```
 1 C:\Users\jdeag\Desktop\project\ArtificialIntel\BuildingIdentifier\venv\
   Scripts\python.exe C:/Users/jdeag/Desktop/project/ArtificialIntel/
   BuildingIdentifier/ImageAnnotation/KerasTunerDeagan.py
 2 2021-10-04 14:08:21.604123: 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 2021-10-04 14:08:21.604481: 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 2021-10-04 14:08:46.913481: 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 2021-10-04 14:08:46.948275: 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 2021-10-04 14:08:46.949646: 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 2021-10-04 14:08:46.951207: 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 2021-10-04 14:08:46.952613: 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 2021-10-04 14:08:46.954153: 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 2021-10-04 14:08:46.955630: 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 2021-10-04 14:08:46.957101: 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 2021-10-04 14:08:46.957861: 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 2021-10-04 14:08:46.959409: 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, 64)      1792
34 _____
35 max_pooling2d (MaxPooling2D) (None, 127, 127, 64)      0
36 _____
37 conv2d_1 (Conv2D)            (None, 125, 125, 128)     73856
38 _____
39 max_pooling2d_1 (MaxPooling2 (None, 62, 62, 128)       0
40 _____
41 conv2d_2 (Conv2D)            (None, 60, 60, 256)       295168
42 _____
43 max_pooling2d_2 (MaxPooling2 (None, 30, 30, 256)       0
44 _____
45 flatten (Flatten)            (None, 230400)            0
46 _____
47 dense (Dense)                (None, 256)               58982656
48 _____
49 dense_1 (Dense)              (None, 128)               32896
50 _____
51 dense_2 (Dense)              (None, 6)                 774
52 ================================================================
53 Total params: 59,387,142
54 Trainable params: 59,387,142
55 Non-trainable params: 0
56 _____
57 Epoch 1/10
58 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?"
59   warnings.warn(
60 2021-10-04 14:08:48.398148: I tensorflow/compiler/mlir/
   mlir_graph_optimization_pass.cc:185] None of the MLIR Optimization Passes
    are enabled (registered 2)
61 2021-10-04 14:08:50.588953: W tensorflow/core/framework/
   cpu_allocator_impl.cc:80] Allocation of 528515072 exceeds 10% of free
   system memory.
62 2021-10-04 14:08:53.325873: W tensorflow/core/framework/
   cpu_allocator_impl.cc:80] Allocation of 528515072 exceeds 10% of free
   system memory.
63   1/196 [..............................] - ETA: 21:10 - loss: 1.8088 -
   accuracy: 0.09382021-10-04 14:08:54.433493: W tensorflow/core/framework/
   cpu_allocator_impl.cc:80] Allocation of 528515072 exceeds 10% of free
   system memory.
64 2021-10-04 14:08:54.469678: W tensorflow/core/lib/png/png_io.cc:88] PNG
   warning: iCCP: known incorrect sRGB profile
65 2021-10-04 14:08:57.111540: W tensorflow/core/framework/
   cpu_allocator_impl.cc:80] Allocation of 528515072 exceeds 10% of free
```

```
65  system memory.
66   2/196 [............................] - ETA: 12:04 - loss: 4.9258 -
     accuracy: 0.29692021-10-04 14:08:58.184305: W tensorflow/core/framework/
     cpu_allocator_impl.cc:80] Allocation of 528515072 exceeds 10% of free
     system memory.
67   4/196 [............................] - ETA: 12:00 - loss: 4.9568 -
     accuracy: 0.20312021-10-04 14:09:05.744315: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
68   5/196 [............................] - ETA: 11:54 - loss: 4.3046 -
     accuracy: 0.21882021-10-04 14:09:09.504534: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
69  13/196 [>...........................] - ETA: 11:33 - loss: 2.6249 -
     accuracy: 0.30532021-10-04 14:09:39.995045: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
70  46/196 [======>.....................] - ETA: 9:23 - loss: 1.7411 -
     accuracy: 0.40422021-10-04 14:11:43.441560: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
71  2021-10-04 14:11:43.714715: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
72  56/196 [=======>....................] - ETA: 8:47 - loss: 1.6682 -
     accuracy: 0.41632021-10-04 14:12:21.534799: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
73  58/196 [=======>....................] - ETA: 8:39 - loss: 1.6566 -
     accuracy: 0.41592021-10-04 14:12:31.464400: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
74  60/196 [========>...................] - ETA: 8:32 - loss: 1.6489 -
     accuracy: 0.41722021-10-04 14:12:36.643725: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
75  65/196 [========>...................] - ETA: 8:14 - loss: 1.6261 -
     accuracy: 0.41732021-10-04 14:12:55.976728: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
76  73/196 [==========>.................] - ETA: 7:45 - loss: 1.5983 -
     accuracy: 0.41872021-10-04 14:13:27.173536: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
77  76/196 [==========>.................] - ETA: 7:34 - loss: 1.5866 -
     accuracy: 0.42022021-10-04 14:13:38.552564: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
78  82/196 [===========>................] - ETA: 7:12 - loss: 1.5697 -
     accuracy: 0.42072021-10-04 14:14:01.703140: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
79  87/196 [============>...............] - ETA: 6:53 - loss: 1.5588 -
     accuracy: 0.41882021-10-04 14:14:20.916439: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
80  92/196 [=============>..............] - ETA: 6:35 - loss: 1.5462 -
     accuracy: 0.42122021-10-04 14:14:40.257502: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
81  96/196 [=============>..............] - ETA: 6:19 - loss: 1.5389 -
     accuracy: 0.42422021-10-04 14:14:55.734531: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
82  109/196 [===============>............] - ETA: 5:30 - loss: 1.5179 -
     accuracy: 0.43412021-10-04 14:15:48.215965: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
83  117/196 [=================>..........] - ETA: 5:00 - loss: 1.5076 -
     accuracy: 0.43462021-10-04 14:16:15.642072: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
84  119/196 [=================>..........] - ETA: 4:52 - loss: 1.5068 -
     accuracy: 0.43362021-10-04 14:16:23.199213: W tensorflow/core/lib/png/
```

```
 84  png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 85  122/196 [==================>...........] - ETA: 4:41 - loss: 1.5004 -
     accuracy: 0.43572021-10-04 14:16:34.104700: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 86  2021-10-04 14:16:34.182998: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 87  127/196 [===================>..........] - ETA: 4:21 - loss: 1.4911 -
     accuracy: 0.43822021-10-04 14:16:53.135170: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 88  131/196 [====================>.........] - ETA: 4:06 - loss: 1.4899 -
     accuracy: 0.43942021-10-04 14:17:04.210829: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 89  2021-10-04 14:17:07.752247: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 90  134/196 [====================>.........] - ETA: 3:55 - loss: 1.4873 -
     accuracy: 0.43982021-10-04 14:17:19.280563: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 91  135/196 [====================>.........] - ETA: 3:51 - loss: 1.4858 -
     accuracy: 0.44002021-10-04 14:17:23.165464: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 92  2021-10-04 14:17:23.262725: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 93  154/196 [=======================>.......] - ETA: 2:39 - loss: 1.4668 -
     accuracy: 0.44442021-10-04 14:18:34.426413: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 94  166/196 [=========================>.....] - ETA: 1:53 - loss: 1.4605 -
     accuracy: 0.44242021-10-04 14:19:20.229273: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 95  172/196 [=========================>....] - ETA: 1:30 - loss: 1.4544 -
     accuracy: 0.44492021-10-04 14:19:42.665028: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 96  174/196 [=========================>....] - ETA: 1:23 - loss: 1.4518 -
     accuracy: 0.44542021-10-04 14:19:49.743231: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 97  196/196 [==============================] - ETA: 0s - loss: 1.4399 -
     accuracy: 0.44472021-10-04 14:21:30.378558: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 98  2021-10-04 14:21:31.004992: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 99  2021-10-04 14:21:32.355992: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
100  2021-10-04 14:21:54.128422: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
101  2021-10-04 14:21:54.304535: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
102  2021-10-04 14:22:14.238918: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
103  196/196 [==============================] - 820s 4s/step - loss: 1.4399
     - accuracy: 0.4447 - val_loss: 1.3141 - val_accuracy: 0.4795
104  Epoch 2/10
105  196/196 [==============================] - 1267s 6s/step - loss: 1.3428
     - accuracy: 0.4550 - val_loss: 1.3091 - val_accuracy: 0.4795
106  Epoch 3/10
107  196/196 [==============================] - 1181s 6s/step - loss: 1.3291
     - accuracy: 0.4598 - val_loss: 1.2898 - val_accuracy: 0.4930
108  Epoch 4/10
109  196/196 [==============================] - 996s 5s/step - loss: 1.3115
```

```
109    - accuracy: 0.4615 - val_loss: 1.2718 - val_accuracy: 0.5006
110 Epoch 5/10
111 196/196 [==============================] - 1875s 10s/step - loss: 1.3046
       - accuracy: 0.4660 - val_loss: 1.2734 - val_accuracy: 0.4885
112 Epoch 6/10
113 196/196 [==============================] - 1448s 7s/step - loss: 1.2986
       - accuracy: 0.4665 - val_loss: 1.2782 - val_accuracy: 0.4917
114 Epoch 7/10
115 196/196 [==============================] - 1620s 8s/step - loss: 1.2842
       - accuracy: 0.4766 - val_loss: 1.2669 - val_accuracy: 0.4904
116 Epoch 8/10
117 196/196 [==============================] - 1392s 7s/step - loss: 1.2821
       - accuracy: 0.4751 - val_loss: 1.2462 - val_accuracy: 0.5026
118 Epoch 9/10
119 196/196 [==============================] - 1015s 5s/step - loss: 1.2760
       - accuracy: 0.4761 - val_loss: 1.2554 - val_accuracy: 0.4987
120 Epoch 10/10
121 196/196 [==============================] - 963s 5s/step - loss: 1.2697
       - accuracy: 0.4814 - val_loss: 1.2379 - val_accuracy: 0.5070
122 2021-10-04 17:38:52.628543: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 21 of 256
123 2021-10-04 17:39:02.574566: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 67 of 256
124 2021-10-04 17:39:12.555785: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 135 of 256
125 2021-10-04 17:39:17.424939: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
126 2021-10-04 17:39:23.196569: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 244 of 256
127 2021-10-04 17:39:23.636201: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:228] Shuffle buffer filled.
128   2/27 [=>............................] - ETA: 50s - loss: 1.2837 -
    accuracy: 0.6094  2021-10-04 17:39:31.169276: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
129   9/27 [=========>....................] - ETA: 1:06 - loss: 1.2576 -
    accuracy: 0.52782021-10-04 17:40:02.157192: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
130 10/27 [==========>...................] - ETA: 1:09 - loss: 1.2618 -
    accuracy: 0.53442021-10-04 17:40:03.760130: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
131 2021-10-04 17:40:04.008830: 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
132 2021-10-04 17:40:04.147276: 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
133 2021-10-04 17:40:04.148461: 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
134 2021-10-04 17:40:04.149436: 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
135 2021-10-04 17:40:04.350531: W tensorflow/core/lib/png/png_io.cc:88] PNG
```

135 warning: iCCP: profile 'ICC Profile': 'gXYZ': ICC profile tag start not
    a multiple of 4
136 2021-10-04 17:40:04.517528: 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
137 2021-10-04 17:40:04.518256: 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
138 2021-10-04 17:40:04.518963: 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
139 2021-10-04 17:40:04.519667: 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
140 2021-10-04 17:40:04.571834: 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
141 2021-10-04 17:40:04.572548: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: profile 'ICC Profile': 'lumi': ICC profile tag start not
    a multiple of 4
142 2021-10-04 17:40:04.673257: 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
143 2021-10-04 17:40:04.673731: 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
144 2021-10-04 17:40:04.753323: 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
145 2021-10-04 17:40:04.754031: 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
146 2021-10-04 17:40:04.754722: 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
147 17/27 [==================>...........] - ETA: 38s - loss: 1.2815 -
    accuracy: 0.52392021-10-04 17:40:28.846076: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
148 27/27 [==============================] - 121s 3s/step - loss: 1.2845 -
    accuracy: 0.5174
149 Accuracy: 0.5173611044883728
150 Loss: 1.2844961881637573
151 end
152
153 Process finished with exit code 0
154