```
 1 C:\Users\jdeag\Desktop\project\ArtificialIntel\BuildingIdentifier\venv\
   Scripts\python.exe C:/Users/jdeag/Desktop/project/ArtificialIntel/
   BuildingIdentifier/ImageAnnotation/KerasTunerDeagan.py
 2 2021-10-01 08:21:31.315718: 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 2021-10-01 08:21:31.316312: 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 2021-10-01 08:21:43.375914: 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 2021-10-01 08:21:43.376866: 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 2021-10-01 08:21:43.377801: 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 2021-10-01 08:21:43.378732: 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 2021-10-01 08:21:43.379651: 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 2021-10-01 08:21:43.380574: 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 2021-10-01 08:21:43.381499: 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 2021-10-01 08:21:43.382465: 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 2021-10-01 08:21:43.382644: 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 2021-10-01 08:21:43.387789: 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, 128)               29491328
48  _____
49  dense_1 (Dense)              (None, 6)                 774
50  ================================================================
51  Total params: 29,862,918
52  Trainable params: 29,862,918
53  Non-trainable params: 0
54  _____
55  Epoch 1/10
56  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?"
57    warnings.warn(
58  2021-10-01 08:21:44.767934: I tensorflow/compiler/mlir/
    mlir_graph_optimization_pass.cc:185] None of the MLIR Optimization Passes
     are enabled (registered 2)
59  2021-10-01 08:21:46.047674: W tensorflow/core/framework/
    cpu_allocator_impl.cc:80] Allocation of 528515072 exceeds 10% of free
    system memory.
60  2021-10-01 08:21:46.332010: W tensorflow/core/framework/
    cpu_allocator_impl.cc:80] Allocation of 256000000 exceeds 10% of free
    system memory.
61  2021-10-01 08:21:48.949978: W tensorflow/core/framework/
    cpu_allocator_impl.cc:80] Allocation of 256000000 exceeds 10% of free
    system memory.
62  2021-10-01 08:21:50.240015: W tensorflow/core/framework/
    cpu_allocator_impl.cc:80] Allocation of 264257536 exceeds 10% of free
    system memory.
63  2021-10-01 08:21:50.243347: W tensorflow/core/framework/
    cpu_allocator_impl.cc:80] Allocation of 528515072 exceeds 10% of free
    system memory.
64    1/196 [..............................] - ETA: 25:30 - loss: 1.7988 -
```

64 accuracy: 0.12502021-10-01 08:21:52.428642: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
65 4/196 [...........................] - ETA: 12:21 - loss: 6.3057 -
accuracy: 0.28912021-10-01 08:22:04.225746: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
66 5/196 [...........................] - ETA: 12:05 - loss: 5.3501 -
accuracy: 0.32502021-10-01 08:22:07.661918: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
67 13/196 [>..........................] - ETA: 11:16 - loss: 2.9602 -
accuracy: 0.34862021-10-01 08:22:36.636837: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
68 46/196 [======>....................] - ETA: 9:02 - loss: 1.8377 -
accuracy: 0.41982021-10-01 08:24:35.146015: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
69 2021-10-01 08:24:35.352878: W tensorflow/core/lib/png/png_io.cc:88] PNG
warning: iCCP: known incorrect sRGB profile
70 56/196 [=======>...................] - ETA: 8:26 - loss: 1.7492 -
accuracy: 0.42912021-10-01 08:25:11.102723: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
71 58/196 [=======>...................] - ETA: 8:19 - loss: 1.7354 -
accuracy: 0.42832021-10-01 08:25:18.618787: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
72 60/196 [========>..................] - ETA: 8:12 - loss: 1.7254 -
accuracy: 0.42922021-10-01 08:25:25.836713: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
73 65/196 [========>..................] - ETA: 7:54 - loss: 1.6960 -
accuracy: 0.42842021-10-01 08:25:44.063640: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
74 73/196 [==========>................] - ETA: 7:26 - loss: 1.6599 -
accuracy: 0.42682021-10-01 08:26:14.373932: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
75 76/196 [==========>................] - ETA: 7:15 - loss: 1.6459 -
accuracy: 0.42802021-10-01 08:26:24.767279: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
76 82/196 [===========>...............] - ETA: 6:54 - loss: 1.6243 -
accuracy: 0.42802021-10-01 08:26:46.516628: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
77 87/196 [============>..............] - ETA: 6:36 - loss: 1.6096 -
accuracy: 0.42562021-10-01 08:27:05.543967: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
78 92/196 [=============>.............] - ETA: 6:18 - loss: 1.5950 -
accuracy: 0.42702021-10-01 08:27:23.379941: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
79 96/196 [=============>.............] - ETA: 6:03 - loss: 1.5856 -
accuracy: 0.42972021-10-01 08:27:37.982342: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
80 109/196 [================>..........] - ETA: 5:16 - loss: 1.5575 -
accuracy: 0.43892021-10-01 08:28:25.295617: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
81 117/196 [=================>.........] - ETA: 4:47 - loss: 1.5442 -
accuracy: 0.43942021-10-01 08:28:54.492138: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
82 119/196 [=================>.........] - ETA: 4:40 - loss: 1.5428 -
accuracy: 0.43802021-10-01 08:29:01.717762: W tensorflow/core/lib/png/
png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
83 122/196 [==================>........] - ETA: 4:29 - loss: 1.5356 -
accuracy: 0.44012021-10-01 08:29:12.933680: W tensorflow/core/lib/png/

```
 83 png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 84 2021-10-01 08:29:13.157107: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
 85 128/196 [===================>..........] - ETA: 4:07 - loss: 1.5255 -
    accuracy: 0.44292021-10-01 08:29:34.530831: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 86 129/196 [===================>..........] - ETA: 4:03 - loss: 1.5237 -
    accuracy: 0.44312021-10-01 08:29:38.803182: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 87 130/196 [===================>..........] - ETA: 4:00 - loss: 1.5255 -
    accuracy: 0.44212021-10-01 08:29:43.253564: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 88 133/196 [====================>.........] - ETA: 3:49 - loss: 1.5195 -
    accuracy: 0.44362021-10-01 08:29:52.604933: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 89 134/196 [====================>.........] - ETA: 3:45 - loss: 1.5186 -
    accuracy: 0.44382021-10-01 08:29:56.475636: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 90 2021-10-01 08:29:56.525435: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
 91 153/196 [========================>.......] - ETA: 2:36 - loss: 1.4954 -
    accuracy: 0.44792021-10-01 08:31:07.022878: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 92 165/196 [=========================>.....] - ETA: 1:52 - loss: 1.4866 -
    accuracy: 0.44532021-10-01 08:31:49.034549: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 93 172/196 [==========================>....] - ETA: 1:27 - loss: 1.4780 -
    accuracy: 0.44802021-10-01 08:32:17.029702: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 94 173/196 [==========================>....] - ETA: 1:23 - loss: 1.4763 -
    accuracy: 0.44822021-10-01 08:32:18.584259: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 95 196/196 [==============================] - ETA: 0s - loss: 1.4594 -
    accuracy: 0.44762021-10-01 08:34:15.386522: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 96 2021-10-01 08:34:15.802930: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
 97 2021-10-01 08:34:16.918953: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
 98 2021-10-01 08:34:42.131381: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
 99 2021-10-01 08:34:42.559377: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
100 2021-10-01 08:34:52.667592: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
101 196/196 [==============================] - 800s 4s/step - loss: 1.4594
     - accuracy: 0.4476 - val_loss: 1.3169 - val_accuracy: 0.4795
102 Epoch 2/10
103 196/196 [==============================] - 1523s 8s/step - loss: 1.3386
     - accuracy: 0.4538 - val_loss: 1.3014 - val_accuracy: 0.4827
104 Epoch 3/10
105 196/196 [==============================] - 1439s 7s/step - loss: 1.3139
     - accuracy: 0.4593 - val_loss: 1.2926 - val_accuracy: 0.4552
106 Epoch 4/10
107 196/196 [==============================] - 1717s 8s/step - loss: 1.3042
     - accuracy: 0.4665 - val_loss: 1.2660 - val_accuracy: 0.5013
108 Epoch 5/10
```

```
109  196/196 [==============================] - 2455s 12s/step - loss: 1.2970
        - accuracy: 0.4690 - val_loss: 1.2640 - val_accuracy: 0.5051
110  Epoch 6/10
111  196/196 [==============================] - 1416s 7s/step - loss: 1.2917
        - accuracy: 0.4722 - val_loss: 1.2625 - val_accuracy: 0.5000
112  Epoch 7/10
113  196/196 [==============================] - 1014s 5s/step - loss: 1.2811
        - accuracy: 0.4794 - val_loss: 1.2566 - val_accuracy: 0.4994
114  Epoch 8/10
115  196/196 [==============================] - 958s 5s/step - loss: 1.2752
        - accuracy: 0.4783 - val_loss: 1.2535 - val_accuracy: 0.4942
116  Epoch 9/10
117  196/196 [==============================] - 910s 5s/step - loss: 1.2730
        - accuracy: 0.4818 - val_loss: 1.2591 - val_accuracy: 0.4712
118  Epoch 10/10
119  196/196 [==============================] - 907s 5s/step - loss: 1.2703
        - accuracy: 0.4774 - val_loss: 1.2586 - val_accuracy: 0.5019
120  2021-10-01 12:01:08.078466: I tensorflow/core/kernels/data/
        shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
        while): 49 of 256
121  2021-10-01 12:01:18.176837: I tensorflow/core/kernels/data/
        shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
        while): 110 of 256
122  2021-10-01 12:01:26.847525: W tensorflow/core/lib/png/png_io.cc:88] PNG
        warning: iCCP: known incorrect sRGB profile
123  2021-10-01 12:01:28.501814: I tensorflow/core/kernels/data/
        shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
        while): 194 of 256
124  2021-10-01 12:01:34.583633: I tensorflow/core/kernels/data/
        shuffle_dataset_op.cc:228] Shuffle buffer filled.
125   3/27 [==>...........................] - ETA: 2:21 - loss: 1.2873 -
        accuracy: 0.58332021-10-01 12:01:54.796388: W tensorflow/core/lib/png/
        png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
126   9/27 [=========>....................] - ETA: 1:20 - loss: 1.2839 -
        accuracy: 0.53822021-10-01 12:02:22.527880: W tensorflow/core/lib/png/
        png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
127  10/27 [==========>...................] - ETA: 1:16 - loss: 1.2887 -
        accuracy: 0.53752021-10-01 12:02:23.575744: 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
128  2021-10-01 12:02:23.793095: 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
129  2021-10-01 12:02:23.793743: 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
130  2021-10-01 12:02:23.794487: 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
131  2021-10-01 12:02:23.886835: 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
132  2021-10-01 12:02:23.887839: 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
133  2021-10-01 12:02:23.888789: W tensorflow/core/lib/png/png_io.cc:88] PNG
        warning: iCCP: profile 'ICC Profile': 'dmnd': ICC profile tag start not
```

```
133 a multiple of 4
134 2021-10-01 12:02:23.889842: 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
135 2021-10-01 12:02:23.890904: 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
136 2021-10-01 12:02:23.891729: 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
137 2021-10-01 12:02:23.892631: 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
138 2021-10-01 12:02:23.893564: 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
139 2021-10-01 12:02:23.894384: 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
140 2021-10-01 12:02:23.894597: 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
141 2021-10-01 12:02:23.932647: 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
142 2021-10-01 12:02:23.932856: 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
143 2021-10-01 12:02:25.303550: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
144 16/27 [=================>.............] - ETA: 42s - loss: 1.2959 -
    accuracy: 0.52152021-10-01 12:02:42.021802: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
145 27/27 [==============================] - 114s 3s/step - loss: 1.3119 -
    accuracy: 0.5243
146 Accuracy: 0.5243055820465088
147 Loss: 1.311941385269165
148 end
149
150 Process finished with exit code 0
151
```