

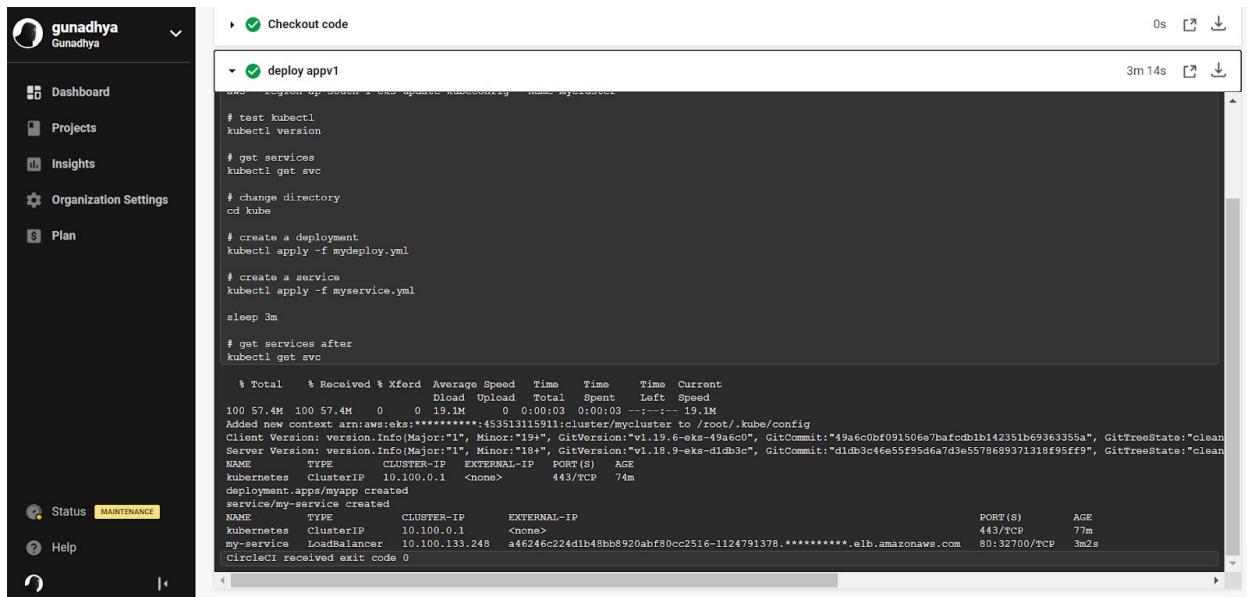
Capstone Screenshots

Project URL : <https://github.com/gunadhy/a/capstone>

Pipeline

The screenshot shows the CircleCI web interface for the 'capstone' pipeline. On the left is a dark sidebar with navigation links: Dashboard, Projects, Insights, Organization Settings, Plan, Status (MAINTENANCE), and Help. The main area is titled 'Pipeline' and shows the 'capstone' pipeline details. The pipeline status is 'Success'. It was triggered by a commit to the 'main' branch (commit hash: da6ac38, commit message: kubeupdate2) 13m ago. The duration was 7m 55s. The pipeline has 7 jobs listed under 'Jobs': linting-v1 (status: success, duration: 9s), build-image-v1 (status: success, duration: 23s), linting-v2 (status: success, duration: 6s), build-image-v2 (status: success, duration: 20s), deployment (status: success, duration: 3m 18s), and rolling-update (status: success, duration: 3m 16s). There are also 'Edit Config' and 'Project Settings' buttons.

Success kubernetes deployment and load balancer service.



The screenshot shows a CircleCI pipeline interface. On the left, there's a sidebar with navigation links: Dashboard, Projects, Insights, Organization Settings, Plan, Status (which is currently set to MAINTENANCE), and Help. The main area displays a terminal window with a green checkmark icon indicating success for the 'deploy appv1' step. The terminal output shows the following command history and results:

```
# 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
```

After the deployment command, the terminal shows a table of services:

% 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

Following this, a message indicates the addition of a new context:

```
Added new context arn:aws:eks:*****:45351315911:cluster/mycluster to /root/.kube/config
```

Then, detailed information about the client and server versions is provided:

```
Client Version: version.Info{Major:"1", Minor:"19+", GitVersion:"v1.19.6-eks-49a6c0", GitCommit:"49a6c0bf091506e7bafcd81b142351b69363355a", GitTreeState:"clean"
Server Version: version.Info{Major:"1", Minor:"18+", GitVersion:"v1.18.9-eks-d1db3c", GitCommit:"d1db3c46e55f95d6a7d3e5578689371318f95ff9", GitTreeState:"clean"}
```

Finally, the table of services is shown again with the newly created 'my-service' entry:

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				

At the bottom of the terminal window, it says "circleCI received exit code 0".

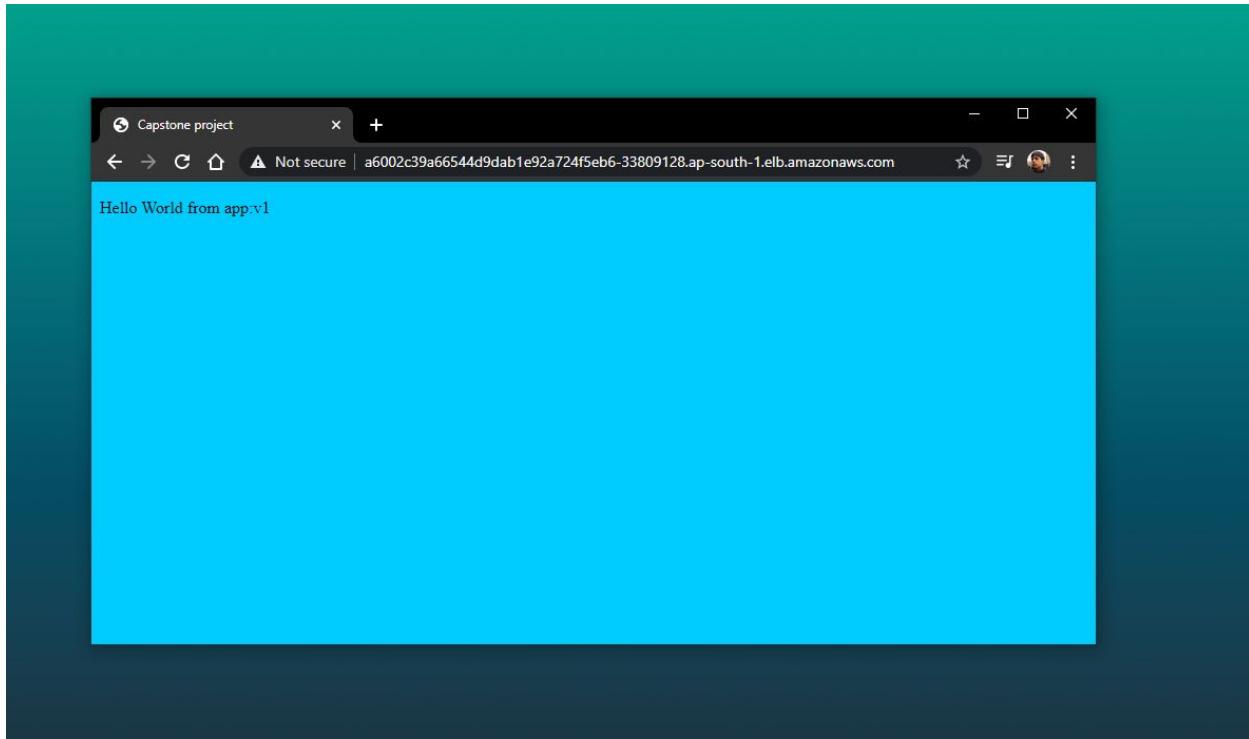
Successful Rolling update with appv2

The screenshot shows a CircleCI pipeline interface. On the left, there's a sidebar with navigation links: Dashboard, Projects, Insights, Organization Settings, and Plan. Below the sidebar, there are status indicators for Status (green) and Help (yellow). The main area displays a terminal window with the following content:

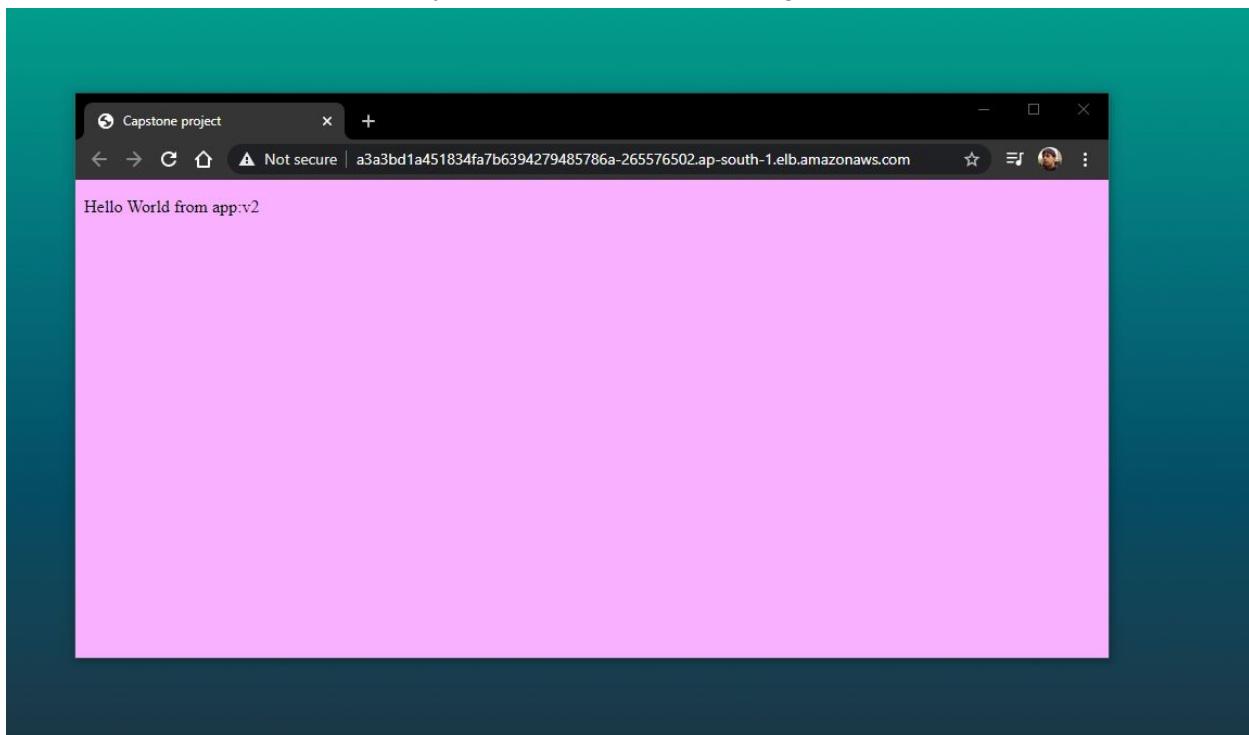
```
Checkout code
deploy appv2 by rolling update
aws --region ap-south-1 eks update-kubeconfig --name mycluster
kubectl version
kubectl get svc
cd kube
update app to version2
do a rolling update based on update strategy
kubectl apply -f rolling.yml
sleep 3m
get services after
kubectl get svc
Total % Received % Xferd Average Speed Time Time Current
          Dload Upload Total Spent Left Speed
100 57.4M 100 57.4M 0 0 18.8M 0 0:00:03 0:00:03 18.8M
Added new context: arn:aws:eks:*****:43513115911:cluster/mycluster to /root/.kube/config
Client Version: version.Info{Major:"1", Minor:"19+", GitVersion:"v1.19.6-eks-49a6c0", GitCommit:"49a6c0bf0915067baecd1b142351b69363355a", GitTreeState:"clean"
Server Version: version.Info{Major:"1", Minor:"18+", GitVersion:"v1.18.9-eks-d1db3c", GitCommit:"d1db3c46e55f95d6a7d3e5578680371310f95ff9", GitTreeState:"clean
NAME           TYPE            CLUSTER-IP      EXTERNAL-IP
kubernetes     ClusterIP      10.100.0.1    <none>
my-service     LoadBalancer   10.100.133.248 a46246c224d1b48bb8920abf80cc2516-1124791378.*****.elb.amazonaws.com
my-service     LoadBalancer   10.100.133.248 a46246c224d1b48bb8920abf80cc2516-1124791378.*****.elb.amazonaws.com
deployment.apps/myapp configured
NAME           TYPE            CLUSTER-IP      EXTERNAL-IP
kubernetes     ClusterIP      10.100.0.1    <none>
my-service     LoadBalancer   10.100.133.248 a46246c224d1b48bb8920abf80cc2516-1124791378.*****.elb.amazonaws.com
CircleCI received exit code 0
```

The terminal output indicates a successful deployment of appv2 using a rolling update strategy. The deployment status is shown as "MAINTENANCE".

Deployment of appv1



Deployment of appv2 after Rolling update



Build Docker image

```

Preparing environment variables
Checkout code
Setup a remote Docker engine
build and push docker image
#!/bin/bash -eo pipefail
cd appv1
docker build --tag=testappv1image .
echo $DOCKER_PASSWORD | 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
5c93be23: Pulling fs layer
3cde729c: Pulling fs layer
3948ae69: Pulling fs layer
edffdd36: Pulling fs layer
Digest: sha256:3c9e9e2858798a99ea1c7a770df1e8a57a279a6d61cae8a7e0541868c7a9cbc
Status: Downloaded newer image for nginx:1.18.0
--> 034f2a24811a
Step 2/3 : COPY index.html /usr/share/nginx/html/index.html
--> Running in 33cf0b6fcoba
Removing intermediate container 33cf0b6fcoba
--> 8c093bf8d7a7
Step 3/3 : COPY index.html /usr/share/nginx/html
--> 01d8650ca3c3
Successfully built 01d8650ca3c3
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]

74a29867: Preparing
a27af0dc: Preparing
774f5614: Preparing

```

Status: OPERATIONAL

Help

Cloudformation Stack

Stacks (3)			
Stack name	Status	Created time	Description
eksctl-mycluster-nodegroup-mynodegroup	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

Instances (8) Info											
Filter instances Clear filters											
	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...		
<input type="checkbox"/>	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		
<input type="checkbox"/>	mycluster-my...	i-029370e625d6bebff	Running	t2.medium	2/2 checks passed	No alarms	+ ap-south-1a	ec2-13-235-128-45.ap...	13.235.128.45		
<input type="checkbox"/>	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		
<input type="checkbox"/>	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		
<input type="checkbox"/>	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		
<input type="checkbox"/>	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		
<input type="checkbox"/>	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		
<input type="checkbox"/>	mycluster-my...	i-0b0c1b5e22cba9d06	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

The screenshot shows the AWS EKS console interface. At the top, there's a navigation bar with 'EKS' and 'Clusters'. A search bar says 'Search for services, features, marketplace products, and docs [Alt+S]'. On the right, there are user info ('gunadhyा'), location ('Mumbai'), and support links.

In the main area, a message says 'New Kubernetes versions are available for 1 cluster.' Below it, the 'Clusters (1)' section shows one entry:

Cluster name	Kubernetes version	Status
mycluster	1.18 · Update now	Active

On the right of this table are 'Edit', 'Delete', and 'Create cluster' buttons. Below the table, there are navigation arrows and a page number '1'.

Below this, the cluster details for 'mycluster' are shown. The title is 'mycluster'. A message says '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 message at the bottom left says 'A new Kubernetes version is available for this cluster. Learn more' with a 'Update now' button.

The 'Configuration' tab is selected. Under 'Cluster configuration', it shows 'Kubernetes version: 1.18' and 'Platform version: eks.3'. Below this, there are tabs for 'Details', 'Compute', 'Networking', 'Add-ons', 'Authentication', 'Logging', 'Update history', and 'Tags'. The 'Details' tab is active, displaying information like API server endpoint (<https://FFCB89CF730338651A4FEE1A4EB431B8.yl4.ap-south-1.eks.amazonaws.com>), OpenID Connect provider URL (<https://oidc.eks.ap-south-1.amazonaws.com/id/FFCB89CF730338651A4FEE1A4EB431B8>), Cluster ARN (arn:aws:eks:ap-south-1:453513115911:cluster/mycluster), Creation time (Mar 8th 2021 at 5:20 PM), Certificate authority (long hex string), and Cluster IAM Role ARN (arn:aws:iam::453513115911:role/eksctl-mycluster-cluster-ServiceRole-15TSI2WG2N7YS).

1 Lint Error check in pipeline

The screenshot shows the CircleCI web interface for a pipeline named 'linting-v1'. The pipeline has a status of 'Failed' and was completed 8s ago. It used a Docker Medium executor on the 'main' branch with commit 'ba2def9'. The pipeline details are as follows:

- Duration / Finished:** 8s / 1s ago
- Queued:** 0s
- Executor:** Docker Medium
- Branch:** main
- Commit:** ba2def9
- Author & Message:** fixed path to dockerfile

The pipeline consists of the following steps:

- Spin up environment (Passed)
- Preparing environment variables (Passed)
- Checkout code (Passed)
- Restoring cache (Passed)
- install dependencies (Passed)
- lint check 1 (Passed)
- lint check 2 (Failed)

The 'lint check 2' step failed with the following output:

```
#!/bin/bash -eo pipefail
./node/bin ./appv1/Dockerfile
./appv1/Dockerfile:21: unexpected 't' expecting '$'
FROM, 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 CircleCI pipeline status page for a project named "gunadnya". The pipeline consists of several steps:

- Spin up environment (green checkmark)
- Preparing environment variables (green checkmark)
- Checkout code (green checkmark)
- Restoring cache (green checkmark)
- install dependencies (green checkmark)
- lint check 1 (red exclamation mark):
 - Logs show deprecation warnings for request@2.88.2 and har-validator@5.1.5, and a note that capstone@1.0.0 is no longer supported.
 - htmlhint@0.14.2 was added to 75 packages.
 - 4 packages are looking for funding.
 - 0 vulnerabilities found.

The "Status" section at the bottom indicates the pipeline is "OPERATIONAL".

```
#!/bin/bash --norc
npm install --save-dev htmlhint
npx htmlhint "**/*.html"

npm [WARN] deprecated request@2.88.2: request has been deprecated, see https://github.com/request/request/issues/3142
npm [WARN] deprecated har-validator@5.1.5: this library is no longer supported
npm [WARN] capstone@1.0.0 No description
npm [WARN] capstone@1.0.0 No repository field.

+ htmlhint@0.14.2
added 75 packages from 74 contributors and audited 75 packages in 2.489s

4 packages are looking for funding
  run npm fund for details

found 0 vulnerabilities

Config loaded: /home/circleci/project/.htmlhintrc

/home/circleci/project/app/www/index.html
  L4 | <title>
        ^ <title></title> must not be empty. (title-require)

Scanned 2 files, found 1 errors in 1 files (12 ms)

Exited with code exit status 1
CircleCI received exit code 1
```

Successful lint check

The screenshot shows a CI/CD pipeline run interface. The top navigation bar includes links for Dashboard, Project, Branch, Workflow, Job, All Pipelines, capstone, main, default, and linting-v1 (7). On the left sidebar, there are links for Dashboard, Projects, Insights, Organization Settings, and Plan. A status indicator at the bottom left shows 'Status: OPERATIONAL'. The main content area displays a summary of the 'linting-v1' job, which was successful. It shows details like Duration / Finished (8s / 3s ago), Queued (0s), Executor (Docker Medium), Branch (main), Commit (752d3c4), and Author & Message (dockerfilefix2). Below this, a table lists the steps of the pipeline: 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). Each step row includes icons for rerunning and downloading artifacts.