

Bài 1:

```
Command Prompt
Microsoft Windows [Version 10.0.26100.7171]
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C:\Users\Hello>docker --version
Docker version 29.0.1, build eedd969

C:\Users\Hello>
```

Bài 2:

<https://youtu.be/Ap6VLgBSyfg>

Bài 3:

https://youtu.be/Q7h-0UH_tmg

Bài 4:

<https://youtu.be/fxUI1cgK0MI>

Bài 5:

1. Tạo Dockerfile

```
EXPLORER
MY_PROJECT
  > images
  > output
  Dockerfile

Dockerfile
1 FROM python:3.8-slim
2
3 # Install system dependencies
4 RUN apt-get update && apt-get install -y \
5     git \
6     python3-opencv \
7     libgl1-mesa-glx \
8     wget \
9     && rm -rf /var/lib/apt/lists/*
10
11 # Clone YOLOv7
12 RUN git clone https://github.com/WongKinYiu/yolov7 /workspace/yolov7
13 WORKDIR /workspace/yolov7
14
15 # Install Python dependencies
16 RUN pip install --upgrade pip
17 RUN pip install -r requirements.txt
18
19 # Download pretrained weights
20 RUN wget https://github.com/WongKinYiu/yolov7/releases/download/v0.1/yolov7.pt -O yolov7.pt
21
22 CMD ["bash"]
23
```

2. Tạo image

<input type="checkbox"/>	Name	Tag	Image ID	Created	Size	Actions
<input type="checkbox"/>	<div><div></div>yolov7-custom</div>	latest	da668d2c7dc4	40 minutes ag	17.13 GB	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>

3. Chạy container và kiểm tra mount thành công chưa

```
C:\Users\Hello\Documents\my_project>docker run -it --rm -v C:/Users/Hello/Documents/my_project/images:/workspace/yolov7/images -v C:/Users/Hello/Documents/my_project/output:/workspace/yolov7/output yolov7-custom bash
root@9cec558860de:/workspace/yolov7# ls /workspace/yolov7/images
000000580630.jpg 000000580710.jpg 000000580805.jpg 000000580940.jpg 000000581020.jpg 000000581235.jpg 000000581272.jpg 000000581323.jpg
000000580635.jpg 000000580716.jpg 000000580818.jpg 000000580947.jpg 000000581067.jpg 000000581255.jpg 000000581280.jpg 000000581333.jpg
000000580641.jpg 000000580770.jpg 000000580838.jpg 000000580948.jpg 000000581069.jpg 000000581260.jpg 000000581281.jpg 000000581342.jpg
000000580642.jpg 000000580771.jpg 000000580858.jpg 000000580969.jpg 000000581095.jpg 000000581261.jpg 000000581295.jpg 000000581358.jpg
000000580654.jpg 000000580793.jpg 000000580861.jpg 000000580970.jpg 000000581122.jpg 000000581264.jpg 000000581305.jpg 000000581365.jpg
```

4. Chạy YOLOv7

```
root@9cec558860de:/workspace/yolov7# python detect.py --weights yolov7.pt --source images --project output --name results --exist-ok
Namespaces(agnostic_nms=False, augment=False, classes=None, conf_thres=0.25, device='', exist_ok=True, img_size=640, iou_thres=0.45, name='results', no_trace=False, nosave=False, project='output', save_conf=False, save_txt=False, source='images', update=False, view_img=False, weights=['yolov7.pt'])
YOLOR v0.1-128-ga207844 torch 2.4.1+cu121 CPU

/workspace/yolov7/models/experimental.py:252: FutureWarning: You are using `torch.load` with `weights_only=False` (the current default value), which uses the default
```

5. Kết quả: https://youtu.be/zN_0S03MwGM

```
root@9cec558860de:/workspace/yolov7# python detect.py --weights yolov7.pt --source images --project output --name results --exist-ok
1 motorcycle, Done. (444.5ms) Inference, (8.0ms) NMS
The image with the result is saved in: output/results/000000580630.jpg
4 birds, 6 elephants, Done. (341.9ms) Inference, (0.7ms) NMS
The image with the result is saved in: output/results/000000580635.jpg
2 bottles, 1 potted plant, 2 clocks, Done. (400.7ms) Inference, (0.7ms) NMS
The image with the result is saved in: output/results/000000580641.jpg
1 couch, 1 cell phone, Done. (422.9ms) Inference, (0.7ms) NMS
The image with the result is saved in: output/results/000000580642.jpg
3 persons, 2 skateboards, Done. (395.4ms) Inference, (0.5ms) NMS
```