In [1]:

```
import sys
import warnings

if not sys.warnoptions:
    warnings.simplefilter("ignore")
```

In [2]:

```
from imageai.Detection.Custom import DetectionModelTrainer

trainer = DetectionModelTrainer()
trainer.setModelTypeAsYOLOv3()
trainer.setDataDirectory(data_directory="maconha")
trainer.setTrainConfig(object_names_array=["maconha"], batch_size=4, num_experiments=20
0, train_from_pretrained_model="pretrained-yolov3.h5")
trainer.trainModel()
```

```
Using TensorFlow backend.
```

```
Generating anchor boxes for training images and annotation...
Average IOU for 9 anchors: 0.74
Anchor Boxes generated.
Detection configuration saved in  maconha\json\detection_config.json
Training on:    ['maconha']
Training with Batch Size:  4
Number of Experiments:  200
WARNING:tensorflow:From D:\Usuarios\spi112884\Anaconda3\lib\site-packages
\tensorflow_core\python\ops\resource_variable_ops.py:1630: calling BaseRes
ourceVariable.__init__ (from tensorflow.python.ops.resource_variable_ops)
with constraint is deprecated and will be removed in a future version.
Instructions for updating:
If using Keras pass *_constraint arguments to layers.
WARNING:tensorflow:From D:\Usuarios\spi112884\Anaconda3\lib\site-packages
\imageai\Detection\Custom\yolo.py:24: to_float (from tensorflow.python.op
s.math_ops) is deprecated and will be removed in a future version.
Instructions for updating:
Use `tf.cast` instead.
WARNING:tensorflow:From D:\Usuarios\spi112884\Anaconda3\lib\site-packages
\imageai\Detection\Custom\yolo.py:149: The name tf.assign_add is deprecate
d. Please use tf.compat.v1.assign_add instead.

Training with transfer learning from pretrained Model
WARNING:tensorflow:From D:\Usuarios\spi112884\Anaconda3\lib\site-packages
\keras\backend\tensorflow_backend.py:422: The name tf.global_variables is
deprecated. Please use tf.compat.v1.global_variables instead.

WARNING:tensorflow:From D:\Usuarios\spi112884\Anaconda3\lib\site-packages
\keras\backend\tensorflow_backend.py:431: The name tf.is_variable_initiali
zed is deprecated. Please use tf.compat.v1.is_variable_initialized instea
d.

WARNING:tensorflow:From D:\Usuarios\spi112884\Anaconda3\lib\site-packages
\keras\backend\tensorflow_backend.py:438: The name tf.variables_initialize
r is deprecated. Please use tf.compat.v1.variables_initializer instead.

WARNING:tensorflow:From D:\Usuarios\spi112884\Anaconda3\lib\site-packages
\keras\callbacks\tensorboard_v1.py:200: The name tf.summary.merge_all is d
eprecated. Please use tf.compat.v1.summary.merge_all instead.

WARNING:tensorflow:From D:\Usuarios\spi112884\Anaconda3\lib\site-packages
\keras\callbacks\tensorboard_v1.py:203: The name tf.summary.FileWriter is
deprecated. Please use tf.compat.v1.summary.FileWriter instead.

Epoch 1/200
320/320 [==============================] - 314s 980ms/step - loss: 37.8686
- yolo_layer_1_loss: 6.2117 - yolo_layer_2_loss: 10.8389 - yolo_layer_3_lo
ss: 20.8181 - val_loss: 13.6973 - val_yolo_layer_1_loss: 2.4399 - val_yolo
_layer_2_loss: 5.9214 - val_yolo_layer_3_loss: 7.5422
WARNING:tensorflow:From D:\Usuarios\spi112884\Anaconda3\lib\site-packages
\keras\callbacks\tensorboard_v1.py:343: The name tf.Summary is deprecated.
Please use tf.compat.v1.Summary instead.

Epoch 2/200
320/320 [==============================] - 236s 738ms/step - loss: 15.0615
- yolo_layer_1_loss: 2.4448 - yolo_layer_2_loss: 5.2256 - yolo_layer_3_los
s: 7.3912 - val_loss: 22.3936 - val_yolo_layer_1_loss: 2.2063 - val_yolo_l
ayer_2_loss: 5.5267 - val_yolo_layer_3_loss: 6.6167
Epoch 3/200
320/320 [==============================] - 230s 720ms/step - loss: 11.9561
- yolo_layer_1_loss: 1.5426 - yolo_layer_2_loss: 4.3237 - yolo_layer_3_los
```

```
s: 6.0899 - val_loss: 10.7500 - val_yolo_layer_1_loss: 1.8878 - val_yolo_l
ayer_2_loss: 5.3355 - val_yolo_layer_3_loss: 6.3166
Epoch 4/200
320/320 [==============================] - 240s 749ms/step - loss: 11.4218
- yolo_layer_1_loss: 1.8840 - yolo_layer_2_loss: 4.1070 - yolo_layer_3_los
s: 5.4309 - val_loss: 6.5645 - val_yolo_layer_1_loss: 1.5868 - val_yolo_la
yer_2_loss: 5.1113 - val_yolo_layer_3_loss: 5.4937
Epoch 5/200
320/320 [==============================] - 238s 743ms/step - loss: 10.7189
- yolo_layer_1_loss: 1.6792 - yolo_layer_2_loss: 3.7181 - yolo_layer_3_los
s: 5.3216 - val_loss: 9.0928 - val_yolo_layer_1_loss: 2.2792 - val_yolo_la
yer_2_loss: 5.4829 - val_yolo_layer_3_loss: 5.9581
Epoch 6/200
320/320 [==============================] - 234s 731ms/step - loss: 9.1658
- yolo_layer_1_loss: 1.2959 - yolo_layer_2_loss: 3.4766 - yolo_layer_3_los
s: 4.3932 - val_loss: 11.2672 - val_yolo_layer_1_loss: 1.4878 - val_yolo_l
ayer_2_loss: 5.1411 - val_yolo_layer_3_loss: 5.1917
Epoch 7/200
320/320 [==============================] - 243s 759ms/step - loss: 8.6969
- yolo_layer_1_loss: 1.4226 - yolo_layer_2_loss: 3.3221 - yolo_layer_3_los
s: 3.9521 - val_loss: 10.4377 - val_yolo_layer_1_loss: 2.1946 - val_yolo_l
ayer_2_loss: 5.6304 - val_yolo_layer_3_loss: 4.8563
Epoch 8/200
320/320 [==============================] - 282s 880ms/step - loss: 8.3371
- yolo_layer_1_loss: 1.5224 - yolo_layer_2_loss: 3.2483 - yolo_layer_3_los
s: 3.5664 - val_loss: 10.1698 - val_yolo_layer_1_loss: 1.7984 - val_yolo_l
ayer_2_loss: 5.1728 - val_yolo_layer_3_loss: 5.3555
Epoch 9/200
320/320 [==============================] - 281s 879ms/step - loss: 7.7232
- yolo_layer_1_loss: 1.4229 - yolo_layer_2_loss: 3.1586 - yolo_layer_3_los
s: 3.1417 - val_loss: 13.5849 - val_yolo_layer_1_loss: 1.4556 - val_yolo_l
ayer_2_loss: 4.8574 - val_yolo_layer_3_loss: 5.2598
Epoch 10/200
320/320 [==============================] - 269s 841ms/step - loss: 7.6027
- yolo_layer_1_loss: 1.1676 - yolo_layer_2_loss: 2.9359 - yolo_layer_3_los
s: 3.4991 - val_loss: 2.6343 - val_yolo_layer_1_loss: 1.5571 - val_yolo_la
yer_2_loss: 5.2162 - val_yolo_layer_3_loss: 5.2497
Epoch 11/200
320/320 [==============================] - 247s 773ms/step - loss: 7.1502
- yolo_layer_1_loss: 1.1203 - yolo_layer_2_loss: 2.8146 - yolo_layer_3_los
s: 3.2152 - val_loss: 14.8673 - val_yolo_layer_1_loss: 1.5254 - val_yolo_l
ayer_2_loss: 5.0546 - val_yolo_layer_3_loss: 5.1099
Epoch 12/200
320/320 [==============================] - 256s 799ms/step - loss: 6.9538
- yolo_layer_1_loss: 1.1451 - yolo_layer_2_loss: 2.7892 - yolo_layer_3_los
s: 3.0195 - val_loss: 16.2817 - val_yolo_layer_1_loss: 1.6392 - val_yolo_l
ayer_2_loss: 5.0095 - val_yolo_layer_3_loss: 4.9329
Epoch 13/200
320/320 [==============================] - 255s 798ms/step - loss: 6.9648
- yolo_layer_1_loss: 1.1205 - yolo_layer_2_loss: 2.8803 - yolo_layer_3_los
s: 2.9639 - val_loss: 8.3726 - val_yolo_layer_1_loss: 1.6697 - val_yolo_la
yer_2_loss: 5.3345 - val_yolo_layer_3_loss: 4.8992
Epoch 14/200
320/320 [==============================] - 254s 793ms/step - loss: 6.7885
- yolo_layer_1_loss: 1.2577 - yolo_layer_2_loss: 2.6028 - yolo_layer_3_los
s: 2.9280 - val_loss: 11.1344 - val_yolo_layer_1_loss: 1.4840 - val_yolo_l
ayer_2_loss: 5.2769 - val_yolo_layer_3_loss: 5.1476
Epoch 15/200
320/320 [==============================] - 265s 828ms/step - loss: 6.4109
- yolo_layer_1_loss: 1.0250 - yolo_layer_2_loss: 2.6187 - yolo_layer_3_los
s: 2.7673 - val_loss: 12.5606 - val_yolo_layer_1_loss: 1.8719 - val_yolo_l
```

```
ayer_2_loss: 5.0523 - val_yolo_layer_3_loss: 4.7664
Epoch 16/200
320/320 [==============================] - 250s 780ms/step - loss: 6.2436
- yolo_layer_1_loss: 0.8487 - yolo_layer_2_loss: 2.3985 - yolo_layer_3_los
s: 2.9964 - val_loss: 9.9177 - val_yolo_layer_1_loss: 1.2521 - val_yolo_la
yer_2_loss: 5.4346 - val_yolo_layer_3_loss: 5.1652
Epoch 17/200
320/320 [==============================] - 263s 823ms/step - loss: 5.8886
- yolo_layer_1_loss: 0.8533 - yolo_layer_2_loss: 2.2932 - yolo_layer_3_los
s: 2.7421 - val_loss: 9.4441 - val_yolo_layer_1_loss: 1.9785 - val_yolo_la
yer_2_loss: 5.3522 - val_yolo_layer_3_loss: 4.6499
Epoch 18/200
320/320 [==============================] - 270s 842ms/step - loss: 5.9613
- yolo_layer_1_loss: 0.9597 - yolo_layer_2_loss: 2.4021 - yolo_layer_3_los
s: 2.5995 - val_loss: 10.5330 - val_yolo_layer_1_loss: 1.4906 - val_yolo_l
ayer_2_loss: 4.6502 - val_yolo_layer_3_loss: 5.0184
Epoch 19/200
320/320 [==============================] - 262s 820ms/step - loss: 6.2374
- yolo_layer_1_loss: 1.0701 - yolo_layer_2_loss: 2.4761 - yolo_layer_3_los
s: 2.6912 - val_loss: 3.7661 - val_yolo_layer_1_loss: 1.4131 - val_yolo_la
yer_2_loss: 4.7041 - val_yolo_layer_3_loss: 5.4676
Epoch 20/200
320/320 [==============================] - 276s 862ms/step - loss: 5.2575
- yolo_layer_1_loss: 0.8695 - yolo_layer_2_loss: 1.9564 - yolo_layer_3_los
s: 2.4316 - val_loss: 12.9951 - val_yolo_layer_1_loss: 1.7042 - val_yolo_l
ayer_2_loss: 4.9459 - val_yolo_layer_3_loss: 4.8004
Epoch 21/200
320/320 [==============================] - 277s 865ms/step - loss: 4.7945
- yolo_layer_1_loss: 0.7632 - yolo_layer_2_loss: 1.9191 - yolo_layer_3_los
s: 2.1122 - val_loss: 6.9448 - val_yolo_layer_1_loss: 1.2620 - val_yolo_la
yer_2_loss: 4.8723 - val_yolo_layer_3_loss: 4.9380
Epoch 22/200
320/320 [==============================] - 272s 850ms/step - loss: 4.2492
- yolo_layer_1_loss: 0.6575 - yolo_layer_2_loss: 1.6190 - yolo_layer_3_los
s: 1.9727 - val_loss: 21.3264 - val_yolo_layer_1_loss: 1.3105 - val_yolo_l
ayer_2_loss: 4.5534 - val_yolo_layer_3_loss: 5.0534
Epoch 23/200
320/320 [==============================] - 279s 871ms/step - loss: 4.4769
- yolo_layer_1_loss: 0.6774 - yolo_layer_2_loss: 1.8201 - yolo_layer_3_los
s: 1.9794 - val_loss: 8.2836 - val_yolo_layer_1_loss: 1.3796 - val_yolo_la
yer_2_loss: 4.5271 - val_yolo_layer_3_loss: 5.1903
Epoch 24/200
320/320 [==============================] - 276s 864ms/step - loss: 4.2726
- yolo_layer_1_loss: 0.6451 - yolo_layer_2_loss: 1.7154 - yolo_layer_3_los
s: 1.9121 - val_loss: 14.4473 - val_yolo_layer_1_loss: 1.7791 - val_yolo_l
ayer_2_loss: 4.7828 - val_yolo_layer_3_loss: 4.9951
Epoch 25/200
320/320 [==============================] - 278s 868ms/step - loss: 4.2985
- yolo_layer_1_loss: 0.6960 - yolo_layer_2_loss: 1.7689 - yolo_layer_3_los
s: 1.8337 - val_loss: 13.1313 - val_yolo_layer_1_loss: 1.3448 - val_yolo_l
ayer_2_loss: 4.7885 - val_yolo_layer_3_loss: 4.9606
Epoch 26/200
320/320 [==============================] - 279s 873ms/step - loss: 4.0576
- yolo_layer_1_loss: 0.5666 - yolo_layer_2_loss: 1.5935 - yolo_layer_3_los
s: 1.8975 - val_loss: 10.2053 - val_yolo_layer_1_loss: 1.6626 - val_yolo_l
ayer_2_loss: 4.8568 - val_yolo_layer_3_loss: 4.5788
Epoch 27/200
320/320 [==============================] - 276s 861ms/step - loss: 4.1952
- yolo_layer_1_loss: 0.5731 - yolo_layer_2_loss: 1.5252 - yolo_layer_3_los
s: 2.0970 - val_loss: 7.5846 - val_yolo_layer_1_loss: 1.3518 - val_yolo_la
yer_2_loss: 4.4463 - val_yolo_layer_3_loss: 4.9949
```

```
Epoch 28/200
320/320 [==============================] - 276s 863ms/step - loss: 4.2708
- yolo_layer_1_loss: 0.6304 - yolo_layer_2_loss: 1.6216 - yolo_layer_3_los
s: 2.0189 - val_loss: 14.8909 - val_yolo_layer_1_loss: 1.5713 - val_yolo_l
ayer_2_loss: 4.7358 - val_yolo_layer_3_loss: 4.8530
Epoch 29/200
320/320 [==============================] - 274s 856ms/step - loss: 3.9916
- yolo_layer_1_loss: 0.5852 - yolo_layer_2_loss: 1.5491 - yolo_layer_3_los
s: 1.8572 - val_loss: 9.4030 - val_yolo_layer_1_loss: 1.5322 - val_yolo_la
yer_2_loss: 4.7322 - val_yolo_layer_3_loss: 4.8851
Epoch 30/200
320/320 [==============================] - 276s 863ms/step - loss: 4.2428
- yolo_layer_1_loss: 0.5916 - yolo_layer_2_loss: 1.6603 - yolo_layer_3_los
s: 1.9909 - val_loss: 11.5946 - val_yolo_layer_1_loss: 1.3565 - val_yolo_l
ayer_2_loss: 4.8650 - val_yolo_layer_3_loss: 4.6945
Epoch 31/200
320/320 [==============================] - 278s 869ms/step - loss: 3.8876
- yolo_layer_1_loss: 0.6105 - yolo_layer_2_loss: 1.6567 - yolo_layer_3_los
s: 1.6204 - val_loss: 4.9732 - val_yolo_layer_1_loss: 1.2839 - val_yolo_la
yer_2_loss: 4.4222 - val_yolo_layer_3_loss: 4.8207
Epoch 32/200
320/320 [==============================] - 275s 860ms/step - loss: 4.1310
- yolo_layer_1_loss: 0.5841 - yolo_layer_2_loss: 1.7185 - yolo_layer_3_los
s: 1.8284 - val_loss: 7.5207 - val_yolo_layer_1_loss: 1.7555 - val_yolo_la
yer_2_loss: 4.7406 - val_yolo_layer_3_loss: 4.5758
Epoch 33/200
320/320 [==============================] - 274s 858ms/step - loss: 3.9797
- yolo_layer_1_loss: 0.4918 - yolo_layer_2_loss: 1.6263 - yolo_layer_3_los
s: 1.8616 - val_loss: 16.0465 - val_yolo_layer_1_loss: 1.3531 - val_yolo_l
ayer_2_loss: 4.7655 - val_yolo_layer_3_loss: 4.7387
Epoch 34/200
320/320 [==============================] - 275s 860ms/step - loss: 3.7981
- yolo_layer_1_loss: 0.4566 - yolo_layer_2_loss: 1.5921 - yolo_layer_3_los
s: 1.7494 - val_loss: 8.6264 - val_yolo_layer_1_loss: 1.9460 - val_yolo_la
yer_2_loss: 4.7240 - val_yolo_layer_3_loss: 4.4406
Epoch 35/200
320/320 [==============================] - 279s 873ms/step - loss: 4.0184
- yolo_layer_1_loss: 0.6041 - yolo_layer_2_loss: 1.5726 - yolo_layer_3_los
s: 1.8416 - val_loss: 21.7151 - val_yolo_layer_1_loss: 1.3170 - val_yolo_l
ayer_2_loss: 4.6936 - val_yolo_layer_3_loss: 4.7841
Epoch 36/200
320/320 [==============================] - 281s 879ms/step - loss: 4.4814
- yolo_layer_1_loss: 0.8654 - yolo_layer_2_loss: 1.7470 - yolo_layer_3_los
s: 1.8691 - val_loss: 10.7976 - val_yolo_layer_1_loss: 1.4976 - val_yolo_l
ayer_2_loss: 4.7709 - val_yolo_layer_3_loss: 4.6357
Epoch 37/200
320/320 [==============================] - 273s 854ms/step - loss: 4.1317
- yolo_layer_1_loss: 0.5113 - yolo_layer_2_loss: 1.5657 - yolo_layer_3_los
s: 2.0547 - val_loss: 11.6181 - val_yolo_layer_1_loss: 1.5078 - val_yolo_l
ayer_2_loss: 4.6485 - val_yolo_layer_3_loss: 4.8210
Epoch 38/200
320/320 [==============================] - 276s 863ms/step - loss: 4.0765
- yolo_layer_1_loss: 0.5765 - yolo_layer_2_loss: 1.5355 - yolo_layer_3_los
s: 1.9645 - val_loss: 9.6203 - val_yolo_layer_1_loss: 1.5068 - val_yolo_la
yer_2_loss: 4.6164 - val_yolo_layer_3_loss: 4.6471
Epoch 39/200
320/320 [==============================] - 268s 838ms/step - loss: 4.0296
- yolo_layer_1_loss: 0.5060 - yolo_layer_2_loss: 1.5355 - yolo_layer_3_los
s: 1.9882 - val_loss: 12.3724 - val_yolo_layer_1_loss: 1.2893 - val_yolo_l
ayer_2_loss: 4.7315 - val_yolo_layer_3_loss: 5.1828
Epoch 40/200
```

```
320/320 [==============================] - 272s 849ms/step - loss: 4.1503
- yolo_layer_1_loss: 0.5485 - yolo_layer_2_loss: 1.6200 - yolo_layer_3_los
s: 1.9818 - val_loss: 9.8282 - val_yolo_layer_1_loss: 1.6460 - val_yolo_la
yer_2_loss: 4.9643 - val_yolo_layer_3_loss: 4.5348
Epoch 41/200
320/320 [==============================] - 280s 874ms/step - loss: 4.1982
- yolo_layer_1_loss: 0.5464 - yolo_layer_2_loss: 1.6943 - yolo_layer_3_los
s: 1.9575 - val_loss: 9.7060 - val_yolo_layer_1_loss: 0.9835 - val_yolo_la
yer_2_loss: 4.8221 - val_yolo_layer_3_loss: 4.8663
Epoch 42/200
320/320 [==============================] - 274s 856ms/step - loss: 4.0124
- yolo_layer_1_loss: 0.4434 - yolo_layer_2_loss: 1.6248 - yolo_layer_3_los
s: 1.9442 - val_loss: 17.9225 - val_yolo_layer_1_loss: 1.5066 - val_yolo_l
ayer_2_loss: 4.7394 - val_yolo_layer_3_loss: 4.9622
Epoch 43/200
320/320 [==============================] - 273s 853ms/step - loss: 3.9810
- yolo_layer_1_loss: 0.5467 - yolo_layer_2_loss: 1.6042 - yolo_layer_3_los
s: 1.8301 - val_loss: 15.2322 - val_yolo_layer_1_loss: 1.4793 - val_yolo_l
ayer_2_loss: 4.7578 - val_yolo_layer_3_loss: 4.5587
Epoch 44/200
320/320 [==============================] - 275s 860ms/step - loss: 4.0466
- yolo_layer_1_loss: 0.5877 - yolo_layer_2_loss: 1.6252 - yolo_layer_3_los
s: 1.8336 - val_loss: 11.8014 - val_yolo_layer_1_loss: 1.2570 - val_yolo_l
ayer_2_loss: 4.4104 - val_yolo_layer_3_loss: 5.1306
Epoch 45/200
320/320 [==============================] - 281s 880ms/step - loss: 4.0369
- yolo_layer_1_loss: 0.7217 - yolo_layer_2_loss: 1.6278 - yolo_layer_3_los
s: 1.6874 - val_loss: 13.4331 - val_yolo_layer_1_loss: 1.6644 - val_yolo_l
ayer_2_loss: 4.6264 - val_yolo_layer_3_loss: 4.6276
Epoch 46/200
320/320 [==============================] - 279s 871ms/step - loss: 3.9559
- yolo_layer_1_loss: 0.5733 - yolo_layer_2_loss: 1.5838 - yolo_layer_3_los
s: 1.7988 - val_loss: 9.0802 - val_yolo_layer_1_loss: 1.5054 - val_yolo_la
yer_2_loss: 4.4847 - val_yolo_layer_3_loss: 4.8054
Epoch 47/200
320/320 [==============================] - 281s 878ms/step - loss: 4.1580
- yolo_layer_1_loss: 0.7392 - yolo_layer_2_loss: 1.6596 - yolo_layer_3_los
s: 1.7593 - val_loss: 12.3846 - val_yolo_layer_1_loss: 1.5074 - val_yolo_l
ayer_2_loss: 4.6443 - val_yolo_layer_3_loss: 4.5275
Epoch 48/200
320/320 [==============================] - 275s 858ms/step - loss: 3.9563
- yolo_layer_1_loss: 0.5939 - yolo_layer_2_loss: 1.5904 - yolo_layer_3_los
s: 1.7720 - val_loss: 6.3097 - val_yolo_layer_1_loss: 1.2228 - val_yolo_la
yer_2_loss: 4.8137 - val_yolo_layer_3_loss: 4.8854
Epoch 49/200
320/320 [==============================] - 277s 866ms/step - loss: 4.1587
- yolo_layer_1_loss: 0.5784 - yolo_layer_2_loss: 1.5635 - yolo_layer_3_los
s: 2.0168 - val_loss: 3.2217 - val_yolo_layer_1_loss: 1.5412 - val_yolo_la
yer_2_loss: 4.7588 - val_yolo_layer_3_loss: 4.7338
Epoch 50/200
320/320 [==============================] - 276s 863ms/step - loss: 4.0529
- yolo_layer_1_loss: 0.5423 - yolo_layer_2_loss: 1.6297 - yolo_layer_3_los
s: 1.8809 - val_loss: 9.3583 - val_yolo_layer_1_loss: 1.4405 - val_yolo_la
yer_2_loss: 4.5585 - val_yolo_layer_3_loss: 4.7722
Epoch 51/200
320/320 [==============================] - 280s 875ms/step - loss: 4.2003
- yolo_layer_1_loss: 0.6223 - yolo_layer_2_loss: 1.6192 - yolo_layer_3_los
s: 1.9589 - val_loss: 13.5091 - val_yolo_layer_1_loss: 1.5474 - val_yolo_l
ayer_2_loss: 4.6175 - val_yolo_layer_3_loss: 4.5733
Epoch 52/200
320/320 [==============================] - 277s 867ms/step - loss: 4.3088
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- yolo_layer_1_loss: 0.4797 - yolo_layer_2_loss: 1.7389 - yolo_layer_3_los
s: 2.0902 - val_loss: 10.8669 - val_yolo_layer_1_loss: 1.5650 - val_yolo_l
ayer_2_loss: 4.8461 - val_yolo_layer_3_loss: 4.5577
Epoch 53/200
320/320 [==============================] - 271s 847ms/step - loss: 4.1496
- yolo_layer_1_loss: 0.4669 - yolo_layer_2_loss: 1.5896 - yolo_layer_3_los
s: 2.0932 - val_loss: 2.3558 - val_yolo_layer_1_loss: 1.4359 - val_yolo_la
yer_2_loss: 4.4908 - val_yolo_layer_3_loss: 4.6713
Epoch 54/200
320/320 [==============================] - 276s 863ms/step - loss: 4.1044
- yolo_layer_1_loss: 0.6353 - yolo_layer_2_loss: 1.5527 - yolo_layer_3_los
s: 1.9165 - val_loss: 12.3771 - val_yolo_layer_1_loss: 1.5851 - val_yolo_l
ayer_2_loss: 4.6009 - val_yolo_layer_3_loss: 5.1092
Epoch 55/200
320/320 [==============================] - 274s 857ms/step - loss: 4.0552
- yolo_layer_1_loss: 0.5742 - yolo_layer_2_loss: 1.6685 - yolo_layer_3_los
s: 1.8125 - val_loss: 10.7770 - val_yolo_layer_1_loss: 1.4748 - val_yolo_l
ayer_2_loss: 4.5708 - val_yolo_layer_3_loss: 5.0616
Epoch 56/200
320/320 [==============================] - 275s 861ms/step - loss: 4.1150
- yolo_layer_1_loss: 0.4666 - yolo_layer_2_loss: 1.5535 - yolo_layer_3_los
s: 2.0949 - val_loss: 5.6173 - val_yolo_layer_1_loss: 1.7441 - val_yolo_la
yer_2_loss: 4.8616 - val_yolo_layer_3_loss: 4.2674
Epoch 57/200
320/320 [==============================] - 276s 862ms/step - loss: 3.8188
- yolo_layer_1_loss: 0.5293 - yolo_layer_2_loss: 1.5908 - yolo_layer_3_los
s: 1.6987 - val_loss: 11.9317 - val_yolo_layer_1_loss: 1.8097 - val_yolo_l
ayer_2_loss: 4.7572 - val_yolo_layer_3_loss: 4.6507
Epoch 58/200
320/320 [==============================] - 276s 864ms/step - loss: 4.1504
- yolo_layer_1_loss: 0.6254 - yolo_layer_2_loss: 1.5892 - yolo_layer_3_los
s: 1.9358 - val_loss: 20.4996 - val_yolo_layer_1_loss: 1.5052 - val_yolo_l
ayer_2_loss: 4.8397 - val_yolo_layer_3_loss: 4.8822
Epoch 59/200
320/320 [==============================] - 275s 860ms/step - loss: 3.8481
- yolo_layer_1_loss: 0.4966 - yolo_layer_2_loss: 1.5060 - yolo_layer_3_los
s: 1.8454 - val_loss: 12.0613 - val_yolo_layer_1_loss: 1.5961 - val_yolo_l
ayer_2_loss: 4.7942 - val_yolo_layer_3_loss: 4.6525
Epoch 60/200
320/320 [==============================] - 276s 861ms/step - loss: 4.0512
- yolo_layer_1_loss: 0.5662 - yolo_layer_2_loss: 1.6686 - yolo_layer_3_los
s: 1.8164 - val_loss: 15.9705 - val_yolo_layer_1_loss: 1.2953 - val_yolo_l
ayer_2_loss: 4.7921 - val_yolo_layer_3_loss: 4.7757
Epoch 61/200
320/320 [==============================] - 277s 866ms/step - loss: 4.1030
- yolo_layer_1_loss: 0.6099 - yolo_layer_2_loss: 1.6793 - yolo_layer_3_los
s: 1.8137 - val_loss: 7.8439 - val_yolo_layer_1_loss: 1.8336 - val_yolo_la
yer_2_loss: 4.7850 - val_yolo_layer_3_loss: 4.4432
Epoch 62/200
320/320 [==============================] - 281s 879ms/step - loss: 4.3323
- yolo_layer_1_loss: 0.6739 - yolo_layer_2_loss: 1.7519 - yolo_layer_3_los
s: 1.9065 - val_loss: 11.3138 - val_yolo_layer_1_loss: 1.2116 - val_yolo_l
ayer_2_loss: 4.5729 - val_yolo_layer_3_loss: 4.7630
Epoch 63/200
320/320 [==============================] - 279s 872ms/step - loss: 4.1179
- yolo_layer_1_loss: 0.6954 - yolo_layer_2_loss: 1.6982 - yolo_layer_3_los
s: 1.7242 - val_loss: 22.7694 - val_yolo_layer_1_loss: 1.3582 - val_yolo_l
ayer_2_loss: 4.9088 - val_yolo_layer_3_loss: 4.6920
Epoch 64/200
320/320 [==============================] - 276s 861ms/step - loss: 3.9051
- yolo_layer_1_loss: 0.5647 - yolo_layer_2_loss: 1.6387 - yolo_layer_3_los
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s: 1.7017 - val_loss: 11.2480 - val_yolo_layer_1_loss: 1.2948 - val_yolo_l
ayer_2_loss: 4.5376 - val_yolo_layer_3_loss: 4.9395
Epoch 65/200
320/320 [==============================] - 280s 875ms/step - loss: 4.1618
- yolo_layer_1_loss: 0.7209 - yolo_layer_2_loss: 1.6516 - yolo_layer_3_los
s: 1.7892 - val_loss: 7.7786 - val_yolo_layer_1_loss: 1.2863 - val_yolo_la
yer_2_loss: 4.9154 - val_yolo_layer_3_loss: 4.6581
Epoch 66/200
320/320 [==============================] - 275s 859ms/step - loss: 4.2664
- yolo_layer_1_loss: 0.5975 - yolo_layer_2_loss: 1.6442 - yolo_layer_3_los
s: 2.0247 - val_loss: 8.3313 - val_yolo_layer_1_loss: 1.5016 - val_yolo_la
yer_2_loss: 4.7560 - val_yolo_layer_3_loss: 4.3570
Epoch 67/200
320/320 [==============================] - 273s 853ms/step - loss: 4.0752
- yolo_layer_1_loss: 0.6286 - yolo_layer_2_loss: 1.7148 - yolo_layer_3_los
s: 1.7318 - val_loss: 12.2707 - val_yolo_layer_1_loss: 1.4114 - val_yolo_l
ayer_2_loss: 4.5614 - val_yolo_layer_3_loss: 4.7605
Epoch 68/200
320/320 [==============================] - 275s 858ms/step - loss: 4.3240
- yolo_layer_1_loss: 0.6408 - yolo_layer_2_loss: 1.7646 - yolo_layer_3_los
s: 1.9186 - val_loss: 14.4264 - val_yolo_layer_1_loss: 1.4910 - val_yolo_l
ayer_2_loss: 4.7379 - val_yolo_layer_3_loss: 4.6262
Epoch 69/200
320/320 [==============================] - 280s 874ms/step - loss: 4.2570
- yolo_layer_1_loss: 0.6865 - yolo_layer_2_loss: 1.7987 - yolo_layer_3_los
s: 1.7718 - val_loss: 16.6721 - val_yolo_layer_1_loss: 1.3890 - val_yolo_l
ayer_2_loss: 4.6250 - val_yolo_layer_3_loss: 4.9358
Epoch 70/200
320/320 [==============================] - 273s 854ms/step - loss: 4.2190
- yolo_layer_1_loss: 0.5425 - yolo_layer_2_loss: 1.7148 - yolo_layer_3_los
s: 1.9617 - val_loss: 14.6131 - val_yolo_layer_1_loss: 1.4889 - val_yolo_l
ayer_2_loss: 4.8232 - val_yolo_layer_3_loss: 4.8416
Epoch 71/200
320/320 [==============================] - 275s 860ms/step - loss: 4.1109
- yolo_layer_1_loss: 0.5674 - yolo_layer_2_loss: 1.5865 - yolo_layer_3_los
s: 1.9570 - val_loss: 19.7382 - val_yolo_layer_1_loss: 1.5842 - val_yolo_l
ayer_2_loss: 4.6958 - val_yolo_layer_3_loss: 4.6370
Epoch 72/200
320/320 [==============================] - 282s 882ms/step - loss: 4.2491
- yolo_layer_1_loss: 0.6858 - yolo_layer_2_loss: 1.7263 - yolo_layer_3_los
s: 1.8369 - val_loss: 13.7252 - val_yolo_layer_1_loss: 1.4192 - val_yolo_l
ayer_2_loss: 4.5284 - val_yolo_layer_3_loss: 4.9951
Epoch 73/200
320/320 [==============================] - 276s 864ms/step - loss: 4.4791
- yolo_layer_1_loss: 0.6240 - yolo_layer_2_loss: 1.7198 - yolo_layer_3_los
s: 2.1354 - val_loss: 13.5780 - val_yolo_layer_1_loss: 1.7046 - val_yolo_l
ayer_2_loss: 4.5087 - val_yolo_layer_3_loss: 4.4917
Epoch 74/200
320/320 [==============================] - 277s 867ms/step - loss: 4.1248
- yolo_layer_1_loss: 0.5873 - yolo_layer_2_loss: 1.5451 - yolo_layer_3_los
s: 1.9924 - val_loss: 3.2004 - val_yolo_layer_1_loss: 1.9307 - val_yolo_la
yer_2_loss: 4.7974 - val_yolo_layer_3_loss: 4.6470
Epoch 75/200
320/320 [==============================] - 281s 879ms/step - loss: 4.0277
- yolo_layer_1_loss: 0.5298 - yolo_layer_2_loss: 1.5853 - yolo_layer_3_los
s: 1.9126 - val_loss: 13.3564 - val_yolo_layer_1_loss: 1.8090 - val_yolo_l
ayer_2_loss: 5.0175 - val_yolo_layer_3_loss: 4.2502
Epoch 76/200
320/320 [==============================] - 275s 861ms/step - loss: 3.9323
- yolo_layer_1_loss: 0.5606 - yolo_layer_2_loss: 1.5403 - yolo_layer_3_los
s: 1.8315 - val_loss: 22.0548 - val_yolo_layer_1_loss: 1.5505 - val_yolo_l
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ayer_2_loss: 4.7970 - val_yolo_layer_3_loss: 4.8448
Epoch 77/200
320/320 [==============================] - 281s 877ms/step - loss: 4.0326
- yolo_layer_1_loss: 0.5869 - yolo_layer_2_loss: 1.5954 - yolo_layer_3_los
s: 1.8503 - val_loss: 5.4542 - val_yolo_layer_1_loss: 1.4440 - val_yolo_la
yer_2_loss: 4.7622 - val_yolo_layer_3_loss: 4.7167
Epoch 78/200
320/320 [==============================] - 275s 858ms/step - loss: 3.9700
- yolo_layer_1_loss: 0.5207 - yolo_layer_2_loss: 1.6093 - yolo_layer_3_los
s: 1.8400 - val_loss: 10.6757 - val_yolo_layer_1_loss: 1.7381 - val_yolo_l
ayer_2_loss: 4.7544 - val_yolo_layer_3_loss: 4.5438
Epoch 79/200
320/320 [==============================] - 278s 869ms/step - loss: 4.0384
- yolo_layer_1_loss: 0.5608 - yolo_layer_2_loss: 1.5883 - yolo_layer_3_los
s: 1.8893 - val_loss: 3.9846 - val_yolo_layer_1_loss: 1.4160 - val_yolo_la
yer_2_loss: 5.2083 - val_yolo_layer_3_loss: 4.4874
Epoch 80/200
320/320 [==============================] - 275s 861ms/step - loss: 3.9699
- yolo_layer_1_loss: 0.5994 - yolo_layer_2_loss: 1.6925 - yolo_layer_3_los
s: 1.6781 - val_loss: 7.8579 - val_yolo_layer_1_loss: 1.6788 - val_yolo_la
yer_2_loss: 4.6127 - val_yolo_layer_3_loss: 4.6934
Epoch 81/200
320/320 [==============================] - 279s 872ms/step - loss: 3.9306
- yolo_layer_1_loss: 0.5962 - yolo_layer_2_loss: 1.5555 - yolo_layer_3_los
s: 1.7789 - val_loss: 16.2738 - val_yolo_layer_1_loss: 1.6616 - val_yolo_l
ayer_2_loss: 4.8265 - val_yolo_layer_3_loss: 4.7845
Epoch 82/200
320/320 [==============================] - 282s 881ms/step - loss: 4.2426
- yolo_layer_1_loss: 0.7438 - yolo_layer_2_loss: 1.6079 - yolo_layer_3_los
s: 1.8908 - val_loss: 16.6741 - val_yolo_layer_1_loss: 1.3259 - val_yolo_l
ayer_2_loss: 4.5794 - val_yolo_layer_3_loss: 4.8832
Epoch 83/200
320/320 [==============================] - 273s 852ms/step - loss: 4.1436
- yolo_layer_1_loss: 0.4741 - yolo_layer_2_loss: 1.6082 - yolo_layer_3_los
s: 2.0614 - val_loss: 15.1797 - val_yolo_layer_1_loss: 1.7763 - val_yolo_l
ayer_2_loss: 5.0304 - val_yolo_layer_3_loss: 4.3928
Epoch 84/200
320/320 [==============================] - 275s 860ms/step - loss: 4.1014
- yolo_layer_1_loss: 0.5424 - yolo_layer_2_loss: 1.6529 - yolo_layer_3_los
s: 1.9061 - val_loss: 11.9566 - val_yolo_layer_1_loss: 1.4016 - val_yolo_l
ayer_2_loss: 4.6825 - val_yolo_layer_3_loss: 4.6475
Epoch 85/200
320/320 [==============================] - 276s 862ms/step - loss: 4.2392
- yolo_layer_1_loss: 0.5707 - yolo_layer_2_loss: 1.5166 - yolo_layer_3_los
s: 2.1520 - val_loss: 19.0510 - val_yolo_layer_1_loss: 1.4292 - val_yolo_l
ayer_2_loss: 4.8114 - val_yolo_layer_3_loss: 5.0277
Epoch 86/200
320/320 [==============================] - 278s 868ms/step - loss: 4.2324
- yolo_layer_1_loss: 0.6234 - yolo_layer_2_loss: 1.6545 - yolo_layer_3_los
s: 1.9545 - val_loss: 2.8905 - val_yolo_layer_1_loss: 1.5135 - val_yolo_la
yer_2_loss: 4.5527 - val_yolo_layer_3_loss: 4.7650
Epoch 87/200
320/320 [==============================] - 282s 880ms/step - loss: 3.8966
- yolo_layer_1_loss: 0.7030 - yolo_layer_2_loss: 1.6134 - yolo_layer_3_los
s: 1.5803 - val_loss: 14.7938 - val_yolo_layer_1_loss: 1.3843 - val_yolo_l
ayer_2_loss: 4.6947 - val_yolo_layer_3_loss: 4.5869
Epoch 88/200
320/320 [==============================] - 276s 864ms/step - loss: 4.0759
- yolo_layer_1_loss: 0.5656 - yolo_layer_2_loss: 1.6298 - yolo_layer_3_los
s: 1.8805 - val_loss: 6.9344 - val_yolo_layer_1_loss: 1.3455 - val_yolo_la
yer_2_loss: 4.7370 - val_yolo_layer_3_loss: 4.4973
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Epoch 89/200
320/320 [==============================] - 277s 865ms/step - loss: 4.0132
- yolo_layer_1_loss: 0.5718 - yolo_layer_2_loss: 1.5919 - yolo_layer_3_los
s: 1.8495 - val_loss: 17.2906 - val_yolo_layer_1_loss: 1.3692 - val_yolo_l
ayer_2_loss: 4.6531 - val_yolo_layer_3_loss: 4.6593
Epoch 90/200
320/320 [==============================] - 282s 882ms/step - loss: 4.1815
- yolo_layer_1_loss: 0.7421 - yolo_layer_2_loss: 1.6633 - yolo_layer_3_los
s: 1.7761 - val_loss: 20.3910 - val_yolo_layer_1_loss: 1.4532 - val_yolo_l
ayer_2_loss: 4.5747 - val_yolo_layer_3_loss: 4.8012
Epoch 91/200
320/320 [==============================] - 273s 853ms/step - loss: 4.0729
- yolo_layer_1_loss: 0.6197 - yolo_layer_2_loss: 1.6244 - yolo_layer_3_los
s: 1.8288 - val_loss: 7.3660 - val_yolo_layer_1_loss: 1.0068 - val_yolo_la
yer_2_loss: 4.4035 - val_yolo_layer_3_loss: 5.1835
Epoch 92/200
320/320 [==============================] - 279s 873ms/step - loss: 4.1744
- yolo_layer_1_loss: 0.6392 - yolo_layer_2_loss: 1.6073 - yolo_layer_3_los
s: 1.9279 - val_loss: 10.6453 - val_yolo_layer_1_loss: 1.4974 - val_yolo_l
ayer_2_loss: 4.9967 - val_yolo_layer_3_loss: 4.4024
Epoch 93/200
320/320 [==============================] - 283s 886ms/step - loss: 4.5272
- yolo_layer_1_loss: 0.7230 - yolo_layer_2_loss: 1.6842 - yolo_layer_3_los
s: 2.1199 - val_loss: 11.4845 - val_yolo_layer_1_loss: 1.4970 - val_yolo_l
ayer_2_loss: 4.8460 - val_yolo_layer_3_loss: 4.6255
Epoch 94/200
320/320 [==============================] - 273s 853ms/step - loss: 3.6504
- yolo_layer_1_loss: 0.4352 - yolo_layer_2_loss: 1.5147 - yolo_layer_3_los
s: 1.7005 - val_loss: 16.3842 - val_yolo_layer_1_loss: 1.5963 - val_yolo_l
ayer_2_loss: 4.8383 - val_yolo_layer_3_loss: 4.3923
Epoch 95/200
320/320 [==============================] - 275s 860ms/step - loss: 3.7538
- yolo_layer_1_loss: 0.4502 - yolo_layer_2_loss: 1.4463 - yolo_layer_3_los
s: 1.8572 - val_loss: 6.9940 - val_yolo_layer_1_loss: 1.9025 - val_yolo_la
yer_2_loss: 5.2621 - val_yolo_layer_3_loss: 4.3148
Epoch 96/200
320/320 [==============================] - 278s 869ms/step - loss: 4.0324
- yolo_layer_1_loss: 0.5182 - yolo_layer_2_loss: 1.6247 - yolo_layer_3_los
s: 1.8895 - val_loss: 11.6906 - val_yolo_layer_1_loss: 1.4410 - val_yolo_l
ayer_2_loss: 4.7344 - val_yolo_layer_3_loss: 4.5205
Epoch 97/200
320/320 [==============================] - 274s 857ms/step - loss: 4.1463
- yolo_layer_1_loss: 0.5233 - yolo_layer_2_loss: 1.5777 - yolo_layer_3_los
s: 2.0453 - val_loss: 10.5200 - val_yolo_layer_1_loss: 1.3615 - val_yolo_l
ayer_2_loss: 4.6726 - val_yolo_layer_3_loss: 4.9676
Epoch 98/200
320/320 [==============================] - 274s 856ms/step - loss: 4.0079
- yolo_layer_1_loss: 0.5294 - yolo_layer_2_loss: 1.5884 - yolo_layer_3_los
s: 1.8901 - val_loss: 16.6910 - val_yolo_layer_1_loss: 1.5238 - val_yolo_l
ayer_2_loss: 4.9438 - val_yolo_layer_3_loss: 4.7562
Epoch 99/200
320/320 [==============================] - 282s 882ms/step - loss: 3.9695
- yolo_layer_1_loss: 0.6680 - yolo_layer_2_loss: 1.5952 - yolo_layer_3_los
s: 1.7063 - val_loss: 11.8578 - val_yolo_layer_1_loss: 1.3075 - val_yolo_l
ayer_2_loss: 4.5486 - val_yolo_layer_3_loss: 4.8743
Epoch 100/200
320/320 [==============================] - 280s 875ms/step - loss: 4.0987
- yolo_layer_1_loss: 0.6294 - yolo_layer_2_loss: 1.6743 - yolo_layer_3_los
s: 1.7949 - val_loss: 6.0830 - val_yolo_layer_1_loss: 1.5934 - val_yolo_la
yer_2_loss: 4.4969 - val_yolo_layer_3_loss: 4.6724
Epoch 101/200
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320/320 [==============================] - 277s 866ms/step - loss: 4.1201
- yolo_layer_1_loss: 0.5698 - yolo_layer_2_loss: 1.5928 - yolo_layer_3_los
s: 1.9574 - val_loss: 1.9970 - val_yolo_layer_1_loss: 1.5877 - val_yolo_la
yer_2_loss: 4.7125 - val_yolo_layer_3_loss: 4.5248
Epoch 102/200
320/320 [==============================] - 272s 849ms/step - loss: 4.0444
- yolo_layer_1_loss: 0.5156 - yolo_layer_2_loss: 1.6934 - yolo_layer_3_los
s: 1.8354 - val_loss: 6.5995 - val_yolo_layer_1_loss: 1.4697 - val_yolo_la
yer_2_loss: 4.8266 - val_yolo_layer_3_loss: 4.7588
Epoch 103/200
320/320 [==============================] - 279s 872ms/step - loss: 4.0336
- yolo_layer_1_loss: 0.5765 - yolo_layer_2_loss: 1.5854 - yolo_layer_3_los
s: 1.8717 - val_loss: 13.6899 - val_yolo_layer_1_loss: 1.6933 - val_yolo_l
ayer_2_loss: 4.6108 - val_yolo_layer_3_loss: 4.9137
Epoch 104/200
320/320 [==============================] - 276s 863ms/step - loss: 3.9907
- yolo_layer_1_loss: 0.5873 - yolo_layer_2_loss: 1.5428 - yolo_layer_3_los
s: 1.8605 - val_loss: 7.2644 - val_yolo_layer_1_loss: 1.3669 - val_yolo_la
yer_2_loss: 4.5546 - val_yolo_layer_3_loss: 5.0933
Epoch 105/200
320/320 [==============================] - 274s 857ms/step - loss: 3.8652
- yolo_layer_1_loss: 0.5494 - yolo_layer_2_loss: 1.5273 - yolo_layer_3_los
s: 1.7885 - val_loss: 13.9390 - val_yolo_layer_1_loss: 1.2379 - val_yolo_l
ayer_2_loss: 4.4685 - val_yolo_layer_3_loss: 5.1846
Epoch 106/200
320/320 [==============================] - 279s 873ms/step - loss: 4.1297
- yolo_layer_1_loss: 0.5217 - yolo_layer_2_loss: 1.6320 - yolo_layer_3_los
s: 1.9760 - val_loss: 15.1789 - val_yolo_layer_1_loss: 1.8342 - val_yolo_l
ayer_2_loss: 4.6724 - val_yolo_layer_3_loss: 4.5912
Epoch 107/200
320/320 [==============================] - 279s 870ms/step - loss: 3.9601
- yolo_layer_1_loss: 0.6377 - yolo_layer_2_loss: 1.6274 - yolo_layer_3_los
s: 1.6950 - val_loss: 7.4885 - val_yolo_layer_1_loss: 1.2875 - val_yolo_la
yer_2_loss: 4.5517 - val_yolo_layer_3_loss: 4.8000
Epoch 108/200
320/320 [==============================] - 273s 854ms/step - loss: 4.0599
- yolo_layer_1_loss: 0.4885 - yolo_layer_2_loss: 1.6490 - yolo_layer_3_los
s: 1.9224 - val_loss: 9.7373 - val_yolo_layer_1_loss: 1.3810 - val_yolo_la
yer_2_loss: 4.3959 - val_yolo_layer_3_loss: 5.0798
Epoch 109/200
320/320 [==============================] - 276s 862ms/step - loss: 4.2159
- yolo_layer_1_loss: 0.6442 - yolo_layer_2_loss: 1.6675 - yolo_layer_3_los
s: 1.9042 - val_loss: 15.2640 - val_yolo_layer_1_loss: 1.3910 - val_yolo_l
ayer_2_loss: 4.7758 - val_yolo_layer_3_loss: 4.8479
Epoch 110/200
320/320 [==============================] - 278s 869ms/step - loss: 4.1933
- yolo_layer_1_loss: 0.5569 - yolo_layer_2_loss: 1.7505 - yolo_layer_3_los
s: 1.8859 - val_loss: 16.6019 - val_yolo_layer_1_loss: 1.3621 - val_yolo_l
ayer_2_loss: 5.0609 - val_yolo_layer_3_loss: 4.6766
Epoch 111/200
320/320 [==============================] - 280s 874ms/step - loss: 4.1352
- yolo_layer_1_loss: 0.6368 - yolo_layer_2_loss: 1.6239 - yolo_layer_3_los
s: 1.8745 - val_loss: 5.8243 - val_yolo_layer_1_loss: 1.3897 - val_yolo_la
yer_2_loss: 4.9514 - val_yolo_layer_3_loss: 4.6560
Epoch 112/200
320/320 [==============================] - 278s 870ms/step - loss: 4.1112
- yolo_layer_1_loss: 0.6244 - yolo_layer_2_loss: 1.6617 - yolo_layer_3_los
s: 1.8251 - val_loss: 12.1830 - val_yolo_layer_1_loss: 1.3434 - val_yolo_l
ayer_2_loss: 4.5788 - val_yolo_layer_3_loss: 4.9819
Epoch 113/200
320/320 [==============================] - 276s 864ms/step - loss: 4.2160
```

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- yolo_layer_1_loss: 0.5527 - yolo_layer_2_loss: 1.6035 - yolo_layer_3_los
s: 2.0598 - val_loss: 9.0392 - val_yolo_layer_1_loss: 1.6573 - val_yolo_la
yer_2_loss: 4.5476 - val_yolo_layer_3_loss: 4.8455
Epoch 114/200
320/320 [==============================] - 276s 862ms/step - loss: 3.9683
- yolo_layer_1_loss: 0.4685 - yolo_layer_2_loss: 1.4962 - yolo_layer_3_los
s: 2.0036 - val_loss: 6.7886 - val_yolo_layer_1_loss: 1.7173 - val_yolo_la
yer_2_loss: 4.6846 - val_yolo_layer_3_loss: 4.5889
Epoch 115/200
320/320 [==============================] - 273s 854ms/step - loss: 3.8656
- yolo_layer_1_loss: 0.5016 - yolo_layer_2_loss: 1.5090 - yolo_layer_3_los
s: 1.8550 - val_loss: 3.7399 - val_yolo_layer_1_loss: 1.3300 - val_yolo_la
yer_2_loss: 4.6881 - val_yolo_layer_3_loss: 4.7554
Epoch 116/200
320/320 [==============================] - 282s 880ms/step - loss: 4.1163
- yolo_layer_1_loss: 0.7184 - yolo_layer_2_loss: 1.6835 - yolo_layer_3_los
s: 1.7144 - val_loss: 16.4862 - val_yolo_layer_1_loss: 1.4887 - val_yolo_l
ayer_2_loss: 4.8163 - val_yolo_layer_3_loss: 4.4664
Epoch 117/200
320/320 [==============================] - 274s 855ms/step - loss: 3.9946
- yolo_layer_1_loss: 0.5079 - yolo_layer_2_loss: 1.6191 - yolo_layer_3_los
s: 1.8676 - val_loss: 6.1599 - val_yolo_layer_1_loss: 1.2437 - val_yolo_la
yer_2_loss: 4.5678 - val_yolo_layer_3_loss: 5.1010
Epoch 118/200
320/320 [==============================] - 279s 872ms/step - loss: 4.2030
- yolo_layer_1_loss: 0.5022 - yolo_layer_2_loss: 1.7259 - yolo_layer_3_los
s: 1.9749 - val_loss: 16.8163 - val_yolo_layer_1_loss: 2.0021 - val_yolo_l
ayer_2_loss: 4.9320 - val_yolo_layer_3_loss: 4.5245
Epoch 119/200
320/320 [==============================] - 283s 885ms/step - loss: 4.2429
- yolo_layer_1_loss: 0.7344 - yolo_layer_2_loss: 1.6535 - yolo_layer_3_los
s: 1.8550 - val_loss: 5.6604 - val_yolo_layer_1_loss: 1.1988 - val_yolo_la
yer_2_loss: 4.5555 - val_yolo_layer_3_loss: 4.8953
Epoch 120/200
320/320 [==============================] - 280s 875ms/step - loss: 4.0296
- yolo_layer_1_loss: 0.6648 - yolo_layer_2_loss: 1.5934 - yolo_layer_3_los
s: 1.7714 - val_loss: 11.2246 - val_yolo_layer_1_loss: 2.0379 - val_yolo_l
ayer_2_loss: 4.9253 - val_yolo_layer_3_loss: 4.1164
Epoch 121/200
320/320 [==============================] - 273s 853ms/step - loss: 4.0477
- yolo_layer_1_loss: 0.4569 - yolo_layer_2_loss: 1.6533 - yolo_layer_3_los
s: 1.9375 - val_loss: 6.9618 - val_yolo_layer_1_loss: 1.3127 - val_yolo_la
yer_2_loss: 4.3023 - val_yolo_layer_3_loss: 5.0405
Epoch 122/200
320/320 [==============================] - 278s 868ms/step - loss: 4.2081
- yolo_layer_1_loss: 0.5592 - yolo_layer_2_loss: 1.6854 - yolo_layer_3_los
s: 1.9634 - val_loss: 12.8599 - val_yolo_layer_1_loss: 1.7330 - val_yolo_l
ayer_2_loss: 4.9024 - val_yolo_layer_3_loss: 4.3973
Epoch 123/200
320/320 [==============================] - 287s 897ms/step - loss: 4.4559
- yolo_layer_1_loss: 0.8442 - yolo_layer_2_loss: 1.7297 - yolo_layer_3_los
s: 1.8821 - val_loss: 9.7833 - val_yolo_layer_1_loss: 1.5010 - val_yolo_la
yer_2_loss: 4.8946 - val_yolo_layer_3_loss: 4.6611
Epoch 124/200
320/320 [==============================] - 281s 879ms/step - loss: 4.2689
- yolo_layer_1_loss: 0.7301 - yolo_layer_2_loss: 1.7236 - yolo_layer_3_los
s: 1.8153 - val_loss: 7.2899 - val_yolo_layer_1_loss: 1.6728 - val_yolo_la
yer_2_loss: 4.9297 - val_yolo_layer_3_loss: 4.6183
Epoch 125/200
320/320 [==============================] - 277s 866ms/step - loss: 4.3925
- yolo_layer_1_loss: 0.7031 - yolo_layer_2_loss: 1.6266 - yolo_layer_3_los
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s: 2.0628 - val_loss: 5.4207 - val_yolo_layer_1_loss: 1.2056 - val_yolo_la
yer_2_loss: 4.3790 - val_yolo_layer_3_loss: 4.9109
Epoch 126/200
320/320 [==============================] - 278s 868ms/step - loss: 4.2365
- yolo_layer_1_loss: 0.5720 - yolo_layer_2_loss: 1.6807 - yolo_layer_3_los
s: 1.9838 - val_loss: 4.8298 - val_yolo_layer_1_loss: 1.4626 - val_yolo_la
yer_2_loss: 4.5151 - val_yolo_layer_3_loss: 4.6533
Epoch 127/200
320/320 [==============================] - 282s 882ms/step - loss: 3.9866
- yolo_layer_1_loss: 0.6785 - yolo_layer_2_loss: 1.6693 - yolo_layer_3_los
s: 1.6387 - val_loss: 6.4782 - val_yolo_layer_1_loss: 1.5745 - val_yolo_la
yer_2_loss: 4.4039 - val_yolo_layer_3_loss: 4.9117
Epoch 128/200
320/320 [==============================] - 281s 877ms/step - loss: 4.0600
- yolo_layer_1_loss: 0.6565 - yolo_layer_2_loss: 1.6364 - yolo_layer_3_los
s: 1.7671 - val_loss: 2.0061 - val_yolo_layer_1_loss: 1.8679 - val_yolo_la
yer_2_loss: 4.5826 - val_yolo_layer_3_loss: 4.3172
Epoch 129/200
320/320 [==============================] - 282s 882ms/step - loss: 4.1882
- yolo_layer_1_loss: 0.6814 - yolo_layer_2_loss: 1.6912 - yolo_layer_3_los
s: 1.8156 - val_loss: 15.0901 - val_yolo_layer_1_loss: 1.8674 - val_yolo_l
ayer_2_loss: 4.9559 - val_yolo_layer_3_loss: 4.5509
Epoch 130/200
320/320 [==============================] - 275s 861ms/step - loss: 4.1904
- yolo_layer_1_loss: 0.5906 - yolo_layer_2_loss: 1.6900 - yolo_layer_3_los
s: 1.9098 - val_loss: 6.7382 - val_yolo_layer_1_loss: 1.2888 - val_yolo_la
yer_2_loss: 4.9544 - val_yolo_layer_3_loss: 4.8410
Epoch 131/200
320/320 [==============================] - 277s 865ms/step - loss: 4.0802
- yolo_layer_1_loss: 0.4343 - yolo_layer_2_loss: 1.6241 - yolo_layer_3_los
s: 2.0218 - val_loss: 16.0157 - val_yolo_layer_1_loss: 1.6960 - val_yolo_l
ayer_2_loss: 4.8977 - val_yolo_layer_3_loss: 4.2587
Epoch 132/200
320/320 [==============================] - 275s 859ms/step - loss: 4.2367
- yolo_layer_1_loss: 0.5962 - yolo_layer_2_loss: 1.6795 - yolo_layer_3_los
s: 1.9610 - val_loss: 13.4160 - val_yolo_layer_1_loss: 1.6283 - val_yolo_l
ayer_2_loss: 4.8772 - val_yolo_layer_3_loss: 4.8659
Epoch 133/200
320/320 [==============================] - 280s 876ms/step - loss: 4.2336
- yolo_layer_1_loss: 0.6631 - yolo_layer_2_loss: 1.6416 - yolo_layer_3_los
s: 1.9288 - val_loss: 6.5250 - val_yolo_layer_1_loss: 1.2780 - val_yolo_la
yer_2_loss: 4.5009 - val_yolo_layer_3_loss: 4.8084
Epoch 134/200
320/320 [==============================] - 277s 866ms/step - loss: 4.2614
- yolo_layer_1_loss: 0.6825 - yolo_layer_2_loss: 1.6523 - yolo_layer_3_los
s: 1.9266 - val_loss: 8.5617 - val_yolo_layer_1_loss: 1.1567 - val_yolo_la
yer_2_loss: 4.6787 - val_yolo_layer_3_loss: 4.5910
Epoch 135/200
320/320 [==============================] - 278s 868ms/step - loss: 4.0237
- yolo_layer_1_loss: 0.5440 - yolo_layer_2_loss: 1.5736 - yolo_layer_3_los
s: 1.9060 - val_loss: 4.1531 - val_yolo_layer_1_loss: 1.1840 - val_yolo_la
yer_2_loss: 4.9137 - val_yolo_layer_3_loss: 4.7090
Epoch 136/200
320/320 [==============================] - 278s 870ms/step - loss: 4.2302
- yolo_layer_1_loss: 0.7186 - yolo_layer_2_loss: 1.6685 - yolo_layer_3_los
s: 1.8431 - val_loss: 10.4469 - val_yolo_layer_1_loss: 1.2715 - val_yolo_l
ayer_2_loss: 4.3785 - val_yolo_layer_3_loss: 4.9735
Epoch 137/200
320/320 [==============================] - 277s 867ms/step - loss: 4.2707
- yolo_layer_1_loss: 0.6865 - yolo_layer_2_loss: 1.7293 - yolo_layer_3_los
s: 1.8549 - val_loss: 15.6001 - val_yolo_layer_1_loss: 1.6088 - val_yolo_l
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ayer_2_loss: 4.9466 - val_yolo_layer_3_loss: 4.7957
Epoch 138/200
320/320 [==============================] - 280s 875ms/step - loss: 4.2294
- yolo_layer_1_loss: 0.7627 - yolo_layer_2_loss: 1.6556 - yolo_layer_3_los
s: 1.8111 - val_loss: 19.3426 - val_yolo_layer_1_loss: 1.8057 - val_yolo_l
ayer_2_loss: 4.6789 - val_yolo_layer_3_loss: 4.6172
Epoch 139/200
320/320 [==============================] - 278s 869ms/step - loss: 4.1256
- yolo_layer_1_loss: 0.5852 - yolo_layer_2_loss: 1.6113 - yolo_layer_3_los
s: 1.9292 - val_loss: 7.2579 - val_yolo_layer_1_loss: 1.5810 - val_yolo_la
yer_2_loss: 4.7688 - val_yolo_layer_3_loss: 4.5810
Epoch 140/200
320/320 [==============================] - 274s 856ms/step - loss: 3.9870
- yolo_layer_1_loss: 0.5485 - yolo_layer_2_loss: 1.5501 - yolo_layer_3_los
s: 1.8883 - val_loss: 8.1831 - val_yolo_layer_1_loss: 1.4060 - val_yolo_la
yer_2_loss: 4.0677 - val_yolo_layer_3_loss: 5.0929
Epoch 141/200
320/320 [==============================] - 280s 876ms/step - loss: 4.3341
- yolo_layer_1_loss: 0.6862 - yolo_layer_2_loss: 1.6484 - yolo_layer_3_los
s: 1.9995 - val_loss: 12.4476 - val_yolo_layer_1_loss: 1.2827 - val_yolo_l
ayer_2_loss: 4.3851 - val_yolo_layer_3_loss: 5.0923
Epoch 142/200
320/320 [==============================] - 274s 856ms/step - loss: 4.1104
- yolo_layer_1_loss: 0.4832 - yolo_layer_2_loss: 1.6750 - yolo_layer_3_los
s: 1.9521 - val_loss: 10.7933 - val_yolo_layer_1_loss: 1.4002 - val_yolo_l
ayer_2_loss: 4.9178 - val_yolo_layer_3_loss: 4.5604
Epoch 143/200
320/320 [==============================] - 273s 854ms/step - loss: 4.1921
- yolo_layer_1_loss: 0.5886 - yolo_layer_2_loss: 1.6170 - yolo_layer_3_los
s: 1.9866 - val_loss: 9.2748 - val_yolo_layer_1_loss: 1.4365 - val_yolo_la
yer_2_loss: 4.6405 - val_yolo_layer_3_loss: 4.6707
Epoch 144/200
320/320 [==============================] - 278s 870ms/step - loss: 4.1023
- yolo_layer_1_loss: 0.5944 - yolo_layer_2_loss: 1.6586 - yolo_layer_3_los
s: 1.8493 - val_loss: 3.0037 - val_yolo_layer_1_loss: 1.6136 - val_yolo_la
yer_2_loss: 4.5732 - val_yolo_layer_3_loss: 4.8747
Epoch 145/200
320/320 [==============================] - 276s 862ms/step - loss: 4.0055
- yolo_layer_1_loss: 0.5875 - yolo_layer_2_loss: 1.5955 - yolo_layer_3_los
s: 1.8226 - val_loss: 7.3079 - val_yolo_layer_1_loss: 1.4432 - val_yolo_la
yer_2_loss: 4.7411 - val_yolo_layer_3_loss: 4.5869
Epoch 146/200
320/320 [==============================] - 280s 876ms/step - loss: 4.1021
- yolo_layer_1_loss: 0.6320 - yolo_layer_2_loss: 1.7306 - yolo_layer_3_los
s: 1.7394 - val_loss: 13.0583 - val_yolo_layer_1_loss: 1.0890 - val_yolo_l
ayer_2_loss: 4.7704 - val_yolo_layer_3_loss: 5.0831
Epoch 147/200
320/320 [==============================] - 281s 878ms/step - loss: 3.9773
- yolo_layer_1_loss: 0.5939 - yolo_layer_2_loss: 1.5655 - yolo_layer_3_los
s: 1.8178 - val_loss: 9.7176 - val_yolo_layer_1_loss: 1.2405 - val_yolo_la
yer_2_loss: 4.4567 - val_yolo_layer_3_loss: 4.7236
Epoch 148/200
320/320 [==============================] - 279s 871ms/step - loss: 4.2322
- yolo_layer_1_loss: 0.7329 - yolo_layer_2_loss: 1.7785 - yolo_layer_3_los
s: 1.7209 - val_loss: 15.4575 - val_yolo_layer_1_loss: 1.4684 - val_yolo_l
ayer_2_loss: 4.6987 - val_yolo_layer_3_loss: 5.0141
Epoch 149/200
320/320 [==============================] - 275s 860ms/step - loss: 3.6725
- yolo_layer_1_loss: 0.4914 - yolo_layer_2_loss: 1.5745 - yolo_layer_3_los
s: 1.6066 - val_loss: 3.0212 - val_yolo_layer_1_loss: 1.0382 - val_yolo_la
yer_2_loss: 4.4468 - val_yolo_layer_3_loss: 4.7799
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Epoch 150/200
320/320 [==============================] - 273s 854ms/step - loss: 4.0326
- yolo_layer_1_loss: 0.6169 - yolo_layer_2_loss: 1.5541 - yolo_layer_3_los
s: 1.8615 - val_loss: 14.9135 - val_yolo_layer_1_loss: 1.2345 - val_yolo_l
ayer_2_loss: 4.6711 - val_yolo_layer_3_loss: 5.0497
Epoch 151/200
320/320 [==============================] - 276s 862ms/step - loss: 3.9453
- yolo_layer_1_loss: 0.6243 - yolo_layer_2_loss: 1.5064 - yolo_layer_3_los
s: 1.8146 - val_loss: 16.3030 - val_yolo_layer_1_loss: 1.3421 - val_yolo_l
ayer_2_loss: 4.6605 - val_yolo_layer_3_loss: 4.9359
Epoch 152/200
320/320 [==============================] - 280s 875ms/step - loss: 4.0143
- yolo_layer_1_loss: 0.6268 - yolo_layer_2_loss: 1.5994 - yolo_layer_3_los
s: 1.7881 - val_loss: 10.7200 - val_yolo_layer_1_loss: 1.6542 - val_yolo_l
ayer_2_loss: 4.7177 - val_yolo_layer_3_loss: 4.6603
Epoch 153/200
320/320 [==============================] - 273s 852ms/step - loss: 4.0445
- yolo_layer_1_loss: 0.5422 - yolo_layer_2_loss: 1.5549 - yolo_layer_3_los
s: 1.9473 - val_loss: 13.4208 - val_yolo_layer_1_loss: 1.5985 - val_yolo_l
ayer_2_loss: 4.9253 - val_yolo_layer_3_loss: 4.8498
Epoch 154/200
320/320 [==============================] - 278s 868ms/step - loss: 3.8770
- yolo_layer_1_loss: 0.5033 - yolo_layer_2_loss: 1.5221 - yolo_layer_3_los
s: 1.8516 - val_loss: 11.2987 - val_yolo_layer_1_loss: 1.9006 - val_yolo_l
ayer_2_loss: 5.0668 - val_yolo_layer_3_loss: 4.1194
Epoch 155/200
320/320 [==============================] - 273s 853ms/step - loss: 3.9548
- yolo_layer_1_loss: 0.5529 - yolo_layer_2_loss: 1.5690 - yolo_layer_3_los
s: 1.8329 - val_loss: 6.4945 - val_yolo_layer_1_loss: 1.5331 - val_yolo_la
yer_2_loss: 4.8024 - val_yolo_layer_3_loss: 4.7072
Epoch 156/200
320/320 [==============================] - 275s 859ms/step - loss: 4.2751
- yolo_layer_1_loss: 0.5486 - yolo_layer_2_loss: 1.6335 - yolo_layer_3_los
s: 2.0931 - val_loss: 7.8392 - val_yolo_layer_1_loss: 1.3772 - val_yolo_la
yer_2_loss: 4.8558 - val_yolo_layer_3_loss: 4.6396
Epoch 157/200
320/320 [==============================] - 278s 867ms/step - loss: 4.2018
- yolo_layer_1_loss: 0.6735 - yolo_layer_2_loss: 1.7395 - yolo_layer_3_los
s: 1.7887 - val_loss: 11.5477 - val_yolo_layer_1_loss: 1.6219 - val_yolo_l
ayer_2_loss: 4.7874 - val_yolo_layer_3_loss: 4.6974
Epoch 158/200
320/320 [==============================] - 273s 853ms/step - loss: 3.9937
- yolo_layer_1_loss: 0.4801 - yolo_layer_2_loss: 1.5381 - yolo_layer_3_los
s: 1.9755 - val_loss: 8.4423 - val_yolo_layer_1_loss: 1.4011 - val_yolo_la
yer_2_loss: 4.5874 - val_yolo_layer_3_loss: 4.9356
Epoch 159/200
320/320 [==============================] - 279s 873ms/step - loss: 4.0338
- yolo_layer_1_loss: 0.6405 - yolo_layer_2_loss: 1.6404 - yolo_layer_3_los
s: 1.7530 - val_loss: 5.5451 - val_yolo_layer_1_loss: 1.6381 - val_yolo_la
yer_2_loss: 4.8438 - val_yolo_layer_3_loss: 4.8579
Epoch 160/200
320/320 [==============================] - 276s 863ms/step - loss: 4.2363
- yolo_layer_1_loss: 0.4895 - yolo_layer_2_loss: 1.7398 - yolo_layer_3_los
s: 2.0070 - val_loss: 8.9013 - val_yolo_layer_1_loss: 1.6141 - val_yolo_la
yer_2_loss: 4.6700 - val_yolo_layer_3_loss: 4.8736
Epoch 161/200
320/320 [==============================] - 277s 865ms/step - loss: 3.8235
- yolo_layer_1_loss: 0.5970 - yolo_layer_2_loss: 1.5318 - yolo_layer_3_los
s: 1.6948 - val_loss: 11.3661 - val_yolo_layer_1_loss: 1.4124 - val_yolo_l
ayer_2_loss: 4.8747 - val_yolo_layer_3_loss: 4.5512
Epoch 162/200
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320/320 [==============================] - 276s 861ms/step - loss: 4.2161
- yolo_layer_1_loss: 0.5780 - yolo_layer_2_loss: 1.6629 - yolo_layer_3_los
s: 1.9751 - val_loss: 17.6914 - val_yolo_layer_1_loss: 1.3293 - val_yolo_l
ayer_2_loss: 4.7808 - val_yolo_layer_3_loss: 4.8191
Epoch 163/200
320/320 [==============================] - 278s 870ms/step - loss: 4.2291
- yolo_layer_1_loss: 0.6028 - yolo_layer_2_loss: 1.6765 - yolo_layer_3_los
s: 1.9497 - val_loss: 11.0980 - val_yolo_layer_1_loss: 1.5778 - val_yolo_l
ayer_2_loss: 4.7535 - val_yolo_layer_3_loss: 4.6521
Epoch 164/200
320/320 [==============================] - 279s 872ms/step - loss: 4.1269
- yolo_layer_1_loss: 0.6714 - yolo_layer_2_loss: 1.5994 - yolo_layer_3_los
s: 1.8561 - val_loss: 18.7073 - val_yolo_layer_1_loss: 1.6299 - val_yolo_l
ayer_2_loss: 4.9851 - val_yolo_layer_3_loss: 4.6644
Epoch 165/200
320/320 [==============================] - 273s 854ms/step - loss: 4.0971
- yolo_layer_1_loss: 0.4439 - yolo_layer_2_loss: 1.5792 - yolo_layer_3_los
s: 2.0740 - val_loss: 2.0319 - val_yolo_layer_1_loss: 1.4436 - val_yolo_la
yer_2_loss: 4.5979 - val_yolo_layer_3_loss: 4.9881
Epoch 166/200
320/320 [==============================] - 281s 879ms/step - loss: 4.0997
- yolo_layer_1_loss: 0.6186 - yolo_layer_2_loss: 1.5154 - yolo_layer_3_los
s: 1.9657 - val_loss: 8.3480 - val_yolo_layer_1_loss: 1.8388 - val_yolo_la
yer_2_loss: 4.6864 - val_yolo_layer_3_loss: 4.7623
Epoch 167/200
320/320 [==============================] - 276s 862ms/step - loss: 4.3431
- yolo_layer_1_loss: 0.5937 - yolo_layer_2_loss: 1.6011 - yolo_layer_3_los
s: 2.1484 - val_loss: 11.5297 - val_yolo_layer_1_loss: 1.3620 - val_yolo_l
ayer_2_loss: 4.5942 - val_yolo_layer_3_loss: 4.7040
Epoch 168/200
320/320 [==============================] - 275s 859ms/step - loss: 3.8102
- yolo_layer_1_loss: 0.4678 - yolo_layer_2_loss: 1.5675 - yolo_layer_3_los
s: 1.7749 - val_loss: 7.3237 - val_yolo_layer_1_loss: 1.7481 - val_yolo_la
yer_2_loss: 4.9477 - val_yolo_layer_3_loss: 4.5476
Epoch 169/200
320/320 [==============================] - 273s 855ms/step - loss: 3.9948
- yolo_layer_1_loss: 0.5805 - yolo_layer_2_loss: 1.5393 - yolo_layer_3_los
s: 1.8750 - val_loss: 6.9332 - val_yolo_layer_1_loss: 1.3909 - val_yolo_la
yer_2_loss: 4.6877 - val_yolo_layer_3_loss: 4.9181
Epoch 170/200
320/320 [==============================] - 279s 871ms/step - loss: 4.2332
- yolo_layer_1_loss: 0.6636 - yolo_layer_2_loss: 1.6432 - yolo_layer_3_los
s: 1.9263 - val_loss: 6.7053 - val_yolo_layer_1_loss: 1.4816 - val_yolo_la
yer_2_loss: 4.6731 - val_yolo_layer_3_loss: 4.5226
Epoch 171/200
320/320 [==============================] - 279s 873ms/step - loss: 4.1528
- yolo_layer_1_loss: 0.6024 - yolo_layer_2_loss: 1.5947 - yolo_layer_3_los
s: 1.9557 - val_loss: 5.3319 - val_yolo_layer_1_loss: 1.6484 - val_yolo_la
yer_2_loss: 4.8477 - val_yolo_layer_3_loss: 4.8051
Epoch 172/200
320/320 [==============================] - 275s 860ms/step - loss: 4.1203
- yolo_layer_1_loss: 0.5483 - yolo_layer_2_loss: 1.5063 - yolo_layer_3_los
s: 2.0657 - val_loss: 9.2024 - val_yolo_layer_1_loss: 1.6108 - val_yolo_la
yer_2_loss: 4.7950 - val_yolo_layer_3_loss: 4.9302
Epoch 173/200
320/320 [==============================] - 271s 848ms/step - loss: 3.9834
- yolo_layer_1_loss: 0.5382 - yolo_layer_2_loss: 1.6617 - yolo_layer_3_los
s: 1.7835 - val_loss: 5.4582 - val_yolo_layer_1_loss: 1.1408 - val_yolo_la
yer_2_loss: 4.5217 - val_yolo_layer_3_loss: 4.9258
Epoch 174/200
320/320 [==============================] - 283s 884ms/step - loss: 4.2624
```

```
- yolo_layer_1_loss: 0.7130 - yolo_layer_2_loss: 1.5424 - yolo_layer_3_los
s: 2.0071 - val_loss: 5.7923 - val_yolo_layer_1_loss: 1.4235 - val_yolo_la
yer_2_loss: 5.0955 - val_yolo_layer_3_loss: 4.5344
Epoch 175/200
320/320 [==============================] - 277s 867ms/step - loss: 4.0864
- yolo_layer_1_loss: 0.6005 - yolo_layer_2_loss: 1.6543 - yolo_layer_3_los
s: 1.8316 - val_loss: 10.3351 - val_yolo_layer_1_loss: 1.7631 - val_yolo_l
ayer_2_loss: 4.6105 - val_yolo_layer_3_loss: 4.9033
Epoch 176/200
320/320 [==============================] - 276s 861ms/step - loss: 3.9676
- yolo_layer_1_loss: 0.5400 - yolo_layer_2_loss: 1.5711 - yolo_layer_3_los
s: 1.8565 - val_loss: 14.9788 - val_yolo_layer_1_loss: 1.2467 - val_yolo_l
ayer_2_loss: 4.5354 - val_yolo_layer_3_loss: 4.7260
Epoch 177/200
320/320 [==============================] - 279s 872ms/step - loss: 3.9731
- yolo_layer_1_loss: 0.6042 - yolo_layer_2_loss: 1.6103 - yolo_layer_3_los
s: 1.7586 - val_loss: 8.7869 - val_yolo_layer_1_loss: 1.2058 - val_yolo_la
yer_2_loss: 4.5419 - val_yolo_layer_3_loss: 4.7749
Epoch 178/200
320/320 [==============================] - 280s 876ms/step - loss: 4.0841
- yolo_layer_1_loss: 0.5394 - yolo_layer_2_loss: 1.6822 - yolo_layer_3_los
s: 1.8624 - val_loss: 9.2042 - val_yolo_layer_1_loss: 1.3553 - val_yolo_la
yer_2_loss: 4.7330 - val_yolo_layer_3_loss: 4.8203
Epoch 179/200
320/320 [==============================] - 279s 871ms/step - loss: 3.9530
- yolo_layer_1_loss: 0.5930 - yolo_layer_2_loss: 1.6270 - yolo_layer_3_los
s: 1.7331 - val_loss: 7.9250 - val_yolo_layer_1_loss: 1.2253 - val_yolo_la
yer_2_loss: 4.8820 - val_yolo_layer_3_loss: 4.6551
Epoch 180/200
320/320 [==============================] - 278s 869ms/step - loss: 4.2335
- yolo_layer_1_loss: 0.5782 - yolo_layer_2_loss: 1.6915 - yolo_layer_3_los
s: 1.9639 - val_loss: 6.7899 - val_yolo_layer_1_loss: 1.6165 - val_yolo_la
yer_2_loss: 4.6249 - val_yolo_layer_3_loss: 4.6236
Epoch 181/200
320/320 [==============================] - 268s 839ms/step - loss: 4.0928
- yolo_layer_1_loss: 0.4745 - yolo_layer_2_loss: 1.5413 - yolo_layer_3_los
s: 2.0771 - val_loss: 6.8535 - val_yolo_layer_1_loss: 1.4421 - val_yolo_la
yer_2_loss: 4.6969 - val_yolo_layer_3_loss: 4.7774
Epoch 182/200
320/320 [==============================] - 271s 847ms/step - loss: 3.9966
- yolo_layer_1_loss: 0.5916 - yolo_layer_2_loss: 1.5355 - yolo_layer_3_los
s: 1.8695 - val_loss: 8.2944 - val_yolo_layer_1_loss: 1.2099 - val_yolo_la
yer_2_loss: 4.3918 - val_yolo_layer_3_loss: 4.9072
Epoch 183/200
320/320 [==============================] - 275s 858ms/step - loss: 4.1239
- yolo_layer_1_loss: 0.6068 - yolo_layer_2_loss: 1.6656 - yolo_layer_3_los
s: 1.8515 - val_loss: 9.2775 - val_yolo_layer_1_loss: 1.5263 - val_yolo_la
yer_2_loss: 4.9885 - val_yolo_layer_3_loss: 4.6872
Epoch 184/200
320/320 [==============================] - 271s 848ms/step - loss: 4.0840
- yolo_layer_1_loss: 0.4377 - yolo_layer_2_loss: 1.6312 - yolo_layer_3_los
s: 2.0151 - val_loss: 11.6647 - val_yolo_layer_1_loss: 1.7829 - val_yolo_l
ayer_2_loss: 4.6252 - val_yolo_layer_3_loss: 4.6728
Epoch 185/200
320/320 [==============================] - 281s 878ms/step - loss: 4.2566
- yolo_layer_1_loss: 0.7099 - yolo_layer_2_loss: 1.6691 - yolo_layer_3_los
s: 1.8775 - val_loss: 8.2108 - val_yolo_layer_1_loss: 1.4901 - val_yolo_la
yer_2_loss: 4.5440 - val_yolo_layer_3_loss: 4.8819
Epoch 186/200
320/320 [==============================] - 280s 874ms/step - loss: 4.1329
- yolo_layer_1_loss: 0.6407 - yolo_layer_2_loss: 1.6679 - yolo_layer_3_los
```

```
s: 1.8243 - val_loss: 10.0851 - val_yolo_layer_1_loss: 1.8738 - val_yolo_l
ayer_2_loss: 4.8638 - val_yolo_layer_3_loss: 4.4739
Epoch 187/200
320/320 [==============================] - 278s 868ms/step - loss: 4.0019
- yolo_layer_1_loss: 0.5626 - yolo_layer_2_loss: 1.5645 - yolo_layer_3_los
s: 1.8748 - val_loss: 7.7492 - val_yolo_layer_1_loss: 1.3151 - val_yolo_la
yer_2_loss: 5.0719 - val_yolo_layer_3_loss: 4.5918
Epoch 188/200
320/320 [==============================] - 276s 864ms/step - loss: 4.2048
- yolo_layer_1_loss: 0.6552 - yolo_layer_2_loss: 1.6766 - yolo_layer_3_los
s: 1.8730 - val_loss: 2.7936 - val_yolo_layer_1_loss: 1.0777 - val_yolo_la
yer_2_loss: 4.5878 - val_yolo_layer_3_loss: 5.1801
Epoch 189/200
320/320 [==============================] - 277s 865ms/step - loss: 4.1024
- yolo_layer_1_loss: 0.6512 - yolo_layer_2_loss: 1.6424 - yolo_layer_3_los
s: 1.8089 - val_loss: 5.9135 - val_yolo_layer_1_loss: 1.6177 - val_yolo_la
yer_2_loss: 4.7608 - val_yolo_layer_3_loss: 4.6448
Epoch 190/200
320/320 [==============================] - 274s 857ms/step - loss: 4.0373
- yolo_layer_1_loss: 0.6336 - yolo_layer_2_loss: 1.6330 - yolo_layer_3_los
s: 1.7708 - val_loss: 9.0814 - val_yolo_layer_1_loss: 1.5435 - val_yolo_la
yer_2_loss: 4.7953 - val_yolo_layer_3_loss: 4.6679
Epoch 191/200
320/320 [==============================] - 277s 866ms/step - loss: 3.8768
- yolo_layer_1_loss: 0.6023 - yolo_layer_2_loss: 1.5136 - yolo_layer_3_los
s: 1.7608 - val_loss: 13.1384 - val_yolo_layer_1_loss: 1.6103 - val_yolo_l
ayer_2_loss: 4.6584 - val_yolo_layer_3_loss: 4.9963
Epoch 192/200
320/320 [==============================] - 275s 860ms/step - loss: 3.9901
- yolo_layer_1_loss: 0.5081 - yolo_layer_2_loss: 1.6930 - yolo_layer_3_los
s: 1.7890 - val_loss: 14.4165 - val_yolo_layer_1_loss: 1.3931 - val_yolo_l
ayer_2_loss: 4.5043 - val_yolo_layer_3_loss: 4.7873
Epoch 193/200
320/320 [==============================] - 278s 869ms/step - loss: 4.0931
- yolo_layer_1_loss: 0.5932 - yolo_layer_2_loss: 1.6807 - yolo_layer_3_los
s: 1.8192 - val_loss: 7.3189 - val_yolo_layer_1_loss: 1.6934 - val_yolo_la
yer_2_loss: 4.9155 - val_yolo_layer_3_loss: 4.4382
Epoch 194/200
320/320 [==============================] - 278s 869ms/step - loss: 3.8950
- yolo_layer_1_loss: 0.5617 - yolo_layer_2_loss: 1.5118 - yolo_layer_3_los
s: 1.8215 - val_loss: 2.6312 - val_yolo_layer_1_loss: 1.8168 - val_yolo_la
yer_2_loss: 4.7232 - val_yolo_layer_3_loss: 4.5989
Epoch 195/200
320/320 [==============================] - 277s 864ms/step - loss: 3.8339
- yolo_layer_1_loss: 0.5951 - yolo_layer_2_loss: 1.5869 - yolo_layer_3_los
s: 1.6520 - val_loss: 9.0132 - val_yolo_layer_1_loss: 1.7343 - val_yolo_la
yer_2_loss: 4.9315 - val_yolo_layer_3_loss: 4.3213
Epoch 196/200
320/320 [==============================] - 275s 858ms/step - loss: 4.0326
- yolo_layer_1_loss: 0.5701 - yolo_layer_2_loss: 1.5620 - yolo_layer_3_los
s: 1.9005 - val_loss: 13.8715 - val_yolo_layer_1_loss: 1.4963 - val_yolo_l
ayer_2_loss: 4.8039 - val_yolo_layer_3_loss: 4.3997
Epoch 197/200
320/320 [==============================] - 278s 867ms/step - loss: 4.3346
- yolo_layer_1_loss: 0.7232 - yolo_layer_2_loss: 1.7238 - yolo_layer_3_los
s: 1.8877 - val_loss: 2.3339 - val_yolo_layer_1_loss: 1.4656 - val_yolo_la
yer_2_loss: 4.5511 - val_yolo_layer_3_loss: 4.6785
Epoch 198/200
320/320 [==============================] - 276s 864ms/step - loss: 4.2487
- yolo_layer_1_loss: 0.5823 - yolo_layer_2_loss: 1.6074 - yolo_layer_3_los
s: 2.0590 - val_loss: 16.7187 - val_yolo_layer_1_loss: 1.3190 - val_yolo_l
```

```
ayer_2_loss: 4.7424 - val_yolo_layer_3_loss: 4.9317
Epoch 199/200
320/320 [==============================] - 279s 873ms/step - loss: 4.1921
- yolo_layer_1_loss: 0.5739 - yolo_layer_2_loss: 1.5944 - yolo_layer_3_los
s: 2.0238 - val_loss: 2.6653 - val_yolo_layer_1_loss: 2.1986 - val_yolo_la
yer_2_loss: 5.0436 - val_yolo_layer_3_loss: 4.2107
Epoch 200/200
320/320 [==============================] - 282s 882ms/step - loss: 4.2550
- yolo_layer_1_loss: 0.6759 - yolo_layer_2_loss: 1.7403 - yolo_layer_3_los
s: 1.8388 - val_loss: 10.8591 - val_yolo_layer_1_loss: 1.2892 - val_yolo_l
ayer_2_loss: 4.7992 - val_yolo_layer_3_loss: 4.6978
```

In [3]:

```
metrics = trainer.evaluateModel(model_path="maconha/models", json_path="maconha/json/detection_config.json", iou_threshold=0.5, object_threshold=0.3, nms_threshold=0.5)
print(metrics)
```

```
Starting Model evaluation....
Model File:  maconha/models\detection_model-ex-001--loss-0037.869.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.1839
mAP: 0.1839
================================
Model File:  maconha/models\detection_model-ex-002--loss-0015.062.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.1548
mAP: 0.1548
================================
skipping the evaluation of maconha/models\detection_model-ex-003--loss-001
1.956.h5 because following exception occurred: cannot convert float infini
ty to integer
Model File:  maconha/models\detection_model-ex-004--loss-0011.422.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.4949
mAP: 0.4949
================================
Model File:  maconha/models\detection_model-ex-005--loss-0010.719.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.2487
mAP: 0.2487
================================
Model File:  maconha/models\detection_model-ex-006--loss-0009.166.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.6254
mAP: 0.6254
================================
Model File:  maconha/models\detection_model-ex-007--loss-0008.697.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.5051
mAP: 0.5051
================================
Model File:  maconha/models\detection_model-ex-008--loss-0008.337.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.5240
mAP: 0.5240
================================
Model File:  maconha/models\detection_model-ex-009--loss-0007.723.h5
```

```
Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.6389
mAP: 0.6389
================================
Model File:  maconha/models\detection_model-ex-010--loss-0007.603.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.5058
mAP: 0.5058
================================
Model File:  maconha/models\detection_model-ex-011--loss-0007.150.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.6846
mAP: 0.6846
================================
Model File:  maconha/models\detection_model-ex-012--loss-0006.954.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.6006
mAP: 0.6006
================================
Model File:  maconha/models\detection_model-ex-014--loss-0006.789.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.6155
mAP: 0.6155
================================
Model File:  maconha/models\detection_model-ex-015--loss-0006.411.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.5688
mAP: 0.5688
================================
Model File:  maconha/models\detection_model-ex-016--loss-0006.244.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.5392
mAP: 0.5392
================================
Model File:  maconha/models\detection_model-ex-017--loss-0005.889.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.6327
```

```
mAP: 0.6327
==============================
Model File:  maconha/models\detection_model-ex-020--loss-0005.258.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.5892
mAP: 0.5892
==============================
Model File:  maconha/models\detection_model-ex-021--loss-0004.794.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.6015
mAP: 0.6015
==============================
Model File:  maconha/models\detection_model-ex-022--loss-0004.249.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.5992
mAP: 0.5992
==============================
Model File:  maconha/models\detection_model-ex-026--loss-0004.058.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.6547
mAP: 0.6547
==============================
Model File:  maconha/models\detection_model-ex-029--loss-0003.992.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.6524
mAP: 0.6524
==============================
Model File:  maconha/models\detection_model-ex-031--loss-0003.888.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.6339
mAP: 0.6339
==============================
Model File:  maconha/models\detection_model-ex-034--loss-0003.798.h5

Using IoU :  0.5
Using Object Threshold :  0.3
Using Non-Maximum Suppression :  0.5
maconha: 0.6327
mAP: 0.6327
==============================
skipping the evaluation of maconha/models\detection_model-ex-094--loss-000
3.650.h5 because following exception occurred: OOM when allocating tensor
with shape[3,3,512,1024] and type float on /job:localhost/replica:0/task:
```

```
0/device:GPU:0 by allocator GPU_0_bfc
         [[node conv_70_25/random_uniform/RandomUniform (defined at D:\Usu
arios\spi112884\Anaconda3\lib\site-packages\tensorflow_core\python\framewo
rk\ops.py:1748) ]]
Hint: If you want to see a list of allocated tensors when OOM happens, add
report_tensor_allocations_upon_oom to RunOptions for current allocation in
fo.


Original stack trace for 'conv_70_25/random_uniform/RandomUniform':
  File "D:\Usuarios\spi112884\Anaconda3\lib\runpy.py", line 193, in _run_m
odule_as_main
    "__main__", mod_spec)
  File "D:\Usuarios\spi112884\Anaconda3\lib\runpy.py", line 85, in _run_co
de
    exec(code, run_globals)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\ipykernel_launch
er.py", line 16, in <module>
    app.launch_new_instance()
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\traitlets\config
\application.py", line 664, in launch_instance
    app.start()
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\ipykernel\kernel
app.py", line 563, in start
    self.io_loop.start()
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\tornado\platform
\asyncio.py", line 148, in start
    self.asyncio_loop.run_forever()
  File "D:\Usuarios\spi112884\Anaconda3\lib\asyncio\base_events.py", line
534, in run_forever
    self._run_once()
  File "D:\Usuarios\spi112884\Anaconda3\lib\asyncio\base_events.py", line
1771, in _run_once
    handle._run()
  File "D:\Usuarios\spi112884\Anaconda3\lib\asyncio\events.py", line 88, i
n _run
    self._context.run(self._callback, *self._args)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\tornado\ioloop.p
y", line 690, in <lambda>
    lambda f: self._run_callback(functools.partial(callback, future))
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\tornado\ioloop.p
y", line 743, in _run_callback
    ret = callback()
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\tornado\gen.py",
line 787, in inner
    self.run()
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\tornado\gen.py",
line 748, in run
    yielded = self.gen.send(value)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\ipykernel\kernel
base.py", line 365, in process_one
    yield gen.maybe_future(dispatch(*args))
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\tornado\gen.py",
line 209, in wrapper
    yielded = next(result)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\ipykernel\kernel
base.py", line 272, in dispatch_shell
    yield gen.maybe_future(handler(stream, idents, msg))
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\tornado\gen.py",
line 209, in wrapper
    yielded = next(result)
```

```
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\ipykernel\kernel
base.py", line 542, in execute_request
    user_expressions, allow_stdin,
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\tornado\gen.py",
line 209, in wrapper
    yielded = next(result)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\ipykernel\ipkern
el.py", line 294, in do_execute
    res = shell.run_cell(code, store_history=store_history, silent=silent)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\ipykernel\zmqshe
ll.py", line 536, in run_cell
    return super(ZMQInteractiveShell, self).run_cell(*args, **kwargs)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\IPython\core\int
eractiveshell.py", line 2855, in run_cell
    raw_cell, store_history, silent, shell_futures)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\IPython\core\int
eractiveshell.py", line 2881, in _run_cell
    return runner(coro)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\IPython\core\asy
nc_helpers.py", line 68, in _pseudo_sync_runner
    coro.send(None)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\IPython\core\int
eractiveshell.py", line 3058, in run_cell_async
    interactivity=interactivity, compiler=compiler, result=result)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\IPython\core\int
eractiveshell.py", line 3249, in run_ast_nodes
    if (await self.run_code(code, result,  async_=asy)):
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\IPython\core\int
eractiveshell.py", line 3326, in run_code
    exec(code_obj, self.user_global_ns, self.user_ns)
  File "<ipython-input-3-2a8d27d1921d>", line 1, in <module>
    metrics = trainer.evaluateModel(model_path="maconha/models", json_path
="maconha/json/detection_config.json", iou_threshold=0.5, object_threshold
=0.3, nms_threshold=0.5)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\imageai\Detectio
n\Custom\__init__.py", line 415, in evaluateModel
    infer_model = load_model(model_file)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\keras\engine\sav
ing.py", line 492, in load_wrapper
    return load_function(*args, **kwargs)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\keras\engine\sav
ing.py", line 584, in load_model
    model = _deserialize_model(h5dict, custom_objects, compile)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\keras\engine\sav
ing.py", line 274, in _deserialize_model
    model = model_from_config(model_config, custom_objects=custom_objects)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\keras\engine\sav
ing.py", line 627, in model_from_config
    return deserialize(config, custom_objects=custom_objects)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\keras\layers\__i
nit__.py", line 168, in deserialize
    printable_module_name='layer')
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\keras\utils\gene
ric_utils.py", line 147, in deserialize_keras_object
    list(custom_objects.items())))
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\keras\engine\net
work.py", line 1075, in from_config
    process_node(layer, node_data)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\keras\engine\net
work.py", line 1025, in process_node
    layer(unpack_singleton(input_tensors), **kwargs)
```

```
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\keras\engine\bas
e_layer.py", line 463, in __call__
    self.build(unpack_singleton(input_shapes))
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\keras\layers\con
volutional.py", line 141, in build
    constraint=self.kernel_constraint)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\keras\engine\bas
e_layer.py", line 279, in add_weight
    weight = K.variable(initializer(shape, dtype=dtype),
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\keras\initialize
rs.py", line 227, in __call__
    dtype=dtype, seed=self.seed)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\keras\backend\te
nsorflow_backend.py", line 4357, in random_uniform
    shape, minval=minval, maxval=maxval, dtype=dtype, seed=seed)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\tensorflow_core
\python\keras\backend.py", line 5494, in random_uniform
    shape, minval=minval, maxval=maxval, dtype=dtype, seed=seed)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\tensorflow_core
\python\ops\random_ops.py", line 245, in random_uniform
    rnd = gen_random_ops.random_uniform(shape, dtype, seed=seed1, seed2=se
ed2)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\tensorflow_core
\python\ops\gen_random_ops.py", line 822, in random_uniform
    name=name)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\tensorflow_core
\python\framework\op_def_library.py", line 794, in _apply_op_helper
    op_def=op_def)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\tensorflow_core
\python\util\deprecation.py", line 507, in new_func
    return func(*args, **kwargs)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\tensorflow_core
\python\framework\ops.py", line 3357, in create_op
    attrs, op_def, compute_device)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\tensorflow_core
\python\framework\ops.py", line 3426, in _create_op_internal
    op_def=op_def)
  File "D:\Usuarios\spi112884\Anaconda3\lib\site-packages\tensorflow_core
\python\framework\ops.py", line 1748, in __init__
    self._traceback = tf_stack.extract_stack()

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In [ ]:

```
from imageai.Detection.Custom import DetectionModelTrainer

trainer = DetectionModelTrainer()
trainer.setModelTypeAsYOLOv3()
trainer.setDataDirectory(data_directory="maconha")
metrics = trainer.evaluateModel(model_path="maconha/models2", json_path="maconha/json/detection_config.json", iou_threshold=0.5, object_threshold=0.3, nms_threshold=0.5)
print(metrics)
```

```
Starting Model evaluation....
```

In [ ]:

```
from imageai.Detection.Custom import DetectionModelTrainer

trainer = DetectionModelTrainer()
trainer.setModelTypeAsYOLOv3()
trainer.setDataDirectory(data_directory="maconha")
metrics = trainer.evaluateModel(model_path="maconha/models2", json_path="maconha/json/detection_config.json", iou_threshold=0.5, object_threshold=0.3, nms_threshold=0.5)
print(metrics)
```

In [ ]:

```

```