

```
hafsa_027@Dell:~/sre-app/k8s/angular-ui$ kubectl -n sre-monitoring get pods
NAME                                READY   STATUS    RESTARTS   AGE
angular-ui-7d5c5f644f-c699p        0/1     Error     0           40s
grafana-6d4895b584-rbzn4           1/1     Running   5 (16h ago) 30h
prometheus-798fbcdbcc-t5tld        1/1     Running   2 (16h ago) 30h
hafsa_027@Dell:~/sre-app/k8s/angular-ui$ kubectl -n sre-monitoring describe pod angular-ui-7d5c5f644f-c699p
Name:                                angular-ui-7d5c5f644f-c699p
```

```
Events:
Type      Reason      Age      From      Message
-----
Normal    Scheduled   59s      default-scheduler   Successfully assigned sre-monitoring/angular-ui-7d5c5f644f-c699p to minikube
Normal    Pulled      31s      kubelet    Successfully pulled image "hafsazareen/angular-ui:latest" in 23.542s (23.542s including waiting). Image size: 48044260 bytes.
Normal    Pulling     22s (x2 over 54s) kubelet    Pulling image "hafsazareen/angular-ui:latest"
Normal    Created     14s (x2 over 30s) kubelet    Created container: angular-ui
Normal    Started     14s (x2 over 29s) kubelet    Started container angular-ui
Normal    Pulled      14s      kubelet    Successfully pulled image "hafsazareen/angular-ui:latest" in 4.315s (7.201s including waiting). Image size: 48044260 bytes.
Warning   BackOff     6s       kubelet    Back-off restarting failed container angular-ui in pod angular-ui-7d5c5f644f-c699p_sre-monitoring(1ab029e0-9171-4118-8dab-6b05ff1b6eec)
```

```
hafsa_027@Dell:~/sre-app/k8s/angular-ui$ kubectl -n sre-monitoring logs angular-ui-7d5c5f644f-c699p --all-containers
/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: /etc/nginx/conf.d/default.conf differs from the packaged version
/docker-entrypoint.sh: Sourcing /docker-entrypoint.d/15-local-resolvers.envsh
/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
2025/03/25 23:53:11 [emerg] 1#1: host not found in upstream "flask-api-service" in /etc/nginx/conf.d/default.conf:12
nginx: [emerg] host not found in upstream "flask-api-service" in /etc/nginx/conf.d/default.conf:12
```

! rbac.yaml

Dockerfile

nginx.conf X

TS polyfills.ts

index.html

styles

angular-ui > nginx.conf

1

server {

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location / {

try_files \$uri \$uri/ /index.html;

}

location /api/ {

proxy_pass http://flask-api-service.svc.cluster.local:5000/api/;

proxy_set_header Host \$host;

```
hafsa_027@Dell:~/sre-app$ kubectl apply -f k8s/flask-api/deployment.yaml
deployment.apps/flask-api created
service/flask-api-service created
hafsa_027@Dell:~/sre-app$ kubectl -n sre-monitoring get services
NAME                                TYPE           CLUSTER-IP      EXTERNAL-IP      PORT(S)          AGE
angular-ui-service                 ClusterIP      10.104.2.161    <none>            80/TCP           30h
grafana                             ClusterIP      10.96.10.237    <none>            3000/TCP         30h
prometheus                         ClusterIP      10.105.150.221  <none>            9090/TCP         30h
```

```
hafsa_027@Dell:~/sre-app$ kubectl get services -n default
NAME                                TYPE           CLUSTER-IP      EXTERNAL-IP      PORT(S)          AGE
backend-service                   ClusterIP      10.110.44.157    <none>            80/TCP           30h
flask-api-service                  ClusterIP      10.109.124.104   <none>            5000/TCP         42s
frontend-service                  ClusterIP      10.108.83.228    <none>            80/TCP           31h
kubernetes                         ClusterIP      10.96.0.1        <none>            443/TCP          31h
```

```

hafsa_027@Dell:~/sre-app$ kubectl delete -f k8s/flask-api/deployment.yaml # Remove old deployment
kubectl apply -f k8s/flask-api/deployment.yaml --namespace=sre-monitoring # Deploy in correct namespace
deployment.apps "flask-api" deleted
service "flask-api-service" deleted
deployment.apps/flask-api created
service/flask-api-service created
hafsa_027@Dell:~/sre-app$ kubectl get pods -n sre-monitoring | grep flask-api
flask-api-66575bdf8f-dq95k    0/1    ContainerCreating    0        6s
hafsa_027@Dell:~/sre-app$ kubectl get pods -n sre-monitoring
NAME                                READY   STATUS              RESTARTS   AGE
angular-ui-7d5c5f644f-c699p        0/1    CrashLoopBackOff    6 (71s ago)  8m42s
flask-api-66575bdf8f-dq95k         0/1    ContainerCreating    0          11s
grafana-6d4895b584-rbzn4           1/1    Running             5 (16h ago)  30h
prometheus-798fbcdbcc-t5tld        1/1    Running             2 (16h ago)  30h

```

```

hafsa_027@Dell:~/sre-app$ kubectl get deployment flask-api -n sre-monitoring -o yaml | grep image
{"apiVersion":"apps/v1","kind":"Deployment","metadata":{"annotations":{},"labels":{"app":"flask-api","name":"flask-api","namespace":"sre-monitoring"},"spec":{"replicas":1,"selector":{"matchLabels":{"app":"flask-api"},"template":{"metadata":{"labels":{"app":"flask-api"},"spec":{"containers":[{"env":[{"name":"FLASK_ENV","value":"production"}],"image":"your-dockerhub-username/flask-api:latest","name":"flask-api","ports":[{"containerPort":5000}],"resources":{"limits":{"cpu":"0.5","memory":"512Mi"},"requests":{"cpu":"0.2","memory":"256Mi"}}}}}}}}}
image: your-dockerhub-username/flask-api:latest
imagePullPolicy: Always

```

```

hafsa_027@Dell:~/sre-app$ kubectl edit deployment flask-api -n sre-monitoring
deployment.apps/flask-api edited
hafsa_027@Dell:~/sre-app$ kubectl apply -f k8s/flask-api/deployment.yaml
deployment.apps/flask-api configured
service/flask-api-service unchanged
hafsa_027@Dell:~/sre-app$ kubectl get deployment flask-api -n sre-monitoring -o yaml | grep image
{"apiVersion":"apps/v1","kind":"Deployment","metadata":{"annotations":{},"labels":{"app":"flask-api","name":"flask-api","namespace":"sre-monitoring"},"spec":{"replicas":1,"selector":{"matchLabels":{"app":"flask-api"},"template":{"metadata":{"labels":{"app":"flask-api"},"spec":{"containers":[{"env":[{"name":"FLASK_ENV","value":"production"}],"image":"your-dockerhub-username/flask-api:latest","name":"flask-api","ports":[{"containerPort":5000}],"resources":{"limits":{"cpu":"0.5","memory":"512Mi"},"requests":{"cpu":"0.2","memory":"256Mi"}}}}}}}}}
image: hafsazareen/flask-api:latest
imagePullPolicy: Always
hafsa_027@Dell:~/sre-app$ kubectl get pods -n sre-monitoring
NAME                                READY   STATUS    RESTARTS   AGE
angular-ui-7d5c5f644f-c699p        1/1    Running   7 (15m ago)  23m
flask-api-6f6679b5b9-cxwbp         1/1    Running   0           47s
grafana-6d4895b584-rbzn4           1/1    Running   5 (16h ago)  30h
prometheus-798fbcdbcc-t5tld        1/1    Running   2 (17h ago)  30h

```

OUTPUT SCREENSHOTS:-

The screenshot shows the Docker Hub interface for a user named 'hafsazareen'. The left sidebar contains navigation links: Repositories, Settings, Default privacy, Notifications, Billing, Usage, Pulls, and Storage. The main area is titled 'Repositories' and shows a list of repositories within the 'hafsazareen' namespace. The list includes 'hafsazareen/flask-api', 'hafsazareen/angular-ui', 'hafsazareen/react-sre-app', 'hafsazareen/python-docker-app', and 'hafsazareen/python-docker-project-web'. Each repository entry shows its name, last pushed time, image status, visibility, and scout status.

Name	Last Pushed	Contains	Visibility	Scout
hafsazareen/flask-api	about 1 hour ago	IMAGE	Public	Inactive
hafsazareen/angular-ui	about 1 hour ago	IMAGE	Public	Inactive
hafsazareen/react-sre-app	5 days ago	IMAGE	Public	Inactive
hafsazareen/python-docker-app	29 days ago	IMAGE	Public	Inactive
hafsazareen/python-docker-project-web	29 days ago	IMAGE	Public	Inactive

← → ↻ ⓘ localhost:8081

Welcome to SRE Dashboard

← → ↻ ⓘ localhost:5000/api/metrics

Pretty print ☒

```
{
  "cpu_usage": 30.5,
  "disk_usage": 60.8,
  "memory_usage": 45.2,
  "network_io": {
    "received_bytes": 2048000,
    "sent_bytes": 1024000
  }
}
```

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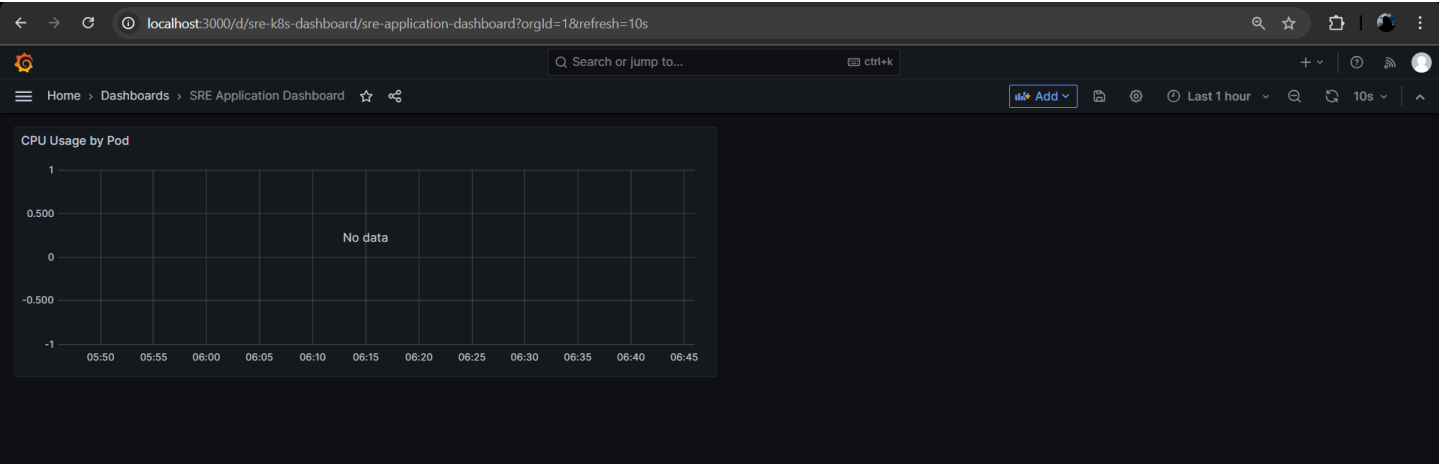
ⓘ

localhost:5000/api/alerts

Pretty print

☐

```
[
  {
    "id": 1,
    "message": "High CPU usage detected",
    "severity": "critical",
    "timestamp": "2025-03-20T10:30:00Z"
  },
  {
    "id": 2,
    "message": "Memory usage above threshold",
    "severity": "warning",
    "timestamp": "2025-03-20T11:45:00Z"
  },
  {
    "id": 3,
    "message": "System update available",
    "severity": "info",
    "timestamp": "2025-03-20T09:15:00Z"
  }
]
```



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ⓘ

localhost:9090/targets?search=

🔍 Prometheus

Alerts

Graph

Status ▾

Help

⚙️

🌙

ⓘ

Targets

All scrape pools ▾

All Unhealthy Collapse All

🔍

Filter by endpoint or labels

👉 Unknown

👉 Unhealthy

👉 Healthy

flask-app (1/1 up)

🔍 Now test

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://flask-api-service:5000/metrics	UP	<code>instance="flask-api-service-5000"</code> <code>job="flask-app"</code>	10.352s ago	14.344ms	

prometheus (1/1 up)

🔍 Show test

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://localhost:9090/metrics	UP	<code>instance="localhost:9090"</code> <code>job="prometheus"</code>	10.453s ago	13.266ms	