

How to run a Django Server using Docker on Mac

This is a document that will guide you how to run you Django Server using Docker.

The current image state is recommend only for development purposes.

Prerequisites

- Make sure that the current files, **Dockerfile** and **docker-compose.yml** are at the same folder of the root of your Django project (same folder as **manage.py**)
- If your project doesn't have a **requirements.txt** file yet you can copy it to the root of your project.

1. Setup

- Docker instalation:
 - Install Docker Desktop on Mac - [LINK](#)
 - Youtube - Install Docker Desktop on Mac - [LINK](#)
- Docker Compose
 - Docker Desktop for Mac includes Compose along with other Docker apps, so Mac users do not need to install Compose separately.
- User manual
 - Docker Desktop for Mac user manual - [LINK](#)

2. Running the server image

- Using Docker Compose

At the project folder open you terminal, then enter the command:

```
> docker-compose up
```

At the first time it will build a docker image at your machine. It can take a couple of minutes. The server will be ready when you see the current line: `server_1 | Watching for file changes with StatReloader.`

Now, you can access the server at the default location: **`http://localhost:8000`**

3. Executing commands with docker compose

To run a command at a running container you just need to following the syntax:

```
> docker-compose exec [SERVICE] [COMMAND]
```

Examples

- Migrating the database

```
> docker-compose exec server python manage.py makemigrations
> docker-compose exec server python manage.py migrate
```
- Creating a SuperUser

```
> docker-compose exec server python manage.py createsuperuser
```

- Installing a Python Package

```
> docker-compose exec server pip install Django
```