APPLICATION DEPLOYMENT

GIT REPO URL : https://github.com/SAARA213/Devops_Capstone.git

DEPLOYED SITE URL : http://13.127.0.6/

DOCKER IMAGE NAME : reactjs

DOCKERIZE THE APPLICATION BY CREATING DOCKERFILE

```
ubuntu@ip-172-31-36-239:~$ sudo docker images
REPOSITORY    TAG       IMAGE ID       CREATED         SIZE
reactjs       latest    9c439eb92690   16 minutes ago  48.3MB
nginx         alpine    70ea0d8cc530   5 days ago      48.3MB
ubuntu@ip-172-31-36-239:~$ sudo docker ps
CONTAINER ID   IMAGE          COMMAND                CREATED        STATUS        PORTS                                     NAMES
cb5fe11632b6   9c439eb92690   "/docker-entrypoint…"  8 minutes ago  Up 8 minutes  0.0.0.0:80->80/tcp, :::80->80/tcp         clever_ganguly
ubuntu@ip-172-31-36-239:~$
```

JENKINS-LOGIN PAGE

Enter an item name

React app

» Required field

Freestyle project
Classic, general-purpose job type that checks out from up to one SCM, executes build steps serially, followed by post-build steps like archiving artifacts and sending email notifications.

Pipeline
Orchestrates long-running activities that can span multiple build agents. Suitable for building pipelines (formerly known as workflows) and/or organizing complex activities that do not easily fit in free-style job type.

Multi-configuration project
Suitable for projects that need a large number of different configurations, such as testing on multiple environments, platform-specific builds, etc.

Folder
Creates a container that stores nested items in it. Useful for grouping things together. Unlike view, which is just a filter, a folder creates a separate namespace, so you can have multiple things of the same name as long as they are in different folders.

Multibranch Pipeline
a set of Pipeline projects according to detected branches in one SCM repository.

OK

CONFIGURATION SETTING FOR PROJECT

Dashboard   >   React app   >   Configuration

Configure

- ⚙ General
- Source Code Management
- Build Triggers
- 🌐 Build Environment
- ≣ Build Steps
- Post-build Actions

Description

Deploy react application to production ready state

Plain text   **Preview**

☐ Discard old builds   ?

☑ GitHub project

Project url   ?

https://github.com/SAARA213/Devops_Capstone.git

Advanced ⌄

☐ This project is parameterised   ?

☐ Throttle builds   ?

☐ Execute concurrent builds if necessary   ?

Advanced ⌄

Source Code Management

○ None

● Git ?

   Repositories ?

   Repository URL ?   ✕

   https://github.com/SAARA213/Devops_Capstone.git

   Credentials ?

   - none -   ⌄

   + Add ▾

   Advanced ⌄

   Add Repository

   Branches to build ?

   Branch Specifier (blank for 'any') ?   ✕

   */master

Build Triggers

☐ Trigger builds remotely (e.g., from scripts) ?

☐ Build after other projects are built ?

☐ Build periodically ?

☐ GitHub hook trigger for GITScm polling ?

☑ Poll SCM ?

   Schedule ?

   * * * * *

   ⚠ Do you really mean "every minute" when you say "* * * * *"? Perhaps you meant "H * * * *" to poll once per hour
   Would last have run at Tuesday, June 4, 2024 at 10:01:15 AM Coordinated Universal Time; would next run at Tuesday, June 4, 2024 at 10:01:15 AM Coordinated Universal Time.

☐ Ignore post-commit hooks ?

EXECUTE STEP COMMANDS

Build Steps

≡ **Execute shell** ?   ✕

Command
See the list of available environment variables

```
chmod 777 build.sh
./build.sh
chmod 777 deploy.sh
./deploy.sh
docker tag reactjs saaradhakumar/prod_repo:react
docker login -u saaradhakumar -p Lohita@123
docker push saaradhakumar/prod_repo:react
```

Advanced ⌄

OUTPUT-DEPLOYED THE APPLICATION-SUCCESS

Changes

1. Update docker-compose.yaml (commit: 85ad504) (details / githubweb)
2. Update Dockerfile (commit: 458b361) (details / githubweb)
3. Update Dockerfile (commit: 26ca9bf) (details / githubweb)
4. Update docker-compose.yaml (commit: 13ce15d) (details / githubweb)

Started by user Saaradha

This run spent:

- 6 ms waiting;
- 4.8 sec build duration;
- 4.8 sec total from scheduled to completion.

Revision: 13ce15de06c92574935c90a70adc1cefaa536ffe
Repository: https://github.com/SAARA213/Devops_Capstone.git

- refs/remotes/origin/main

```
+ docker build -t reactjs .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
            Install the buildx component to build images with BuildKit:
            https://docs.docker.com/go/buildx/

Sending build context to Docker daemon   3.637MB

Step 1/5 : FROM nginx:alpine
 ---> 70ea0d8cc530
Step 2/5 : WORKDIR /usr/share/nginx/html/
 ---> Using cache
 ---> 9c439eb92690
Step 3/5 : COPY build /usr/share/nginx/html/
 ---> Using cache
 ---> 6a3f3adbe1e1
Step 4/5 : EXPOSE 8000
 ---> Running in 2d111cb4ba0c
Removing intermediate container 2d111cb4ba0c
 ---> 6df1a564f388
Step 5/5 : CMD ["nginx", "-g", "daemon off;"]
 ---> Running in d8b5717f415c
Removing intermediate container d8b5717f415c
 ---> c0eac5705b90
Successfully built c0eac5705b90
Successfully tagged reactjs:latest
+ docker run -d -p 8001:8000 reactjs
fbd4dbbe177fbc182ed4ee499db1a3830384376a62bf3937bf330c35e4b45ea7
+ docker tag reactjs saaradhakumar/prod_repo:react
+ docker login -u saaradhakumar -p Lohita@123
WARNING! Using --password via the CLI is insecure. Use --password-stdin.
WARNING! Your password will be stored unencrypted in /var/lib/jenkins/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store
```

```
Login Succeeded
+ docker push saaradhakumar/prod_repo:react
The push refers to repository [docker.io/saaradhakumar/prod_repo]
2c814e3cd7b7: Preparing
9cba8117003a: Preparing
b6d04dc5ecf7: Preparing
d38ed9b519d2: Preparing
3b4115e2edd1: Preparing
8d720e2faad3: Preparing
7b87df18a0ed: Preparing
a05d3326ce5a: Preparing
d4fc045c9e3a: Preparing
8d720e2faad3: Waiting
7b87df18a0ed: Waiting
a05d3326ce5a: Waiting
d4fc045c9e3a: Waiting
b6d04dc5ecf7: Layer already exists
3b4115e2edd1: Layer already exists
9cba8117003a: Layer already exists
d38ed9b519d2: Layer already exists
a05d3326ce5a: Layer already exists
7b87df18a0ed: Layer already exists
8d720e2faad3: Layer already exists
d4fc045c9e3a: Layer already exists
2c814e3cd7b7: Pushed
react: digest: sha256:b6556a9bff55842af1af45e7d62c167efa1d52ba7d0c1c8c05870548760d5e33 size: 2199
Finished: SUCCESS
```

```
Login Succeeded
+ docker push saaradhakumar/dev_repo:react
The push refers to repository [docker.io/saaradhakumar/dev_repo]
2c814e3cd7b7: Preparing
9cba8117003a: Preparing
b6d04dc5ecf7: Preparing
d38ed9b519d2: Preparing
3b4115e2edd1: Preparing
8d720e2faad3: Preparing
7b87df18a0ed: Preparing
a05d3326ce5a: Preparing
d4fc045c9e3a: Preparing
8d720e2faad3: Waiting
7b87df18a0ed: Waiting
a05d3326ce5a: Waiting
d4fc045c9e3a: Waiting
9cba8117003a: Layer already exists
b6d04dc5ecf7: Layer already exists
d38ed9b519d2: Layer already exists
3b4115e2edd1: Layer already exists
7b87df18a0ed: Layer already exists
8d720e2faad3: Layer already exists
d4fc045c9e3a: Layer already exists
a05d3326ce5a: Layer already exists
2c814e3cd7b7: Mounted from saaradhakumar/prod_repo
react: digest: sha256:108387cc4d77f76922c9d025c0301142250addff058490e65b2c13136d86e724 size: 2199
Finished: SUCCESS
```

⊘ React app

Deploy react application to production ready state

Permalinks

- Last build (#10), 1 min 41 sec ago
- Last stable build (#10), 1 min 41 sec ago
- Last successful build (#10), 1 min 41 sec ago
- Last failed build (#9), 11 min ago
- Last unsuccessful build (#9), 11 min ago
- Last completed build (#10), 1 min 41 sec ago

+ New Item

Build History

Manage Jenkins

My Views

Build Queue

No builds in the queue.

Build Executor Status

1 Idle

2 Idle

Add description

All +

S	W	Name ↓	Last Success	Last Failure	Last Duration
✓	☁	React app	4 min 6 sec #10	13 min #9	20 sec

Icon: S M L

DOCKER HUB REPO WITH IMAGE TAGS

dockerhub   Explore   Repositories   Organizations

Search Docker Hub   ctrl+K   ?   S

saaradhakumar   Edit profile

👤 Community User   📅 Joined April 8, 2024

Repositories   Starred   Contributed

Displaying 1 to 4 repositories

saaradhakumar/dev_repo

By saaradhakumar · Updated 6 minutes ago

Public repo for the react application

⬇1 · ☆0

saaradhakumar/prod_repo 🔒
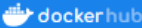
By saaradhakumar · Updated 14 minutes ago

Private repo for the react application

⬇0 · ☆0

DEV REPO -PUBLIC TO ACCESS

dockerhub   Explore   Repositories   Organizations   🔍 Search Docker Hub   ctrl+K   ❓   ⊞   S

Explore / saaradhakumar/dev_repo

saaradhakumar/dev_repo ☆0

By saaradhakumar · Updated less than a minute ago
Public repo for the react application
`IMAGE`

Manage Repository

⬇ Pulls 0

Overview   **Tags**

Sort by Newest ▾   🔍 Filter Tags

TAG
🟢 latest
Last pushed a few seconds ago by saaradhakumar

`docker pull saaradhakumar/dev_repo:latest` **Copy**

Digest	OS/ARCH	Last pull	Compressed Size ⓘ
435f94b30a95	linux/amd64	---	20.9 MB
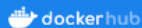
TAG
🟢 react
Last pushed 11 minutes ago by saaradhakumar

`docker pull saaradhakumar/dev_repo:react` **Copy**

Digest	OS/ARCH	Last pull	Compressed Size ⓘ
435f94b30a95	linux/amd64	---	20.9 MB

PROD REPO-PRIVATE

dockerhub   Explore   Repositories   Organizations   🔍 Search Docker Hub   ctrl+K   ❓   ⊞   S

Explore / saaradhakumar/prod_repo

saaradhakumar/prod_repo ☆0

By saaradhakumar · Updated 12 minutes ago
Private repo for the react application
`IMAGE`

Manage Repository

⬇ Pulls 0

Overview   **Tags**
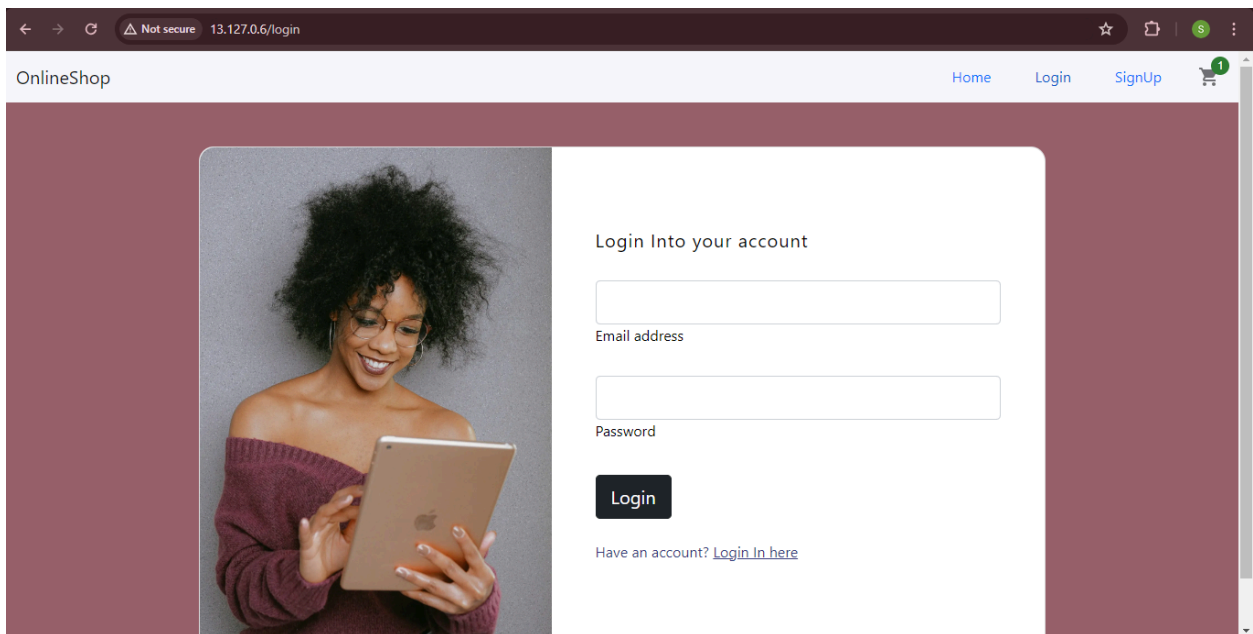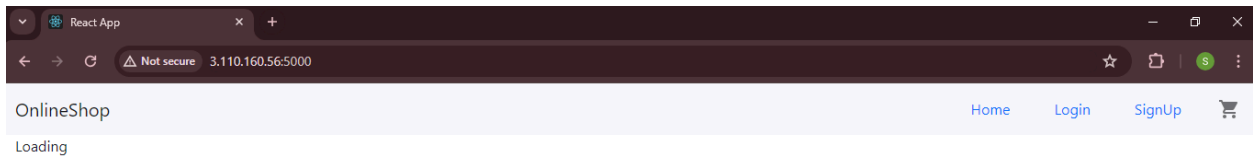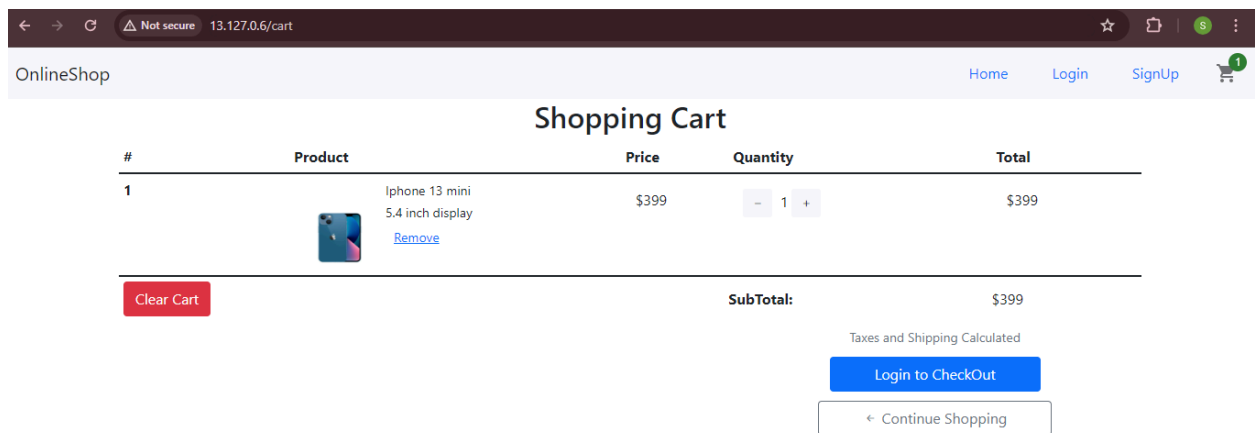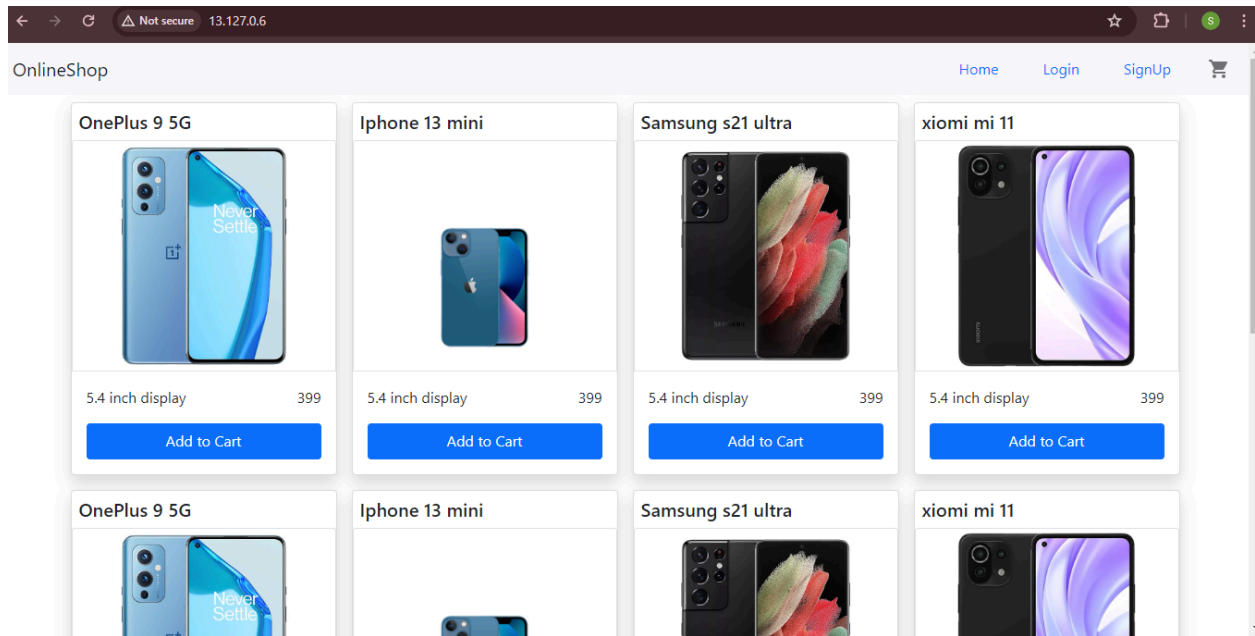
Sort by Newest ▾   🔍 Filter Tags

TAG
🟢 react
Last pushed 12 minutes ago by saaradhakumar

`docker pull saaradhakumar/prod_repo:react` **Copy**

Digest	OS/ARCH	Last pull	Compressed Size ⓘ
435f94b30a95	linux/amd64	---	20.9 MB

DEPLOYED SITE PAGE

Home   Login   SignUp

OnePlus 9 5G	**Iphone 13 mini**	**Samsung s21 ultra**	**xiomi mi 11**	
5.4 inch display 399	5.4 inch display 399	5.4 inch display 399	5.4 inch display 399	
Add to Cart	Add to Cart	Add to Cart	Add to Cart	

OnePlus 9 5G	**Iphone 13 mini**	**Samsung s21 ultra**	**xiomi mi 11**

Home   Login   SignUp

Shopping Cart

#	Product	Price	Quantity	Total
1	Iphone 13 mini 5.4 inch display Remove	$399	− 1 +	$399

Clear Cart

SubTotal: $399

Taxes and Shipping Calculated

Login to CheckOut

← Continue Shopping

AWS-EC2 CONSOLE

AWS-SG CONFIGURATIONS

MONITORING HEALTH CHECK STATUS USING CLOUD WATCH
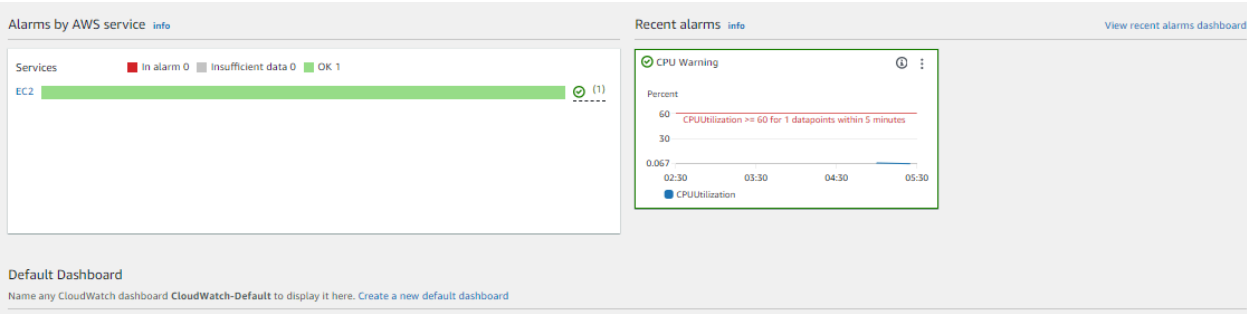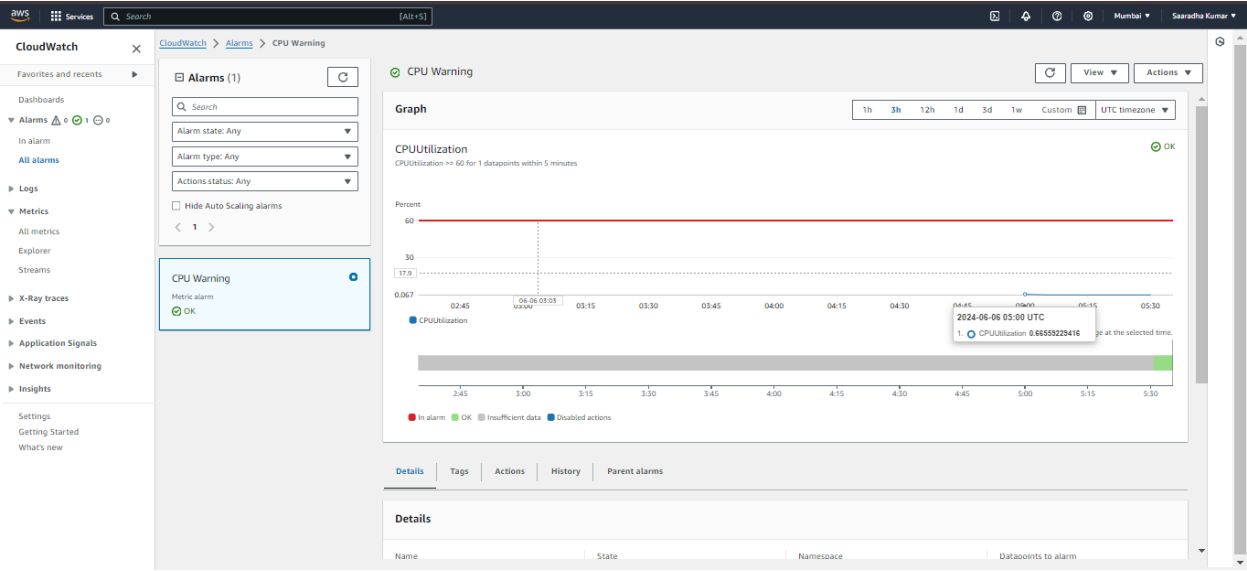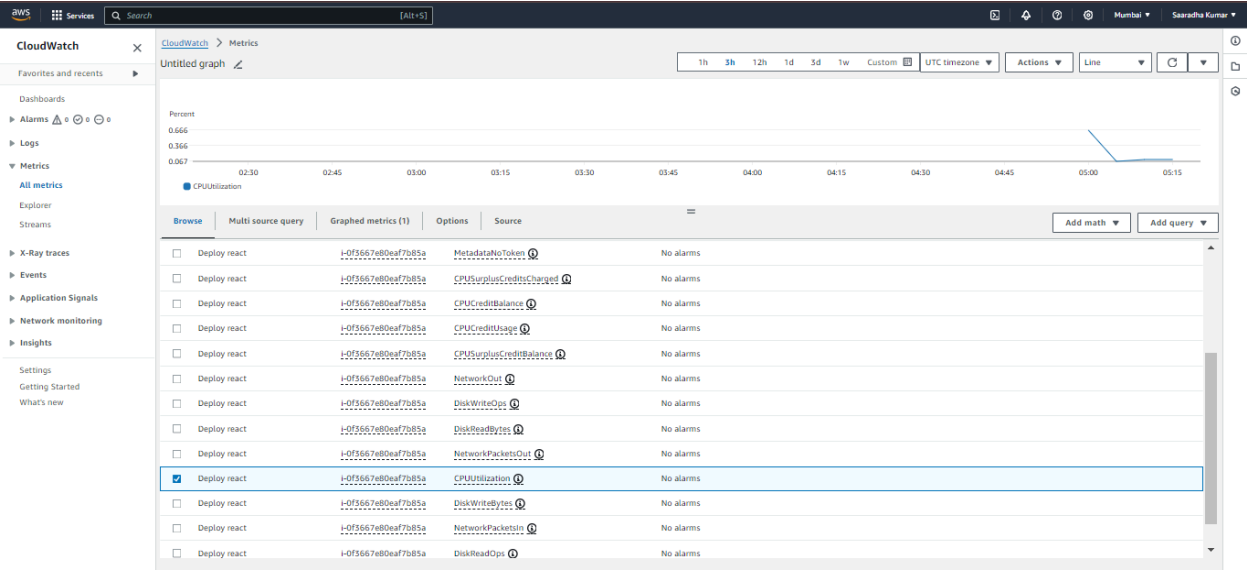
CPUUtilization

CPUUtilization >= 60 for 1 datapoints within 5 minutes

⊘ OK

Percent

60	———
30	
0.067	

02:45 03:00 03:15 03:30 03:45 04:00 04:15 04:30 04:45 05:00 05:15 05:30
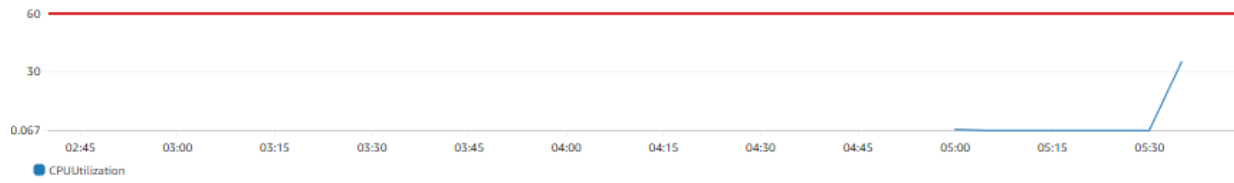
■ CPUUtilization

Click timeline to see the state change at the selected time.

⊘ CPU Warning

[⟳] [View ▼] [Actions ▼]

Graph

[1h] [3h] [12h] [1d] [3d] [1w] [Custom 🗓] [UTC timezone ▼]

CPUUtilization

CPUUtilization >= 60 for 1 datapoints within 5 minutes

⊘ OK

Percent

60	———
30	
0.066	

03:00 03:15 03:30 03:45 04:00 04:15 04:30 04:45 05:00 05:15 05:30 05:45

■ CPUUtilization

Click timeline to see the state change at the selected time.

3:00 3:15 3:30 3:45 4:00 4:15 4:30 4:45 5:00 5:15 5:30 5:45