IPs: 10.100.47.36
Port: <unset> 8080/TCP
TargetPort: 8080/TCP
Endpoints: 192.168.18.28:8080,192.168.44.47:8080,192.168.7.253:8080
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: 10.100.121.161
IPs: 10.100.121.161
Port: <unset> 8100/TCP
TargetPort: 80/TCP
Endpoints: 192.168.4.150:80,192.168.42.243:80
Session Affinity: 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: 192.168.113.202:443,192.168.84.114:443
Session Affinity: None
Events: <none>

Name: publicfrontend
Namespace: default
Labels: app=frontend
Annotations: <none>
Selector: app=frontend
Type: LoadBalancer
IP Family Policy: SingleStack
IP Families: IPv4
IP: 10.100.255.221
Namespace: default
Labels: app=reverseproxy
Annotations: <none>
Selector: app=reverseproxy
Type: LoadBalancer
IP Family Policy: SingleStack
IP Families: IPv4
IP: 10.100.113.6
IPs: 10.100.113.6
LoadBalancer Ingress: ae8c7edaf4e2a42f59b29333df88453a-590189512.us-east-1.elb.amazonaws.com
Port: <unset> 8080/TCP
TargetPort: 8080/TCP
NodePort: <unset> 31421/TCP
Endpoints: 192.168.26.165:8080,192.168.52.57:8080
Session Affinity: None
External Traffic Policy: Cluster
Events: <none>

Name: reverseproxy
Namespace: default
Labels: <none>
Annotations: <none>
Selector: app=reverseproxy
Type: ClusterIP
IP Family Policy: SingleStack
IP Families: IPv4
IP: 10.100.89.50
IPs: 10.100.89.50
Port: <unset> 8080/TCP
TargetPort: 8080/TCP
Endpoints: 192.168.26.165:8080,192.168.52.57:8080

```

5. Kubectl describe hpa

```
C:\data\cloud-developer-master\live>kubectl describe hpa
Name: user
Namespace: default
Labels: <none>
Annotations: <none>
CreationTimestamp: Wed, 28 Sep 2022 08:25:56 +0100
Reference: Deployment/user
Metrics: ( current / target )
  resource cpu on pods (as a percentage of request): <unknown> / 70%
Min replicas: 2
Max replicas: 4
Deployment pods: 0 current / 0 desired
Events: <none>
```

6. Kubectl logs

- feed

```
C:\data\cloud-developer-master\live>kubectl logs feed-76664c9cd6-549hs
> 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" TIMESTAMPTZ, "updatedAt" TIMESTAMPTZ, 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.attname) AS column_indexes, array_agg(a.attname) AS column_names, pg_get_indexdef(ix.indexrelid) AS definition FROM pg_class t, pg_class i, pg_index ix, pg_attribute a WHERE t.oid = ix.indexrelid AND i.oid = ix.indexrelid AND a.attrelid = t.oid AND t.relkind = 'r' and t.relname = 'FeedItem' GROUP 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";
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;
C:\data\cloud-developer-master\live[]
```

- User

```
C:\data\cloud-developer-master\live>kubectl logs user-8485dd899b-442k4
> udagram-api@2.0.0 prod /usr/src/app
> tsc && node ./www/server.js

Initialize database connection...
Executing (default): CREATE TABLE IF NOT EXISTS "User" ("email" VARCHAR(255) , "passwordHash" VARCHAR(255), "createdAt" TIMESTAMPTZ, "updatedAt" TIMESTAMPTZ, PRIMARY KEY ("email"));
Executing (default): SELECT i.relname AS name, ix.indisprimary AS primary, ix.indisunique AS unique, ix.indkey AS indkey, array_agg(a.attname) AS column_indexes, array_agg(a.attname) AS column_names, pg_get_indexdef(ix.indexrelid) AS definition FROM pg_class t, pg_class i, pg_index ix, pg_attribute a WHERE t.oid = ix.indexrelid AND i.oid = ix.indexrelid AND a.attrelid = t.oid AND t.relkind = 'r' and t.relname = 'User' GROUP 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
C:\data\cloud-developer-master\live[]
```

- Frontend

```
C:\data\cloud-developer-master\live\kubectl logs frontend-9d945786f-cgf5m
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
/docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
/docker-entrypoint.sh: Configuration complete; ready for start up
2022/09/28 06:31:18 [notice] #1: using the "epoll" event method
2022/09/28 06:31:18 [notice] #1: nginx/1.23.1
2022/09/28 06:31:18 [notice] #1: built by gcc 11.2.1 20220219 (Alpine 11.2.1_git20220219)
2022/09/28 06:31:18 [notice] #1: OS: Linux 5.4.209-116.367.amzn2.x86_64
2022/09/28 06:31:18 [notice] #1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
2022/09/28 06:31:18 [notice] #1: start worker processes
2022/09/28 06:31:18 [notice] #1: start worker process 32
2022/09/28 06:31:18 [notice] #1: start worker process 33
192.168.11.231 - - [28/Sep/2022:06:39:36 +0000] "GET /styles.js HTTP/1.1" 200 102551 "http://a9b863d73cb17426fba0f48cc7707e5c-283669451.us-east-1.elb.amazonaws.com/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/104.0.5112.126 Safari/537.36" "-"
192.168.11.231 - - [28/Sep/2022:06:39:36 +0000] "GET /main.js HTTP/1.1" 200 84346 "http://a9b863d73cb17426fba0f48cc7707e5c-283669451.us-east-1.elb.amazonaws.com/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/104.0.5112.126 Safari/537.36" "-"
192.168.11.231 - - [28/Sep/2022:06:40:02 +0000] "GET /8.js HTTP/1.1" 200 70736 "http://a9b863d73cb17426fba0f48cc7707e5c-283669451.us-east-1.elb.amazonaws.com/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/104.0.5112.126 Safari/537.36" "-"
192.168.11.231 - - [28/Sep/2022:06:40:02 +0000] "GET /68.js HTTP/1.1" 200 7928 "http://a9b863d73cb17426fba0f48cc7707e5c-283669451.us-east-1.elb.amazonaws.com/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/104.0.5112.126 Safari/537.36" "-"
192.168.11.231 - - [28/Sep/2022:06:40:04 +0000] "GET /swipe-back-35ad8e37.js.js HTTP/1.1" 200 2739 "http://a9b863d73cb17426fba0f48cc7707e5c-283669451.us-east-1.elb.amazonaws.com/" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/104.0.5112.126 Safari/537.36" "-"
192.168.11.231 - - [28/Sep/2022:06:40:04 +0000] "GET /svg/md-menu.svg HTTP/1.1" 200 166 "http://a9b863d73cb17426fba0f48cc7707e5c-283669451.us-east-1.elb.amazonaws.com/home" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/104.0.5112.126 Safari/537.36" "-"
192.168.11.231 - - [28/Sep/2022:06:40:04 +0000] "GET /56.js HTTP/1.1" 200 8070 "http://a9b863d73cb17426fba0f48cc7707e5c-283669451.us-east-1.elb.amazonaws.com/home" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/104.0.5112.126 Safari/537.36" "-"
192.168.11.231 - - [28/Sep/2022:06:40:05 +0000] "GET /tap-click-ca08ce7f.js.js HTTP/1.1" 200 6469 "http://a9b863d73cb17426fba0f48cc7707e5c-283669451.us-east-1.elb.amazonaws.com/home" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/104.0.5112.126 Safari/537.36" "-"
192.168.11.231 - - [28/Sep/2022:06:40:05 +0000] "GET /8.js HTTP/1.1" 200 13091 "http://a9b863d73cb17426fba0f48cc7707e5c-283669451.us-east-1.elb.amazonaws.com/home" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/104.0.5112.126 Safari/537.36" "-"
192.168.11.231 - - [28/Sep/2022:06:40:05 +0000] "GET /28.js HTTP/1.1" 200 4194 "http://a9b863d73cb17426fba0f48cc7707e5c-283669451.us-east-1.elb.amazonaws.com/home" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/104.0.5112.126 Safari/537.36" "-"
192.168.11.231 - - [28/Sep/2022:06:40:10 +0000] "GET /assets/icon/favicon.png HTTP/1.1" 200 930 "-" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/104.0.5112.126 Safari/537.36" "-"
192.168.11.231 - - [28/Sep/2022:06:40:45 +0000] "GET /42.js HTTP/1.1" 200 17197 "http://a9b863d73cb17426fba0f48cc7707e5c-283669451.us-east-1.elb.amazonaws.com/home" "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/104.0.5112.126 Safari/537.36" "-"
```

- Reverseproxy

```
C:\data\cloud-developer-master\live\kubectl logs reverseproxy-5446fb6c54-hjtbt7
/docker-entrypoint.sh: /docker-entrypoint.d/ is not empty, will attempt to perform configuration
/docker-entrypoint.sh: Looking for shell scripts in /docker-entrypoint.d/
/docker-entrypoint.sh: Launching /docker-entrypoint.d/10-listen-on-ipv6-by-default.sh
10-listen-on-ipv6-by-default.sh: info: Getting the checksum of /etc/nginx/conf.d/default.conf
10-listen-on-ipv6-by-default.sh: info: Enabled listen on IPv6 in /etc/nginx/conf.d/default.conf
/docker-entrypoint.sh: Launching /docker-entrypoint.d/20-envsubst-on-templates.sh
/docker-entrypoint.sh: Launching /docker-entrypoint.d/30-tune-worker-processes.sh
/docker-entrypoint.sh: Configuration complete; ready for start up
2022/09/28 06:25:03 [notice] #1: using the "epoll" event method
2022/09/28 06:25:03 [notice] #1: nginx/1.23.1
2022/09/28 06:25:03 [notice] #1: built by gcc 11.2.1 20220219 (Alpine 11.2.1_git20220219)
2022/09/28 06:25:03 [notice] #1: OS: Linux 5.4.209-116.367.amzn2.x86_64
2022/09/28 06:25:03 [notice] #1: getrlimit(RLIMIT_NOFILE): 1048576:1048576
2022/09/28 06:25:03 [notice] #1: start worker processes
2022/09/28 06:25:03 [notice] #1: start worker process 32
2022/09/28 06:25:13 [info] 32#32: *2 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
2022/09/28 06:25:18 [info] 32#32: *3 client closed connection while waiting for request, client: 192.168.49.41, server: 0.0.0.0:8080
2022/09/28 06:25:38 [info] 32#32: *1 client closed connection while waiting for request, client: 192.168.49.41, server: 0.0.0.0:8080
2022/09/28 06:25:43 [info] 32#32: *4 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
2022/09/28 06:26:08 [info] 32#32: *5 client closed connection while waiting for request, client: 192.168.49.41, server: 0.0.0.0:8080
2022/09/28 06:26:18 [info] 32#32: *6 client closed connection while waiting for request, client: 192.168.49.41, server: 0.0.0.0:8080
2022/09/28 06:26:28 [info] 32#32: *7 client closed connection while waiting for request, client: 192.168.49.41, server: 0.0.0.0:8080
2022/09/28 06:26:33 [info] 32#32: *8 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
2022/09/28 06:26:38 [info] 32#32: *9 client closed connection while waiting for request, client: 192.168.49.41, server: 0.0.0.0:8080
2022/09/28 06:26:43 [info] 32#32: *10 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
2022/09/28 06:26:53 [info] 32#32: *11 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
2022/09/28 06:26:58 [info] 32#32: *12 client closed connection while waiting for request, client: 192.168.49.41, server: 0.0.0.0:8080
2022/09/28 06:27:03 [info] 32#32: *13 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
2022/09/28 06:27:13 [info] 32#32: *14 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
2022/09/28 06:27:18 [info] 32#32: *15 client closed connection while waiting for request, client: 192.168.49.41, server: 0.0.0.0:8080
2022/09/28 06:27:23 [info] 32#32: *16 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
2022/09/28 06:27:38 [info] 32#32: *17 client closed connection while waiting for request, client: 192.168.49.41, server: 0.0.0.0:8080
2022/09/28 06:27:53 [info] 32#32: *18 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
2022/09/28 06:28:13 [info] 32#32: *19 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
2022/09/28 06:28:28 [info] 32#32: *20 client closed connection while waiting for request, client: 192.168.49.41, server: 0.0.0.0:8080
2022/09/28 06:29:08 [info] 32#32: *21 client closed connection while waiting for request, client: 192.168.49.41, server: 0.0.0.0:8080
2022/09/28 06:29:13 [info] 32#32: *22 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
2022/09/28 06:29:18 [info] 32#32: *23 client closed connection while waiting for request, client: 192.168.49.41, server: 0.0.0.0:8080
2022/09/28 06:29:23 [info] 32#32: *24 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
2022/09/28 06:29:28 [info] 32#32: *25 client closed connection while waiting for request, client: 192.168.49.41, server: 0.0.0.0:8080
2022/09/28 06:29:33 [info] 32#32: *26 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
2022/09/28 06:29:48 [info] 32#32: *27 client closed connection while waiting for request, client: 192.168.49.41, server: 0.0.0.0:8080
2022/09/28 06:30:03 [info] 32#32: *28 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
2022/09/28 06:30:08 [info] 32#32: *29 client closed connection while waiting for request, client: 192.168.49.41, server: 0.0.0.0:8080
2022/09/28 06:30:13 [info] 32#32: *30 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
2022/09/28 06:30:23 [info] 32#32: *31 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
2022/09/28 06:30:28 [info] 32#32: *32 client closed connection while waiting for request, client: 192.168.49.41, server: 0.0.0.0:8080
2022/09/28 06:30:33 [info] 32#32: *33 client closed connection while waiting for request, client: 192.168.11.231, server: 0.0.0.0:8080
```

Application URL <http://a9b863d73cb17426fba0f48cc7707e5c-283669451.us-east-1.elb.amazonaws.com>