

Yogeshwaran S

Case Study 7

Module 7: Containers

Step 1 Containerization Process

Create a directory in project on the directory clone the GitHub repository

```
yogibca62@cloudshell:~ (oceanic-glazing-299902)$ cd my_app
yogibca62@cloudshell:~/my_app (oceanic-glazing-299902)$ git clone https://github.com/docker-samples/node-bulletin-board
Cloning into 'node-bulletin-board'...
remote: Enumerating objects: 152, done.
remote: Total 152 (delta 0), reused 0 (delta 0), pack-reused 152
Receiving objects: 100% (152/152), 190.11 KiB | 383.00 KiB/s, done.
Resolving deltas: 100% (69/69), done.
yogibca62@cloudshell:~/my_app (oceanic-glazing-299902)$ ls
node-bulletin-board
yogibca62@cloudshell:~/my_app (oceanic-glazing-299902)$
```

Step 2

Find the docker file and activate the docker file using chmod +x dockerfile

```
yogibca62@cloudshell:~/my_app/node-bulletin-board/bulletin-board-app (oceanic-glazing-299902)$ ls -lrt
total 40
-rw-r--r-- 1 yogibca62 yogibca62 1071 Apr 17 18:02 server.js
-rw-r--r-- 1 yogibca62 yogibca62 888 Apr 17 18:02 readme.md
-rw-r--r-- 1 yogibca62 yogibca62 572 Apr 17 18:02 package.json
-rw-r--r-- 1 yogibca62 yogibca62 1131 Apr 17 18:02 LICENSE
-rw-r--r-- 1 yogibca62 yogibca62 1826 Apr 17 18:02 index.html
drwxr-xr-x 3 yogibca62 yogibca62 4096 Apr 17 18:02 fonts
-rw-r--r-- 1 yogibca62 yogibca62 127 Apr 17 18:02 Dockerfile
drwxr-xr-x 2 yogibca62 yogibca62 4096 Apr 17 18:02 backend
-rw-r--r-- 1 yogibca62 yogibca62 1239 Apr 17 18:02 app.js
-rw-r--r-- 1 yogibca62 yogibca62 1227 Apr 17 18:02 site.css
yogibca62@cloudshell:~/my_app/node-bulletin-board/bulletin-board-app (oceanic-glazing-299902)$ ^C
yogibca62@cloudshell:~/my_app/node-bulletin-board/bulletin-board-app (oceanic-glazing-299902)$ chmod +x Dockerfile
yogibca62@cloudshell:~/my_app/node-bulletin-board/bulletin-board-app (oceanic-glazing-299902)$ ls -lrt
total 40
-rw-r--r-- 1 yogibca62 yogibca62 1071 Apr 17 18:02 server.js
-rw-r--r-- 1 yogibca62 yogibca62 888 Apr 17 18:02 readme.md
-rw-r--r-- 1 yogibca62 yogibca62 572 Apr 17 18:02 package.json
-rw-r--r-- 1 yogibca62 yogibca62 1131 Apr 17 18:02 LICENSE
-rw-r--r-- 1 yogibca62 yogibca62 1826 Apr 17 18:02 index.html
drwxr-xr-x 3 yogibca62 yogibca62 4096 Apr 17 18:02 fonts
-rwxr-xr-x 1 yogibca62 yogibca62 127 Apr 17 18:02 Dockerfile
drwxr-xr-x 2 yogibca62 yogibca62 4096 Apr 17 18:02 backend
-rw-r--r-- 1 yogibca62 yogibca62 1239 Apr 17 18:02 app.js
-rw-r--r-- 1 yogibca62 yogibca62 1227 Apr 17 18:02 site.css
yogibca62@cloudshell:~/my_app/node-bulletin-board/bulletin-board-app (oceanic-glazing-299902)$
```

Step 3

Now I have to build the container image

So I build on gcp usa location so I use , gcloud builds submit --tag gcr.io/[my_project_id]/[tag_name]

```
yogibca62@cloudshell:~/my_app/node-bulletin-board/bulletin-board-app (oceanic-glazing-299902)$ ls
app.js  backend  Dockerfile  fonts  index.html  LICENSE  package.json  readme.md  server.js  site.css
yogibca62@cloudshell:~/my_app/node-bulletin-board/bulletin-board-app (oceanic-glazing-299902)$ ls -lrt
yogibca62@cloudshell:~/my_app/node-bulletin-board/bulletin-board-app (oceanic-glazing-299902)$ gcloud builds submit --tag gcr.io/oceanic-glazing-299902/myapp
Creating temporary tarball archive of 12 file(s) totalling 31.4 KiB before compression.
Some files were not included in the source upload.

Check the gcloud log [/tmp/tmp.nIKBO6LhiM/logs/2021.04.17/18.10.28.829862.log] to see which files and the contents of the default gcloudignore file used (see '$ gcloud topic gcloudignore' to learn more).
```

ID	CREATE TIME	IMAGES	DURATION	SOURCE	STATUS
c2ca4a26-187d-43a3-82df-11ec1036a64f	2021-04-17T18:10:34+00:00	34S	gs://oceanic-glazing-299902_cloudbuild/source/1618683033.057738-0a2c6dfbdfa944a49d047d81878c5b49.tgz	gcr.io/oceanic-glazing-299902/myapp (+1 more)	SUCCESS

```
yogibca62@cloudshell:~/my_app/node-bulletin-board/bulletin-board-app (oceanic-glazing-299902)$
```

Step 4 run and deploy

For that I must use cloud run application so I use commend

Gcloud run deploy --image gcr.io/[pro.id]/[tag.name]

```
yogibca62@cloudshell:~/my_app/node-bulletin-board/bulletin-board-app (oceanic-glazing-299902)$ gcloud run deploy --image gcr.io/oceanic-glazing-299902/myapp
Please choose a target platform:
  [1] Cloud Run (fully managed)
  [2] Cloud Run for Anthos deployed on Google Cloud
  [3] Cloud Run for Anthos deployed on VMware
  [4] cancel
Please enter your numeric choice: 1
```

```
Service [myapp] revision [myapp-00001-sul] has been deployed and is serving 100 percent of traffic.
Service URL: https://myapp-kt7yybzd1q-uc.a.run.app
yogibca62@cloudshell:~/my_app/node-bulletin-board/bulletin-board-app (oceanic-glazing-299902)$
```

Now test the application deployed or not from the link given

