САНКТ-ПЕТЕРБУРГСКИЙ НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ ИТМО

Дисциплина: Бэк-энд разработка

Отчет

Лабораторная работа

Выполнил:

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Группа К3341

Проверил:
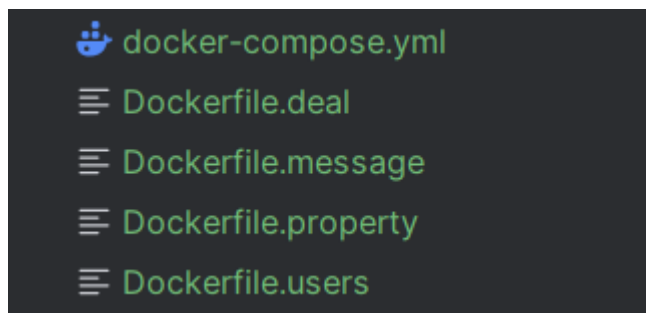Добряков Д. И.

Санкт-Петербург

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Задача

Завернуть приложение в докер

Ход работы

Нужно завернуть приложение в докер средствами докер и докер Компот

Структура:

```
docker-compose.yml
Dockerfile.deal
Dockerfile.message
Dockerfile.property
Dockerfile.users
```

Докеры:

```yaml
services:
 users-service:
   build:
     context: .
     dockerfile: Dockerfile.users
   container_name: users-microservice
   ports:
     - "8877:8877"
   environment:
     - PORT=8877
   networks:
     - rental-network

 property-service:
   build:
     context: .
     dockerfile: Dockerfile.property
   container_name: property-microservice
   ports:
     - "8878:8878"
   environment:
     - PORT=8878
   networks:
     - rental-network
```

```yaml
  message-service:
    build:
      context: .
      dockerfile: Dockerfile.message
    container_name: message-microservice
    ports:
      - "8879:8879"
    environment:
      - PORT=8879
    networks:
      - rental-network


  deal-service:
    build:
      context: .
      dockerfile: Dockerfile.deal
    container_name: deal-microservice
    ports:
      - "8880:8880"
    environment:
      - PORT=8880
    networks:
      - rental-network

  db:
    image: postgres:17
    environment:
      POSTGRES_USER: postgres
      POSTGRES_PASSWORD: postgres
      POSTGRES_DB: postgres
    ports:
      - "5432:5432"
    volumes:
      - postgres_data:/var/lib/postgresql/data/

networks:
  rental-network:
    driver: bridge
```

```dockerfile
FROM node:18-alpine AS builder
WORKDIR /app
COPY package*.json ./
RUN npm ci --only=production
COPY . .
RUN npm run build

FROM node:18-alpine
```

```dockerfile
WORKDIR /app
COPY --from=builder /app/dist dist
COPY --from=builder /app/node_modules node_modules
EXPOSE 3004
CMD ["node", "dist/deal/main"]
```

```dockerfile
FROM node:18-alpine AS builder
WORKDIR /app
COPY package*.json ./
RUN npm ci --only=production
COPY . .
RUN npm run build

FROM node:18-alpine
WORKDIR /app
COPY --from=builder /app/dist dist
COPY --from=builder /app/node_modules node_modules
EXPOSE 3002
CMD ["node", "dist/message/main"]
```

```dockerfile
FROM node:18-alpine AS builder
WORKDIR /app
COPY package*.json ./
RUN npm ci --only=production
COPY . .
RUN npm run build

FROM node:18-alpine
WORKDIR /app
COPY --from=builder /app/dist dist
COPY --from=builder /app/node_modules node_modules
EXPOSE 3003
CMD ["node", "dist/property/main"]
```

```dockerfile
FROM node:18-alpine AS builder
WORKDIR /app
COPY package*.json ./
RUN npm ci --only=production
COPY . .
RUN npm run build

FROM node:18-alpine
WORKDIR /app
COPY --from=builder /app/dist dist
COPY --from=builder /app/node_modules node_modules
EXPOSE 3001
CMD ["node", "dist/users/main"]
```

Вывод: Завернули все в докер