

Министерство образования и науки Российской Федерации
федеральное государственное автономное образовательное учреждение
высшего образования
«САНКТ-ПЕТЕРБУРГСКИЙ НАЦИОНАЛЬНЫЙ ИССЛЕДОВАТЕЛЬСКИЙ
УНИВЕРСИТЕТ ИТМО»
Факультет среднего профессионального образования

ОТЧЁТ
ПО ПРАКТИЧЕСКОЙ РАБОТЕ № 4
по теме: Докер
по дисциплине: Учебная практика

Специальность 09.02.07 Информационные системы и программирование

Проверил:

_____ Говоров А.И.

Дата: «_____» _____ 2020г.

Оценка _____

Выполнил:

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Санкт-Петербург 2020

DOKERFILE

```
FROM python:3.6
ENV PYTHONUNBUFFERED 1
RUN mkdir /usr/src/app
WORKDIR /usr/src/app
RUN mkdir -p /var/log/platform_admin
COPY . /usr/src/app/
RUN pip install -r requirements.txt
RUN python manage.py makemigrations
RUN python manage.py migrate
```

DOKER-COMPOSE.YML

```
version: '3'
services:
  web:
    restart: always
    build:
      context: ./
      dockerfile: DockerFile
    container_name: SimpleDjangoProject
    command: python3 manage.py runserver 0.0.0.0:8000
    volumes:
      - ../usr/src/app
    environment:
      IN_DOCKER: 1
    ports:
      - "8000:8000"
```

REQUIREMENT.TXT

Django

psycopg2-binary>=2.8

Pillow

```
Jandern@JANDERN-PC MINGW64 ~/Desktop/D/ITMO_FSPD_Web_Django_2020/students/y2337/practical_works/Primachenko_Alexander/docker/django_project_primachenko (master)
$ docker-compose build
Building web
Step 1/9 : FROM python:3.6
----> 81576dde3410
Step 2/9 : ENV PYTHONUNBUFFERED 1
----> Using cache
----> 4b69cc0630d3
Step 3/9 : RUN mkdir /usr/src/app
----> Using cache
----> 231f446d1109
Step 4/9 : WORKDIR /usr/src/app
----> Using cache
----> c2d0031154fe
Step 5/9 : RUN mkdir -p /var/log/platform_admin
----> Using cache
----> c5e4e64c0f10
Step 6/9 : COPY . /usr/src/app/
----> 881360583410
Step 7/9 : RUN pip install -r requirements.txt
----> Running in be3f2e18e98e
Collecting Django
  Downloading Django-3.1-py3-none-any.whl (7.8 MB)
Collecting psycopg2-binary>=2.8
  Downloading psycopg2_binary-2.8.5-cp36-cp36m-manylinux1_x86_64.whl (2.9 MB)
Collecting Pillow
  Downloading Pillow-7.2.0-cp36-cp36m-manylinux1_x86_64.whl (2.2 MB)
Collecting asgiref<=3.2.10
  Downloading asgiref-3.2.10-py3-none-any.whl (19 kB)
Collecting sqlparse<=0.2.2
  Downloading sqlparse-0.3.1-py2.py3-none-any.whl (40 kB)
Collecting pytz
  Downloading pytz-2020.1-py2.py3-none-any.whl (510 kB)
Installing collected packages: asgiref, sqlparse, pytz, Django, psycopg2-binary, Pillow
Successfully installed Django-3.1 Pillow-7.2.0 asgiref-3.2.10 psycopg2-binary-2.8.5 pytz-2020.1 sqlparse-0.3.1
WARNING: You are using pip version 20.1.1; however, version 20.2.1 is available.
You should consider upgrading via the '/usr/local/bin/python -m pip install --upgrade pip' command.
Removing intermediate container be3f2e18e98e
----> 20e4ee22c2b1
Step 8/9 : RUN python manage.py makemigrations
----> Running in 63b75c990d70
Migrations for 'project_first_app':
  project_first_app/migrations/0002_auto_20200805_1941.py
    - Alter field first_name on user
Removing intermediate container 63b75c990d70
----> 5ed5fe2c6d9f
Step 9/9 : RUN python manage.py migrate
----> Running in 5fd417b4a91b
Operations to perform:
  Apply all migrations: admin, auth, contenttypes, project_first_app, sessions
Running migrations:
  Applying auth.0012_alter_user_first_name_max_length... OK
  Applying project_first_app.0002_auto_20200805_1941... OK
Removing intermediate container 5fd417b4a91b
----> 5ee5ab6d397
Successfully built 5ee5ab6d397
Successfully tagged django_project_primachenko_web:latest
```

Рисунок 1 – работа команды docker-compose build

```
Jandern@JANDERN-PC MINGW64 ~/Desktop/D/ITMO_FSPD_Web_Django_2020/students/y2337/practical_works/Primachenko_Alexander/docker/django_project_primachenko (master)
$ docker-compose up -d
Creating network "django_project_primachenko_default" with the default driver
Creating SimpleDjangoProject ... done

Jandern@JANDERN-PC MINGW64 ~/Desktop/D/ITMO_FSPD_Web_Django_2020/students/y2337/practical_works/Primachenko_Alexander/docker/django_project_primachenko (master)
$ docker ps
CONTAINER ID        IMAGE                                COMMAND                  CREATED             STATUS              PORTS               NAMES
6f2fa4d9a007       django_project_primachenko_web     "python3 manage.py r..." 7 seconds ago       Up 7 seconds       0.0.0.0:8000->8000/tcp   SimpleDjangoProject
```

Рисунок 2 – работа команды docker-compose up и docker ps