



Docker, Docker-compose

Presentation on the use cases in the *MTech Student Portal Project*:CS682

Debashish Deka 173050055





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What is docker ?

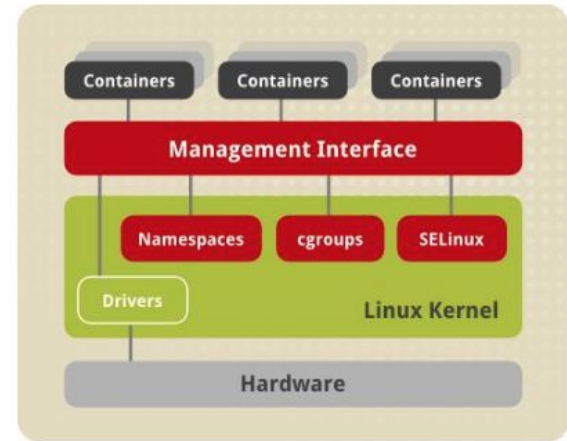
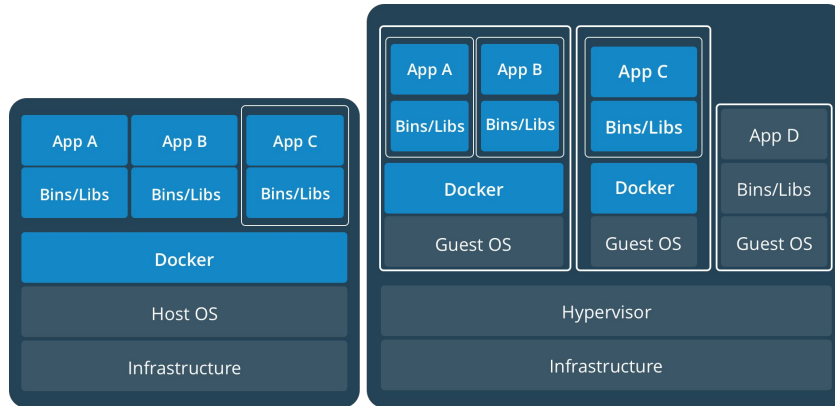
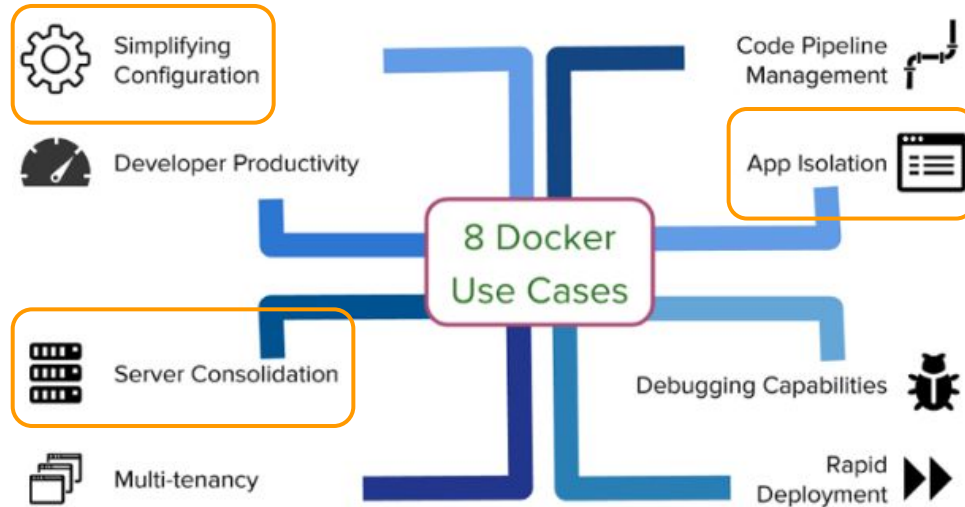


Image Courtesy : Redhat

Docker use cases



Demo-1

1

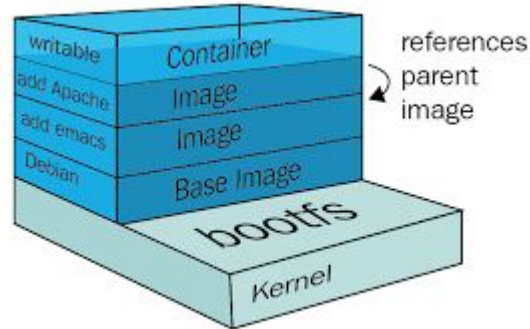
`docker run [args] image:tag [command] [args]`

- `docker run -it --rm ubuntu /bin/bash`
- `docker run -it --rm -v /home/dd/Desktop/msp/team1:/team1 ubuntu /bin/bash`

2

Dockerfile [Github-link](#)

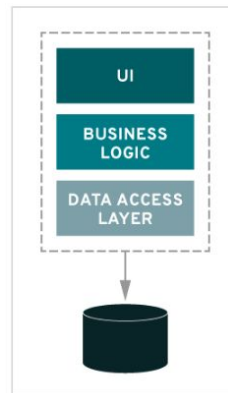
[Demo video](#)



Micro-service

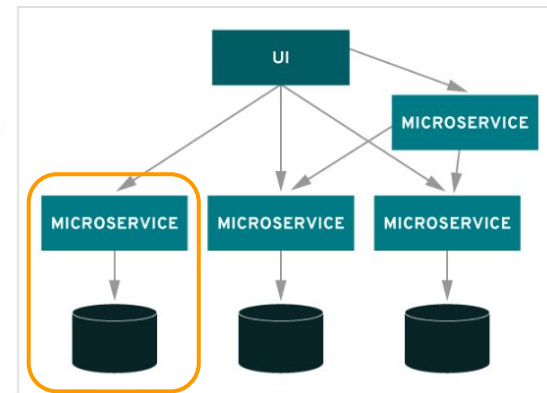
- 1 Language Independent
- 2 Small Team
- 3 Fault Isolation
- 4 Scalable

MONOLITHIC



VS.

MICROSERVICES



Docker-compose

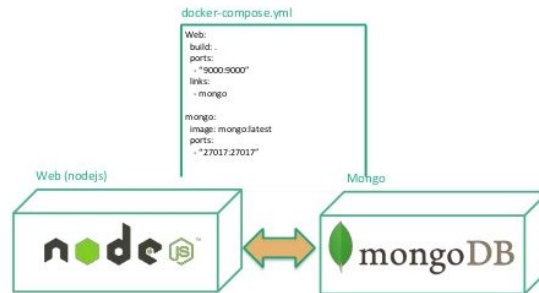
1

It is a docker tool for defining and running multi-container docker applications

2

Docker-compose.yml

Docker compose

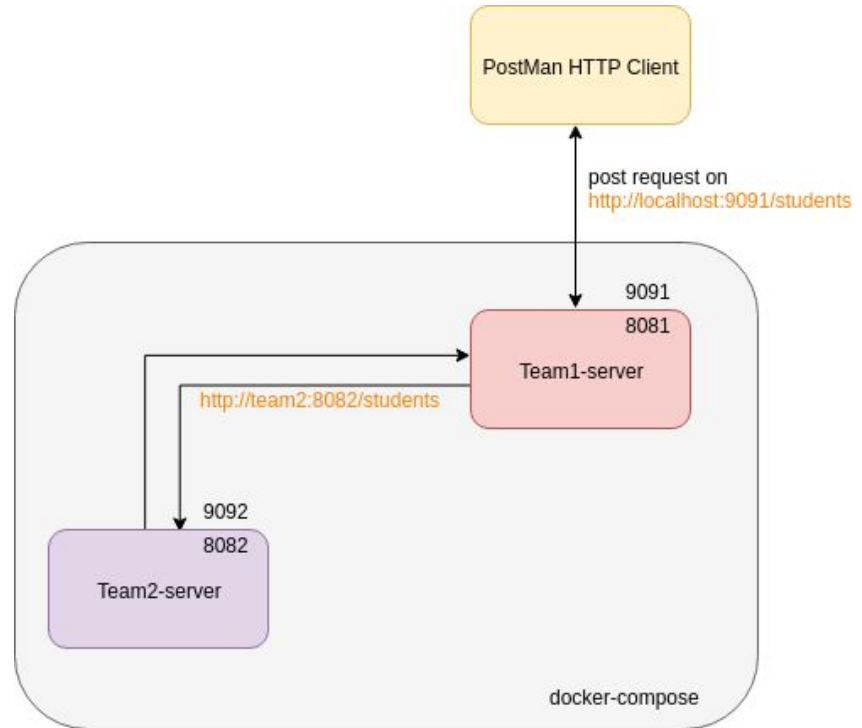


```
# docker-compose.yml
version: "3"
services:
  app:
    build: .
    depends_on:
      - postgres
    ports:
      - "3000:3000"
      - "9229:9229"
  postgres:
    image: postgres:11.1-alpine
    environment:
      POSTGRES_PASSWORD: postgres
```

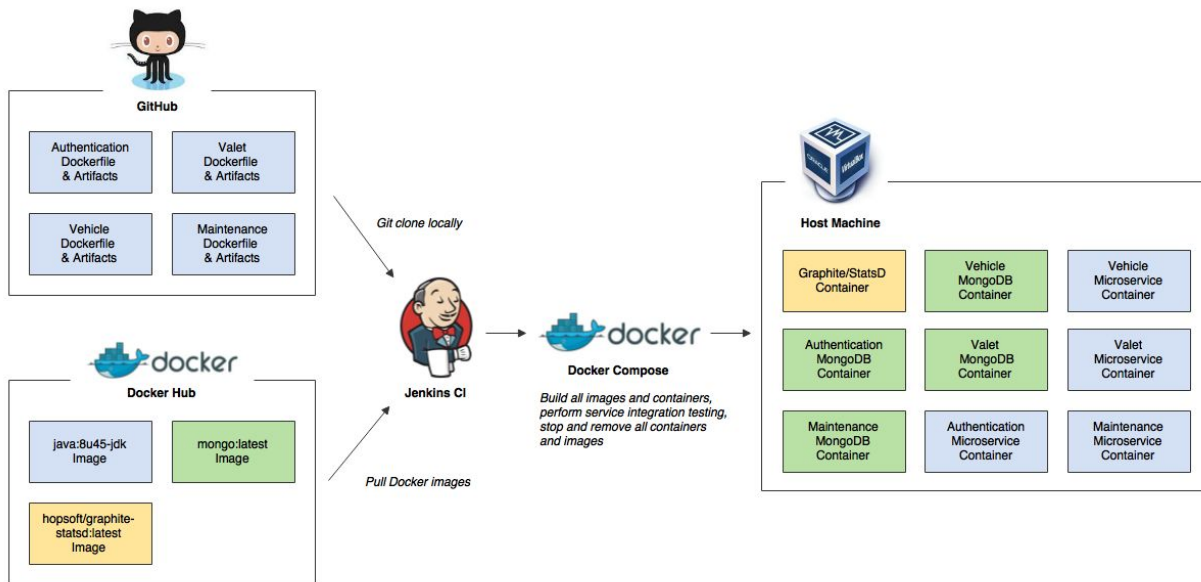
Demo-2

[Github-link](#)

[Demo-Link](#)

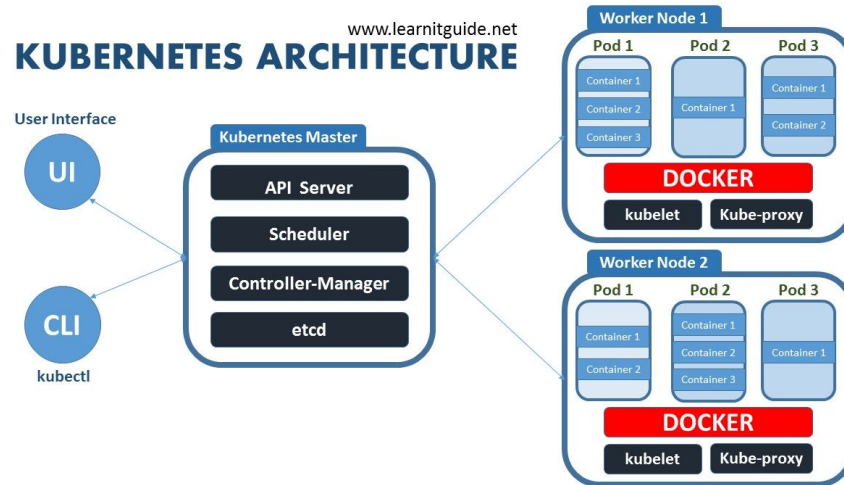


TODO: CI-CD with docker and Jenkins



TODO:

Create kubernetes cluster and deploy M.tech Student portal





Thank you.

