Отчёт по лабораторной 2

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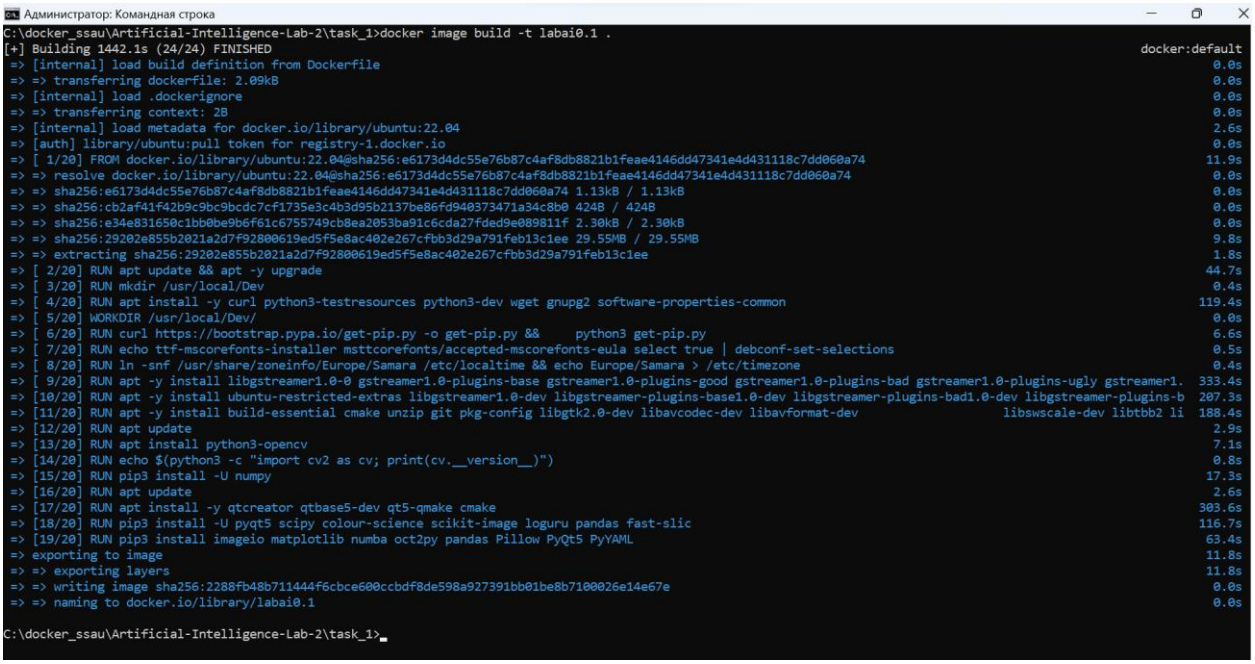
ЧАСТЬ 1

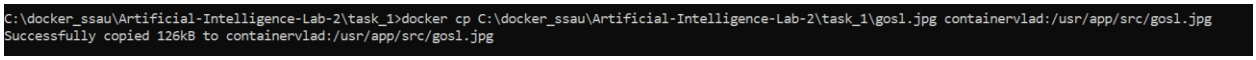
1. Будем производить обработку данного изображения gosl.jpg

2. Производим билд проекта labai0.1
   Docker image build -t labai0.1 .

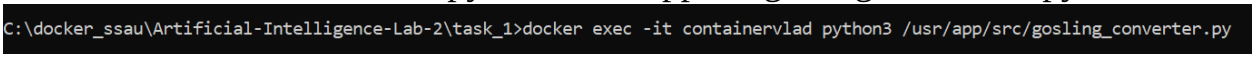


3. Создаём контейнер containervlad
   Docker run -dit -v .\data/usr/app/src –name containervlad labai0.1

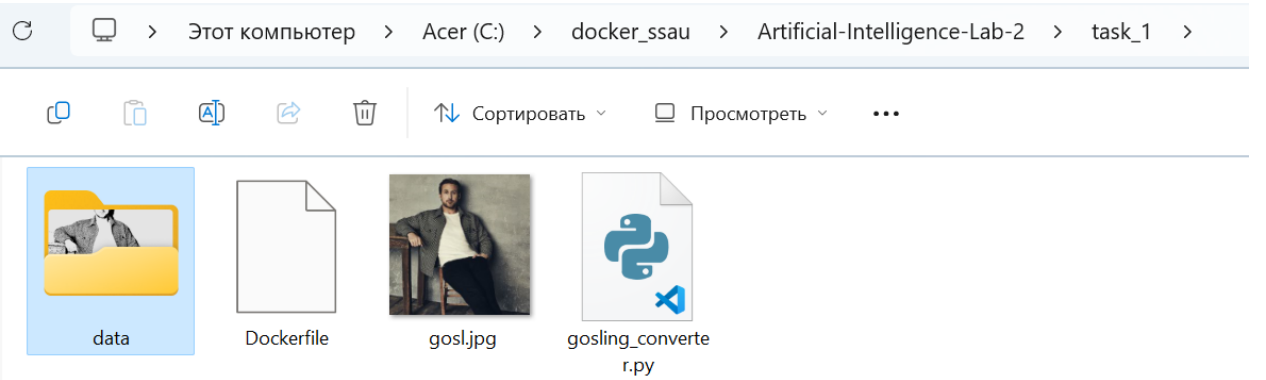
4. Копируем файлы: само изображение и скрипт gosling_converter.py
   docker cp C:\docker_ssau\Artificial-Intelligence-Lab-2\task_1\gosl.jpg containervlad:/usr/app/src/gosl.jpg
   docker cp C:\docker_ssau\Artificial-Intelligence-Lab-2\task_1\gosling_converter.py containervlad:/usr/app/src/gosling_converter.py



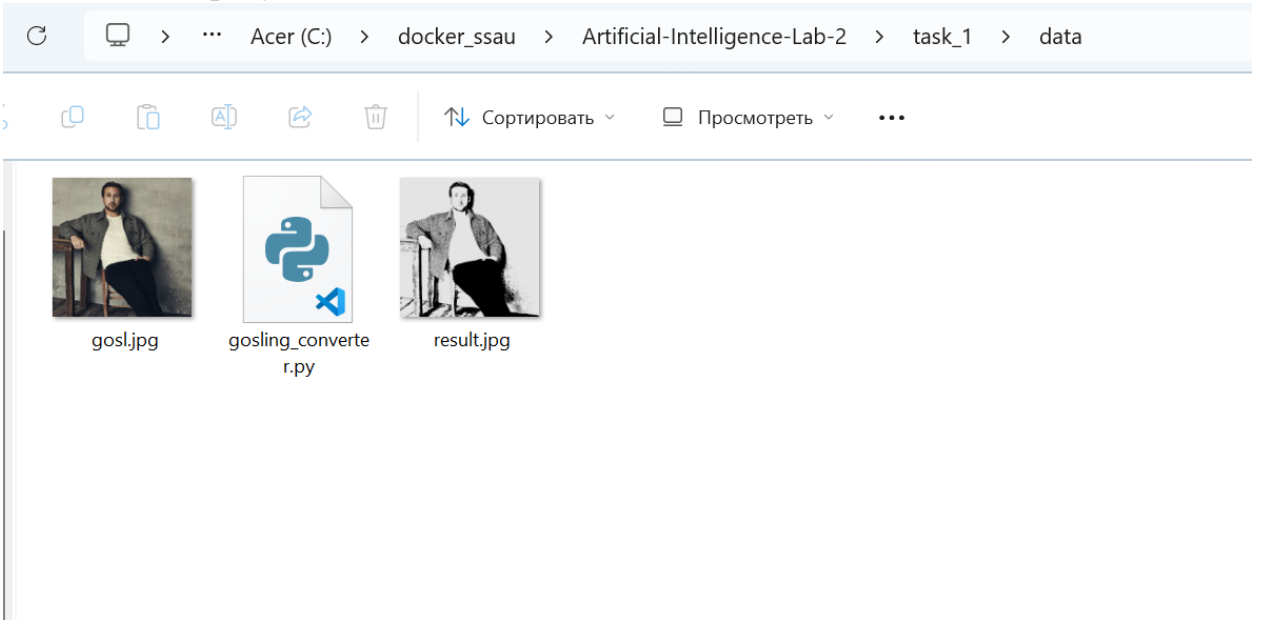
5. Запускаем
   docker exec -it containervlad python3 /usr/app/src/gosling_converter.py



6. В папке с проектом появилась папка data



7. В ней лежит результат



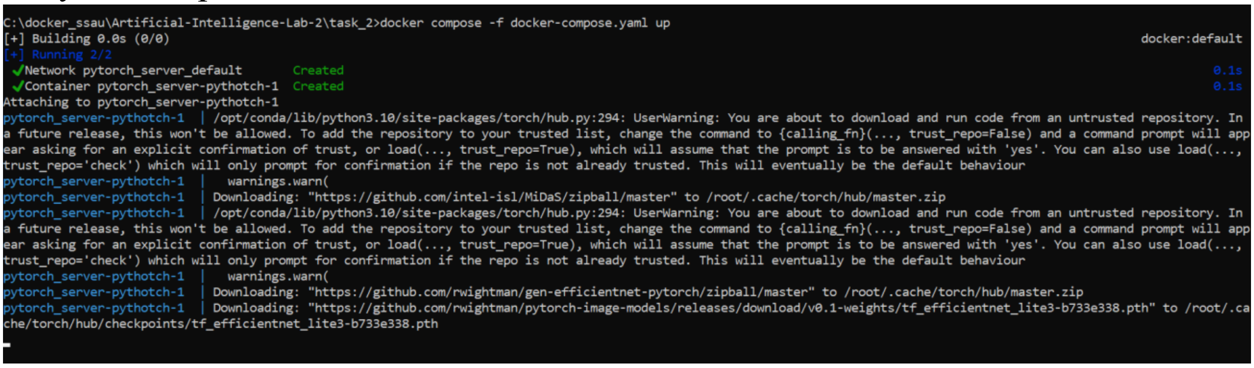
8. Вот он крупным планом

ЧАСТЬ 2

1. Билдим проект
   docker image build -t lab2_2:0.0.1 C:\Users\User\AI2\

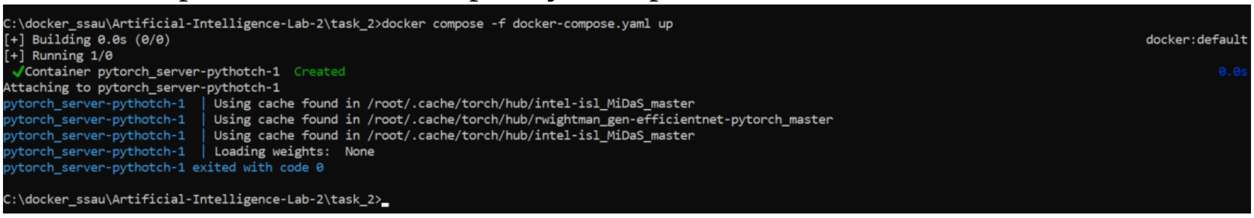
```
C:\docker_ssau\Artificial-Intelligence-Lab-2\task_2>docker image build -t labai2:0.1 .
[+] Building 2576.7s (9/9) FINISHED                                                                 docker:default
 => [internal] load .dockerignore                                                                              0.0s
 => => transferring context: 2B                                                                                0.0s
 => [internal] load build definition from Dockerfile                                                           0.0s
 => => transferring dockerfile: 337B                                                                           0.0s
 => [internal] load metadata for docker.io/pytorch/pytorch:latest                                              2.9s
 => [auth] pytorch/pytorch:pull token for registry-1.docker.io                                                 0.0s
 => [1/4] FROM docker.io/pytorch/pytorch:latest@sha256:3387e598cb94fc248d82e712a65b10931a990cea3a2e76362ca30d135f565de4   2117.9s
 => => resolve docker.io/pytorch/pytorch:latest@sha256:3387e598cb94fc248d82e712a65b10931a990cea3a2e76362ca30d135f565de4   0.0s
 => => sha256:3387e598cb94fc248d82e712a65b10931a990cea3a2e76362ca30d135f565de4 1.37kB / 1.37kB                 0.0s
 => => sha256:96d3e8fcea30561fe213e97aa46543d0daf78d2c59f981ba972964fd9db2539a 4.40kB / 4.40kB                 0.0s
 => => sha256:30ecab32a3b65c6ec04c63a65b90e627b49d1297d8793896ed50b656377d8a06 28.58MB / 28.58MB               25.9s
 => => sha256:36bd8c5480de13567d1a20742a03183621f79ece3e60791a9b5f0421aea997cc 15.14MB / 15.14MB               20.5s
 => => sha256:4fc93add8a06dc2e19f91ff5dba9b8e20609c6da30abc2ebf6dbd17d61edbb33 3.44GB / 3.44GB               1950.7s
 => => sha256:4f4fb700ef54461cfa02571ae0db9a0dc1e0cdb5577484a6d75e68dc38e8acc1 32B / 32B                      20.9s
 => => sha256:613276d556e20f60e60286ee3af7c545857b4d827c7576beb937e87604db6c04 99B / 99B                      21.3s
 => => extracting sha256:30ecab32a3b65c6ec04c63a65b90e627b49d1297d8793896ed50b656377d8a06                      2.1s
 => => extracting sha256:36bd8c5480de13567d1a20742a03183621f79ece3e60791a9b5f0421aea997cc                      1.6s
 => => extracting sha256:4fc93add8a06dc2e19f91ff5dba9b8e20609c6da30abc2ebf6dbd17d61edbb33                    160.6s
 => => extracting sha256:4f4fb700ef54461cfa02571ae0db9a0dc1e0cdb5577484a6d75e68dc38e8acc1                      0.0s
 => => extracting sha256:613276d556e20f60e60286ee3af7c545857b4d827c7576beb937e87604db6c04                      0.0s
 => [2/4] RUN apt-get update && apt-get install ffmpeg libsm6 libxext6  -y                                   343.9s
 => [3/4] RUN pip install numpy opencv-python timm                                                           107.6s
 => [4/4] WORKDIR /usr/app/src                                                                                 0.0s
 => exporting to image                                                                                         4.1s
 => => exporting layers                                                                                        4.1s
 => => writing image sha256:5bb1a11bd120343b769711ce7b9bbc1a7a092a2cafc246f67898eab43d2c6178                   0.0s
 => => naming to docker.io/library/labai2:0.1                                                                  0.0s
```

Запускаем проект



```
C:\docker_ssau\Artificial-Intelligence-Lab-2\task_2>docker compose -f docker-compose.yaml up
[+] Building 0.0s (0/0)                                                                             docker:default
[+] Running 2/2
 ✔Network pytorch_server_default       Created                                                                 0.1s
 ✔Container pytorch_server-pythotch-1  Created                                                                 0.1s
Attaching to pytorch_server-pythotch-1
pytorch_server-pythotch-1  | /opt/conda/lib/python3.10/site-packages/torch/hub.py:294: UserWarning: You are about to download and run code from an untrusted repository. In a future release, this won't be allowed. To add the repository to your trusted list, change the command to {calling_fn}(..., trust_repo=False) and a command prompt will appear asking for an explicit confirmation of trust, or load(..., trust_repo=True), which will assume that the prompt is to be answered with 'yes'. You can also use load(..., trust_repo='check') which will only prompt for confirmation if the repo is not already trusted. This will eventually be the default behaviour
pytorch_server-pythotch-1  |   warnings.warn(
pytorch_server-pythotch-1  | Downloading: "https://github.com/intel-isl/MiDaS/zipball/master" to /root/.cache/torch/hub/master.zip
pytorch_server-pythotch-1  | /opt/conda/lib/python3.10/site-packages/torch/hub.py:294: UserWarning: You are about to download and run code from an untrusted repository. In a future release, this won't be allowed. To add the repository to your trusted list, change the command to {calling_fn}(..., trust_repo=False) and a command prompt will appear asking for an explicit confirmation of trust, or load(..., trust_repo=True), which will assume that the prompt is to be answered with 'yes'. You can also use load(..., trust_repo='check') which will only prompt for confirmation if the repo is not already trusted. This will eventually be the default behaviour
pytorch_server-pythotch-1  |   warnings.warn(
pytorch_server-pythotch-1  | Downloading: "https://github.com/rwightman/gen-efficientnet-pytorch/zipball/master" to /root/.cache/torch/hub/master.zip
pytorch_server-pythotch-1  | Downloading: "https://github.com/rwightman/pytorch-image-models/releases/download/v0.1-weights/tf_efficientnet_lite3-b733e338.pth" to /root/.cache/torch/hub/checkpoints/tf_efficientnet_lite3-b733e338.pth
```

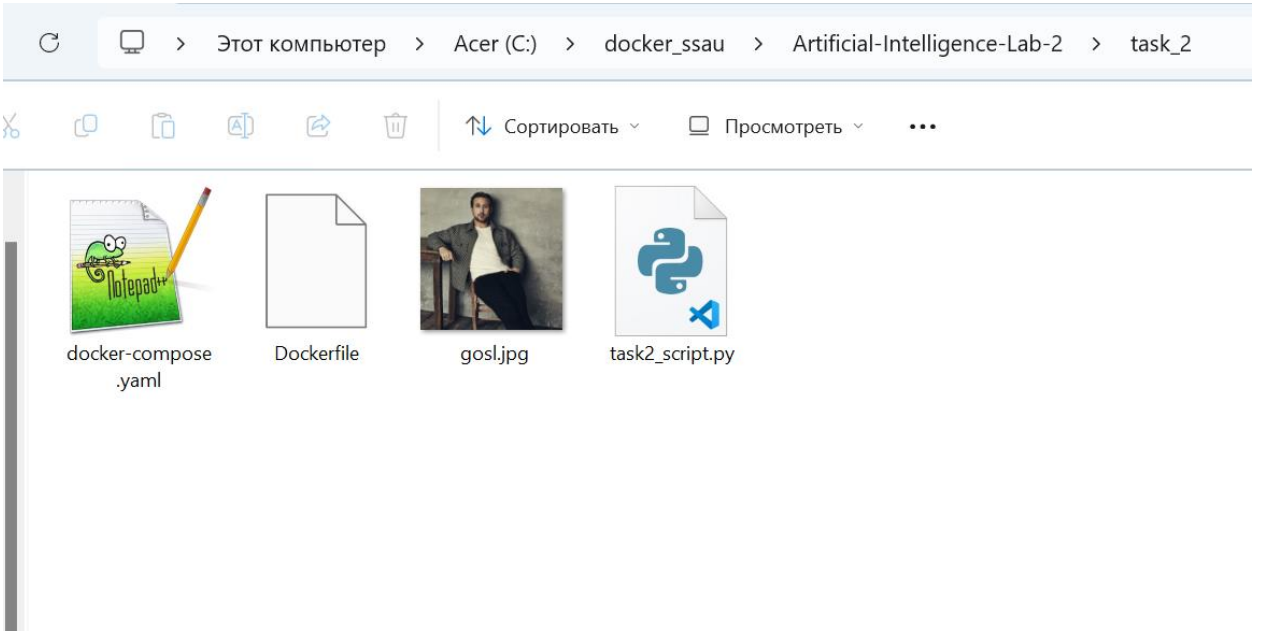
2. Теперь запустим его
   docker compose -f docker-compose.yaml up



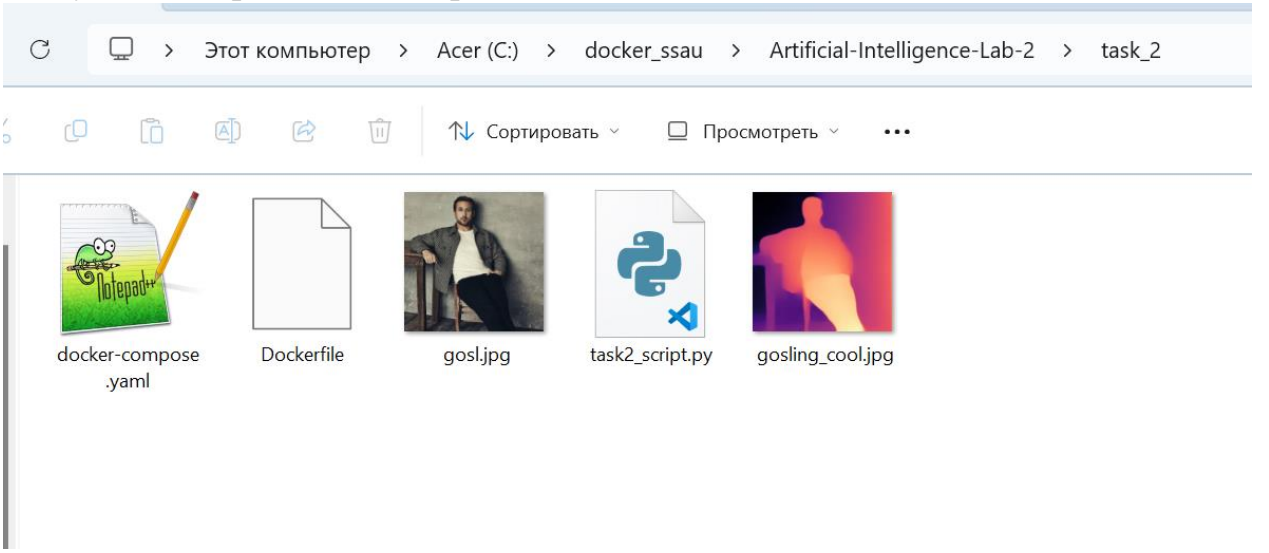
```
C:\docker_ssau\Artificial-Intelligence-Lab-2\task_2>docker compose -f docker-compose.yaml up
[+] Building 0.0s (0/0)                                                                             docker:default
[+] Running 1/0
 ✔Container pytorch_server-pythotch-1  Created                                                                 0.0s
Attaching to pytorch_server-pythotch-1
pytorch_server-pythotch-1  | Using cache found in /root/.cache/torch/hub/intel-isl_MiDaS_master
pytorch_server-pythotch-1  | Using cache found in /root/.cache/torch/hub/rwightman_gen-efficientnet-pytorch_master
pytorch_server-pythotch-1  | Using cache found in /root/.cache/torch/hub/intel-isl_MiDaS_master
pytorch_server-pythotch-1  | Loading weights:  None
pytorch_server-pythotch-1 exited with code 0

C:\docker_ssau\Artificial-Intelligence-Lab-2\task_2>
```

3. Что у нас было в папке с проектом



4. Что у нас теперь в папке с проектом



5. Что у нас по итогу получилось