**Load Balancing:**

Ec2

AMI

Target Group

Load Balancer

**Auto Scaling**

Ec2

AMI

lanuch template

Target Group

Load Balancer

Auto scaling Group

**Target Group**

Create target group:

Choose Target Type : Instance

Target Group name : target-group-01

Protocol : HTTP

Port : 80

IP address type : IPV4

VPC :

Protocol Version : HTTP1

Health Check Path : /

Next

Add ec2 instance in Target Group

Include as pending below

Create Target Group

Add target group in Listeners and routing

**Load Balancer**

Load Balancer

Application Load Balancer

name : lb-01

Scheme : Internet Facing

Load Balancer Ip : IPV4

Network Mapping(VPC):

Availability Zone :

:South-east-2a

:South-east-2a

Security Group : default

Listeners and routing(port):

protocal : HTTP

Port : 80

Default action : select already created target group

Create Load Balancer

**Lanuch Template**

name template : tepmlate01

version : v1

Auto scaling guidance : tick yes

which AMI use? : use the same which you already created

instance type : t2.micro

key pair :

security group :

adavacne details

Bash script user data :write script

create launch template

**Auto scaling Group**

Choose launch template

name : asg-01

launch template : myTeampate

version : 1

Next

instance type: It will get selected automatically

Network

VPC : it will get selected automatically

region : select one region

Availability Zone distribution - new

Balanced best effort

next

Listeners and routing:

Protocol :HTTP

Port :80

Default routing (forward to):Create New Group

Health checks:

EC2 Health Check :Always enabled

Turn on Elastic Load Balancing health checks: tick yes

Next

Configure group and scaling

Desired capacity type:2

Scaling:

Min desired capacity: 1

Max desired capacity: 5

Choose whether to use a target tracking policy: Target tracking scaling policy

Scaling policy name: scaling-name-01

Metric type: Average CPU utilization

Target value: 50

Instance warmup: 300 sec

Instance maintenance policy:

No policy

Additional capacity settings

Default

Next

Add Notification

Next

Add Tags

Next

Summanry

Create Auto Scaling Groups

Bash script for template

#!/bin/bash

# Ensure Docker is running

sudo systemctl start docker

# Check if the container is already running or exists

if [ "$(sudo docker ps -aq -f name=new\_ecr)" ]; then

# Stop and remove the existing container

sudo docker stop new\_ecr

sudo docker rm new\_ecr

fi

# Run the Docker container

sudo docker run -p 80:5000 -e DAGSHUB\_PAT=c7739af80dc00d48cfbd465104124cf4ecd96802 --name new\_ecr 905418096737.dkr.ecr.ap-south-1.amazonaws.com/new\_ecr:latest