



What is Docker?

Build, Run, Ship Applications

It is a platform for building, running and shipping applications

WORKS ON MY MACHINE



CUSTOMER PROBLEM NOW!

HOW CAN WE SOLVE THIS PROBLEM?

- We can ship the machine that you developed the app?
- Or we can dockerise it!



POSSIBLE REASON WHY THE APP WON'T WORK ON ANOTHER MACHINE

- Missing files
- Software version mismatch
 - Example: different node version
- Different configuration settings

BENEFITS

- When you delete an app all the dependencies will go with it. Won't clutter your hd
- A new team member can easily build the app on their machine

\$ docker-compose up

PACKAGE

● Node 14

● Postgresql

● App-1



I don't know who owns that house, but I can understand their decisions in life.

PACKAGE

● Node 18

● MongoDB

● App-2

Your containers will be isolated from each other

CONTAINER

- An isolated environment for running an application
- Lightweight, uses only one OS
- Start quickly
- Need less hardware resources

VIRTUAL MACHINE

- An abstraction of a machine (physical hardware)

Hypervisors

A computer software, firmware or hardware that allows partitioning the resource of a CPU among multiple operating systems

macOS

Linux

App 1



Postgresql

Node 14

App 2

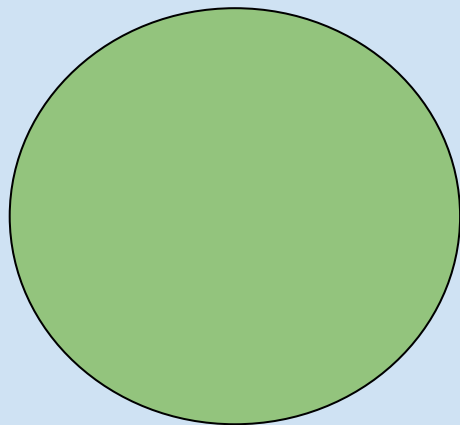


MongoDB

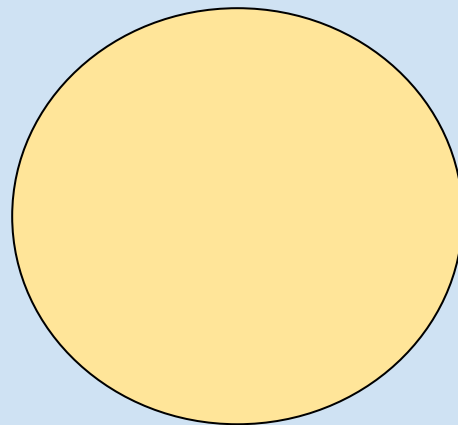
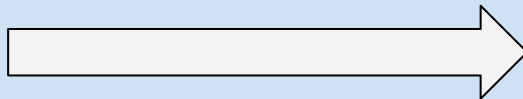
Node 14

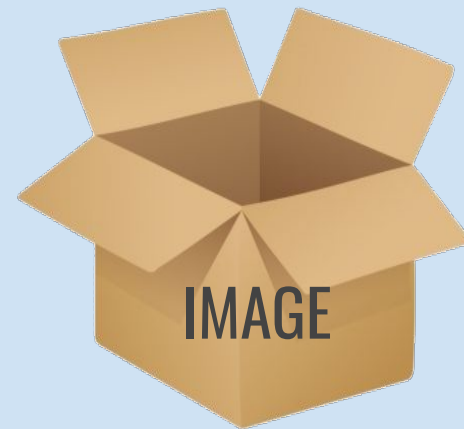
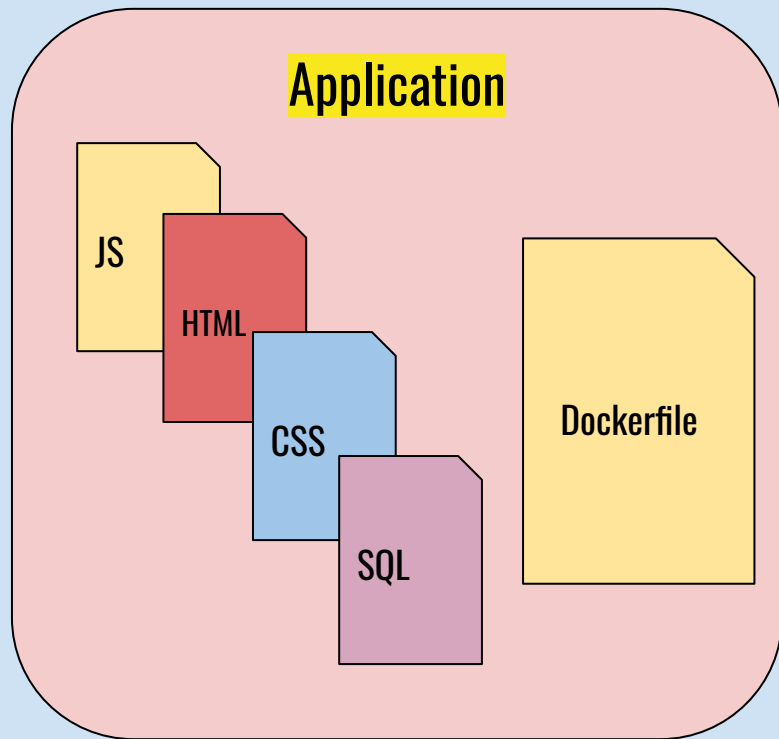
CLIENT

SERVER
DOCKER ENGINE



REST API





- Runtime environment (eg Node)
- Application files
- Libraries
- Environment variables

\$ docker run ...

