

## 1. Github repo:

[https://github.com/Santhoshkumar1510/capstone\\_project.git](https://github.com/Santhoshkumar1510/capstone_project.git)

deployed site url:

<http://16.16.173.125:8000/>

docker images name - nginx

```
ubuntu@ip-172-31-2-110:~$ docker images
REPOSITORY              TAG               IMAGE ID           CREATED            SIZE
nginx                   latest            1ca858ba0dc0      48 minutes ago    191MB
santhoshkumare15/prod   version-1         1ca858ba0dc0      48 minutes ago    191MB
sarathakashk95/prod    version-1         2f0a53f65ff3      3 days ago        191MB
mynodeimg               latest            f185621965e2      3 days ago        104MB
nginx                   latest            a72860cb95fd      5 weeks ago       188MB
my-flask                 latest            5bb630fa7cdb      2 months ago      61.7MB
santhoshkumare15/mydockerjenkins latest            5bb630fa7cdb      2 months ago      61.7MB
santhoshkumare15/mydockerjenkins <none>           a4acc4931b17      2 months ago      61.7MB
santhoshkumare15/mydockerjenkins <none>           67ff99373732      2 months ago      61.7MB
<none>                  <none>           2651e791ff0f      2 months ago      104MB
python                  3.9-alpine       955010c864a2      2 months ago      48MB
node                    12.2.0-alpine    f391dabf9dce      5 years ago       77.7MB
```

## 2. Aws ec2 console

The screenshot displays the AWS Management Console interface for the EC2 service. The left-hand navigation pane shows the 'Instances' section selected. The main content area shows a list of instances, with the 'Jenkins' instance (ID: i-0500c625955344532) highlighted. Below the list, the 'Details' tab for the 'Jenkins' instance is open, showing its status as 'Running' and its public IP address as 16.16.173.125.



Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
Mysys	i-06bb6e6179c397fdb	Stopped	t3.micro	-	View alarms	eu-north-1a
Docker-EC2	i-01083b1e3c1d6af70	Stopped	t3.micro	-	View alarms	eu-north-1b
Docker	i-0417e95bf76198c7f	Stopped	t3.micro	-	View alarms	eu-north-1b
Jenkins	i-0500c625955344532	Running	t3.micro	Initializing	View alarms	eu-north-1c

**i-0500c625955344532 (Jenkins)**

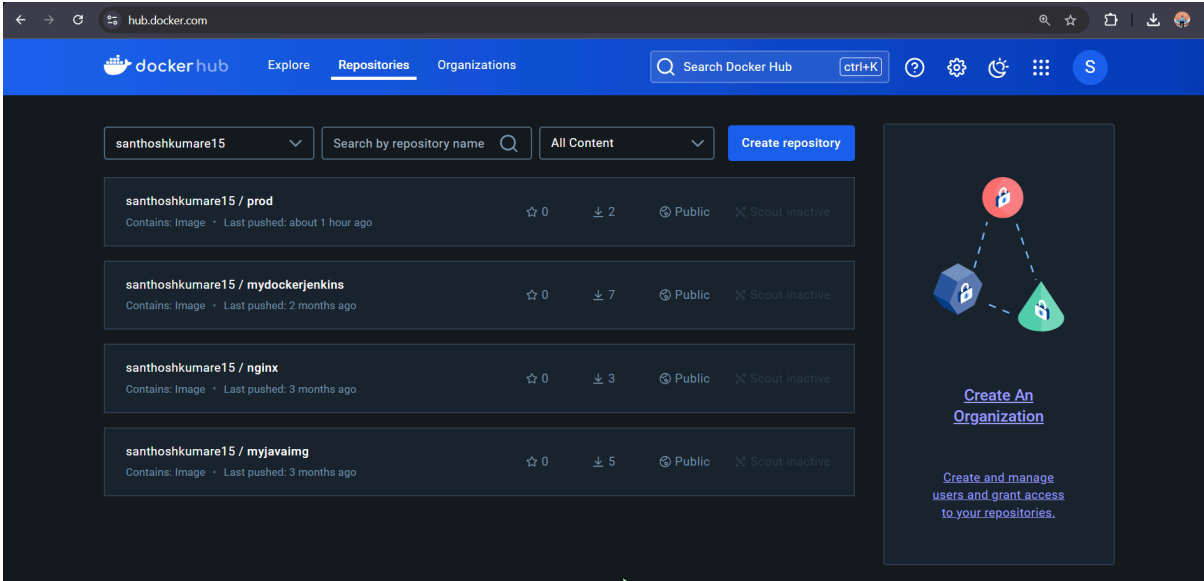
**Instance summary**

Instance ID	Public IPv4 address	Private IPv4 addresses
i-0500c625955344532 (Jenkins)	16.16.173.125   <a href="#">open address</a>	172.31.2.110
IPv6 address	Instance state	Public IPv4 DNS
-	Running	ec2-16-16-173-125.eu-north-1.compute.amazonaws.com   <a href="#">open address</a>
Hostname type	Private IP DNS name (IPv4 only)	

## SG configuration:

Inbound rules (3)						Manage tags	Edit inbound rules
<input type="text" value="Search"/>					< 1 > 		
Security group rule...	IP version	Type	Protocol	Port range			
sgr-0041b62284fcd2b5	IPv4	SSH	TCP	22			
sgr-03c715c8b9cdf11c0	IPv4	Custom TCP	TCP	8080			
sgr-0184d84d4dfbf34da	IPv4	Custom TCP	TCP	8000			

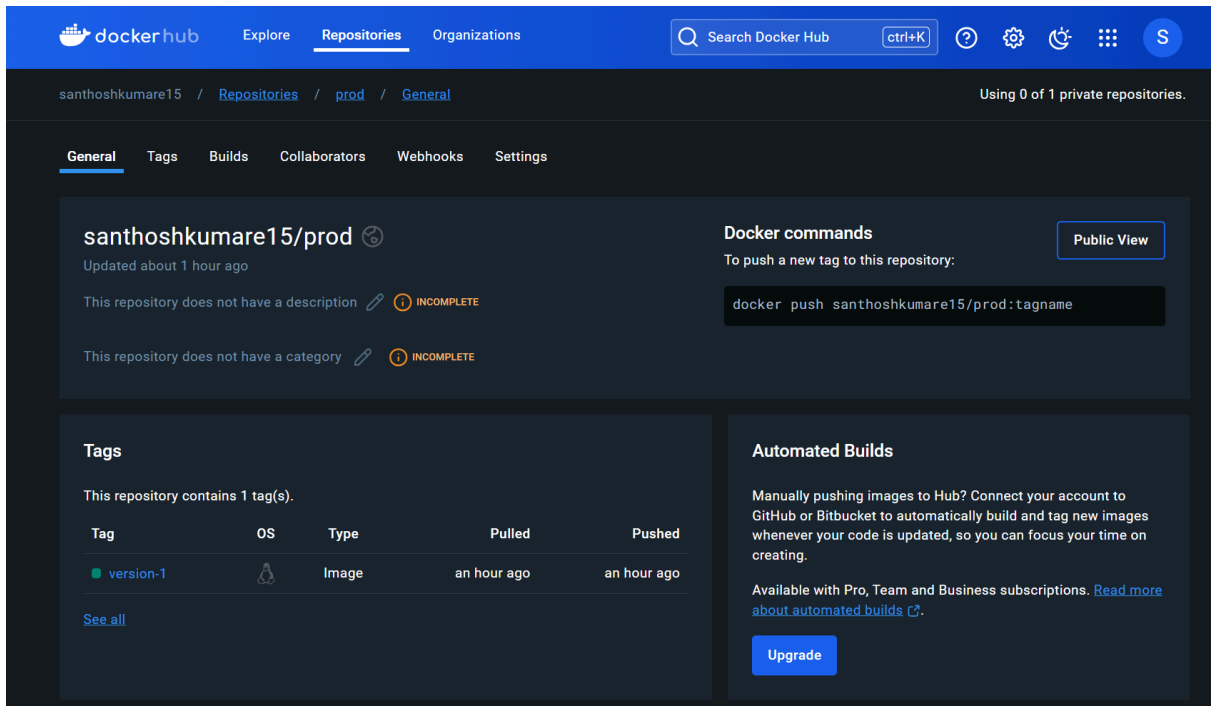
## Docker hub repo with image tags:



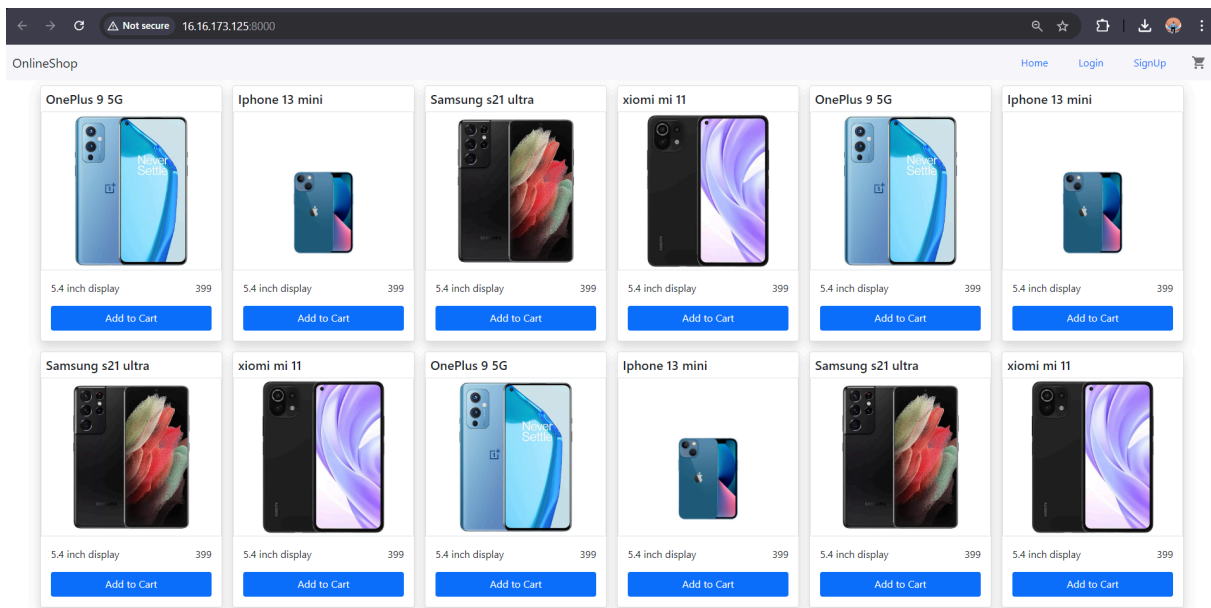
The screenshot shows the Docker Hub interface for the user 'santhoshkumare15'. The page displays a list of repositories under the 'Repos' tab. The repositories listed are:

- santhoshkumare15 / prod**: Contains: Image, Last pushed: about 1 hour ago, 0 stars, 2 downloads, Public, Scout inactive.
- santhoshkumare15 / mydockerjenkins**: Contains: Image, Last pushed: 2 months ago, 0 stars, 7 downloads, Public, Scout inactive.
- santhoshkumare15 / nginx**: Contains: Image, Last pushed: 3 months ago, 0 stars, 3 downloads, Public, Scout inactive.
- santhoshkumare15 / myjavainlg**: Contains: Image, Last pushed: 3 months ago, 0 stars, 5 downloads, Public, Scout inactive.

On the right side, there is a 'Create An Organization' button with a sub-header 'Create and manage users and grant access to your repositories.' The top navigation bar includes 'Explore', 'Repos', 'Organizations', and a search bar.



Deployed site image:



Jenkins Console Output:

Jenkins

Search (CTRL+K)

Santhosh kumar E

log out

Dashboard > Capstone > #4

Status

Changes

Console Output

View as plain text

Edit Build Information

Delete build '#4'

Timings

Git Build Data

Pipeline Overview

Pipeline Console

Restart from Stage

Replay

Pipeline Steps

Workspaces

Previous Build

Console Output

Started by user Santhosh kumar E

Lightweight checkout support not available, falling back to full checkout.

Checking out git https://github.com/Santhoshkumar1510/capstone\_project.git into /var/lib/jenkins/workspace/Capstone@script/5c37f523f5fb9c42a5cd2a792201aed3ce8f20b999424d511acb25e540892ccb to read jenkinsfile

The recommended git tool is: NONE

No credentials specified

> git rev-parse --resolve-git-dir /var/lib/jenkins/workspace/Capstone@script/5c37f523f5fb9c42a5cd2a792201aed3ce8f20b999424d511acb25e540892ccb/.git # timeout=10

Fetching changes from the remote Git repository

> git config remote.origin.url https://github.com/Santhoshkumar1510/capstone\_project.git # timeout=10

Fetching upstream changes from https://github.com/Santhoshkumar1510/capstone\_project.git

> git --version # timeout=10

> git --version # 'git version 2.43.0'

> git fetch --tags --force --progress -- https://github.com/Santhoshkumar1510/capstone\_project.git +refs/heads/\*:refs/remotes/origin/\* # timeout=10

Seen branch in repository origin/main

Seen 1 remote branch

> git show-ref --tags -d # timeout=10

Checking out Revision f8f5fc693c3eed6a93682944e52410ffe560f3ac (origin/main)

> git config core.sparsecheckout # timeout=10

> git checkout -f f8f5fc693c3eed6a93682944e52410ffe560f3ac # timeout=10

Commit message: "this is new commit"

> git rev-list --no-walk 212fd74926bdaec23fc0e5bead0708c7ba445e76 # timeout=10

[Pipeline] Start of Pipeline

[Pipeline] node

Running on Jenkins in /var/lib/jenkins/workspace/Capstone

[Pipeline] {

[Pipeline] stage

[Pipeline] { (Declarative: Checkout SCM)

Jenkins pipeline output:

Jenkins

Search (CTRL+K)

Santhosh kumar E

log out

Dashboard >

+ New Item

Build History

Project Relationship

Check File Fingerprint

Manage Jenkins

My Views

People

Build Queue

Build Executor Status

All

+

S	W	Name ↓	Last Success	Last Failure	Last Duration
✓	☁	Capstone	57 min #4	3 days 2 hr #3	27 sec ▶
⋯	☀	cicd	N/A	N/A	N/A ▶
⋯	☀	ecom	N/A	N/A	N/A ▶
✓	☀	Jenkins_CICD	2 mo 0 days #6	N/A	22 sec ▶
✓	☀	job1	3 days 4 hr #2	N/A	17 sec ▶

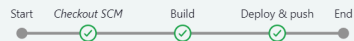
Icon: S M L

Add description

## Build #4

[Rebuild](#)[Console](#)[Configure](#)

### Pipeline



### Details


Manually run by Santhosh kumar E

Started 58 min ago





Queued 37 ms

Took 27 sec

## Jenkins configuration:


 **Jenkins**


Search (CTRL+K)


   Santhosh kumar E  log out

Dashboard > Capstone > Configuration


### Configure

 General

 Advanced Project Options

 Pipeline

### General

Enabled 

Description

Plain text [Preview](#)

☐ Discard old builds ?

☐ Do not allow concurrent builds

☐ Do not allow the pipeline to resume if the controller restarts

☒ GitHub project

Project url ?

https://github.com/Santhoshkumar1510/capstone\_project.git/

Advanced ▾

☐ Pipeline speed/durability override ?

☐ Preserve stashes from completed builds ?

☐ This project is parameterized ?

☐ Throttle builds ?

Build Triggers

[Save](#) [Apply](#)

Dashboard > Capstone > Configuration

Configure

General

Advanced Project Options

Pipeline

Build Triggers

☐ Build after other projects are built ?

☐ Build periodically ?

☐ GitHub Branches

☐ GitHub Pull Requests ?

☒ GitHub hook trigger for GITScm polling ?

☐ Poll SCM ?

☐ Quiet period ?

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

Advanced Project Options

Advanced

Pipeline

Definition

Pipeline script from SCM

SCM ?

Git

Repositories ?

Repository URL ?

https://github.com/Santhoshkumar1510/capstone\_project.git

Save

Apply

← → ↺ ⚠ Not secure 16.16.173.125:8080/job/Capstone/configure 🔍 ☆

Dashboard > Capstone > Configuration

Configure

General

Advanced Project Options

Pipeline

Definition

Pipeline script from SCM

SCM ?

Git

Repositories ?

Repository URL ?

https://github.com/Santhoshkumar1510/capstone\_project.git

Credentials ?

- none -

+ Add

Advanced

Add Repository

Branches to build ?

Branch Specifier (blank for 'any') ?

\*/main

Branch Specifier (blank for 'any') ?

\*/devbranch

Save

Apply

← → ↻ Not secure 16.16.173.125:8080/job/Capestone/configure ☆

Dashboard > Capestone > Configuration

### Configure

- General
- Advanced Project Options
- Pipeline**

Branch Specifier (blank for 'any') ?

Add Branch

Repository browser ?

(Auto) ▼

Additional Behaviours

Add ▼

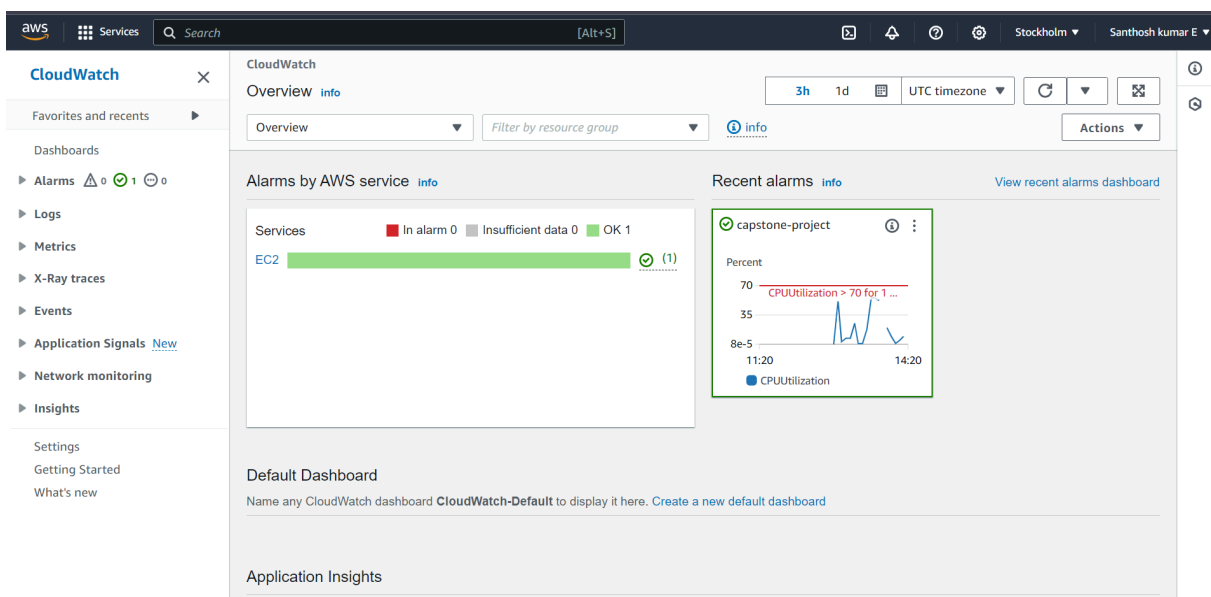
Script Path ?

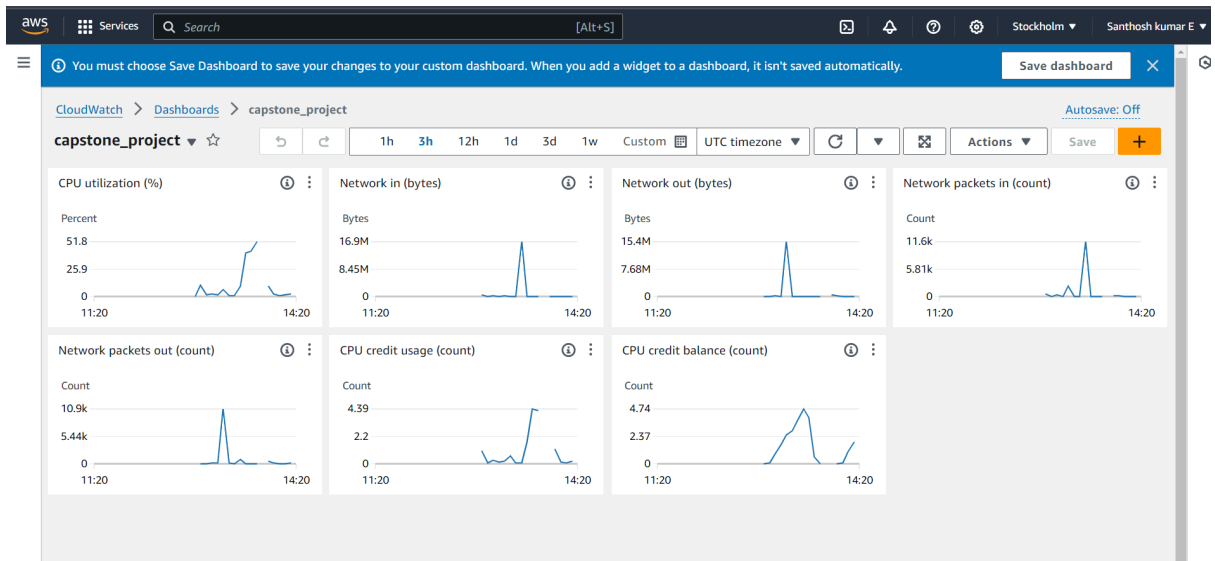
☒ Lightweight checkout ?

[Pipeline Syntax](#)

Save Apply

Monitoring health status of the application:





## Email-notification-alarm:

The screenshot shows the 'Configure actions' step in the AWS CloudWatch console for creating an alarm. The left sidebar shows the steps: Step 1: Specify metric and conditions, Step 2: Configure actions (current), Step 3: Add name and description, and Step 4: Preview and create.

**Notification**

Alarm state trigger  
Define the alarm state that will trigger this action.

☒ **In alarm**  
The metric or expression is outside of the defined threshold.

☐ **OK**  
The metric or expression is within the defined threshold.

☐ **Insufficient data**  
The alarm has just started or not enough data is available.

Send a notification to the following SNS topic  
Define the SNS (Simple Notification Service) topic that will receive the notification.

☒ **Select an existing SNS topic**

☐ Create new topic

☐ Use topic ARN to notify other accounts

Send a notification to...

Q Default\_CloudWatch\_Alarms\_Topic X

Only topics belonging to this account are listed here. All persons and applications subscribed to the selected topic will receive notifications.

Email (endpoints)  
santhoshkumare15@gmail.com - View in SNS Console

Add notification







aws

Services

Search

[Alt+S]



Stockholm

CloudWatch > Alarms > Create alarm

Step 1

[Specify metric and conditions](#)

Step 2

[Configure actions](#)

Step 3

[Add name and description](#)

Step 4

**Preview and create**

# Preview and create

Step 1: Specify metric and conditions

Edit

Metric

Graph

This alarm will trigger when the blue line goes above the red line for 1 datapoints within 5 minutes.

Percent

70

35

8e-5

11:30

12:30

13:30

CPUUtilization

Namespace

AWS/EC2

Metric name

CPUUtilization

InstanceId

i-0500c625955344532

Instance name

Jenkins

Statistic

Maximum

Period

5 minutes