

Title: Docker Containers for Maven Multi-module Spring Boot project with Angular Frontend module

Post Body:

I have Maven Multi-Modules Project (Angular Frontend Module + SpringBoot Backend Module) residing under same Parent Maven Project. I want to run the application in Docker Multi-containers (docker container for Frontend + docker container for Backend + docker container for database). How can I use Docker Compose to run docker multi-containers?

I created 'docker-compose.yml' in the parent project, and in each module I add 'Dockerfile'.

Here is structure of my project

docker-compose.yml File

```
version: '3'
services:
  docker-container-application-mariadb:
    image: mariadb:latest
    environment:
      - MYSQL_ROOT_PASSWORD=...
```

Backend Dockerfile:

```
FROM openjdk:8
EXPOSE 8080
ADD target/application_backend.jar application_backend.jar
# Run the jar file
ENTRYPOINT ['java', '-jar', 'application_backend.jar']
```

When I run:

```
docker-compose up
```

here is the error I am getting:

```
Step 4/6 : ADD $PWD/application-backend/target/application_backend.jar application_backend.jar
ERROR: Service 'docker-container-application-backend' failed to build: COPY failed: stat /var/lib/docker/tmp/buildkit/contentions/application_backend.jar: no such file or directory
```

Error after code update:

Error after Code update suggested by @Milah:

Accepted Answer: None

Highest Rated Answer:

This should work. I don't have your environment to test so if you get errors let me know and I'll fix them.

Place this Docker file at the root of the project (same level as docker-compose).

Dockerfile:

```
FROM maven:3.6.0-jdk-8-alpine as build
WORKDIR /app
COPY . .
WORKDIR /app/application-backend
RUN mvn clean package -DskipTests
```

Next to the Dockerfile there should be also an ignore file.

```
.dockerignore
```

```
application-frontend/
```

You should change the docker-compose file as follows:

```
...
docker-container-application-backend:
  image: docker-image-application-backend
  build:
    context: ./
  dockerfile: Dockerfile
```

The declaration `dockerfile: Dockerfile` is redundant, can be removed.