```
 1  C:\Users\jdeag\Desktop\project\ArtificialIntel\BuildingIdentifier\venv\
    Scripts\python.exe C:/Users/jdeag/Desktop/project/ArtificialIntel/
    BuildingIdentifier/ImageAnnotation/KerasTunerDeagan.py
 2  2021-09-29 13:41:10.409940: W tensorflow/stream_executor/platform/default
    /dso_loader.cc:64] Could not load dynamic library 'cudart64_110.dll';
    dlerror: cudart64_110.dll not found
 3  2021-09-29 13:41:10.410149: I tensorflow/stream_executor/cuda/cudart_stub
    .cc:29] Ignore above cudart dlerror if you do not have a GPU set up on
    your machine.
 4  THIS IS THE PROPER KERAS TUNER
    //////////////////////////////////////////////////////////////////////////
    //////////////////////////////////////////////////////////////////////////
    ////////////////////
 5  2.6.0
 6  Found 7811 files belonging to 6 classes.
 7  Using 6249 files for training.
 8  2021-09-29 13:41:25.009949: W tensorflow/stream_executor/platform/default
    /dso_loader.cc:64] Could not load dynamic library 'cudart64_110.dll';
    dlerror: cudart64_110.dll not found
 9  2021-09-29 13:41:25.010893: W tensorflow/stream_executor/platform/default
    /dso_loader.cc:64] Could not load dynamic library 'cublas64_11.dll';
    dlerror: cublas64_11.dll not found
10  2021-09-29 13:41:25.011815: W tensorflow/stream_executor/platform/default
    /dso_loader.cc:64] Could not load dynamic library 'cublasLt64_11.dll';
    dlerror: cublasLt64_11.dll not found
11  2021-09-29 13:41:25.012779: W tensorflow/stream_executor/platform/default
    /dso_loader.cc:64] Could not load dynamic library 'cufft64_10.dll';
    dlerror: cufft64_10.dll not found
12  2021-09-29 13:41:25.013737: W tensorflow/stream_executor/platform/default
    /dso_loader.cc:64] Could not load dynamic library 'curand64_10.dll';
    dlerror: curand64_10.dll not found
13  2021-09-29 13:41:25.014650: W tensorflow/stream_executor/platform/default
    /dso_loader.cc:64] Could not load dynamic library 'cusolver64_11.dll';
    dlerror: cusolver64_11.dll not found
14  2021-09-29 13:41:25.015558: W tensorflow/stream_executor/platform/default
    /dso_loader.cc:64] Could not load dynamic library 'cusparse64_11.dll';
    dlerror: cusparse64_11.dll not found
15  2021-09-29 13:41:25.016465: W tensorflow/stream_executor/platform/default
    /dso_loader.cc:64] Could not load dynamic library 'cudnn64_8.dll';
    dlerror: cudnn64_8.dll not found
16  2021-09-29 13:41:25.017033: W tensorflow/core/common_runtime/gpu/
    gpu_device.cc:1835] Cannot dlopen some GPU libraries. Please make sure
    the missing libraries mentioned above are installed properly if you would
     like to use GPU. Follow the guide at https://www.tensorflow.org/install/
    gpu for how to download and setup the required libraries for your
    platform.
17  Skipping registering GPU devices...
18  2021-09-29 13:41:25.018375: I tensorflow/core/platform/cpu_feature_guard.
    cc:142] This TensorFlow binary is optimized with oneAPI Deep Neural
    Network Library (oneDNN) to use the following CPU instructions in
    performance-critical operations:  AVX AVX2
19  To enable them in other operations, rebuild TensorFlow with the
    appropriate compiler flags.
20  Found 7811 files belonging to 6 classes.
21  Using 1562 files for validation.
22  Found 864 files belonging to 6 classes.
23  Model: "sequential"
```

```
24  _____
25  Layer (type)                 Output Shape               Param #
26  ================================================================
27  rescaling (Rescaling)        (None, 256, 256, 3)        0
28  _____
29  random_flip (RandomFlip)     (None, 256, 256, 3)        0
30  _____
31  random_rotation (RandomRotat (None, 256, 256, 3)        0
32  _____
33  conv2d (Conv2D)              (None, 254, 254, 32)       896
34  _____
35  max_pooling2d (MaxPooling2D) (None, 127, 127, 32)       0
36  _____
37  conv2d_1 (Conv2D)            (None, 125, 125, 64)       18496
38  _____
39  max_pooling2d_1 (MaxPooling2 (None, 62, 62, 64)         0
40  _____
41  conv2d_2 (Conv2D)            (None, 60, 60, 128)        73856
42  _____
43  conv2d_3 (Conv2D)            (None, 58, 58, 128)        147584
44  _____
45  max_pooling2d_2 (MaxPooling2 (None, 29, 29, 128)        0
46  _____
47  flatten (Flatten)            (None, 107648)             0
48  _____
49  dense (Dense)                (None, 256)                27558144
50  _____
51  dense_1 (Dense)              (None, 128)                32896
52  _____
53  dense_2 (Dense)              (None, 6)                  774
54  ================================================================
55  Total params: 27,832,646
56  Trainable params: 27,832,646
57  Non-trainable params: 0
58  _____
59  Epoch 1/10
60  C:\Users\jdeag\Desktop\project\ArtificialIntel\BuildingIdentifier\venv\
    lib\site-packages\keras\backend.py:4906: UserWarning: "`
    sparse_categorical_crossentropy` received `from_logits=True`, but the `
    output` argument was produced by a sigmoid or softmax activation and thus
     does not represent logits. Was this intended?"
61    warnings.warn(
62  2021-09-29 13:41:26.309543: I tensorflow/compiler/mlir/
    mlir_graph_optimization_pass.cc:185] None of the MLIR Optimization Passes
     are enabled (registered 2)
63    1/196 [.............................] - ETA: 13:18 - loss: 1.7830 -
    accuracy: 0.06252021-09-29 13:41:30.015526: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
64    4/196 [.............................] - ETA: 7:02 - loss: 3.5954 -
    accuracy: 0.19532021-09-29 13:41:36.537912: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
65    5/196 [.............................] - ETA: 6:59 - loss: 3.1910 -
    accuracy: 0.20622021-09-29 13:41:38.707199: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
66   13/196 [>............................] - ETA: 6:46 - loss: 2.1086 -
    accuracy: 0.33892021-09-29 13:41:56.665412: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
```

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67    46/196 [=====>.....................] - ETA: 5:33 - loss: 1.5954 -
      accuracy: 0.41712021-09-29 13:43:09.935129: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
68 2021-09-29 13:43:10.068909: W tensorflow/core/lib/png/png_io.cc:88] PNG
      warning: iCCP: known incorrect sRGB profile
69    56/196 [=======>....................] - ETA: 5:12 - loss: 1.5496 -
      accuracy: 0.42692021-09-29 13:43:32.786563: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
70    58/196 [=======>....................] - ETA: 5:08 - loss: 1.5419 -
      accuracy: 0.42622021-09-29 13:43:37.328521: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
71    60/196 [========>...................] - ETA: 5:04 - loss: 1.5379 -
      accuracy: 0.42712021-09-29 13:43:41.805583: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
72    65/196 [========>...................] - ETA: 4:53 - loss: 1.5234 -
      accuracy: 0.42552021-09-29 13:43:53.068228: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
73    73/196 [==========>.................] - ETA: 4:35 - loss: 1.5054 -
      accuracy: 0.42472021-09-29 13:44:11.235039: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
74    76/196 [==========>.................] - ETA: 4:28 - loss: 1.4978 -
      accuracy: 0.42602021-09-29 13:44:18.087797: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
75    82/196 [===========>................] - ETA: 4:15 - loss: 1.4872 -
      accuracy: 0.42612021-09-29 13:44:31.386888: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
76    87/196 [============>...............] - ETA: 4:04 - loss: 1.4804 -
      accuracy: 0.42392021-09-29 13:44:42.448595: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
77    92/196 [=============>..............] - ETA: 3:52 - loss: 1.4723 -
      accuracy: 0.42632021-09-29 13:44:53.747529: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
78    96/196 [=============>..............] - ETA: 3:43 - loss: 1.4682 -
      accuracy: 0.42902021-09-29 13:45:02.612453: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
79   109/196 [================>...........] - ETA: 3:14 - loss: 1.4539 -
      accuracy: 0.43842021-09-29 13:45:31.741380: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
80   117/196 [=================>..........] - ETA: 2:56 - loss: 1.4480 -
      accuracy: 0.43862021-09-29 13:45:49.840568: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
81   119/196 [=================>..........] - ETA: 2:52 - loss: 1.4481 -
      accuracy: 0.43752021-09-29 13:45:54.286151: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
82   122/196 [==================>.........] - ETA: 2:45 - loss: 1.4436 -
      accuracy: 0.43952021-09-29 13:46:00.905922: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
83 2021-09-29 13:46:01.155591: W tensorflow/core/lib/png/png_io.cc:88] PNG
      warning: iCCP: known incorrect sRGB profile
84   127/196 [==================>.........] - ETA: 2:34 - loss: 1.4367 -
      accuracy: 0.44192021-09-29 13:46:12.136351: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
85   130/196 [==================>.........] - ETA: 2:27 - loss: 1.4400 -
      accuracy: 0.44162021-09-29 13:46:18.833380: W tensorflow/core/lib/png/
      png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
86   131/196 [==================>.........] - ETA: 2:25 - loss: 1.4372 -
      accuracy: 0.44302021-09-29 13:46:21.114814: W tensorflow/core/lib/png/
```

```
 86  png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 87  134/196 [====================>..........] - ETA: 2:18 - loss: 1.4354 -
     accuracy: 0.44332021-09-29 13:46:27.913996: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 88  135/196 [====================>..........] - ETA: 2:16 - loss: 1.4343 -
     accuracy: 0.44352021-09-29 13:46:30.347469: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 89  2021-09-29 13:46:30.347858: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 90  154/196 [=======================>.......] - ETA: 1:34 - loss: 1.4217 -
     accuracy: 0.44742021-09-29 13:47:12.839726: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 91  166/196 [=========================>.....] - ETA: 1:07 - loss: 1.4197 -
     accuracy: 0.44522021-09-29 13:47:40.127309: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 92  172/196 [==========================>....] - ETA: 53s - loss: 1.4155 -
     accuracy: 0.44772021-09-29 13:47:53.932250: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 93  174/196 [==========================>....] - ETA: 49s - loss: 1.4135 -
     accuracy: 0.44812021-09-29 13:47:58.239377: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 94  196/196 [==============================] - ETA: 0s - loss: 1.4056 -
     accuracy: 0.44712021-09-29 13:48:56.904945: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 95  2021-09-29 13:48:57.169310: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 96  2021-09-29 13:48:57.909601: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 97  2021-09-29 13:49:08.949906: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 98  2021-09-29 13:49:09.457988: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 99  2021-09-29 13:49:15.715957: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
100  196/196 [==============================] - 477s 2s/step - loss: 1.4056
      - accuracy: 0.4471 - val_loss: 1.3133 - val_accuracy: 0.4795
101  Epoch 2/10
102  196/196 [==============================] - 554s 3s/step - loss: 1.3372
      - accuracy: 0.4502 - val_loss: 1.3281 - val_accuracy: 0.4808
103  Epoch 3/10
104  196/196 [==============================] - 524s 3s/step - loss: 1.3231
      - accuracy: 0.4481 - val_loss: 1.2957 - val_accuracy: 0.4744
105  Epoch 4/10
106  196/196 [==============================] - 529s 3s/step - loss: 1.3211
      - accuracy: 0.4529 - val_loss: 1.3037 - val_accuracy: 0.4930
107  Epoch 5/10
108  196/196 [==============================] - 541s 3s/step - loss: 1.3058
      - accuracy: 0.4646 - val_loss: 1.2720 - val_accuracy: 0.5026
109  Epoch 6/10
110  196/196 [==============================] - 544s 3s/step - loss: 1.2916
      - accuracy: 0.4753 - val_loss: 1.2591 - val_accuracy: 0.5038
111  Epoch 7/10
112  196/196 [==============================] - 547s 3s/step - loss: 1.2836
      - accuracy: 0.4753 - val_loss: 1.2401 - val_accuracy: 0.5038
113  Epoch 8/10
114  196/196 [==============================] - 552s 3s/step - loss: 1.2756
      - accuracy: 0.4785 - val_loss: 1.2646 - val_accuracy: 0.5038
```

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115  Epoch 9/10
116  196/196 [==============================] - 550s 3s/step - loss: 1.2698
     - accuracy: 0.4870 - val_loss: 1.2333 - val_accuracy: 0.5013
117  Epoch 10/10
118  196/196 [==============================] - 568s 3s/step - loss: 1.2673
     - accuracy: 0.4838 - val_loss: 1.2424 - val_accuracy: 0.5019
119  2021-09-29 15:11:27.833510: I tensorflow/core/kernels/data/
     shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
     while): 49 of 256
120  2021-09-29 15:11:37.687686: I tensorflow/core/kernels/data/
     shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
     while): 187 of 256
121  2021-09-29 15:11:38.663089: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
122  2021-09-29 15:11:41.123529: I tensorflow/core/kernels/data/
     shuffle_dataset_op.cc:228] Shuffle buffer filled.
123   3/27 [==>...........................] - ETA: 35s - loss: 1.2495 -
     accuracy: 0.54172021-09-29 15:11:46.727938: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
124   9/27 [=========>....................] - ETA: 32s - loss: 1.2702 -
     accuracy: 0.51392021-09-29 15:11:58.719134: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
125  2021-09-29 15:11:59.059579: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
126  2021-09-29 15:11:59.079059: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: profile 'ICC Profile': 'desc': ICC profile tag start not
     a multiple of 4
127  10/27 [==========>...................] - ETA: 28s - loss: 1.2732 -
     accuracy: 0.51562021-09-29 15:11:59.129278: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: profile 'ICC Profile': 'wtpt': ICC
     profile tag start not a multiple of 4
128  2021-09-29 15:11:59.129543: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: profile 'ICC Profile': 'bkpt': ICC profile tag start not
     a multiple of 4
129  2021-09-29 15:11:59.192592: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: profile 'ICC Profile': 'rXYZ': ICC profile tag start not
     a multiple of 4
130  2021-09-29 15:11:59.192757: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: profile 'ICC Profile': 'gXYZ': ICC profile tag start not
     a multiple of 4
131  2021-09-29 15:11:59.193019: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: profile 'ICC Profile': 'bXYZ': ICC profile tag start not
     a multiple of 4
132  2021-09-29 15:11:59.193264: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: profile 'ICC Profile': 'dmnd': ICC profile tag start not
     a multiple of 4
133  2021-09-29 15:11:59.193492: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: profile 'ICC Profile': 'dmdd': ICC profile tag start not
     a multiple of 4
134  2021-09-29 15:11:59.193720: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: profile 'ICC Profile': 'vued': ICC profile tag start not
     a multiple of 4
135  2021-09-29 15:11:59.193949: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: profile 'ICC Profile': 'view': ICC profile tag start not
     a multiple of 4
136  2021-09-29 15:11:59.194174: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: profile 'ICC Profile': 'lumi': ICC profile tag start not
```

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136 a multiple of 4
137 2021-09-29 15:11:59.194401: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: profile 'ICC Profile': 'meas': ICC profile tag start not
    a multiple of 4
138 2021-09-29 15:11:59.194628: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: profile 'ICC Profile': 'tech': ICC profile tag start not
    a multiple of 4
139 2021-09-29 15:11:59.194851: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: profile 'ICC Profile': 'rTRC': ICC profile tag start not
    a multiple of 4
140 2021-09-29 15:11:59.195077: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: profile 'ICC Profile': 'gTRC': ICC profile tag start not
    a multiple of 4
141 2021-09-29 15:11:59.195302: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: profile 'ICC Profile': 'bTRC': ICC profile tag start not
    a multiple of 4
142 17/27 [=================>............] - ETA: 12s - loss: 1.2789 -
    accuracy: 0.51292021-09-29 15:12:04.841787: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
143 27/27 [==============================] - 53s 1s/step - loss: 1.2853 -
    accuracy: 0.5081
144 Accuracy: 0.5081018805503845
145 Loss: 1.2853010892868042
146 end
147
148 Process finished with exit code 0
149
```