Docker : Docker MasterClass for DevOps

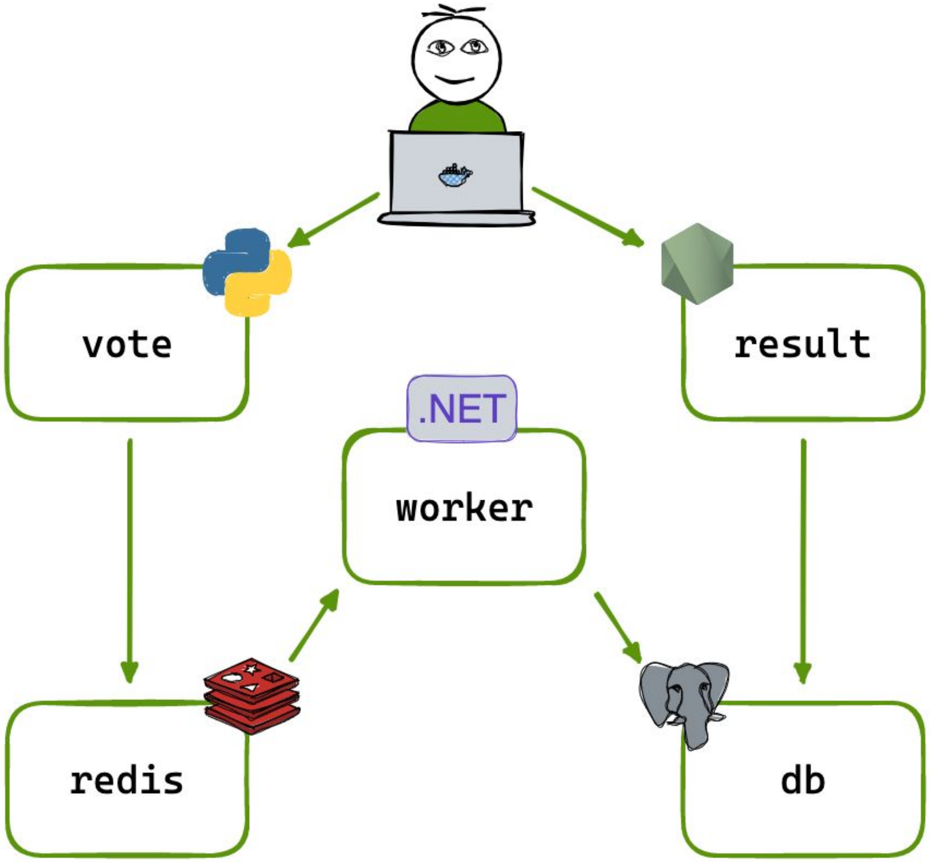
Assignment : Deploy Multi-Node Application in Docker Swarm

Docker : Service Containers

- Assignment to Deploy Multi Node Service via Docker Swarm
- Docker’s Distributed Voting App.
- This solution uses Python, Node.js, .NET, with Redis for messaging and Postgres for storage.

Docker : Service Containers

- Architecture –



Docker : Service Containers

- This is combination of Several docker and compose/swarm file. Code can view at below location: https://github.com/dockersamples/example-voting-app

- App is designed by Docker community and available on Docker Hub for Public use.

- This service need **1 Mount Volume, 2 Network and 5 Stack Services**

- Two overlay network you can call **frontend** and **backend** is needed.

Docker : Service Containers

- Voting App:
  - Image : dockersamples/examplevotingapp_vote
  - Web front app
  - Publish this on port **5000**, Listener Container Port **80**
  - Publish **4 replicas**
  - Publish on **frontend** overlay Network

- Redis:
  - Image : redis:alpine
  - Redis is used to Collect New Votes
  - Publish **4 replicas**
  - Publish on **frontend** overlay Network

Docker : Service Containers

- Worker:
  - Image : dockersamples/examplevotingapp_worker
  - A .NET worker which consumes votes and stores them
  - Publish **4 replicas**
  - Publish on **frontend** & **backend** overlay Network

- DB Service:
  - Image : **postgres:15-alpine**
  - Mount Volume and mount to **/var/lib/postgresql/data**
  - Publish on backend network
  - Publish 1 replicas

Docker : Service Containers

- Result Service:
    - Image : dockersamples/examplevotingapp_result
    - Will display the Voting result
    - Publish on **backend** network
    - Publish on port **5001**, Container port **80**
    - Publish 1 replicas

Thank You…

Don’t be the Same! Be Better!!!