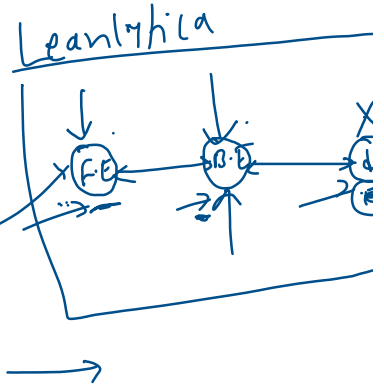## Docker compose

10:21 AM

W3/4 - Why/What/How/Where --- ?

Compose is a tool for defining and running multi-container Docker applications.

With Compose, you use a ~~YAML~~ file to configure your application's ~~services~~.

 Then, with a single command, you create and start all the services from your configuration.

Using Compose is basically a three-step process:

1. Define your app's environment with a Dockerfile so it can be reproduced anywhere.

2. Define the services that make up your app in docker-compose.yml so they can be run together in an isolated environment.

3. Run docker compose up and the Docker compose command starts and runs your entire app. You can alternatively run docker-compose up using the docker-compose binary.

A docker-compose.yml looks like this:

Compose overview

This is how you work with Compose:

- You describe a set (or stack) of containers in a YAML file called `docker-compose.yml`.

- You run `docker-compose up`.

- Compose automatically pulls images, builds containers, and starts them.

- Compose can set up links, volumes, and other Docker options for you.

- Compose can run the containers in the background, or in the foreground.

- When containers are running in the foreground, their aggregated output is shown.

sudo apt install docker-compose

https://github.com/docker/awesome-compose

Docker conatiner run -it

- Docker run --name webapp1 nginx

- Docker run --name webapp2 nginx

- Docker compose is seprate tool
   --> we got just to provide better way of managing your multi-application

   Is not part of your docker engine

   --> Compose specification or version relies on docker (Engine) version

Docker-compose file .yml / yaml

Version: '3'

Services:

  webapp1:

    Image :nginx

    ports:

      - "8000: 80"

  webapp2:

    Image :nginx

    ports:

      - "8001: 80"

Docker componse up -f

Docker compose down

https://github.com/docker/awesome-compose

https://docs.docker.com/compose/compose-file/compose-versioning/