

Assignment 03

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Prerequisites

- ☒ Docker installation
- ☒ DockerHub account registration

Part 1

ACK `main.go` run

Continouus Delivery/assignments/a04

→ git clone https://github.com/mrckurz/cd2020-ex04

Cloning into 'cd2020-ex04'...

remote: Enumerating objects: 9, done.

remote: Counting objects: 100% (9/9), done.

remote: Compressing objects: 100% (8/8), done.

remote: Total 9 (delta 1), reused 8 (delta 0), pack-reused 0

Unpacking objects: 100% (9/9), done.

Continouus Delivery/assignments/a04

→ cd cd2020-ex04

cd2020-ex04 on  master via  v1.14.3 on  v19.03.8

→ ls

Dockerfile main.go main_test.go

cd2020-ex04 on  master via  v1.14.3 on  v19.03.8

→ go run main.go

ACK CURL

```
cd2020-ex04 on ↗ master via 🐭 v1.14.3 on 🐳 v19.03.8
→ curl -L http://localhost:8888
Hello, it is 10:30%
```

```
cd2020-ex04 on ↗ master via 🐭 v1.14.3 on 🐳 v19.03.8
→ █
```

ACK Tests Run

```
cd2020-ex04 on ↗ master via 🐭 v1.14.3 on 🐳 v19.03.8
→ go run main.go
^Csignal: interrupt

cd2020-ex04 on ↗ master via 🐭 v1.14.3 on 🐳 v19.03.8 took 1m 38s
→ go test -v
=== RUN    TestGetMinuteUp
--- PASS: TestGetMinuteUp (0.00s)
=== RUN    TestGetMinuteDown
--- PASS: TestGetMinuteDown (0.00s)
PASS
ok          [REDACTED] /Cont
inous_Delivery/assignments/a04/cd2020-ex04      0.084s

cd2020-ex04 on ↗ master via 🐭 v1.14.3 on 🐳 v19.03.8 took 5s
→ █
```

Dockerfile Modifications



Modifications as pointed out in the Dockerfile itself can be found [here](#).

Build Image

Building the image with:




```
docker image build -f Dockerfile -t s1810/my-first-docker-image:0.0.1 ./
```

```
docker image build -f Dockerfile -t s1810/my-first-docker-image:0.0.1 ./
Sending build context to Docker daemon 4.608kB
Step 1/8 : FROM golang:1.11-alpine
1.11-alpine: Pulling from library/golang
9d48c3bd43c5: Pull complete
7f94eaf8af20: Pull complete
9fe9984849c1: Pull complete
ec448270508e: Pull complete
65ba82af53f7: Pull complete
Digest: sha256:09e47edb668c2cac8c0bbce113f2f72c97b1555d70546dff569c8b9b27fceb3
Status: Downloaded newer image for golang:1.11-alpine
---> e116d2efa2ab
Step 2/8 : LABEL maintainer="manuel.leibetseder@students.fh-hagenberg.at"
---> Running in 5c342c639520
Removing intermediate container 5c342c639520
---> abb022aff395
Step 3/8 : WORKDIR /src
---> Running in 2d9114e192e3
Removing intermediate container 2d9114e192e3
---> 315adc75c996
Step 4/8 : COPY main.go /src/
---> af19e1ea6bd3
Step 5/8 : RUN ls -la
---> Running in 47aa66295c48
total 12
drwxr-xr-x    1 root    root          4096 Jun  3 08:54 .
drwxr-xr-x    1 root    root          4096 Jun  3 08:54 ..
-rw-r--r--    1 root    root           386 Jun  3 08:28 main.go
Removing intermediate container 47aa66295c48
---> 4f6277c3c373
Step 6/8 : RUN CGO_ENABLED=0 go build -o /usr/myapp
---> Running in 1f9624a581a7
Removing intermediate container 1f9624a581a7
---> 3f21b3180b71
Step 7/8 : EXPOSE 8888
---> Running in 00a880b0f72d
Removing intermediate container 00a880b0f72d
---> 7dfe4675c79a
Step 8/8 : CMD ["/usr/myapp"]
---> Running in 19ac05ddd042
Removing intermediate container 19ac05ddd042
---> 530f77594317
Successfully built 530f77594317
Successfully tagged s1810/my-first-docker-image:0.0.1
```

cd2020-ex04 on  master [!?] via  v1.14.3 on  v19.03.8 took 29s

Docker Images




Current images available on my machine:

```
cd2020-ex04 on  master [!?] via  v1.14.3 on  v19.03.8 took 29s
```

→ docker images

| REPOSITORY | TAG | IMAGE ID | CREATED | SIZE |
|-----------------------------|-------------|--------------|----------------|-------|
| s1810/my-first-docker-image | 0.0.1 | 530f77594317 | 59 seconds ago | 325MB |
| postgres | latest | adf2b126dda8 | 2 weeks ago | 313MB |
| golang | 1.11-alpine | e116d2efa2ab | 9 months ago | 312MB |

DockerHub Login

```
cd2020-ex04 on  master [!?] via  v1.14.3 on  v19.03.8
```

→ docker login




Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to <https://hub.docker.com> to create one.

Username: s1810

Password:

Login Succeeded

DockerHub Push

```
cd2020-ex04 on  master [!?] via  v1.14.3 on  v19.03.8 took 8s
```

→ docker image push s1810/my-first-docker-image

The push refers to repository [docker.io/s1810/my-first-docker-image]

2557a46a4bd5: Pushed

d4adab1ef908: Pushed

4035ac48b8b4: Pushed

1c5f3ece5b7b: Mounted from library/golang

128c5ebbedfd: Mounted from library/golang

c973660ff75c: Mounted from library/golang

5ff34e0a6dec: Mounted from library/golang

03901b4a2ea8: Mounted from library/golang

0.0.1: digest: sha256:2e01e02a3961665852f61c3a7d6ba9179496a458d3aded4e8721e60071dada83 size: 1990

s1810

Search by repository name...

Create Repository

s1810 / my-first-docker-image

Updated a few seconds ago

☆ 0




📄 1

🌐 PUBLIC

Part 2




Docker Run & Stop

```

cd2020-ex04 on  master [!?] via  v1.14.3 on  v19.03.8 took 16s
→ docker image build -t s1810/myhello:0.0.1 ./
Sending build context to Docker daemon 4.608kB
Step 1/8 : FROM golang:1.11-alpine
----> e116d2efa2ab
Step 2/8 : LABEL maintainer="manuel.leibetseder@students.fh-hagenberg.at"
----> Using cache
----> abb022aff395
Step 3/8 : WORKDIR /src
----> Using cache
----> 315adc75c996
Step 4/8 : COPY main.go /src/
----> Using cache
----> af19e1ea6bd3
Step 5/8 : RUN ls -la
----> Using cache
----> 4f6277c3c373
Step 6/8 : RUN CGO_ENABLED=0 go build -o /usr/myapp
----> Using cache
----> 3f21b3180b71
Step 7/8 : EXPOSE 8888
----> Using cache
----> 7dfe4675c79a
Step 8/8 : CMD ["/usr/myapp"]
----> Using cache
----> 530f77594317
Successfully built 530f77594317
Successfully tagged s1810/myhello:0.0.1







```




```

cd2020-ex04 on  master [!?] via  v1.14.3 on  v19.03.8
→ docker container run -p 9090:8888 s1810/myhello:0.0.1

```

```




cd2020-ex04 on  master [!?] via  v1.14.3 on  v19.03.8
→ curl -L http://localhost:9090
Hello, it is 11:26
cd2020-ex04 on  master [!?] via  v1.14.3 on  v19.03.8
→ docker rps
zsh: command not found: docke




cd2020-ex04 on  master [!?] via  v1.14.3 on  v19.03.8
→ docker ps

```

| CONTAINER ID | IMAGE | COMMAND | CREATED | STATUS | PORTS | NAMES |
|--------------|---------------------|--------------------------|----------------|---------------|------------------------|----------------|
| 4d57db2994f1 | s1810/myhello:0.0.1 | "/usr/myapp" | 36 seconds ago | Up 35 seconds | 0.0.0.0:9090->8888/tcp | crazy_rosalind |
| 00e3ccc557b0 | postgres | "docker-entrypoint.s..." | 2 days ago | Up 2 days | 0.0.0.0:5432->5432/tcp | pg-docker |

```

cd2020-ex04 on  master [!?] via  v1.14.3 on  v19.03.8
→ docker stop crazy_rosalind
crazy_rosalind

cd2020-ex04 on  master [!?] via  v1.14.3 on  v19.03.8
→ docker ps

```

| CONTAINER ID | IMAGE | COMMAND | CREATED | STATUS | PORTS | NAMES |
|--------------|----------|--------------------------|------------|-----------|------------------------|-----------|
| 00e3ccc557b0 | postgres | "docker-entrypoint.s..." | 2 days ago | Up 2 days | 0.0.0.0:5432->5432/tcp | pg-docker |

Part 3

Dockerfile and .travis.yml Adaption

Using Travis CI to automatically build the image of the exercise. The Dockerfile and .travis.yml had to be adapted to make it work fully automatically.

✓ a04 using different base image as suggested in https://github.co...

Commit 7c7a6ca

Compare 2b89445...7c7a6ca

Branch a04

s018

Go: 1.14.x


AMD64

#15 passed

Ran for 1 min 40 sec

less than a minute ago

Restart build



 s1810/demo

This repository does not have a description

Last pushed: 5 minutes ago

Tags

This repository contains 2 tag(s).




| | | |
|---------|---|---------------|
| latest |  | 5 minutes ago |
| 7c7a6ca |  | 5 minutes ago |

See all

Pulling the Images

In order to verify the images were pushed to the DockerHub-repository a pull has been done:

```




go-mux on  a04 via  v1.14.3 on  v19.03.8 took 5s
[→ docker pull s1810/demo:latest && docker pull s1810/demo:7c7a6ca
latest: Pulling from s1810/demo
dc65f448a2e2: Already exists
346ffb2b67d7: Already exists
dea4ecac934f: Already exists
8ac92ddf84b3: Already exists
7ca605383307: Already exists
020f524b99dd: Already exists
06036b0307c9: Already exists
914c7bf45c17: Pull complete
9ced2d9c8e24: Pull complete
35ba13badb4e: Pull complete
e06c45e50da6: Pull complete
Digest: sha256:49f36a97ab3a92bd91537cf0a99c0867ce8fbbf01a9bca45cdd269f0d90505dc
Status: Downloaded newer image for s1810/demo:latest
docker.io/s1810/demo:latest
7c7a6ca: Pulling from s1810/demo
Digest: sha256:49f36a97ab3a92bd91537cf0a99c0867ce8fbbf01a9bca45cdd269f0d90505dc
Status: Downloaded newer image for s1810/demo:7c7a6ca
docker.io/s1810/demo:7c7a6ca




```

Run the Containers

Verifying working containers:

```

go-mux on  a04 [!?] via  v1.14.3 on  v19.03.8
→ docker run -d -p 9000:8080 s1810/demo:latest && docker run -d -p 9001:8080 s1810/demo:7c7a6ca
bf761e5ead25ebd82ef250448d7e8466729d7b5760afc6945a5483051897c760
5c55c21aff53b55698faf65cf2a8b4217132f5159a72bb5ce4572253ff93cf23

go-mux on  a04 [!?] via  v1.14.3 on  v19.03.8
→ docker ps

```

| CONTAINER ID | IMAGE | COMMAND | CREATED | STATUS | PORTS | NAMES |
|--------------|--------------------|--------------------------|---------------|--------------|----------------------------------|--------------------|
| 5c55c21aff53 | s1810/demo:7c7a6ca | "/usr/myapp" | 3 seconds ago | Up 2 seconds | 8888/tcp, 0.0.0.0:9001->8080/tcp | quirky_poitras |
| bf761e5ead25 | s1810/demo:latest | "/usr/myapp" | 3 seconds ago | Up 2 seconds | 8888/tcp, 0.0.0.0:9000->8080/tcp | jovial_ardinghelli |
| 00e3ccc557b0 | postgres | "docker-entrypoint.s..." | 3 days ago | Up 3 days | 0.0.0.0:5432->5432/tcp | pg-docker |