Section 1. „Running our App in Various Environments”

Links used:

https://console.aws.amazon.com

https://tools.keycdn.com/geo?host=<docker-machine-IP-aws-machine

Commands used in this Lecture:

```
$ docker run -it -p 5000:5000 pythonincontainers/simple-flask:v1.0

$ kubectl version

$ kubectl run simple-deployment --image pythonincontainers/simple-flask:v1.0 --port=5000

$ kubectl get deployment

$ kubectl describe deployment simple-deployment

$ kubectl expose deployment simple-deployment --port 5000 --type=LoadBalancer --name=simple-service

$ kubectl get service simple-service
```

Open Web browser with **localhost:5000** and **localhost:5000/test** addresses. Substitute **localhost** with Docker Machine IP address, if necessary.

```
$ docker-machine create --driver amazonec2 --amazonec2-open-port 5000 --amazonec2-region eu-west-3 aws-machine

$ docker-machine env aws-machine

$ bash

$ eval $(docker-machine env aws-machine)

$ docker version

$ docker ps --all

$ docker image ls --all
```

```
$ docker-machine ip aws-machine

$ docker run --rm -it –name simple-container -p 5000:5000
pythonincontainers/simple-flask:v1.0

$ docker-machine rm aws-machine

$ gcloud auth login

$ docker-machine create --driver google --google-project python-
in-containers --google-zone asia-south1-b --google-tags simple-
flask google-machine

$ docker-machine env google-machine

$ docker-machine ip google-machine

$ docker run --rm -it -p 5000:5000 pythonincontainers/simple-
flask:v1.0

$ docker-machine rm google-machine
```

Creating Docker Machines in Public Clouds like AWS or Google Cloud may incur costs. Please make sure you control these costs.