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SE Assignment 2

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(1) ◦ Key Devops fundamentals Revolve around the concept of continuous integration, delivery, automation & collaboration.

- Devops is more practice than technology thus many tools are applicable to different stages of developmen

- A Number of open source Devops tools are present clubbing ones of ourned makes a Dev-ops tool chain Thus product delivery more efficient.
- Different stages of sw dev:

1) Collaboration
2) Planning
3) Source control
4) Issue tracking
5) configeration management
6) continuous integration
7) Binary Repository
8) Monitoring
9) Automated testing
10) Development
11) Database.

- Companies require skilled individuals familiar with such Dev Ops tools.
- Faster Development : since, using these tools most of process is automated

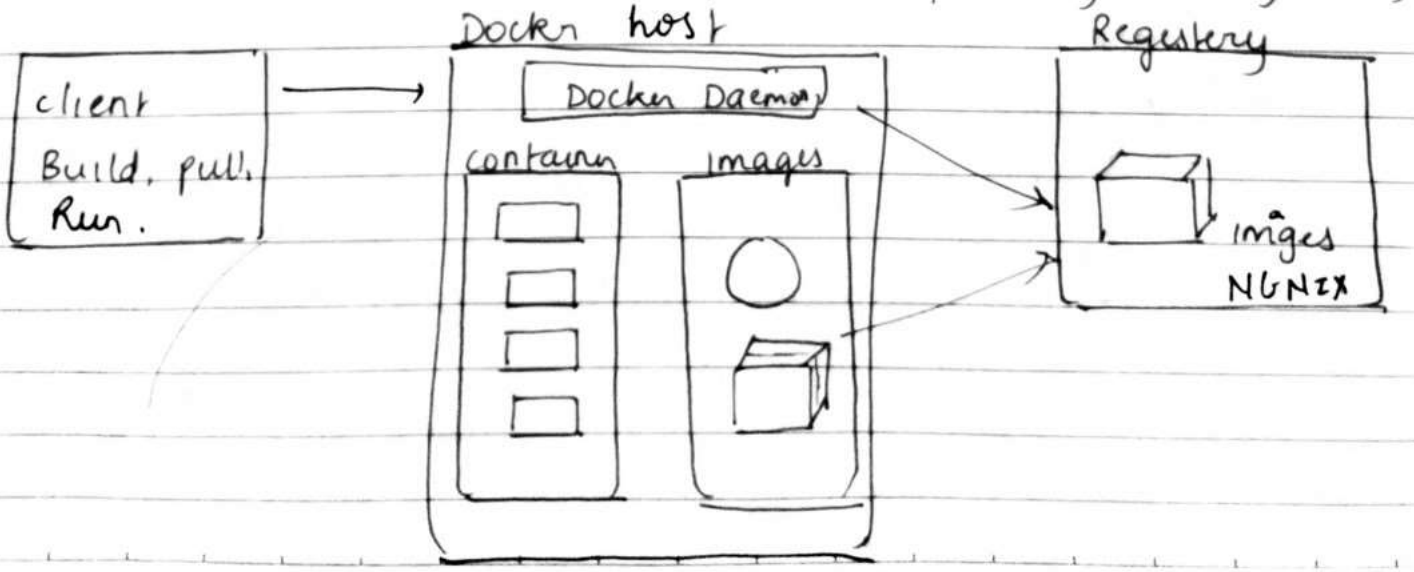
(2) Docker Architecture:

- Docker uses client server Architecture
- Docker client talks with Docker Daemon, Daemon Builds, Runs & distributes Docker containers
- Docker client & Daemon connect via REST API'S over UNIX socket or network interface.

1) Docker client:
When user Runs any command on Docker client CLI a Rest Request forwards it to the daemon
The following commands can be Run on CLI:
Docker Build
Docker pull
docker Run

2) Docker host: It provids an environment to run the applications, It contains docker daemon images containers, Networks & storage

3) Docker Registery: It contains images. Images may be publick (visible to all) or private (for only one org access)



(3) Containerization : is a method of packing, Running & distributing applications in containerized Environment / contained Environment. called a container. It allows isolation of application & its dependencies. Ensuring consistency & portability across different computing Environments.

- Docker is a popular platform for containerization.
- It provides tools & API's for creating deploying & managing containers. Docker containers package an application & its dependencies into standardized unit makit it easy to deploy & run applications on any systems that supports docker
- Docker uses layered file system where each layer represents the change to file system.
- Docker also provides Dockerfiles making it easy to manage container