

Capstone Screenshots

Project URL : <https://github.com/gunadhya/capstone>

Pipeline

The screenshot displays the GitHub Actions pipeline interface for the 'capstone' project. The left sidebar shows the user 'gunadhya' and navigation links for Dashboard, Projects, Insights, Organization Settings, and Plan. The main area shows the pipeline 'capstone' with a 'Success' status. Below the pipeline summary, a list of jobs is shown, each with a green checkmark indicating success and a duration.

PIPELINE	STATUS	WORKFLOW	BRANCH / COMMIT	START	DURATION	ACTIONS
capstone 20	Success	default	main da6ac38 kubeupdate2	13m ago	7m 55s	
Jobs						
	✓	linting-v1	69		9s	
	✓	build-image-v1	70		23s	
	✓	linting-v2	71		6s	
	✓	build-image-v2	72		20s	
	✓	deployment	73		3m 18s	
	✓	rolling-update	74		3m 16s	

Success kubernetes deployment and load balancer service.

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Status MAINTENANCE

Help

Checkout code

0s

deploy appv1

3m 14s

```
# test kubectl
kubectl version

# get services
kubectl get svc

# change directory
cd kube

# create a deployment
kubectl apply -f mydeploy.yml

# create a service
kubectl apply -f myservice.yml

sleep 3m

# get services after
kubectl get svc
```

	% Total	% Received	% Xferd	Average Speed	Time	Time	Time	Current		
				Dload	Upload	Total	Spent	Left	Speed	
100	57.4M	100	57.4M	0	0	19.1M	0	0:00:03	0:00:03	19.1M

Added new context arn:aws:eks:*****:453513115911:cluster/mycluster to /root/.kube/config

Client Version: version.Info{Major:"1", Minor:"19+", GitVersion:"v1.19.6-eks-49a6c0", GitCommit:"49a6c0bf091506e7ba9c4b1b142351b69363355a", GitTreeState:"clean"

Server Version: version.Info{Major:"1", Minor:"18+", GitVersion:"v1.18.9-eks-d1db3c", GitCommit:"d1db3c46e55f95d6a7d3e5578689371318f95ff9", GitTreeState:"clean"

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
kubernetes	ClusterIP	10.100.0.1	<none>	443/TCP	74m

deployment.apps/myapp created

service/my-service created

NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
kubernetes	ClusterIP	10.100.0.1	<none>	443/TCP	77m
my-service	LoadBalancer	10.100.133.248	a46246c224dlb48bb8920abf80cc2516-1124791378.*****.elb.amazonaws.com	80:32700/TCP	3m2s

CircleCI received exit code 0

Successful Rolling update with appv2

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Checkout code0s

deploy appv2 by rolling update3m 13s

```
# configure kubectl
aws --region ap-south-1 eks update-kubeconfig --name mycluster

# test kubectl
kubectl version

# get services before
kubectl get svc

# change directory
cd kube

# update app to version2
# do a rolling update based on update strategy
kubectl apply -f rolling.yml

sleep 3m

# get services after
kubectl get svc
```

	% Total	% Received	% Xferd	Average Speed	Time	Time	Time	Current
				Dload Upload	Total	Spent	Left	Speed
100	57.4M	100	57.4M	0	0	18.8M	0	0:00:03 --:--:-- 18.8M

Added new context arn:aws:eks:*****:453513115911:cluster/mycluster to /root/.kube/config

Client Version: version.Info{Major:"1", Minor:"19", GitVersion:"v1.19.6-eks-49a6c0", GitCommit:"49a6c0bf091506e7bafcd5b142351b69363355", GitTreeState:"clean"

Server Version: version.Info{Major:"1", Minor:"18", GitVersion:"v1.18.9-eks-d1db3c", GitCommit:"d1db3c46e55f95d6a7d3e5578689271318f95ff9", GitTreeState:"clean"

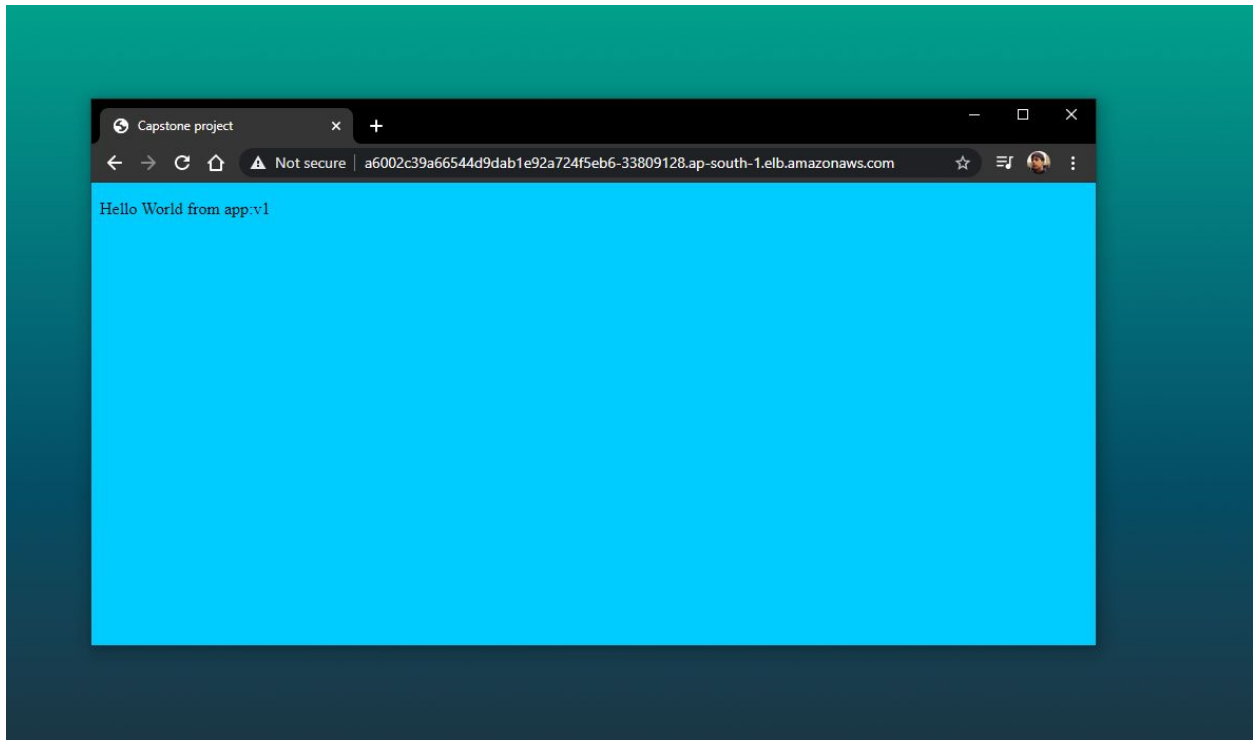
NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
kubernetes	ClusterIP	10.100.0.1	<none>	443/TCP	77m
my-service	LoadBalancer	10.100.133.248	a46246c224d1b48bb8920abf80cc2516-1124791378.*****.elb.amazonaws.com	80:32700/TCP	3m16s

deployment.apps/myapp configured

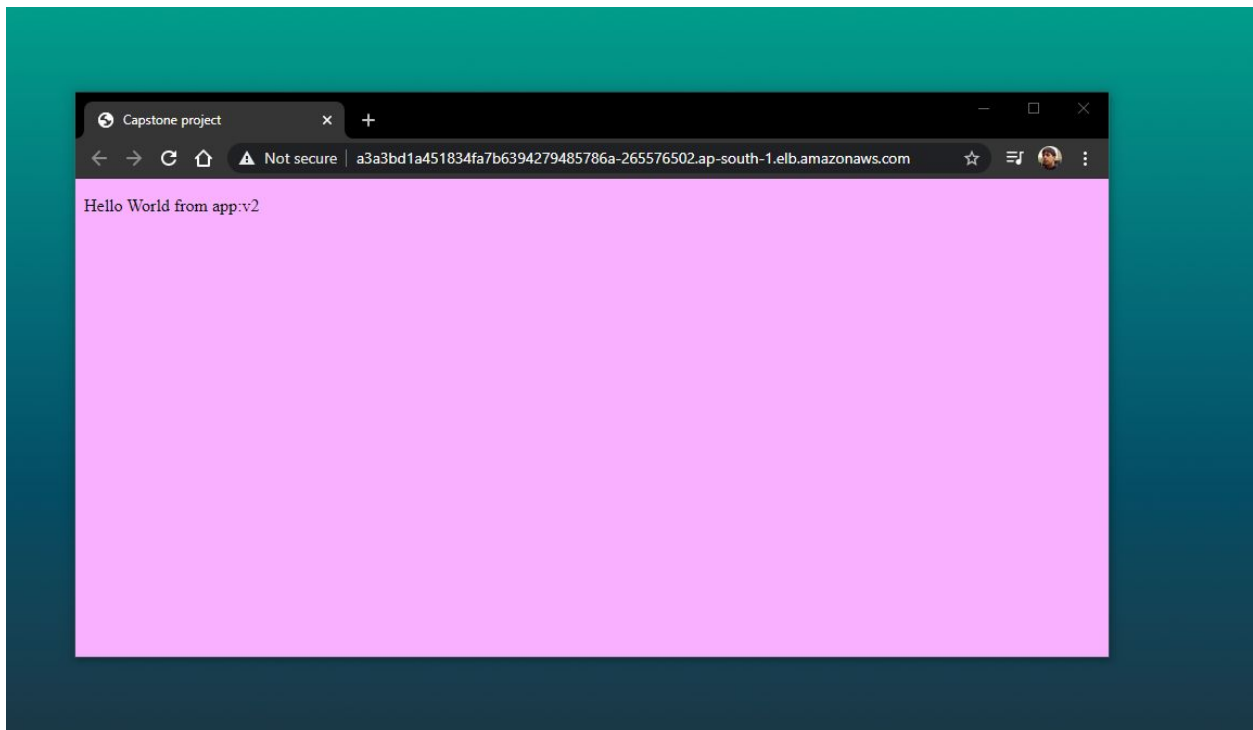
NAME	TYPE	CLUSTER-IP	EXTERNAL-IP	PORT(S)	AGE
kubernetes	ClusterIP	10.100.0.1	<none>	443/TCP	80m
my-service	LoadBalancer	10.100.133.248	a46246c224d1b48bb8920abf80cc2516-1124791378.*****.elb.amazonaws.com	80:32700/TCP	6m21s

CircleCI received exit code 0

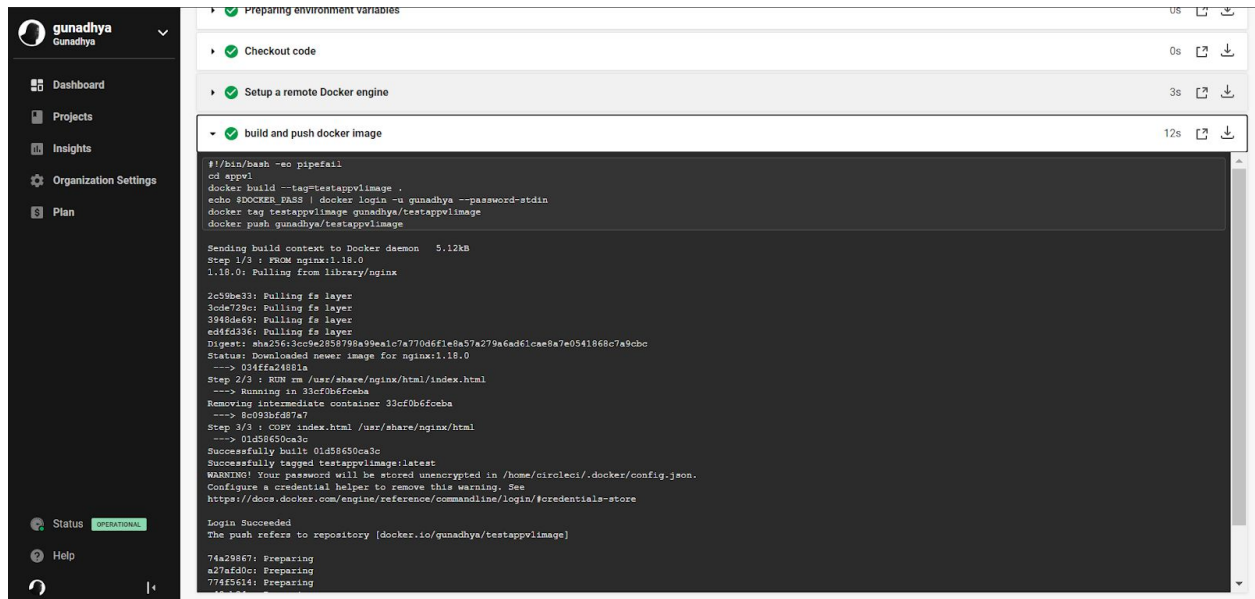
Deployment of appv1



Deployment of appv2 after Rolling update



Build Docker image



The screenshot shows the AWS CloudFormation console interface. On the left is a sidebar with navigation links: Dashboard, Projects, Insights, Organization Settings, and Plan. The main area displays the execution details of a stack named 'gunadhya'. The stack is in the 'OPERATIONAL' state. The current step is 'build and push docker image', which is successful. The step details show the Docker build and push process for a testappv1 image. The build process includes pulling the base image (nginx:1.18.0), copying the index.html file, and successfully building and pushing the image to the Docker repository.

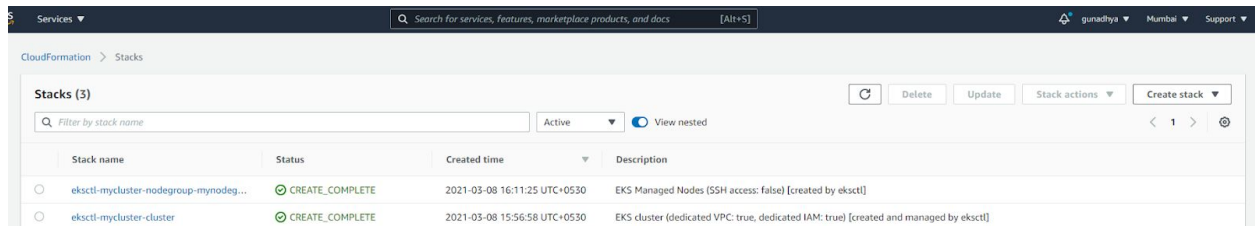
```
#!/bin/bash -eo pipefail
cd appv1
docker build --tag=testappv1image .
echo $DOCKER_PASS | docker login -u gunadhya --password-stdin
docker tag testappv1image gunadhya/testappv1image
docker push gunadhya/testappv1image

Sending build context to Docker daemon  5.12kB
Step 1/3 : FROM nginx:1.18.0
1.18.0: Pulling from library/nginx
2c59ba39: Pulling fs layer
3c0e729c: Pulling fs layer
3948de69: Pulling fs layer
ed6d336: Pulling fs layer
Digest: sha256:3c0e2859798a99ealc7a770d6f1e8a57a279a6ad61c0e8a7e0541868c7a9c0b
Status: Downloaded newer image for nginx:1.18.0
--> 034ffa24801a
Step 2/3 : RUN rm -f /usr/share/nginx/html/index.html
--> 33cf0b6f0c0b
Removing intermediate container 33cf0b6f0c0b
--> 0c093b2d87a7
Step 3/3 : COPY index.html /usr/share/nginx/html
--> 01d58650ca3c
Successfully built 01d58650ca3c
Successfully tagged testappv1image:latest
WARNING: Your password will be stored unencrypted in /home/circleci/.docker/config.json.
Configure a credential helper to remove this warning. See
https://docs.docker.com/engine/reference/commandline/login/#credentials-store

Login Succeeded
The push refers to repository [docker.io/gunadhya/testappv1image]

74a28867: Preparing
a27af40c: Preparing
774f5614: Preparing
```

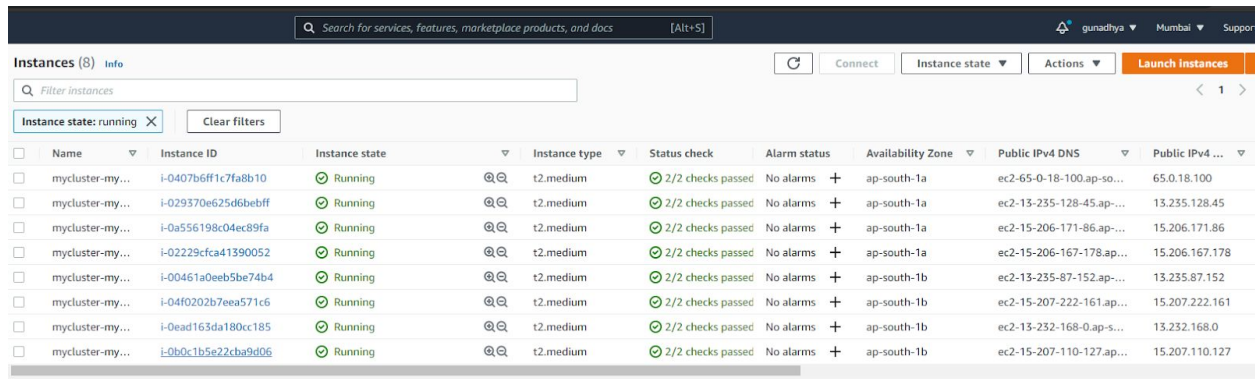
Cloudformation Stack



The screenshot shows the AWS CloudFormation console interface. The top navigation bar includes 'Services', a search bar, and user information. The main area displays a list of stacks under the 'CloudFormation > Stacks' section. There are two stacks listed, both in the 'CREATE_COMPLETE' state.

Stack name	Status	Created time	Description
eksctl-mycluster-nodgroup-mynodeg...	CREATE_COMPLETE	2021-03-08 16:11:25 UTC+0530	EKS Managed Nodes (SSH access: false) [created by eksctl]
eksctl-mycluster-cluster	CREATE_COMPLETE	2021-03-08 15:56:58 UTC+0530	EKS cluster (dedicated VPC: true, dedicated IAM: true) [created and managed by eksctl]

EC2 Dashboard of instances created by eks



The screenshot shows the AWS EC2 console interface. The top navigation bar includes 'Search for services, features, marketplace products, and docs', user information, and a 'Launch instances' button. The main area displays a list of instances under the 'Instances (8) Info' section. All instances are in the 'Running' state.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...
mycluster-my...	i-0407b6ff1c7fa8b10	Running	t2.medium	2/2 checks passed	No alarms	ap-south-1a	ec2-65-0-18-100.ap-so...	65.0.18.100
mycluster-my...	i-029370e625d6bebf	Running	t2.medium	2/2 checks passed	No alarms	ap-south-1a	ec2-13-235-128-45.ap-...	13.235.128.45
mycluster-my...	i-0a556198c04ec89fa	Running	t2.medium	2/2 checks passed	No alarms	ap-south-1a	ec2-15-206-171-86.ap-...	15.206.171.86
mycluster-my...	i-02229cfca41390052	Running	t2.medium	2/2 checks passed	No alarms	ap-south-1a	ec2-15-206-167-178.ap...	15.206.167.178
mycluster-my...	i-00461a0eeb5be74b4	Running	t2.medium	2/2 checks passed	No alarms	ap-south-1b	ec2-13-235-87-152.ap-...	13.235.87.152
mycluster-my...	i-04f0202b7eea571c6	Running	t2.medium	2/2 checks passed	No alarms	ap-south-1b	ec2-15-207-222-161.ap...	15.207.222.161
mycluster-my...	i-0ead163da180cc185	Running	t2.medium	2/2 checks passed	No alarms	ap-south-1b	ec2-13-232-168-0.ap-s...	13.232.168.0
mycluster-my...	i-0b0c1b5e22c9a9d06	Running	t2.medium	2/2 checks passed	No alarms	ap-south-1b	ec2-15-207-110-127.ap...	15.207.110.127

Active EKS Cluster names mycluster

Search for services, features, marketplace products, and docs

[Alt+S]

gunadiya Mumbai Support

EKS > Clusters

New Kubernetes versions are available for 1 cluster.

Clusters (1) Info

Find clusters by name

< 1 >

Cluster name	Kubernetes version	Status
mycluster	1.18 Update now	Active

mycluster

Active

Delete cluster

Your current user or role does not have access to Kubernetes objects on this EKS cluster

This may be due to the current user or role not having Kubernetes RBAC permissions to describe cluster resources or not having an entry in the cluster's auth config map. [Learn more](#)

A new Kubernetes version is available for this cluster. [Learn more](#)

Update now

Overview

Workloads

Configuration

Cluster configuration Info

Kubernetes version Info1.18

Platform version Infoeks.3

Details

Compute

Networking

Add-ons

Authentication

Logging

Update history

Tags

Details

API server endpoint

https://FFCB89CF730338651A4FEE1A4EB431B8.y4.ap-south-1.eks.amazonaws.com

Creation time

Mar 8th 2021 at 5:20 PM

OpenID Connect provider URL

https://oidc.eks.ap-south-1.amazonaws.com/id/FFCB89CF730338651A4FEE1A4EB431B8

Certificate authority

LS0tLS1CRUdJTlBDRVJUSUZQOFURS0tLS0tck1JSUNSRENDQWJ
DZ0F3SUJBZ0lCQURBTKJna3Foa2lHOXcwQkRrc0ZBREFWTVJNd0
VRWURWUVFERXdwcmRXSmwKY201bGRHVnpNQjRYRFJJe1ET

Cluster ARN

arn:aws:eks:ap-south-1:453513115911:cluster/mycluster

Cluster IAM Role ARN

arn:aws:iam::453513115911:role/eksctl-mycluster-cluster-ServiceRole-15TSI2WG2N7YS [Learn more](#)

1 Lint Error check in pipeline

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Status OPERATIONAL

Help

All Pipelines > capstone > main > default > linting-v1 (4)

linting-v1 Failed Run ...

Duration / Finished
8s / 1s ago

Queued
0s

Executor
Docker Medium

Branch
main

Commit
ba2def9

Author & Message
fixed path to dockerfile

STEPS

TESTS

ARTIFACTS

1 / 1 parallel run

Spin up environment
2s

Preparing environment variables
0s

Checkout code
0s

Restoring cache
0s

Install dependencies
0s

lint check 1
4s

lint check 2
0s

```
#!/bin/bash -eo pipefail
./hadolint ./app/Dockerfile

./app/Dockerfile:2:1 unexpected 't' expecting 'f', ADD, ARG, CMD, COPY, ENTRYPOINT, ENV, EXPOSE, FROM, HEALTHCHECK, LABEL, MAINTAINER, ONBUILD, RUN, SHELL, STOPSIGNAL, USER, VOLUME, WORKDIR
Exited with code exit status 1
CircleCI received exit code 1
```

2nd lint error check in pipeline

The screenshot shows a GitHub Actions workflow run for the 'gunadhya' organization. The workflow steps are: Spin up environment (1s), Preparing environment variables (0s), Checkout code (0s), Restoring cache (0s), Install dependencies (0s), and lint check 1 (3s). The 'lint check 1' step is highlighted in red, indicating it failed. The terminal output for this step shows the following commands and results:

```
#!/bin/bash -eo pipefail
npm install --save-dev htmlhint
npm run lint:html
npm run lint:html
```

The output shows several deprecation warnings from npm, followed by the installation of 'htmlhint@0.14.2'. The linting process scanned 2 files and found 1 error in 1 file (12 ms). The error message is: `~/home/circleci/project/app1/index.html: 34:1 <title>/<title> must not be empty. (title-require)`. The step failed with exit code 1.

Successful lint check

The screenshot shows a GitHub Actions workflow run for the 'gunadhya' organization, specifically for the 'linting-v1' job. The workflow steps are: Spin up environment (2s), Preparing environment variables (0s), Checkout code (0s), Restoring cache (0s), Install dependencies (0s), lint check 1 (3s), lint check 2 (0s), and Saving cache (0s). All steps are marked as successful with green checkmarks. The 'linting-v1' job is highlighted in green, indicating it succeeded. The terminal output for the 'lint check 1' step shows the same commands as the previous screenshot, but the linting process found 0 vulnerabilities and no errors. The step succeeded with exit code 0.