## **Python in Containers** Course Materials

## Section 3. "The need of Automation"

## Commands:

```
$ git clone https://github.com/pythonincontainers/base image
$ cd base image
$ docker build -t django -f Docker.mydjango .
$ docker build -t uwsgi -f Docker.myuwsgi .
$ cd ..
$ git clone https://github.com/pythonincontainers/django-polls
$ docker build -t django-polls:uwsgi4nginx -f
Dockerfile.uwsgi4nginx --build-arg BaseImage=uwsgi .
$ docker network create polls net
$ docker volume rm polls vol
$ docker volume create polls vol
$ docker kill db app1 app2 proxy
$ docker rm -f db app1 app2 proxy
$ docker run -d --network polls net -e "POSTGRES USER=pollsuser"
-e "POSTGRES PASSWORD=pollspass" -e "POSTGRES DB=pollsdb" --name
db -v polls vol:/var/lib/postgresql/data postgres
$ docker logs db
$ docker run -it --rm --network polls net -e
"DATABASE URL=postgres://pollsuser:pollspass@db/pollsdb" django-
polls:uwsgi4nginx python manage.py migrate
$ docker run -it --rm --network polls net -e
"DATABASE URL=postgres://pollsuser:pollspass@db/pollsdb" django-
polls:uwsgi4nginx python manage.py loaddata initial data.json
```

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\$ docker run -it --rm --network polls\_net -e
"DATABASE\_URL=postgres://pollsuser:pollspass@db/pollsdb" djangopolls:uwsgi4nginx python manage.py createsuperuser

\$ docker run -d -e
"DATABASE\_URL=postgres://pollsuser:pollspass@db/pollsdb" -network polls\_net --name app1 django-polls:uwsgi4nginx

\$ docker run -d -e
"DATABASE\_URL=postgres://pollsuser:pollspass@db/pollsdb" -network polls\_net --name app2 django-polls:uwsgi4nginx

\$ docker build -t mynginx:ssl -f Dockerfile.nginx-ssl .

\$ docker run -d --name proxy --network polls\_net -p 443:443 -v
\$ {PWD}/mysite\_nginx\_ssl\_lb.conf:/etc/nginx/conf.d/mysite\_nginx\_s
sl.conf mynginx:ssl