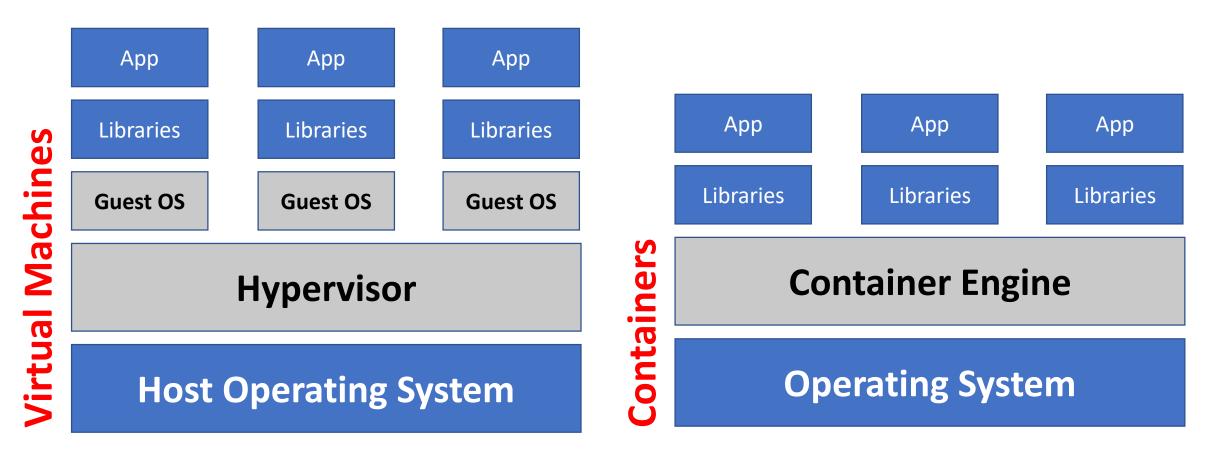
# Agenda

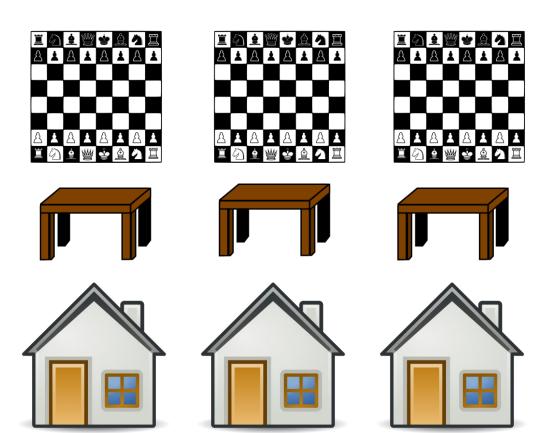
- **Containers**
- Docker
- Data in Docker containers
- Building your own Docker image
- Kubernetes, Swarm (future presentation)



#### **Containers**

- Lightweight alternative to Virtual Machines
- Smaller, less expensive, faster to start up and self contained







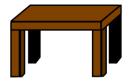
**Host Operating System** 













Containers

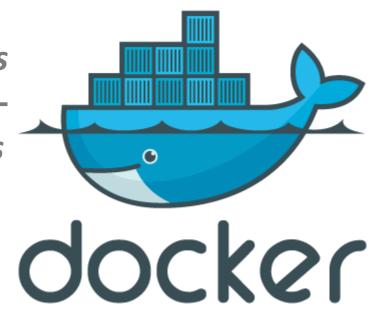
**Container Engine** 

**Operating System** 

### Docker

 Leading open-source containerization platform

Docker containers wrap up a piece of software in a complete filesystem that contains everything it needs to run: code, runtime, system tools, system libraries - anything you can install on a server. This guarantees that it will always run the same, regardless of the environment it is running in...



edureka!



VS





SIZE





**STARTUP** 





**INTEGRATION** 



## Docker Terminology (Images Vs Containers)

- Docker Image (docker images)
  - Essentially a snapshot of a container
- Docker Container (docker ps, docker ps –a)
  - Instance of an image

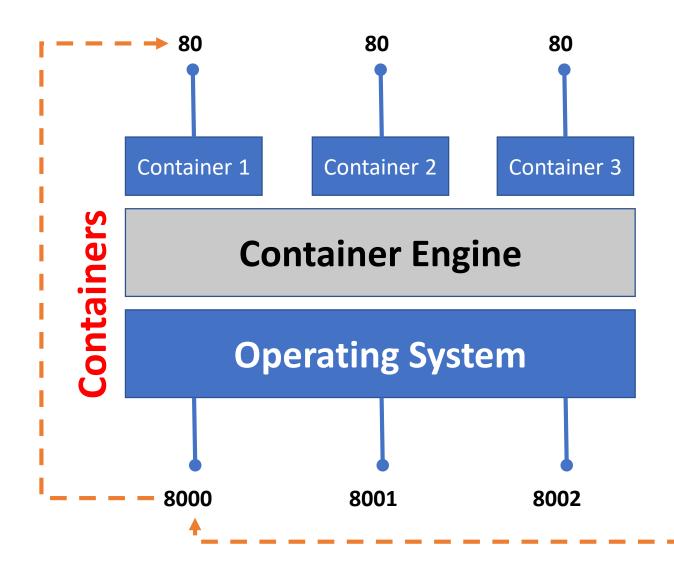
Docker Container 1
Running

Docker Container 2
Stopped

Docker Container 3
Stopped

Docker Container 4
Running

#### **Port Mapping in Docker**



http://host:8000

