```
version: "3.7"
services:
 bbw-frontend-dev:
  container_name: bbw-frontend-dev
  restart: always
  build:
   context: ./fapp
   dockerfile: Dockerfile
  volumes:
   - "./fapp:/app"
   - "/app/node_modules"
  ports:
   - 3001:3000
bbw-frontend-dev-func:
  container_name: bbw-frontend-dev-fun
  restart: always
   context: ./shopping-cart-client-func-v1-props-Lift-State
   dockerfile: Dockerfile
   - "./shopping-cart-client-func-v1-props-Lift-State:/app"
   - "/app/node_modules"
   - 3002:3000
 bbw-mariadb-dev:
  image: mariadb
  container_name: bbw-mariadb-dev
  environment:
   - MYSQL_ROOT_PASSWORD=bbw123
   - MYSQL_DATABASE=demo
  ports:
   - 3306:3306
  volumes:
   - ./database:/var/lib/mysql
 bbw-phpmyadmin:
  depends_on:
   - bbw-mariadb-dev
  image: phpmyadmin/phpmyadmin
  ports:
   - 80:80
  environment:
   PMA_HOST: bbw-mariadb-dev
```

bbw-backend-dev:

container_name: bbw-backend-dev

restart: always

image: maven:3.5-jdk-8

#build: ./app
working_dir: /app

volumes:

- ./app:/app

- ~/.m2:/root/.m2

ports:

- 8081:8080

expose:

- "8080"

command: mvn clean spring-boot:run

depends_on:

- bbw-mariadb-dev

Dockerfile Frontend

pull official base image

FROM node:13.12.0-alpine

add a bash shell to the image

RUN apk add --no-cache bash

set working directory

WORKDIR /app

add `/app/node_modules/.bin` to \$PATH

ENV PATH /app/node_modules/.bin:\$PATH

RUN echo "Path: \$PATH"

install app dependencies

COPY package.json ./

COPY package-lock.json ./

RUN npm install --silent

RUN npm install react-scripts@3.4.1 -g --silent

add All to app

COPY . ./

----- make a BUILD -- to copy in the nginx html

RUN npm run build

start app

#CMD ["npm", "start"]

Best-Practice with ENTRYPOINT!

ENTRYPOINT ["npm", "start"]

Stage - Production

FROM nginx:1.17-alpine

COPY --from=build /app/build /usr/share/nginx/html

EXPOSE 80

CMD ["nginx", "-g", "daemon off;"]

Dockerfile Backend

A two Stage Dockerfile with a build stage and a run -stage!

FROM maven:3.5-jdk-8 as backend-build

WORKDIR ./

COPY pom.xml .

Step 2 Copy the source and build the .jar

COPY src src

we run first a build

RUN mvn install -DskipTests

Stage 2 - Let's build a minimal image with the "deployable package"

FROM openjdk:8-jdk-alpine

we add the jar to the working dir and execute it!

COPY target/*.jar /app.jar

Define an Entry-startpoint of the image

ENTRYPOINT ["sh", "-c", "java -jar /app.jar"]