

Day 18 Task:

Docker for DevOps Engineers

Task-1

Learn how to use the docker-compose.yml file, to set up the environment, configure the services and links between different containers, and also to use environment variables in the docker-compose.yml file.

→ wrote a complete blog on this <https://rushikesh-mashidkar.hashnode.dev/dockerfile-docker-compose-swarm-and-volumes>

Task-2

- Pull a pre-existing Docker image from a public repository (e.g. Docker Hub) and run it on your local machine. Run the container as a non-root user (Hint- Use `usermod` command to give user permission to docker). Make sure you reboot instance after giving permission to user.
- Inspect the container's running processes and exposed ports using the docker inspect command.
- Use the docker logs command to view the container's log output.
- Use the docker stop and docker start commands to stop and start the container.
- Use the docker rm command to remove the container when you're done.

```
ubuntu@ip-172-31-92-131:~/90daysofdevops/Projects/Node-CICD-TODO$ docker logs fd2cbf71a1c7
Watching for file changes with StatReloader
System check identified some issues:

WARNINGS:
todos.Todo: (models.W042) Auto-created primary key used when not defining a primary key type, by default 'django.db.models.AutoField'.
      HINT: Configure the DEFAULT_AUTO_FIELD setting or the TodosConfig.default_auto_field attribute to point to a subclass of AutoField, e.g. 'django.db.models.BigAutoField'.

System check identified 1 issue (0 silenced).
[20/Jan/2023 02:18:06] "GET / HTTP/1.1" 302 0
[20/Jan/2023 02:18:07] "GET /todos HTTP/1.1" 301 0
[20/Jan/2023 02:18:07] "GET /todos/ HTTP/1.1" 200 4091
[20/Jan/2023 02:18:07] "GET /static/css/style.css HTTP/1.1" 200 225
Not Found: /favicon.ico
[20/Jan/2023 02:18:09] "GET /favicon.ico HTTP/1.1" 404 2460
[20/Jan/2023 02:18:13] "POST /todos/22/update HTTP/1.1" 302 0
[20/Jan/2023 02:18:14] "GET /todos/ HTTP/1.1" 200 4128
[20/Jan/2023 02:18:14] "POST /todos/3/update HTTP/1.1" 302 0
[20/Jan/2023 02:18:14] "GET /todos/ HTTP/1.1" 200 4165
[20/Jan/2023 02:18:16] "POST /todos/2/update HTTP/1.1" 302 0
[20/Jan/2023 02:18:17] "GET /todos/ HTTP/1.1" 200 4202
[20/Jan/2023 02:18:47] "POST /todos/add/ HTTP/1.1" 302 0
[20/Jan/2023 02:18:48] "GET /todos/ HTTP/1.1" 200 4807
ubuntu@ip-172-31-92-131:~/90daysofdevops/Projects/Node-CICD-TODO$ docker inspect fd2cbf71a1c7
[
  {
    "Id": "fd2cbf71a1c784343a7066482c9bfdbb92e0ceb2753b73edf3e2b848809816a",
    "Created": "2023-01-19T20:17:46.58426479Z",
    "GlobalIPv6PrefixLen": 0,
    "IPAddress": "172.17.0.2",
    "IPPrefixLen": 16,
    "IPv6Gateway": "",
    "MacAddress": "02:42:ac:11:00:02",
    "Networks": {
      "bridge": {
        "IPAMConfig": null,
        "Links": null,
        "Aliases": null,
        "NetworkID": "851bcbb18bcd6bf94b1816d928e9fc9c12aa0c260cebf93b2e554aa05ca848aa",
        "EndpointID": "701e20dfa1cab9876bccd54036486337185b4c0d6d9f471d8ddeef5440b1d65a",
        "Gateway": "172.17.0.1",
        "IPAddress": "172.17.0.2",
        "IPPrefixLen": 16,
        "IPv6Gateway": "",
        "GlobalIPv6Address": "",
        "GlobalIPv6PrefixLen": 0,
        "MacAddress": "02:42:ac:11:00:02",
        "DriverOpts": null
      }
    }
  }
]
```

```
    "GlobalIPv6PrefixLen": 0,
    "IPAddress": "172.17.0.2",
    "IPPrefixLen": 16,
    "IPv6Gateway": "",
    "MacAddress": "02:42:ac:11:00:02",
    "Networks": {
      "bridge": {
        "IPAMConfig": null,
        "Links": null,
        "Aliases": null,
        "NetworkID": "851bcbb18bcd6bf94b1816d928e9fc9c12aa0c260cebf93b2e554aa05ca848aa",
        "EndpointID": "701e20dfa1cab9876bccd54036486337185b4c0d6d9f471d8ddeef5440b1d65a",
        "Gateway": "172.17.0.1",
        "IPAddress": "172.17.0.2",
        "IPPrefixLen": 16,
        "IPv6Gateway": "",
        "GlobalIPv6Address": "",
        "GlobalIPv6PrefixLen": 0,
        "MacAddress": "02:42:ac:11:00:02",
        "DriverOpts": null
      }
    }
  }
]
ubuntu@ip-172-31-92-131:~/90daysofdevops/Projects/Node-CICD-TODO$ docker stop fd2cbf71a1c7
fd2cbf71a1c7
ubuntu@ip-172-31-92-131:~/90daysofdevops/Projects/Node-CICD-TODO$ docker rm fd2cbf71a1c7
fd2cbf71a1c7
ubuntu@ip-172-31-92-131:~/90daysofdevops/Projects/Node-CICD-TODO$ |
```