Issues

**docker-compose outdated version**

My ubuntu xenial machine had an outdated version of docker-compose which could not handle “version 3”. Latest version 1.20.1 solved the issue.

**nodemon was missing**

npm install nodemon --save

Technology stack

**Node.js**

Open-source, cross-platform JavaScript runtime environment for executing JavaScript code server-side

**npm**

default package manager for Node.js (alternative = yarn)

**MongoDB**

a free and open-source cross-platform document-oriented database. Classified as a NoSQL database program. Uses JSON-like documents with schemas.

**Vue.js**

An open-source progressive JavaScript framework for building user interfaces. Vue can also function as a web application framework capable of powering advanced single-page applications.

npm 5.8.0

yarn 1.5.1

nodejs 8.10.0

Repository: github.com

https://github.com/m-ismar/wacm\_ss18.git

Docker: operating-system-level virtualization (containerization)

Images: waecm-2018-group-13-bsp-1

*executable packages incl. the code, a runtime, libraries, environment variables, config files*

Containers: are runtime instances of images

wacmss18\_webapp\_1

wacmss18\_mongodb\_1

**Dockerfile.web (defines our container)**

# Use an official runtime as a parent image

**FROM node:carbon**

# Set the working directory

**WORKDIR /usr/wacm\_group13**

# Copy ./webapp into the container

**COPY ./webapp .**

# Install all dependencies

**RUN yarn install**

# Make ports available to the world outside this container

**EXPOSE 3000**

**EXPOSE 8443**

# Build and run the application

**CMD [ "npm", "run", "build" ]**

**CMD [ "npm", "start" ]**

Services (containers in production) define how containers should behave

**docker-compose.yml**

version: '3'

services:

webapp:

image: ebuccaneer/waecm-2018-group-13-bsp-1-web

expose:

- "8080"

ports:

- "8080:8080"

mongodb:

image: mongo:3.6.2

ports:

- "27017:27017"

**docker-compose-local.yml**

version: '3'

services:

webapp:

image: web

build:

context: .

dockerfile: Dockerfile.web

expose:

- "8080"

ports:

- "8080:8080"

mongodb:

image: mongo:3.6.2

ports:

- "27017:27017"

COMMANDS:

docker –version 17.05.0-ce

docker info

docker ps

docker images

docker exec -it wacmss18\_webapp\_1 bash

docker build creates docker image

docker login log into the docker public registry on local machine

docker push publish tagged image to your repository

Start webapp with uploaded images (runs docker-compose.yml)

docker-compose up

Start webapp with local build

docker-compose -f docker-compose-local.yml up --build

Database Layer: MongoDB v3.6.2

MongoDB GUI with embedded shell -> robo3T

Webserver with Web-Application (backend) : Node.js

**Resources:**

/counter

HTTP GET delivers the counter

HTTP POST increments the counter by 1

**Authentication:** user/password

HTTP Basic Auth or JWT

Presentation Layer (frontend): Vue.js

Text text