Section 7 - Container Images

Section 7 - Container Images

1 - About Docker Images

What is in an Image (1)

- Application binaries and dependencies (e.g app.jar + JRE:8)
- Metadata about the image data (such as ports, volumes etc...)
- Official Definition: Docker images are the basis of containers. An Image is an ordered collection of root filesystem changes and the corresponding execution parameters for use within a container runtime.
- Ref: https://docs.docker.com/glossary/?term=image

> - A container is created by running a Docker image.
> - An image is used to create a container as a java class is used to create an object instance

What is in an Image (2)

- Inside the image there is not a complete O.S. (No kernel, No kernel modules such as drivers etc)
- The host provides the kernel. The host kernel is "shared" across all the containers.
- Inside the image are just the binaries and dependencies required to run our application.
- The main difference between a container and a VM is that container is more like a process.
- Images size can be:
  - Small as one file (your app binary), as a java jar binary
  - Big as a full Ubuntu distribution with Apache, PHP and more ...
  - Very Big including also the desktop environment