

Install Required Lib

```
!pip install ultralytics
```

```
Collecting ultralytics
  Downloading ultralytics-8.2.56-py3-none-any.whl (800 kB)
    800.3/800.3 kB 9.3 MB/s eta 0:00:00
Requirement already satisfied: numpy<2.0.0,>=1.23.0 in /usr/local/lib/python3.10/dist-packages (from ultralytics) (1.25.2)
Requirement already satisfied: matplotlib>=3.3.0 in /usr/local/lib/python3.10/dist-packages (from ultralytics) (3.7.1)
Requirement already satisfied: opencv-python>=4.6.0 in /usr/local/lib/python3.10/dist-packages (from ultralytics) (4.8.0.76)
Requirement already satisfied: pillow>=7.1.2 in /usr/local/lib/python3.10/dist-packages (from ultralytics) (9.4.0)
Requirement already satisfied: pyyaml>=5.3.1 in /usr/local/lib/python3.10/dist-packages (from ultralytics) (6.0.1)
Requirement already satisfied: requests>=2.23.0 in /usr/local/lib/python3.10/dist-packages (from ultralytics) (2.31.0)
Requirement already satisfied: scipy>=1.4.1 in /usr/local/lib/python3.10/dist-packages (from ultralytics) (1.11.4)
Requirement already satisfied: torch>=1.8.0 in /usr/local/lib/python3.10/dist-packages (from ultralytics) (2.3.0+cu121)
Requirement already satisfied: torchvision>=0.9.0 in /usr/local/lib/python3.10/dist-packages (from ultralytics) (0.18.0+cu121)
Requirement already satisfied: tqdm>=4.64.0 in /usr/local/lib/python3.10/dist-packages (from ultralytics) (4.66.4)
Requirement already satisfied: psutil in /usr/local/lib/python3.10/dist-packages (from ultralytics) (5.9.5)
Requirement already satisfied: py-cpuinfo in /usr/local/lib/python3.10/dist-packages (from ultralytics) (9.0.0)
Requirement already satisfied: pandas>=1.1.4 in /usr/local/lib/python3.10/dist-packages (from ultralytics) (2.0.3)
Requirement already satisfied: seaborn>=0.11.0 in /usr/local/lib/python3.10/dist-packages (from ultralytics) (0.13.1)
Collecting ultralytics-thop>=2.0.0 (from ultralytics)
  Downloading ultralytics_thop-2.0.0-py3-none-any.whl (25 kB)
Requirement already satisfied: contourpy>=1.0.1 in /usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3.0->ultralytics) (1.2.0)
Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3.0->ultralytics) (0.12.1)
Requirement already satisfied: fonttools>=4.22.0 in /usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3.0->ultralytics) (4.52.0)
Requirement already satisfied: kiwisolver>=1.0.1 in /usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3.0->ultralytics) (1.4.5)
Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3.0->ultralytics) (24.1)
Requirement already satisfied: pyparsing>=2.3.1 in /usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3.0->ultralytics) (3.1.2)
Requirement already satisfied: python-dateutil>=2.7 in /usr/local/lib/python3.10/dist-packages (from matplotlib>=3.3.0->ultralytics) (2.9.0)
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.10/dist-packages (from pandas>=1.1.4->ultralytics) (2023.4)
Requirement already satisfied: tzdata>=2022.1 in /usr/local/lib/python3.10/dist-packages (from pandas>=1.1.4->ultralytics) (2024.1)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests>=2.23.0->ultralytics) (3.3.2)
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.10/dist-packages (from requests>=2.23.0->ultralytics) (3.7)
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.10/dist-packages (from requests>=2.23.0->ultralytics) (2.2.3)
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.10/dist-packages (from requests>=2.23.0->ultralytics) (2024.7.4)
Requirement already satisfied: filelock in /usr/local/lib/python3.10/dist-packages (from torch>=1.8.0->ultralytics) (3.15.4)
Requirement already satisfied: typing-extensions>=4.8.0 in /usr/local/lib/python3.10/dist-packages (from torch>=1.8.0->ultralytics) (4.12.2)
Requirement already satisfied: sympy in /usr/local/lib/python3.10/dist-packages (from torch>=1.8.0->ultralytics) (1.13.0)
Requirement already satisfied: networkx in /usr/local/lib/python3.10/dist-packages (from torch>=1.8.0->ultralytics) (3.3)
Requirement already satisfied: jinja2 in /usr/local/lib/python3.10/dist-packages (from torch>=1.8.0->ultralytics) (3.1.4)
Requirement already satisfied: fsspec in /usr/local/lib/python3.10/dist-packages (from torch>=1.8.0->ultralytics) (2023.6.0)
Collecting nvidia-cuda-nvrtc-cu12==12.1.105 (from torch>=1.8.0->ultralytics)
  Using cached nvidia_cuda_nvrtc_cu12-12.1.105-py3-none-manylinux1_x86_64.whl (23.7 MB)
Collecting nvidia-cuda-runtime-cu12==12.1.105 (from torch>=1.8.0->ultralytics)
  Using cached nvidia_cuda_runtime_cu12-12.1.105-py3-none-manylinux1_x86_64.whl (823 kB)
Collecting nvidia-cuda-cupti-cu12==12.1.105 (from torch>=1.8.0->ultralytics)
  Using cached nvidia_cuda_cupti_cu12-12.1.105-py3-none-manylinux1_x86_64.whl (14.1 MB)
Collecting nvidia-cudnn-cu12==8.9.2.26 (from torch>=1.8.0->ultralytics)
  Using cached nvidia_cudnn_cu12-8.9.2.26-py3-none-manylinux1_x86_64.whl (731.7 MB)
Collecting nvidia-cublas-cu12==12.1.3.1 (from torch>=1.8.0->ultralytics)
  Using cached nvidia_cublas_cu12-12.1.3.1-py3-none-manylinux1_x86_64.whl (410.6 MB)
Collecting nvidia-cufft-cu12==11.0.2.54 (from torch>=1.8.0->ultralytics)
  Using cached nvidia_cufft_cu12-11.0.2.54-py3-none-manylinux1_x86_64.whl (121.6 MB)
Collecting nvidia-curand-cu12==10.3.2.106 (from torch>=1.8.0->ultralytics)
  Using cached nvidia_curand_cu12-10.3.2.106-py3-none-manylinux1_x86_64.whl (56.5 MB)
Collecting nvidia-cusolver-cu12==11.4.5.107 (from torch>=1.8.0->ultralytics)
  Using cached nvidia_cusolver_cu12-11.4.5.107-py3-none-manylinux1_x86_64.whl (124.2 MB)
Collecting nvidia-cuspars-cu12==12.1.0.106 (from torch>=1.8.0->ultralytics)
  Using cached nvidia_cuspars-cu12-12.1.0.106-py3-none-manylinux1_x86_64.whl (196.0 MB)
Collecting nvidia-nccl-cu12==2.20.5 (from torch>=1.8.0->ultralytics)
```

```
from ultralytics import YOLO
```

```
!ls
```

```
sample_data
```

```
%cd content
```

```
/content
```

```
!ls
```

```
sample_data
```

```
#Download the Dataset
```

```
#Download the dataset
!pip install roboflow
from roboflow import Roboflow
rf = Roboflow(api_key="1BA72JZUe8Ucyxq5eIle")
project = rf.workspace("test01-fr735").project("brands-qv6fs")
version = project.version(1)
dataset = version.download("yolov8")
```

```
Requirement already satisfied: roboflow in /usr/local/lib/python3.10/dist-packages (1.1.34)
Requirement already satisfied: certifi in /usr/local/lib/python3.10/dist-packages (from roboflow) (2024.7.4)
Requirement already satisfied: chardet==4.0.0 in /usr/local/lib/python3.10/dist-packages (from roboflow) (4.0.0)
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Requirement already satisfied: cyclr in /usr/local/lib/python3.10/dist-packages (from roboflow) (0.12.1)
Requirement already satisfied: kiwisolver>=1.3.1 in /usr/local/lib/python3.10/dist-packages (from roboflow) (1.4.5)
Requirement already satisfied: matplotlib in /usr/local/lib/python3.10/dist-packages (from roboflow) (3.7.1)
Requirement already satisfied: numpy>=1.18.5 in /usr/local/lib/python3.10/dist-packages (from roboflow) (1.25.2)
Requirement already satisfied: opencv-python-headless==4.10.0.84 in /usr/local/lib/python3.10/dist-packages (from roboflow) (4.10.0.84)
Requirement already satisfied: Pillow>=7.1.2 in /usr/local/lib/python3.10/dist-packages (from roboflow) (9.4.0)
Requirement already satisfied: python-dateutil in /usr/local/lib/python3.10/dist-packages (from roboflow) (2.8.2)
Requirement already satisfied: python-dotenv in /usr/local/lib/python3.10/dist-packages (from roboflow) (1.0.1)
Requirement already satisfied: requests in /usr/local/lib/python3.10/dist-packages (from roboflow) (2.31.0)
Requirement already satisfied: six in /usr/local/lib/python3.10/dist-packages (from roboflow) (1.16.0)
Requirement already satisfied: urllib3>=1.26.6 in /usr/local/lib/python3.10/dist-packages (from roboflow) (2.0.7)
Requirement already satisfied: tqdm>=4.41.0 in /usr/local/lib/python3.10/dist-packages (from roboflow) (4.66.4)
Requirement already satisfied: PyYAML>=5.3.1 in /usr/local/lib/python3.10/dist-packages (from roboflow) (6.0.1)
Requirement already satisfied: requests-toolbelt in /usr/local/lib/python3.10/dist-packages (from roboflow) (1.0.0)
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Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests->roboflow) (3.3.2)
loading Roboflow workspace...
loading Roboflow project...
Dependency ultralytics==8.0.196 is required but found version=8.2.56, to fix: `pip install ultralytics==8.0.196`
Downloading Dataset Version Zip in Brands-1 to yolov8:: 100%|██████████| 36391/36391 [00:02<00:00, 17099.52it/s]

Extracting Dataset Version Zip to Brands-1 in yolov8:: 100%|██████████| 1348/1348 [00:00<00:00, 7033.32it/s]
```

```
#Download the dataset
!pip install roboflow
from roboflow import Roboflow
rf = Roboflow(api_key="1BA72JZUe8Ucyxq5eIle")
project = rf.workspace("abhijeety").project("brand-detection-s4rpc")
version = project.version(2)
dataset = version.download("yolov8")
```

```
Requirement already satisfied: roboflow in /usr/local/lib/python3.10/dist-packages (1.1.34)
Requirement already satisfied: certifi in /usr/local/lib/python3.10/dist-packages (from roboflow) (2024.7.4)
Requirement already satisfied: chardet==4.0.0 in /usr/local/lib/python3.10/dist-packages (from roboflow) (4.0.0)
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Requirement already satisfied: matplotlib in /usr/local/lib/python3.10/dist-packages (from roboflow) (3.7.1)
Requirement already satisfied: numpy>=1.18.5 in /usr/local/lib/python3.10/dist-packages (from roboflow) (1.25.2)
Requirement already satisfied: opencv-python-headless==4.10.0.84 in /usr/local/lib/python3.10/dist-packages (from roboflow) (4.10.0.84)
Requirement already satisfied: Pillow>=7.1.2 in /usr/local/lib/python3.10/dist-packages (from roboflow) (9.4.0)
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Requirement already satisfied: contourpy>=1.0.1 in /usr/local/lib/python3.10/dist-packages (from matplotlib->roboflow) (1.2.1)
Requirement already satisfied: fonttools>=4.22.0 in /usr/local/lib/python3.10/dist-packages (from matplotlib->roboflow) (4.53.1)
Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.10/dist-packages (from matplotlib->roboflow) (24.1)
Requirement already satisfied: pyparsing>=2.3.1 in /usr/local/lib/python3.10/dist-packages (from matplotlib->roboflow) (3.1.2)
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.10/dist-packages (from requests->roboflow) (3.3.2)
loading Roboflow workspace...
loading Roboflow project...
Dependency ultralytics==8.0.196 is required but found version=8.2.56, to fix: `pip install ultralytics==8.0.196`
Downloading Dataset Version Zip in Brand-Detection-2 to yolov8:: 100%|██████████| 73650/73650 [00:03<00:00, 22106.17it/s]

Extracting Dataset Version Zip to Brand-Detection-2 in yolov8:: 100%|██████████| 2556/2556 [00:01<00:00, 1993.58it/s]
```

#As both datasets downloaded as separate dataset setting one dataset with one class as 1

```
import os
def change_class_id(directory, old_id=0, new_id=1):
    for filename in os.listdir(directory):
        if filename.endswith('.txt'):
            filepath = os.path.join(directory, filename)
            with open(filepath, 'r') as file:
                lines = file.readlines()

            new_lines = []
            for line in lines:
                parts = line.strip().split()
                if parts[0] == str(old_id):
                    parts[0] = str(new_id)
                new_lines.append(' '.join(parts))

            with open(filepath, 'w') as file:
                file.write('\n'.join(new_lines))
            print(f'Updated {filename}')

label_files_directory = '/content/Brands-1/train/labels'
change_class_id(label_files_directory)
```

```
Updated Screenshot-2024-02-20-at-9-24-11-PM_png.rf.83f926a4de77dcd32e2fa5b3088fffc16.txt
Updated 2940596257_jpg.rf.7fe461e81db8da7e9ebaae1598d67acd.txt
Updated 4929951251_jpg.rf.60e9cb579d825194d97c0cc8a39e3f87.txt
Updated Image_54_jpg.rf.ccb0d2e69faf7a490847b47e05836a17.txt
Updated monica-silva-1yQEs9ZumXU-unsplash_jpg.rf.3d932cd8d2280ebb24bcac1a36cb60f5.txt
Updated Image_2_jpg.rf.0cb175b0ffff5ca44ae828721b888e862.txt
Updated Image_66_jpg.rf.2582421dfb279202ab917781c50d1769.txt
Updated Image_87_JPG.rf.22eb03f08f46b5c0abb009840c47f55f.txt
Updated Image_5_jpeg.rf.ab0d27ef238732a6c3bfff1384bb8d783.txt
Updated 3875300642_jpg.rf.7fa66fa70d40516dae6b3297c511f64a.txt
Updated cristi-ursea-u_uxkdaj8e4-unsplash_jpg.rf.da36eb8eb13cdf5b0c80cf5cf30b46ff.txt
Updated Image_138_jpg.rf.dee42bc5b1d37e62296ad1a6a9648b63.txt
Updated Image_143_jpg.rf.2458274dca0c582baf3ea053cf5ed9ae.txt
Updated 2349837567_jpg.rf.76c5fd0d78148b19a71ff525d39d6162.txt
Updated Image_117_jpg.rf.f69b7e6a4856d56b7a4db008a896677f.txt
Updated 1546003088_jpg.rf.b4688203ee2d5923c7e391695652ddae.txt
Updated Image_47_jpg.rf.649ae5fbc0aae8010fd272c3c14dea6.txt
Updated Image_31_jpg.rf.14743a25d940a9aa290001a54bfe6dbb.txt
Updated Image_86_jpg.rf.b3ad7d1d4d31a7df8f854ad0f1d5e6c7.txt
Updated 3828132415_jpg.rf.fd16947277194bed848ad11a65a18938.txt
Updated Image_39_jpg.rf.11d556ec7e6ffa6c47cb5c09d98c8d40.txt
Updated Image_100_jpg.rf.7459e717b8a76e7ccdcabd4cad2ebe6b.txt
Updated artem-beliakin-beTreGRIdrY-unsplash_jpg.rf.1856fabb96cb902400aad48ab1935bb5.txt
Updated Image_19_png.rf.899c60a9f4cfd13c8821904f621a542.txt
Updated Image_13_png.rf.c8023161f8ebe8547b07b23b191673e0.txt
Updated Image_122_jpg.rf.3b3b35412082201f0a7aa6dd584a1b17.txt
Updated Image_18_jpg.rf.3f2de0370826ec2adffa0c051c979515.txt
Updated historia-reiss-sYs0jH6B3is-unsplash_jpg.rf.08bec5fcc898c9b860e18a1eef2cd5f2.txt
Updated Screenshot-2024-02-20-at-9-26-40-PM_png.rf.53b259de2ad5d70c45aab2c3bc6795ef.txt
Updated Image_107_jpg.rf.e578515cf555aa7af96a95c3a82005f4.txt
Updated Image_social_16_jpg.rf.7bf64f8f20dee23be56e8de7381edf08.txt
Updated frame-harirak-72Szk0Wjdm-unsplash_jpg.rf.9e47bb3f3ec20f4a54dd8370dcb17dd.txt
Updated 2223587931_jpg.rf.8187a151cc45a0d147d93983e917d6ea.txt
Updated Image_62_jpg.rf.bb75e1ba5a0cc77c46f68413b6b09177.txt
Updated Image_42_jpg.rf.7177606531da39d13ae56989ebff8e20.txt
Updated 4525693974_jpg.rf.c61be627ddb0fcb5beec9bd55671bf06.txt
Updated Image_social_17_jpg.rf.eb02feb02add42d226f9c4956a2a824e.txt
Updated Image_49_jpg.rf.bd9fed48fad7d13bee00ffffb2d8636b8.txt
Updated Image_146_jpg.rf.14b6f71c88dac5966843bb5a9ab5fbbbc.txt
Updated Image_147_jpg.rf.2558cd4ebcdc4645a30b53749f83e1e3.txt
Updated Image_101_jpg.rf.30d9fbb72de0f2aff37b1c0520234961.txt
Updated 5000538051_jpg.rf.eacdaf90054311c8c85db2a44af2c6fd.txt
Updated gerard-richard-aN4dcXAP2-k-unsplash_jpg.rf.a383f4a0c08ec95993e8d0ae90ff3b31.txt
Updated Image_81_png.rf.93824ea126723cc6ff692a7c5447407c.txt
Updated alex-gorey-OvpfZVUH2XQ-unsplash_jpg.rf.aae4fd666fa433fb9d66dec4a4d1c9ad.txt
Updated daniel-shoorangiz-GbXR2dL9yE0-unsplash_jpg.rf.9686679f3166c7db36e1ded63996b166.txt
Updated Image_58_jpg.rf.c69d0d0597de734726160a9514588bd9.txt
Updated Image_68_png.rf.782244b80ad4aa9e56462bfad5ee8262.txt
Updated 4816334297_jpg.rf.599b5329f639f3b5d2b8ddf13f49e1eb.txt
Updated Image_111_jpg.rf.47191aa30f751bc4dbba9a06e0942628.txt
Updated 19102117_jpg.rf.8fe05decdd27bae54c16bd5a5d8e1962c.txt
Updated Image_145_jpg.rf.e88a4ea47f958b1dd1e868a52765f8ab.txt
Updated Image_35_jpg.rf.8516f88e5cdadb3cb511c259388e4f5f.txt
Updated Image_103_jpg.rf.9fe8660fe96b6a636a85271ec0f7c7ef.txt
Updated Image_129_jpg.rf.947c5078009d991b45cdbe0334fffb5a.txt
Updated Image_70_jpg.rf.ed377c84ecbe0dc72ef757a171f9882c.txt
Updated Image_57_jpg.rf.6a304f318e580d4e6d0c153aa6202046.txt
Updated Image_119_jpg.rf.03b663cc60b3eafd41760916de1aa45b.txt
```

Start coding or [generate](#) with AI.

```
#Shifting one coke dataset to pepsi
import shutil
import os

# Define source and destination paths
source_train_images = '/content/Brands-1/train/images'
source_test_images = '/content/Brands-1/test/images'
source_valid_images = '/content/Brands-1/valid/images'

source_train_labels = '/content/Brands-1/train/labels'
source_test_labels = '/content/Brands-1/test/labels'
source_valid_labels = '/content/Brands-1/valid/labels'

destination_train_images = '/content/Brand-Detection-2/train/images'
destination_test_images = '/content/Brand-Detection-2/test/images'
destination_valid_images = '/content/Brand-Detection-2/valid/images'

destination_train_labels = '/content/Brand-Detection-2/train/labels'
destination_test_labels = '/content/Brand-Detection-2/test/labels'
destination_valid_labels = '/content/Brand-Detection-2/valid/labels'

# Ensure the destination directories exist
os.makedirs(destination_train_images, exist_ok=True)
os.makedirs(destination_test_images, exist_ok=True)
os.makedirs(destination_valid_images, exist_ok=True)

os.makedirs(destination_train_labels, exist_ok=True)
os.makedirs(destination_test_labels, exist_ok=True)
os.makedirs(destination_valid_labels, exist_ok=True)

# Function to transfer files
def transfer_files(src_dir, dest_dir):
    for filename in os.listdir(src_dir):
        source_file = os.path.join(src_dir, filename)
        destination_file = os.path.join(dest_dir, filename)
        shutil.move(source_file, destination_file)

# Transfer train images
transfer_files(source_train_images, destination_train_images)

# Transfer test images
transfer_files(source_test_images, destination_test_images)

# Transfer valid images
transfer_files(source_valid_images, destination_valid_images)

# Transfer train labels
transfer_files(source_train_labels, destination_train_labels)

# Transfer test labels
transfer_files(source_test_labels, destination_test_labels)

# Transfer valid labels
transfer_files(source_valid_labels, destination_valid_labels)

print("Files transferred successfully!")
```



Files transferred successfully!


```
#Counting the total images for final dataset
import os

def count_files(directory):
    return len([name for name in os.listdir(directory) if os.path.isfile(os.path.join(directory, name))])

# Example directories
train_images_dir = '/content/Brand-Detection-2/valid/images'

# Counting files
num_train_images = count_files(train_images_dir)

print(f'Number of train images: {num_train_images}')
```


 Number of train images: 362

```
#Deleting the redundant dataset
import shutil
import os

def delete_folder(folder_path):
    if os.path.exists(folder_path):
        shutil.rmtree(folder_path)
        print(f'{folder_path} has been deleted successfully.')
    else:
        print(f'{folder_path} does not exist.')


# Example folder paths
folder_to_delete = '/content/Brands-1'

# Deleting the folder
delete_folder(folder_to_delete)
```

 /content/Brands-1 has been deleted successfully.

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```
!ls
```

 Brand-Detection-2 sample_data

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```
#Starting Training for detect task. for 200 epochs
!yolo task=detect mode=train data={dataset.location}/data.yaml epochs=200 imgsz=640
```



Epoch	GPU_mem	box_loss	cls_loss	dfl_loss	Instances	Size
120/200	2.77G	0.9224	0.5251	0.97	117	640: 100% 92/92 [00:31<00:00, 2.90it/s]
Class	Images	Instances	Box(P	R	mAP50	mAP50-95): 100% 12/12 [00:06<00:00, 1.73it/s]
all	362	750	0.877	0.837	0.891	0.613
Epoch	GPU_mem	box_loss	cls_loss	dfl_loss	Instances	Size
121/200	2.95G	0.951	0.5365	0.9722	24	640: 100% 92/92 [00:31<00:00, 2.88it/s]
Class	Images	Instances	Box(P	R	mAP50	mAP50-95): 100% 12/12 [00:06<00:00, 1.87it/s]
all	362	750	0.881	0.813	0.878	0.611
Epoch	GPU_mem	box_loss	cls_loss	dfl_loss	Instances	Size
122/200	2.61G	0.9064	0.5258	0.9737	17	640: 100% 92/92 [00:32<00:00, 2.79it/s]
Class	Images	Instances	Box(P	R	mAP50	mAP50-95): 100% 12/12 [00:05<00:00, 2.31it/s]
all	362	750	0.871	0.827	0.889	0.617
Epoch	GPU_mem	box_loss	cls_loss	dfl_loss	Instances	Size
123/200	2.87G	0.9307	0.5392	0.9739	16	640: 100% 92/92 [00:33<00:00, 2.74it/s]
Class	Images	Instances	Box(P	R	mAP50	mAP50-95): 100% 12/12 [00:05<00:00, 2.39it/s]
all	362	750	0.825	0.865	0.882	0.614
Epoch	GPU_mem	box_loss	cls_loss	dfl_loss	Instances	Size
124/200	2.63G	0.8928	0.5143	0.968	23	640: 100% 92/92 [00:33<00:00, 2.71it/s]
Class	Images	Instances	Box(P	R	mAP50	mAP50-95): 100% 12/12 [00:04<00:00, 2.49it/s]
all	362	750	0.88	0.842	0.896	0.62
Epoch	GPU_mem	box_loss	cls_loss	dfl_loss	Instances	Size
125/200	2.65G	0.9236	0.5281	0.9718	24	640: 100% 92/92 [00:33<00:00, 2.76it/s]
Class	Images	Instances	Box(P	R	mAP50	mAP50-95): 100% 12/12 [00:03<00:00, 3.08it/s]
all	362	750	0.857	0.859	0.896	0.622

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```
import shutil
```

```
# Replace 'folder_name' with the name of your folder
shutil.make_archive('runs', 'zip', 'runs')
```

```
↳ '/content/runs.zip'
```

```
from google.colab import files
```

```
# Replace 'folder_name.zip' with the name of your zip file
files.download('runs.zip')
```



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```
import shutil
```

```
from google.colab import files

# Replace 'your_folder_path' with the path to the folder you want to download
folder_path = '/content/runs'
zip_path = 'runs.zip'

# Zip the folder
shutil.make_archive(zip_path.replace('.zip', ''), 'zip', folder_path)

# Download the zip file
files.download(zip_path)
```



```
import shutil
from google.colab import files

# Replace 'your_folder_path' with the path to the folder you want to download
folder_path = '/content/Brand-Detection-2'
zip_path = 'dataset.zip'

# Zip the folder
shutil.make_archive(zip_path.replace('.zip', ''), 'zip', folder_path)

# Download the zip file
files.download(zip_path)
```

