

yolo5-gradio

December 5, 2023

```
[1]: !pip install gradio  
!git clone https://github.com/ultralytics/yolov5 # Clone YOLOv5 repository  
%cd yolov5  
!pip install -r requirements.txt # Install dependencies
```

```
Collecting gradio  
  Downloading gradio-4.8.0-py3-none-any.whl (16.5 MB)  
    16.5/16.5 MB  
  48.4 MB/s eta 0:00:00  
Collecting aiofiles<24.0,>=22.0 (from gradio)  
  Downloading aiofiles-23.2.1-py3-none-any.whl (15 kB)  
Requirement already satisfied: altair<6.0,>=4.2.0 in  
/usr/local/lib/python3.10/dist-packages (from gradio) (4.2.2)  
Collecting fastapi (from gradio)  
  Downloading fastapi-0.104.1-py3-none-any.whl (92 kB)  
    92.9/92.9 kB  
  10.9 MB/s eta 0:00:00  
Collecting ffdpy (from gradio)  
  Downloading ffdpy-0.3.1.tar.gz (5.5 kB)  
  Preparing metadata (setup.py) ... done  
Collecting gradio-client==0.7.1 (from gradio)  
  Downloading gradio_client-0.7.1-py3-none-any.whl (302 kB)  
    302.9/302.9 kB  
  22.5 MB/s eta 0:00:00  
Collecting httpx (from gradio)  
  Downloading httpx-0.25.2-py3-none-any.whl (74 kB)  
    75.0/75.0 kB  
  6.9 MB/s eta 0:00:00  
Requirement already satisfied: huggingface-hub>=0.14.0 in  
/usr/local/lib/python3.10/dist-packages (from gradio) (0.19.4)  
Requirement already satisfied: importlib-resources<7.0,>=1.3 in  
/usr/local/lib/python3.10/dist-packages (from gradio) (6.1.1)  
Requirement already satisfied: jinja2<4.0 in /usr/local/lib/python3.10/dist-  
packages (from gradio) (3.1.2)  
Requirement already satisfied: markupsafe~=2.0 in  
/usr/local/lib/python3.10/dist-packages (from gradio) (2.1.3)  
Requirement already satisfied: matplotlib~=3.0 in
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/usr/local/lib/python3.10/dist-packages (from gradio) (3.7.1)
Requirement already satisfied: numpy~=1.0 in /usr/local/lib/python3.10/dist-
packages (from gradio) (1.23.5)
Collecting orjson~=3.0 (from gradio)
    Downloading
orjson-3.9.10-cp310-cp310-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (138
kB)
    138.7/138.7

kB 16.0 MB/s eta 0:00:00
Requirement already satisfied: packaging in
/usr/local/lib/python3.10/dist-packages (from gradio) (23.2)
Requirement already satisfied: pandas<3.0,>=1.0 in
/usr/local/lib/python3.10/dist-packages (from gradio) (1.5.3)
Requirement already satisfied: pillow<11.0,>=8.0 in
/usr/local/lib/python3.10/dist-packages (from gradio) (9.4.0)
Collecting pydantic>=2.0 (from gradio)
    Downloading pydantic-2.5.2-py3-none-any.whl (381 kB)
    381.9/381.9

kB 31.4 MB/s eta 0:00:00
Collecting pydub (from gradio)
    Downloading pydub-0.25.1-py2.py3-none-any.whl (32 kB)
Collecting python-multipart (from gradio)
    Downloading python_multipart-0.0.6-py3-none-any.whl (45 kB)
    45.7/45.7 kB

5.1 MB/s eta 0:00:00
Requirement already satisfied: pyyaml<7.0,>=5.0 in
/usr/local/lib/python3.10/dist-packages (from gradio) (6.0.1)
Requirement already satisfied: requests~=2.0 in /usr/local/lib/python3.10/dist-
packages (from gradio) (2.31.0)
Collecting semantic-version~=2.0 (from gradio)
    Downloading semantic_version-2.10.0-py2.py3-none-any.whl (15 kB)
Collecting tomlkit==0.12.0 (from gradio)
    Downloading tomlkit-0.12.0-py3-none-any.whl (37 kB)
Requirement already satisfied: typer[all]<1.0,>=0.9 in
/usr/local/lib/python3.10/dist-packages (from gradio) (0.9.0)
Requirement already satisfied: typing-extensions~=4.0 in
/usr/local/lib/python3.10/dist-packages (from gradio) (4.5.0)
Collecting uvicorn>=0.14.0 (from gradio)
    Downloading uvicorn-0.24.0.post1-py3-none-any.whl (59 kB)
    59.7/59.7 kB

6.4 MB/s eta 0:00:00
Requirement already satisfied: fsspec in /usr/local/lib/python3.10/dist-
packages (from gradio-client==0.7.1->gradio) (2023.6.0)
Collecting websockets<12.0,>=10.0 (from gradio-client==0.7.1->gradio)
    Downloading websockets-11.0.3-cp310-cp310-manylinux_2_5_x86_64.manylinux1_x86_64.manylinux_2_17_x86_64.manylinux2014_x86_64.whl (129 kB)
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129.9/129.9

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kB 13.6 MB/s eta 0:00:00
Requirement already satisfied: entrypoints in
/usr/local/lib/python3.10/dist-packages (from altair<6.0,>=4.2.0->gradio) (0.4)
Requirement already satisfied: jsonschema>=3.0 in
/usr/local/lib/python3.10/dist-packages (from altair<6.0,>=4.2.0->gradio)
(4.19.2)
Requirement already satisfied: toolz in /usr/local/lib/python3.10/dist-packages
(from altair<6.0,>=4.2.0->gradio) (0.12.0)
Requirement already satisfied: filelock in /usr/local/lib/python3.10/dist-
packages (from huggingface-hub>=0.14.0->gradio) (3.13.1)
Requirement already satisfied: tqdm>=4.42.1 in /usr/local/lib/python3.10/dist-
packages (from huggingface-hub>=0.14.0->gradio) (4.66.1)
Requirement already satisfied: contourpy>=1.0.1 in
/usr/local/lib/python3.10/dist-packages (from matplotlib~>3.0->gradio) (1.2.0)
Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.10/dist-
packages (from matplotlib~>3.0->gradio) (0.12.1)
Requirement already satisfied: fonttools>=4.22.0 in
/usr/local/lib/python3.10/dist-packages (from matplotlib~>3.0->gradio) (4.45.1)
Requirement already satisfied: kiwisolver>=1.0.1 in
/usr/local/lib/python3.10/dist-packages (from matplotlib~>3.0->gradio) (1.4.5)
Requirement already satisfied: pyparsing>=2.3.1 in
/usr/local/lib/python3.10/dist-packages (from matplotlib~>3.0->gradio) (3.1.1)
Requirement already satisfied: python-dateutil>=2.7 in
/usr/local/lib/python3.10/dist-packages (from matplotlib~>3.0->gradio) (2.8.2)
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.10/dist-
packages (from pandas<3.0,>=1.0->gradio) (2023.3.post1)
Collecting annotated-types>=0.4.0 (from pydantic>=2.0->gradio)
  Downloading annotated_types-0.6.0-py3-none-any.whl (12 kB)
Collecting pydantic-core==2.14.5 (from pydantic>=2.0->gradio)
  Downloading
pydantic_core-2.14.5-cp310-cp310-manylinux_2_17_x86_64.manylinux2014_x86_64.whl
(2.1 MB)
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2.1/2.1 MB

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76.8 MB/s eta 0:00:00
Collecting typing-extensions~>=4.0 (from gradio)
  Downloading typing_extensions-4.8.0-py3-none-any.whl (31 kB)
Requirement already satisfied: charset-normalizer<4,>=2 in
/usr/local/lib/python3.10/dist-packages (from requests~>2.0->gradio) (3.3.2)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-
packages (from requests~>2.0->gradio) (3.6)
Requirement already satisfied: urllib3<3,>=1.21.1 in
/usr/local/lib/python3.10/dist-packages (from requests~>2.0->gradio) (2.0.7)
Requirement already satisfied: certifi>=2017.4.17 in
/usr/local/lib/python3.10/dist-packages (from requests~>2.0->gradio)
(2023.11.17)
Requirement already satisfied: click<9.0.0,>=7.1.1 in
```

```
/usr/local/lib/python3.10/dist-packages (from typer[all]<1.0,>=0.9->gradio)
(8.1.7)
Collecting colorama<0.5.0,>=0.4.3 (from typer[all]<1.0,>=0.9->gradio)
    Downloading colorama-0.4.6-py2.py3-none-any.whl (25 kB)
Collecting shellingham<2.0.0,>=1.3.0 (from typer[all]<1.0,>=0.9->gradio)
    Downloading shellingham-1.5.4-py2.py3-none-any.whl (9.8 kB)
Requirement already satisfied: rich<14.0.0,>=10.11.0 in
/usr/local/lib/python3.10/dist-packages (from typer[all]<1.0,>=0.9->gradio)
(13.7.0)
Collecting h11>=0.8 (from uvicorn>=0.14.0->gradio)
    Downloading h11-0.14.0-py3-none-any.whl (58 kB)
    58.3/58.3 kB
6.9 MB/s eta 0:00:00
Requirement already satisfied: anyio<4.0.0,>=3.7.1 in
/usr/local/lib/python3.10/dist-packages (from fastapi->gradio) (3.7.1)
Collecting starlette<0.28.0,>=0.27.0 (from fastapi->gradio)
    Downloading starlette-0.27.0-py3-none-any.whl (66 kB)
    67.0/67.0 kB
8.8 MB/s eta 0:00:00
Collecting httpcore==1.* (from httpx->gradio)
    Downloading httpcore-1.0.2-py3-none-any.whl (76 kB)
    76.9/76.9 kB
9.9 MB/s eta 0:00:00
Requirement already satisfied: sniffio in /usr/local/lib/python3.10/dist-
packages (from httpx->gradio) (1.3.0)
Requirement already satisfied: exceptiongroup in /usr/local/lib/python3.10/dist-
packages (from anyio<4.0.0,>=3.7.1->fastapi->gradio) (1.2.0)
Requirement already satisfied: attrs>=22.2.0 in /usr/local/lib/python3.10/dist-
packages (from jsonschema>=3.0->altair<6.0,>=4.2.0->gradio) (23.1.0)
Requirement already satisfied: jsonschema-specifications>=2023.03.6 in
/usr/local/lib/python3.10/dist-packages (from
jsonschema>=3.0->altair<6.0,>=4.2.0->gradio) (2023.11.2)
Requirement already satisfied: referencing>=0.28.4 in
/usr/local/lib/python3.10/dist-packages (from
jsonschema>=3.0->altair<6.0,>=4.2.0->gradio) (0.31.1)
Requirement already satisfied: rpds-py>=0.7.1 in /usr/local/lib/python3.10/dist-
packages (from jsonschema>=3.0->altair<6.0,>=4.2.0->gradio) (0.13.2)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.10/dist-
packages (from python-dateutil>=2.7->matplotlib~>3.0->gradio) (1.16.0)
Requirement already satisfied: markdown-it-py>=2.2.0 in
/usr/local/lib/python3.10/dist-packages (from
rich<14.0.0,>=10.11.0->typer[all]<1.0,>=0.9->gradio) (3.0.0)
Requirement already satisfied: pygments<3.0.0,>=2.13.0 in
/usr/local/lib/python3.10/dist-packages (from
rich<14.0.0,>=10.11.0->typer[all]<1.0,>=0.9->gradio) (2.16.1)
Requirement already satisfied: mdurl~>0.1 in /usr/local/lib/python3.10/dist-
packages (from markdown-it-
py>=2.2.0->rich<14.0.0,>=10.11.0->typer[all]<1.0,>=0.9->gradio) (0.1.2)
```

```
Building wheels for collected packages: ffmpy
  Building wheel for ffmpy (setup.py) ... done
  Created wheel for ffmpy: filename=ffmpy-0.3.1-py3-none-any.whl size=5579
sha256=0c8e3814da272efbc8ffba592cdb4a6710c5d1d79831a69b9139e48c7403adce
  Stored in directory: /root/.cache/pip/wheels/01/a6/d1/1c0828c304a4283b2c1639a0
9ad86f83d7c487ef34c6b4a1bf
Successfully built ffmpy
Installing collected packages: pydub, ffmpy, websockets, typing-extensions,
tomlkit, shellingham, semantic-version, python-multipart, orjson, h11, colorama,
annotated-types, aiofiles, uvicorn, starlette, pydantic-core, httpcore,
pydantic, httpx, gradio-client, fastapi, gradio
Attempting uninstall: typing-extensions
  Found existing installation: typing_extensions 4.5.0
  Uninstalling typing_extensions-4.5.0:
    Successfully uninstalled typing_extensions-4.5.0
Attempting uninstall: pydantic
  Found existing installation: pydantic 1.10.13
  Uninstalling pydantic-1.10.13:
    Successfully uninstalled pydantic-1.10.13
ERROR: pip's dependency resolver does not currently take into account all
the packages that are installed. This behaviour is the source of the following
dependency conflicts.

lida 0.0.10 requires kaleido, which is not installed.
llmx 0.0.15a0 requires cohere, which is not installed.
llmx 0.0.15a0 requires openai, which is not installed.
llmx 0.0.15a0 requires tiktoken, which is not installed.
tensorflow-probability 0.22.0 requires typing-extensions<4.6.0, but you have
typing-extensions 4.8.0 which is incompatible.

Successfully installed aiofiles-23.2.1 annotated-types-0.6.0 colorama-0.4.6
fastapi-0.104.1 ffmpy-0.3.1 gradio-4.8.0 gradio-client-0.7.1 h11-0.14.0
httpcore-1.0.2 httpx-0.25.2 orjson-3.9.10 pydantic-2.5.2 pydantic-core-2.14.5
pydub-0.25.1 python-multipart-0.0.6 semantic-version-2.10.0 shellingham-1.5.4
starlette-0.27.0 tomlkit-0.12.0 typing-extensions-4.8.0 uvicorn-0.24.0.post1
websockets-11.0.3
Cloning into 'yolov5'...
remote: Enumerating objects: 16088, done.
remote: Counting objects: 100% (32/32), done.
remote: Compressing objects: 100% (30/30), done.
remote: Total 16088 (delta 10), reused 14 (delta 2), pack-reused 16056
Receiving objects: 100% (16088/16088), 14.72 MiB | 25.04 MiB/s, done.
Resolving deltas: 100% (11042/11042), done.
/content/yolov5
Collecting gitpython>=3.1.30 (from -r requirements.txt (line 5))
```

```
  Downloading GitPython-3.1.40-py3-none-any.whl (190 kB)
    190.6/190.6

kB 3.9 MB/s eta 0:00:00
Requirement already satisfied: matplotlib>=3.3 in
/usr/local/lib/python3.10/dist-packages (from -r requirements.txt (line 6))
(3.7.1)
Requirement already satisfied: numpy>=1.22.2 in /usr/local/lib/python3.10/dist-
packages (from -r requirements.txt (line 7)) (1.23.5)
Requirement already satisfied: opencv-python>=4.1.1 in
/usr/local/lib/python3.10/dist-packages (from -r requirements.txt (line 8))
(4.8.0.76)
Collecting Pillow>=10.0.1 (from -r requirements.txt (line 9))
  Downloading Pillow-10.1.0-cp310-cp310-manylinux_2_28_x86_64.whl (3.6 MB)
    3.6/3.6 MB

7.9 MB/s eta 0:00:00
Requirement already satisfied: psutil in /usr/local/lib/python3.10/dist-
packages (from -r requirements.txt (line 10)) (5.9.5)
Requirement already satisfied: PyYAML>=5.3.1 in /usr/local/lib/python3.10/dist-
packages (from -r requirements.txt (line 11)) (6.0.1)
Requirement already satisfied: requests>=2.23.0 in
/usr/local/lib/python3.10/dist-packages (from -r requirements.txt (line 12))
(2.31.0)
Requirement already satisfied: scipy>=1.4.1 in /usr/local/lib/python3.10/dist-
packages (from -r requirements.txt (line 13)) (1.11.4)
Collecting thop>=0.1.1 (from -r requirements.txt (line 14))
  Downloading thop-0.1.1.post2209072238-py3-none-any.whl (15 kB)
Requirement already satisfied: torch>=1.8.0 in /usr/local/lib/python3.10/dist-
packages (from -r requirements.txt (line 15)) (2.1.0+cu118)
Requirement already satisfied: torchvision>=0.9.0 in
/usr/local/lib/python3.10/dist-packages (from -r requirements.txt (line 16))
(0.16.0+cu118)
Requirement already satisfied: tqdm>=4.64.0 in /usr/local/lib/python3.10/dist-
packages (from -r requirements.txt (line 17)) (4.66.1)
Collecting ultralytics>=8.0.147 (from -r requirements.txt (line 18))
  Downloading ultralytics-8.0.222-py3-none-any.whl (653 kB)
    654.0/654.0

kB 22.1 MB/s eta 0:00:00
Requirement already satisfied: pandas>=1.1.4 in
/usr/local/lib/python3.10/dist-packages (from -r requirements.txt (line 27))
(1.5.3)
Requirement already satisfied: seaborn>=0.11.0 in
/usr/local/lib/python3.10/dist-packages (from -r requirements.txt (line 28))
(0.12.2)
Requirement already satisfied: setuptools>=65.5.1 in
/usr/local/lib/python3.10/dist-packages (from -r requirements.txt (line 42))
(67.7.2)
```

```
Collecting gitdb<5,>=4.0.1 (from gitpython>=3.1.30->-r requirements.txt (line 5))
  Downloading gitdb-4.0.11-py3-none-any.whl (62 kB)
    62.7/62.7 kB
  6.3 MB/s eta 0:00:00
Requirement already satisfied: contourpy>=1.0.1 in
/usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3->-r
requirements.txt (line 6)) (1.2.0)
Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.10/dist-
packages (from matplotlib>=3.3->-r requirements.txt (line 6)) (0.12.1)
Requirement already satisfied: fonttools>=4.22.0 in
/usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3->-r
requirements.txt (line 6)) (4.45.1)
Requirement already satisfied: kiwisolver>=1.0.1 in
/usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3->-r
requirements.txt (line 6)) (1.4.5)
Requirement already satisfied: packaging>=20.0 in
/usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3->-r
requirements.txt (line 6)) (23.2)
Requirement already satisfied: pyparsing>=2.3.1 in
/usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3->-r
requirements.txt (line 6)) (3.1.1)
Requirement already satisfied: python-dateutil>=2.7 in
/usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3->-r
requirements.txt (line 6)) (2.8.2)
Requirement already satisfied: charset-normalizer<4,>=2 in
/usr/local/lib/python3.10/dist-packages (from requests>=2.23.0->-r
requirements.txt (line 12)) (3.3.2)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-
packages (from requests>=2.23.0->-r requirements.txt (line 12)) (3.6)
Requirement already satisfied: urllib3<3,>=1.21.1 in
/usr/local/lib/python3.10/dist-packages (from requests>=2.23.0->-r
requirements.txt (line 12)) (2.0.7)
Requirement already satisfied: certifi>=2017.4.17 in
/usr/local/lib/python3.10/dist-packages (from requests>=2.23.0->-r
requirements.txt (line 12)) (2023.11.17)
Requirement already satisfied: filelock in /usr/local/lib/python3.10/dist-
packages (from torch>=1.8.0->-r requirements.txt (line 15)) (3.13.1)
Requirement already satisfied: typing-extensions in
/usr/local/lib/python3.10/dist-packages (from torch>=1.8.0->-r requirements.txt
(line 15)) (4.8.0)
Requirement already satisfied: sympy in /usr/local/lib/python3.10/dist-packages
(from torch>=1.8.0->-r requirements.txt (line 15)) (1.12)
Requirement already satisfied: networkx in /usr/local/lib/python3.10/dist-
packages (from torch>=1.8.0->-r requirements.txt (line 15)) (3.2.1)
Requirement already satisfied: jinja2 in /usr/local/lib/python3.10/dist-packages
(from torch>=1.8.0->-r requirements.txt (line 15)) (3.1.2)
Requirement already satisfied: fsspec in /usr/local/lib/python3.10/dist-packages
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```

(from torch>=1.8.0->-r requirements.txt (line 15)) (2023.6.0)
Requirement already satisfied: triton==2.1.0 in /usr/local/lib/python3.10/dist-
packages (from torch>=1.8.0->-r requirements.txt (line 15)) (2.1.0)
Requirement already satisfied: py-cpuinfo in /usr/local/lib/python3.10/dist-
packages (from ultralytics>=8.0.147->-r requirements.txt (line 18)) (9.0.0)
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.10/dist-
packages (from pandas>=1.1.4->-r requirements.txt (line 27)) (2023.3.post1)
Collecting smmap<6,>=3.0.1 (from gitdb<5,>=4.0.1->gitpython>=3.1.30->-r
requirements.txt (line 5))
    Downloading smmap-5.0.1-py3-none-any.whl (24 kB)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.10/dist-
packages (from python-dateutil>=2.7->matplotlib>=3.3->-r requirements.txt (line
6)) (1.16.0)
Requirement already satisfied: MarkupSafe>=2.0 in
/usr/local/lib/python3.10/dist-packages (from jinja2->torch>=1.8.0->-r
requirements.txt (line 15)) (2.1.3)
Requirement already satisfied: mpmath>=0.19 in /usr/local/lib/python3.10/dist-
packages (from sympy->torch>=1.8.0->-r requirements.txt (line 15)) (1.3.0)
Installing collected packages: smmap, Pillow, gitdb, thop, gitpython,
ultralytics
Attempting uninstall: Pillow
  Found existing installation: Pillow 9.4.0
  Uninstalling Pillow-9.4.0:
    Successfully uninstalled Pillow-9.4.0
ERROR: pip's dependency resolver does not currently take into account all
the packages that are installed. This behaviour is the source of the following
dependency conflicts.

imageio 2.31.6 requires pillow<10.1.0,>=8.3.2, but you have pillow 10.1.0 which
is incompatible.

Successfully installed Pillow-10.1.0 gitdb-4.0.11 gitpython-3.1.40
smmap-5.0.1 thop-0.1.1.post2209072238 ultralytics-8.0.222

```

[2]:

```

import gradio as gr
import torch
from PIL import Image, ImageDraw
from yolov5 import utils

```

Here we have to give the path of trained model

[4]:

```

import torch

# Path to our custom model's weights file
custom_model_path = '/content/best.pt'

# Loading the custom YOLO model

```

```

model = torch.hub.load('ultralytics/yolov5', 'custom', path=custom_model_path)

# Now, 'model' holds our custom YOLO model

```

Using cache found in /root/.cache/torch/hub/ultralytics_yolov5_master
YOLOv5 2023-12-5 Python-3.10.12 torch-2.1.0+cu118 CPU

Fusing layers...

Model summary: 157 layers, 7012822 parameters, 0 gradients, 15.8 GFLOPs
Adding AutoShape...

```
[5]: def detect_objects(image):
    results = model(image)
    labels, cords = results.xyxy[0][:, -1].numpy(), results.xyxy[0][:, :-1].
    ↪numpy()
    return labels, cords, image
```

```
[6]: def draw_boxes(labels, cords, image):
    image = Image.fromarray(image)
    draw = ImageDraw.Draw(image)
    for cord in cords:
        x_min, y_min, x_max, y_max = cord[:-1]
        x_min, y_min, x_max, y_max = int(x_min * image.width), int(y_min * ↪
        ↪image.height), int(x_max * image.width), int(y_max * image.height)
        draw.rectangle([x_min, y_min, x_max, y_max], outline ="red", width=2)
    return image

def predict(input_image):
    labels, cords, image = detect_objects(input_image)
    output_image = draw_boxes(labels, cords, image)
    return output_image

iface = gr.Interface(fn=predict, inputs="image", outputs="image")
iface.launch(
    debug=True)
```

Setting queue=True in a Colab notebook requires sharing enabled. Setting `share=True` (you can turn this off by setting `share=False` in `launch()` explicitly).

Colab notebook detected. This cell will run indefinitely so that you can see errors and logs. To turn off, set debug=False in launch().
Running on public URL: <https://3debea5133e0d945e6.gradio.live>

This share link expires in 72 hours. For free permanent hosting and GPU upgrades, run `gradio deploy` from Terminal to deploy to Spaces (<https://huggingface.co/spaces>)

```
<IPython.core.display.HTML object>  
Keyboard interruption in main thread... closing server.  
Killing tunnel 127.0.0.1:7860 <> https://3debea5133e0d945e6.gradio.live
```

[6] :