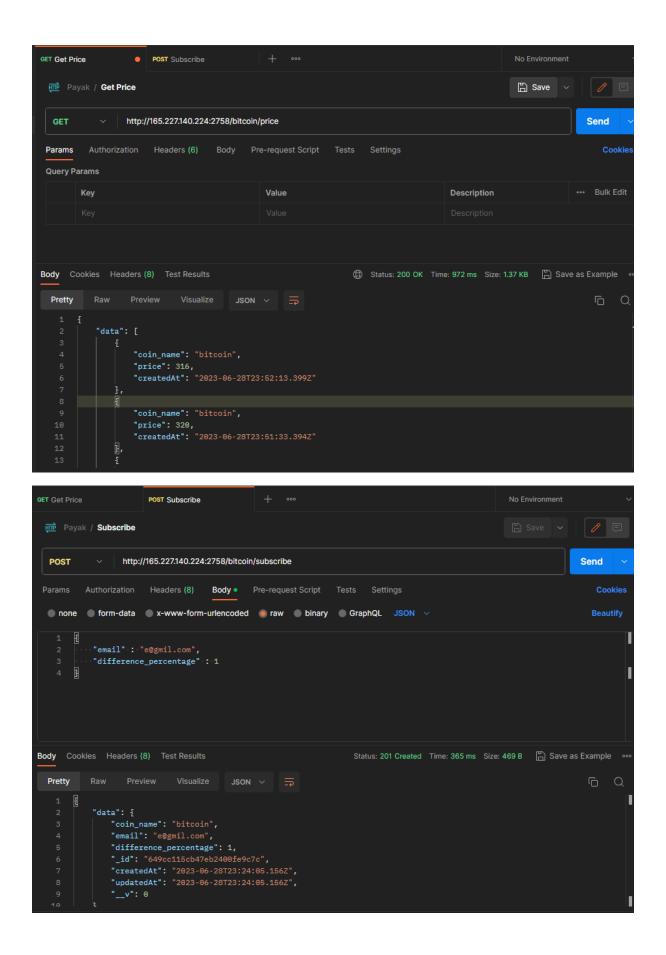
# به نام خدا



## Create Docker Image:

```
docker image build --target production -t cc-bepa:0.0.3 .
docker image build --target production -t cc-payk:0.0.1 .
```

### **Push Docker Images:**

docker image tag cc-bepa:0.0.3 erfan272758/cc-bepa:0.0.3 && docker image push erfan272758/cc-bepa:0.0.3

docker image tag cc-payk:0.0.1 erfan272758/cc-payk:0.0.1 && docker image push erfan272758/cc-payk:0.0.1

```
root@eifa-fral:~# docker image tag cc-bepa:0.0.3 erfan272758/cc-bepa:0.0.3 && docker image push
The push refers to repository [docker.io/erfan272758/cc-bepa]

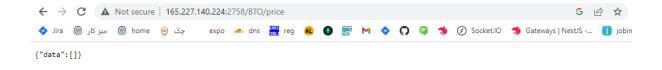
4fff4768aa92: Pushed
15293a86c6ff: Pushed
au740ea08a1c: Pushed
buddafcber03: Pushed
buddafcber03: Pushed
buddafcber03: Pushed
buddafcber03: Nounted from library/node
bu525b4092ff40cf from library/node
bu525b4092e6cd: Mounted from library/node
flurodf99400: Nounted from library/node
didec9917839: Mounted from library/node
dddaf38af39e1dd: Mounted from library/node
dddaf38af39e1dd: Mounted from library/node
ddddf90763dd5: Mounted from library/node
d90076783dd5: Mounted from erfan272758/cc-payk]
fa74cccc1198: Pushed
d9004060: Pushed
d9004060: Mounted from erfan272758/cc-bepa
buddafcber03: Mounted from erfan272758/cc-bepa
d90076783dd5: Mounted from erfan272758/cc-bepa
d14094079400: Mounted from erfan272758/cc-bepa
d14094079400: Mounted from erfan272758/cc-bepa
d14094079400: Mounted from erfan272758/cc-bepa
d140620917839: Mounted from erfan272758/cc-bepa
d140620917839: Mounted from erfan272758/cc-bepa
d1406209178306: Mounted from erfan272758/cc-bepa
d90070783dd5: Mounted from erfan272758/cc-bepa
d90070783d65: Mounted from erfan272758/cc-bepa
d900
```

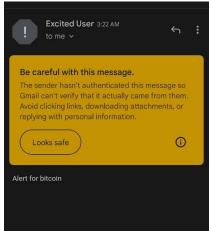
### Deploy:

```
docker container run -d -e MONGO_PORT=27017 -e MONGO_USER=amin -e MONGO_PASS=admin -e MONGO_HOST=my-mongo --network moyMongo -e PORT=2758 -p 2758:2758 --name cc-payk cc-payk:0.0.1

docker container run -d -i -e MONGO_PORT=27017 -e MONGO_USER=amin -e MONGO_PASS=admin -e MONGO_HOST=my-mongo --network moyMongo -e COINNEWS_BASE_URL=http://coinnews-container:8000/api -e EMAIL_API_KEY=$EMAIL_API_KEY --name cc-bepa cc-bepa:0.0.3

docker network connect coinnet cc-bepa
```





#### **Kubectl:**

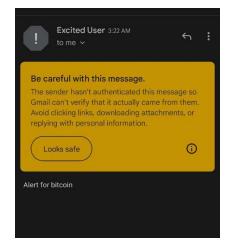
```
root@eifa-fral:~/deploy/cc-final/kube# kubectl apply -f configmap.yml
configmap/my-configmap unchanged
root@eifa-fral:~/deploy/cc-final/kube# kubectl apply -f secret.yml
secret/app-secret created
root@eifa-fral:~/deploy/cc-final/kube# kubectl apply -f mongo-pvc.yml
coinnews_configmap.yml coinnews_service.yml mongo-deploy.yml peyk_deployment.yml
coinnews_deployment.yml configmap.yml mongo-service.yml secret.yml
root@eifa-fral:~/deploy/cc-final/kube# kubectl apply -f mongo-pvc.yml
persistentvolumeclaim/mongo-pvc created
root@eifa-fral:~/deploy/cc-final/kube# kubectl apply -f mongo-deploy.yml
deployment.apps/mongo-deployment created
root@eifa-fral:~/deploy/cc-final/kube# kubectl apply -f mongo-service.yml
service/mongo-service created
root@eifa-fral:~/deploy/cc-final/kube# kubectl apply -f cronjob.yml
cronjob.batch/my-cronjob created
root@eifa-fral:~/deploy/cc-final/kube# kubectl apply -f .yml
coinnews_configmap.yml coinnews_service.yml mongo-deploy.yml peyk_deployment.yml
coinnews_deployment.yml configmap.yml mongo-pvc.yml peyk_service.yml
root@eifa-fral:~/deploy/cc-final/kube# kubectl apply -f peyk_deployment.yml
coinnews_ingress.yml cronjob.yml mongo-service.yml secret.yml
root@eifa-fral:~/deploy/cc-final/kube# kubectl apply -f peyk_deployment.yml
deployment.apps/cc-payk created
root@eifa-fral:~/deploy/cc-final/kube# kubectl apply -f peyk_deployment.yml
deployment.apps/cc-payk created
root@eifa-fral:~/deploy/cc-final/kube# kubectl apply -f peyk_service.yml
service/peyk-service created
root@eifa-fral:~/deploy/cc-final/kube# kubectl apply -f peyk_service.yml
```

```
Every 2.0s: minikube kubectl -- get pods
                                             STATUS
NAME
                                     READY
                                                         RESTARTS
                                                                     AGE
                                     1/1
cc-payk-778b8dfd56-pnflx
                                             Running
                                                         Θ
                                                                     9m21s
                                     1/1
coinnews-79b6fb6c49-q696r
                                             Running
                                                         Θ
                                                                     9m21s
mongo-deployment-776c5688c6-wv7gr
                                     1/1
                                             Running
                                                         Θ
                                                                     9m21s
                                     0/1
my-cronjob-28133412-flrx4
                                             Completed
                                                         Θ
                                                                     2m15s
```

```
very 2.0s: minikube kubectl -- get pods -o wide
                                                                                                                                                                                                 eifa-fra1: Thu Jun 29 02:16:30 2023
                                                                                                                                IP
10.244.0.26
10.244.0.25
10.244.0.27
10.244.0.30
10.244.0.31
NAME
                                                                           STATUS
                                                                                               RESTARTS
                                                                                                                                                        NODE
                                                                                                                                                                           NOMINATED NODE
                                                                                                                                                                                                       READINESS GATES
NAME
cc-payk-778b8dfd56-pnflx
coinnews-79b6fb6c49-q696r
mongo-deployment-776c5688c6-wv7gr
my-cronjob-28133412-flrx4
my-cronjob-28133415-m5bzq
                                                                                                                                                       minikube
minikube
minikube
                                                                           Running
Running
                                                                                                                                                                          <none>
                                                                                                                                                                                                        <none>
                                                                            Running
                                                                                                                                                                           <none>
                                                                            Completed
                                                                                                                   4m31s
                                                                                                                                                        minikube
                                                                                                                                                                           <none>
                                                                                                                                                                                                        <none>
```

برای پایگاه داده یک رپلیکا ایجاد کردیم زیرا دیتابیس بر روی یک ریسورس مشترک فعالیت میکند و بهتر است تنظیمات مدیریت ان بر عهده خود دیتابیس باشد و ریلیکا های ان بوسیله کوبر مدیریت نشود

```
root@eifa-frai:-#
2:203:-66-29702:3:55.685Z*},{"coin_name":"bitcoin","price":49991,"createdAt":"2023-06-29702:17:55.664Z*],{"coin_name":"bitcoin","price":49999,"createdAt":"2023-06-29702:18:55.664Z*],{"coin_name":"bitcoin","price":49999,"createdAt":"2023-06-29702:18:55.664Z*],{"coin_name":"bitcoin","price":49999,"createdAt":"2023-06-29702:18:55.664Z*],{"coin_name":"bitcoin","price":49999,"createdAt":"2023-06-29702:18:55.664Z*],{"coin_name":"bitcoin","price":49999,"createdAt":"2023-06-29702:18:55.664Z*]]}
root@eifa-frai:-/deploy/cc-final/kube# kubectl port-forward cc-payk-778b8dfd56-pnflx 2758:2758
Forwarding from 127.0.0.1:2758 -> 2758
Forwarding from [::1]:2758 -> 2758
Handling connection for 2758
Handling connection for 2758
Handling connection for 2758
```



ساخت HPA:

```
root@eifa-fral:~# kubectl autoscale deployment cc-payk --cpu-percent=80 --min=1 --max=10
horizontalpodautoscaler.autoscaling/cc-payk autoscaled
root@eifa-fra1:~# kubectl get hpa
NAME
         REFERENCE
                               TARGETS
                                               MINPODS
                                                         MAXPODS
                                                                   REPLICAS
                                                                              AGE
                               <unknown>/80%
                                                                              22s
cc-payk
         Deployment/cc-payk
                                                         10
                                                                   1
root@eifa-fra1:~#
```