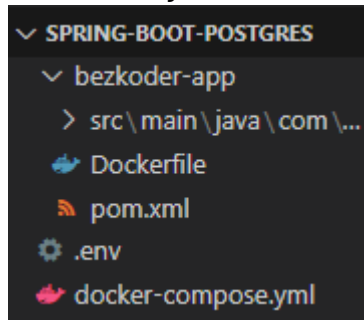# Spring Boot with Docker Compose

I.   Directory Overview

II.   Dockerfile

```
FROM maven:3.8.5-openjdk-17
WORKDIR /bezkoder-app
COPY . .
RUN mvn clean install
CMD mvn spring-boot:run
```

III.   Docker Compose

```
version: "3.8"

services:
  postgresdb:
    image: postgres
    restart: unless-stopped
    env_file: ./.env
    environment:
      - POSTGRES_USER=${POSTGRESDB_USER}
      - POSTGRES_PASSWORD=${POSTGRESDB_ROOT_PASSWORD}
      - POSTGRES_DB=${POSTGRESDB_DATABASE}
    ports:
      - ${POSTGRESDB_LOCAL_PORT}:${POSTGRESDB_DOCKER_PORT}
    volumes:
      - db:/var/lib/postgresql/data  # Fixed volume path

  app:
    depends_on:
      - postgresdb
    build: ./bezkoder-app
```

```yaml
    restart: on-failure
    env_file: ./.env
    ports:
      - ${SPRING_LOCAL_PORT}:${SPRING_DOCKER_PORT}
    environment:
      SPRING_APPLICATION_JSON: '{
        "spring.datasource.url"  :
"jdbc:postgresql://postgresdb:${POSTGRESDB_DOCKER_PORT}/${POSTGRESDB_DATABASE}",
        "spring.datasource.username" : "${POSTGRESDB_USER}",
        "spring.datasource.password" : "${POSTGRESDB_ROOT_PASSWORD}",
        "spring.jpa.properties.hibernate.dialect" :
"org.hibernate.dialect.PostgreSQLDialect",
        "spring.jpa.hibernate.ddl-auto" : "update"
       }'
    volumes:
      - .m2:/root/.m2
    stdin_open: true
    tty: true

volumes:
  db:
```

IV.   .env File

```
POSTGRESDB_USER=postgres
POSTGRESDB_ROOT_PASSWORD=123456
POSTGRESDB_DATABASE=bezkoder_db
POSTGRESDB_LOCAL_PORT=5433
POSTGRESDB_DOCKER_PORT=5432

SPRING_LOCAL_PORT=6868
SPRING_DOCKER_PORT=8080
```

V.   Verify Build

```
$docker compose up –d
$docker ps
$docker images
$docker exec -ti spring-boot-postgres-postgresdb-1 /bin/bash
$docker compose down --rmi all
```

***[Docker Compose: Spring Boot and Postgres example - DEV Community](#)