Docker compose

Abstract

For this homework, we supossed a simple project thats needs the installation of NodeJS and Mongo containers to work

docker-compose.yml

```yaml
version: "3"

services:
    node:
          container_name: nodeapp
          image: node:14
          restart: always
          ports:
            - "5000:3000"
          links:
            - mongo
          volumes:
            - .:/usr/src/app
        mongo:
          container_name: mongodatabase
          image: mongo
          ports:
            - "27018:27017"
```

- **Services:** We specified the services to be used
- **node:** Name that we assign to the service. It can be anyone
- **container_name: nodeapp:** Name of the container. It can be anyone
- **image: node:14:** Image on which it will be based. Here we specify that we would use Node 14
- **restart: always:** Make it restart automatically in case of an error
- **ports: - "5000:3000":** We define the ports. The app that we supposed uses port 3000, but we specify that it must run on port 5000
- **links: - mongo:** We specify that the container is linked to the mongo service, which we specify below.
- **volumes: - .:/usr/src/app:** Copies the files created at the specified address. Everything created in the system is copied to the container, everything created in the container is copied to the system at the specified path
- **mongo:** Name that we assign to the service. This is the name that is written in the links section.
- **container_name: mongodatabase:** Name of the container
- **image: mongo:** Image on which it will be based
- **ports: - "27018:27017":** Define ports. Mongo typically works with port 27017, but here I am binding it to 27018

Screenshot de docker-compose.yml

```yaml
version: "3"

services:
  node:
    container_name: nodeapp
    image: node:14
    restart: always
    ports:
      - "5000:3000"
    links:
      - mongo
    volumes:
      - .:/usr/src/app
  mongo:
    container_name: mongodatabase
    image: mongo
    ports:
      - "27018:27017"

```

Running docker-compose

In order to run the docker-compose file, write the command

```
docker-compose up -d
```

We can verify the containers where create running the line

```
docker-compose ps
```

Screenshots

docker-compose up -d

```
erick  Docker compose  → (main)  ♥ 07:58  docker-compose up -d
[+] Running 3/3
 - Network dockercompose_default  Created                    0.9s
 - Container mongodatabase        Started                    1.8s
 - Container nodeapp              Started                    3.1s
```

---

docker-compose ps

```
erick  Docker compose  → (main)  ♥ 07:58  docker-compose ps
NAME            COMMAND                  SERVICE   STATUS       PORTS
mongodatabase   "docker-entrypoint.s…"   mongo     running      0.0.0.0:27018->27017/tcp
nodeapp         "docker-entrypoint.s…"   node      restarting
```