

```
dima@dima-TUF-GAMING-FX504GD-FX80GD:~/PycharmProjects/pythonProject2/lab_29/my_project$ docker images
REPOSITORY      TAG          IMAGE ID       CREATED        SIZE
dima@dima-TUF-GAMING-FX504GD-FX80GD:~/PycharmProjects/pythonProject2/lab_29/my_project$ docker ps -a
CONTAINER ID    IMAGE        COMMAND        CREATED        STATUS        PORTS        NAMES
dima@dima-TUF-GAMING-FX504GD-FX80GD:~/PycharmProjects/pythonProject2/lab_29/my_project$
```

```
dima@dima-TUF-GAMING-FX504GD-FX80GD: ~
dima@dima-TUF-GAMING-FX504GD-FX80GD:~$ sudo ss -lptn 'sport = :5432'
[sudo] пароль для dima:
State  Recv-Q  Send-Q      Local Address:Port    Peer Address:Port    Process
LISTEN  0        244         127.0.0.1:5432        0.0.0.0:*            users:((("postgres",pid=1158,fd=3))
dima@dima-TUF-GAMING-FX504GD-FX80GD:~$ sudo ss -lptn 'sport = :5432'
State  Recv-Q  Send-Q      Local Address:Port    Peer Address:Port    Process
LISTEN  0        244         127.0.0.1:5432        0.0.0.0:*            users:((("postg
res",pid=1158,fd=3))
dima@dima-TUF-GAMING-FX504GD-FX80GD:~$ kill 1158
bash: kill: (1158) - Операция не позволена
dima@dima-TUF-GAMING-FX504GD-FX80GD:~$ sudo kill 1158
dima@dima-TUF-GAMING-FX504GD-FX80GD:~$ sudo ss -lptn 'sport = :5432'
State  Recv-Q  Send-Q      Local Address:Port    Peer Address:Port    Process
dima@dima-TUF-GAMING-FX504GD-FX80GD:~$
```

`docker run --name my_project -p 5432:5432 -e POSTGRES_USER=postgres -e POSTGRES_PASSWORD=lab_29 -e POSTGRES_DB=lab_29 -d postgres:15.1`

```
dima@dima-TUF-GAMING-FX504GD-FX80GD:~/PycharmProjects/pythonProject2/lab_29/my_project$ docker run --name my_project -p 5432:5432 -e POSTGRES_USER=postgres -e POSTGRES_PASSWORD=lab_29 -e POSTGRES_DB=lab_29 -d postgres:15.1
Unable to find image 'postgres:15.1' locally
15.1: Pulling from library/postgres
8740c948ffdc: Pulling fs Layer
c8dbd2beab50: Pull complete
85d9dc9d0fdb: Pull complete
ddd89d5ec714: Pull complete
f98bb9f03867: Pull complete
8554611e703f: Pull complete
64e0a8694477: Pull complete
8b868a753f47: Pull complete
12ed9aefbab3: Pull complete
825b08d51ffd: Pull complete
8f272b487267: Pull complete
ba2eed7bd2cc: Pull complete
ff59f63f47d6: Pull complete
Digest: sha256:6b07fc4fbcf551ea456093e9b0cecf9dc60d7ea8c56a4ace704940b6dd6b7a3
Status: Downloaded newer image for postgres:15.1
e77f3e868d2bac06722283f767617afa834491f7c865c8e980266ce5c4651be
dima@dima-TUF-GAMING-FX504GD-FX80GD:~/PycharmProjects/pythonProject2/lab_29/my_project$
```

```
DATABASES = {
    "default": {
        "ENGINE": "django.db.backends.postgresql_psycopg2",
        "NAME": "lab_29",
        "USER": "postgres",
        "PASSWORD": "lab_29",
        "HOST": "127.0.0.1",
        "PORT": "5432",
    }
}
```

```
dima@dima-TUF-GAMING-FX5046D-FX806D:~/PycharmProjects/pythonProject2/lab_29/my_project$ docker images
```

REPOSITORY	TAG	IMAGE ID	CREATED	SIZE
postgres	15.1	9f3ec01f884d	13 days ago	379MB

```
dima@dima-TUF-GAMING-FX5046D-FX806D:~/PycharmProjects/pythonProject2/lab_29/my_project$ docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
e77f3e860d2b	postgres:15.1	"docker-entrypoint.s..."	2 minutes ago	Up 2 minutes	0.0.0.0:5432->5432/tcp, :::5432->5432/tcp	my_project

```
dima@dima-TUF-GAMING-FX5046D-FX806D:~/PycharmProjects/pythonProject2/lab_29/my_project$
```

```
^Cdima@dima-TUF-GAMING-FX5046D-FX806D:~/PycharmProjects/pythonProject2/lab_29/my_project$ python3 manage.py makemigrations
```

Migrations for 'posts':

```
posts/migrations/0001_initial.py
- Create model CustomUser
- Create model Posts
```

```
dima@dima-TUF-GAMING-FX5046D-FX806D:~/PycharmProjects/pythonProject2/lab_29/my_project$ python3 manage.py migrate
```

Operations to perform:

```
Apply all migrations: admin, auth, contenttypes, posts, sessions
```

Running migrations:

```
Applying contenttypes.0001_initial... OK
Applying contenttypes.0002_remove_content_type_name... OK
Applying auth.0001_initial... OK
Applying auth.0002_alter_permission_name_max_length... OK
Applying auth.0003_alter_user_email_max_length... OK
Applying auth.0004_alter_user_username_opts... OK
Applying auth.0005_alter_user_last_login_null... OK
Applying auth.0006_require_contenttypes_0002... OK
Applying auth.0007_alter_validators_add_error_messages... OK
Applying auth.0008_alter_user_username_max_length... OK
Applying auth.0009_alter_user_last_name_max_length... OK
Applying auth.0010_alter_group_name_max_length... OK
Applying auth.0011_update_proxy_permissions... OK
Applying auth.0012_alter_user_first_name_max_length... OK
Applying posts.0001_initial... OK
Applying admin.0001_initial... OK
Applying admin.0002_logentry_remove_auto_add... OK
Applying admin.0003_logentry_add_action_flag_choices... OK
Applying sessions.0001_initial... OK
```

```
dima@dima-TUF-GAMING-FX5046D-FX806D:~/PycharmProjects/pythonProject2/lab_29/my_project$ python3 manage.py runserver
```

Watching for file changes with StatReloader

Performing system checks...

System check identified no issues (0 silenced).

January 24, 2023 - 14:25:30

Django version 4.1.5, using settings 'base.settings'

Starting development server at <http://127.0.0.1:8000/>

Quit the server with CONTROL-C.

← → 127.0.0.1:8000/users/ Django REST framework

Api Root / Custom User List

Custom User List

OPTIONS GET

GET /users/

HTTP 200 OK
Allow: GET, POST, HEAD, OPTIONS
Content-Type: application/json
Vary: Accept

```
{
  "count": 0,
  "next": null,
  "previous": null,
  "results": []
}
```

Raw data HTML form

First name

Last name

Email

Password

POST

← → 127.0.0.1:8000/users/ Django REST framework

Api Root / Custom User List

Custom User List

OPTIONS GET

POST /users/

HTTP 201 Created
Allow: GET, POST, HEAD, OPTIONS
Content-Type: application/json
Vary: Accept

```
{
  "id": 1,
  "first_name": "test",
  "last_name": "test",
  "email": "test@ukr.net",
  "password": "pbkdf2_sha256$390000$PaI8NzvtZ2mmaAGNRDF05E$OVyq0JN/ptvvq07jzAmqC4jTl4hqQFol.g8xuGBrQzlw=",
  "access_token": "eyJ3b256$390000$PaI8NzvtZ2mmaAGNRDF05E$OVyq0JN/ptvvq07jzAmqC4jTl4hqQFol.g8xuGBrQzlw="
}
```

Raw data HTML form

First name

Last name

Email

Password

POST

```
dima@dima-TUF-GAMING-FX504GD-FX80GD:~$ sudo ss -lptn 'sport = :5432'
State      Recv-Q    Send-Q    Local Address:Port    Peer Address:Port    Process
LISTEN     0          4096      0.0.0.0:5432          0.0.0.0:*             users:((("docker-proxy",pid=5471,fd=4))
LISTEN     0          4096      [::]:5432            [::]:*                users:((("docker-proxy",pid=5479,fd=4))
dima@dima-TUF-GAMING-FX504GD-FX80GD:~$
```

```
dima@dima-TUF-GAMING-FX504GD-FX806D:~/PycharmProjects/pythonProject2/lab_29/my_project$ python3 manage.py runserver
Watching for file changes with StatReloader
Performing system checks...

System check identified no issues (0 silenced).
January 24, 2023 - 14:25:30
Django version 4.1.5, using settings 'base.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C.
[24/Jan/2023 14:26:16] "GET / HTTP/1.1" 200 10083
[24/Jan/2023 14:26:16] "GET /static/rest_framework/css/bootstrap.min.css HTTP/1.1" 304 0
[24/Jan/2023 14:26:16] "GET /static/rest_framework/css/bootstrap-tweaks.css HTTP/1.1" 304 0
[24/Jan/2023 14:26:16] "GET /static/rest_framework/js/bootstrap.min.js HTTP/1.1" 304 0
[24/Jan/2023 14:26:16] "GET /static/rest_framework/css/prettify.css HTTP/1.1" 304 0
[24/Jan/2023 14:26:16] "GET /static/rest_framework/css/default.css HTTP/1.1" 304 0
[24/Jan/2023 14:26:16] "GET /static/rest_framework/js/csrf.js HTTP/1.1" 304 0
[24/Jan/2023 14:26:16] "GET /static/rest_framework/js/jquery-3.5.1.min.js HTTP/1.1" 304 0
[24/Jan/2023 14:26:16] "GET /static/rest_framework/js/ajax-form.js HTTP/1.1" 304 0
[24/Jan/2023 14:26:16] "GET /static/rest_framework/js/default.js HTTP/1.1" 304 0
[24/Jan/2023 14:26:16] "GET /static/rest_framework/js/prettify-min.js HTTP/1.1" 304 0
[24/Jan/2023 14:26:16] "GET /static/rest_framework/img/grid.png HTTP/1.1" 304 0
Not Found: /favicon.ico
[24/Jan/2023 14:26:16] "GET /favicon.ico HTTP/1.1" 404 4675
[24/Jan/2023 14:26:21] "GET /users/ HTTP/1.1" 200 14292
[24/Jan/2023 14:27:10] "POST /users/ HTTP/1.1" 201 14888
[24/Jan/2023 14:27:51] "GET /users/ HTTP/1.1" 200 14725
```