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Day-19

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Process of Containerizing and deploying webapi using docker

dockerfile

```
FROM mcr.microsoft.com/dotnet/aspnet:8.0 AS base

WORKDIR /app

EXPOSE 80

FROM mcr.microsoft.com/dotnet/sdk:8.0 AS build

WORKDIR /src

COPY ["MyApp/MyApp.csproj", "MyApp/"]

RUN dotnet restore "MyApp/MyApp.csproj"

COPY . .

WORKDIR "/src/MyApp"

RUN dotnet build "MyApp.csproj" -c Release -o /app/build

FROM build AS publish

RUN dotnet publish "MyApp.csproj" -c Release -o /app/publish

FROM base AS final

WORKDIR /app

COPY --from=publish /app/publish .

ENTRYPOINT ["dotnet", "MyApp.dll"]
```

command for build

docker build -t myapp .

```
docker run -d -p 8080:80 --name myapp-container myapp
```

docker-compose.yml

```
version: '3.8'
```

```
services:
```

```
  myapp:
```

```
    build:
```

```
      context: .
```

```
      dockerfile: Dockerfile
```

```
    ports:
```

```
      - "8080:80"
```

```
    environment:
```

```
      - ASPNETCORE_ENVIRONMENT=Production
```

```
      -
```

```
ConnectionStrings__DefaultConnection=Server=mydb;Database=MyDatabase;User=sa;Password=yourStrongPassword123!
```

```
    depends_on:
```

```
      - mydb
```

```
    networks:
```

```
      - myapp-network
```

```
    restart: always
```

```
  mydb:
```

```
    image: mcr.microsoft.com/mssql/server:2019-latest
```

```
    container_name: sql-server
```

```
    environment:
```

```
      - ACCEPT_EULA=Y
```

- SA_PASSWORD=yourStrongPassword123!

ports:

- "1433:1433"

networks:

- myapp-network

volumes:

- sql-data:/var/opt/mssql

restart: always

networks:

myapp-network:

driver: bridge

volumes:

sql-data:

driver: local

command

docker-compose up --build

Output

