Containers

What is a container?

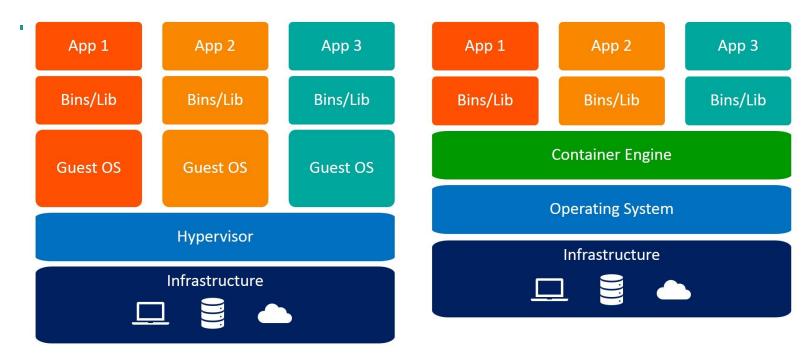
A container is a standard unit of software that packages up code and all its dependencies so the application runs quickly and reliably from one computing environment to another. A container image is a lightweight, standalone, executable package of software that includes everything needed to run an application: code, runtime, system tools, system libraries and settings.

Famous containerization Platforms





Difference b/w VM and Containers



Virtual Machines

Containers

Sample Dockerfile

```
FROM node:8.9-alpine

ENV NODE ENV production

WORKDIR /usr/src/app

COPY ["package.json", "package-lock.json*", "npm-shrinkwrap.json*", "./"]

RUN npm install --production --silent && mv node_modules ../

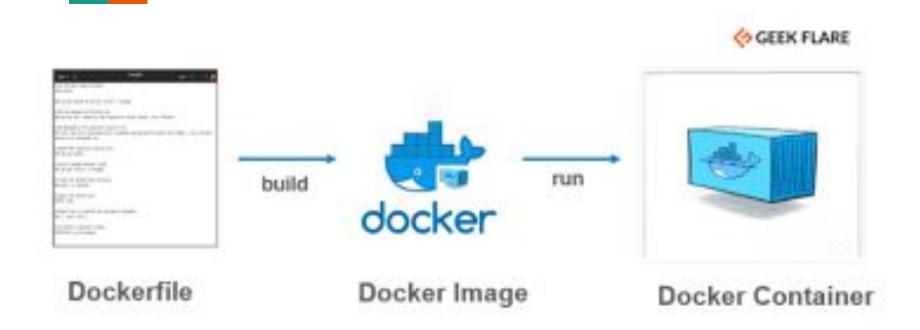
COPY . . .

EXPOSE 3000

MAINTAINER name

cmd npm start
```

Dockerfile → **Docker Image** → **Docker Conatiner**



Let's watch a video on Acceptance testing

https://www.youtube.com/watch?v=knB4jBafR_M

Assignment

- Find the primary difference b/w Docker and Podman
- Document how to create, build and run a container with a Dockerfile (Do it in your local machine and attach screenshots when you document)