```
 1 C:\Users\jdeag\Desktop\project\ArtificialIntel\BuildingIdentifier\venv\
   Scripts\python.exe C:/Users/jdeag/Desktop/project/ArtificialIntel/
   BuildingIdentifier/ImageAnnotation/KerasTunerDeagan.py
 2 2021-09-27 08:41:59.050928: 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 2021-09-27 08:41:59.077221: 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 2021-09-27 08:42:22.118868: 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 2021-09-27 08:42:22.119886: 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 2021-09-27 08:42:22.120817: 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 2021-09-27 08:42:22.121749: 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 2021-09-27 08:42:22.122671: 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 2021-09-27 08:42:22.123599: 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 2021-09-27 08:42:22.124532: 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 2021-09-27 08:42:22.125463: 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 2021-09-27 08:42:22.125652: 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 2021-09-27 08:42:22.131147: 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  max_pooling2d_2 (MaxPooling2 (None, 30, 30, 128)     0
44  _____
45  flatten (Flatten)         (None, 115200)             0
46  _____
47  dense (Dense)             (None, 256)                29491456
48  _____
49  dense_1 (Dense)           (None, 128)                32896
50  _____
51  dense_2 (Dense)           (None, 6)                  774
52  =====================================================
53  Total params: 29,618,374
54  Trainable params: 29,618,374
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  2021-09-27 08:42:23.539185: I tensorflow/compiler/mlir/
    mlir_graph_optimization_pass.cc:185] None of the MLIR Optimization Passes
     are enabled (registered 2)
61  2021-09-27 08:42:25.074245: W tensorflow/core/framework/
    cpu_allocator_impl.cc:80] Allocation of 264257536 exceeds 10% of free
    system memory.
62  2021-09-27 08:42:26.417189: W tensorflow/core/framework/
    cpu_allocator_impl.cc:80] Allocation of 264257536 exceeds 10% of free
    system memory.
63    1/196 [..............................] - ETA: 13:01 - loss: 2.4492 -
    accuracy: 0.31252021-09-27 08:42:27.283153: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
64  2021-09-27 08:42:27.293433: W tensorflow/core/framework/
    cpu_allocator_impl.cc:80] Allocation of 264257536 exceeds 10% of free
    system memory.
65  2021-09-27 08:42:28.488801: W tensorflow/core/framework/
    cpu_allocator_impl.cc:80] Allocation of 264257536 exceeds 10% of free
```

```
65 system memory.
66    2/196 [..............................] - ETA: 6:19 - loss: 6.2164 -
   accuracy: 0.4062 2021-09-27 08:42:29.271103: W tensorflow/core/framework
   /cpu_allocator_impl.cc:80] Allocation of 264257536 exceeds 10% of free
   system memory.
67    4/196 [..............................] - ETA: 6:03 - loss: 4.5563 -
   accuracy: 0.36722021-09-27 08:42:32.803619: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
68    5/196 [..............................] - ETA: 5:57 - loss: 4.0512 -
   accuracy: 0.38752021-09-27 08:42:34.662731: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
69   13/196 [>.............................] - ETA: 5:39 - loss: 2.8055 -
   accuracy: 0.38222021-09-27 08:42:49.420833: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
70   46/196 [======>.......................] - ETA: 4:34 - loss: 2.1453 -
   accuracy: 0.42732021-09-27 08:43:49.400010: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
71 2021-09-27 08:43:49.536356: W tensorflow/core/lib/png/png_io.cc:88] PNG
   warning: iCCP: known incorrect sRGB profile
72   56/196 [=======>......................] - ETA: 4:15 - loss: 2.0652 -
   accuracy: 0.43532021-09-27 08:44:07.641622: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
73   58/196 [=======>......................] - ETA: 4:12 - loss: 2.0512 -
   accuracy: 0.43432021-09-27 08:44:11.495427: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
74   60/196 [========>.....................] - ETA: 4:08 - loss: 2.0405 -
   accuracy: 0.43492021-09-27 08:44:14.857486: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
75   65/196 [========>.....................] - ETA: 3:59 - loss: 2.0110 -
   accuracy: 0.43272021-09-27 08:44:24.095073: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
76   73/196 [=========>....................] - ETA: 3:44 - loss: 1.9700 -
   accuracy: 0.43072021-09-27 08:44:38.759245: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
77   76/196 [=========>....................] - ETA: 3:39 - loss: 1.9543 -
   accuracy: 0.43172021-09-27 08:44:44.193507: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
78   82/196 [==========>...................] - ETA: 3:28 - loss: 1.9277 -
   accuracy: 0.43142021-09-27 08:44:54.947347: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
79   87/196 [===========>..................] - ETA: 3:18 - loss: 1.9086 -
   accuracy: 0.42822021-09-27 08:45:04.194016: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
80   93/196 [============>.................] - ETA: 3:08 - loss: 1.8855 -
   accuracy: 0.42882021-09-27 08:45:16.459680: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
81   95/196 [============>.................] - ETA: 3:04 - loss: 1.8794 -
   accuracy: 0.43032021-09-27 08:45:19.853984: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
82  108/196 [==============>...............] - ETA: 2:41 - loss: 1.8387 -
   accuracy: 0.43982021-09-27 08:45:43.709538: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
83  116/196 [================>.............] - ETA: 2:27 - loss: 1.8183 -
   accuracy: 0.44022021-09-27 08:45:59.607345: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
84  119/196 [=================>............] - ETA: 2:21 - loss: 1.8116 -
   accuracy: 0.43932021-09-27 08:46:04.436585: W tensorflow/core/lib/png/
```

```
 84 png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 85 121/196 [=================>...........] - ETA: 2:17 - loss: 1.8047 -
    accuracy: 0.44092021-09-27 08:46:07.868021: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 86 2021-09-27 08:46:07.878628: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
 87 126/196 [==================>..........] - ETA: 2:08 - loss: 1.7903 -
    accuracy: 0.44322021-09-27 08:46:17.358056: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 88 129/196 [==================>..........] - ETA: 2:03 - loss: 1.7844 -
    accuracy: 0.44432021-09-27 08:46:22.732227: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 89 130/196 [==================>..........] - ETA: 2:01 - loss: 1.7856 -
    accuracy: 0.44332021-09-27 08:46:25.161681: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 90 133/196 [===================>.........] - ETA: 1:56 - loss: 1.7770 -
    accuracy: 0.44482021-09-27 08:46:30.425436: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 91 134/196 [===================>.........] - ETA: 1:54 - loss: 1.7753 -
    accuracy: 0.44502021-09-27 08:46:32.668223: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 92 2021-09-27 08:46:32.690774: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
 93 153/196 [======================>......] - ETA: 1:19 - loss: 1.7367 -
    accuracy: 0.44892021-09-27 08:47:09.428870: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 94 166/196 [========================>.....] - ETA: 55s - loss: 1.7173 -
    accuracy: 0.44652021-09-27 08:47:35.355688: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 95 169/196 [========================>.....] - ETA: 50s - loss: 1.7138 -
    accuracy: 0.44712021-09-27 08:47:41.904870: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 96 171/196 [=========================>....] - ETA: 46s - loss: 1.7067 -
    accuracy: 0.44902021-09-27 08:47:44.521354: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 97 196/196 [============================] - ETA: 0s - loss: 1.6743 -
    accuracy: 0.44862021-09-27 08:48:52.763225: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 98 2021-09-27 08:48:53.411502: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
 99 2021-09-27 08:48:54.183616: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
100 2021-09-27 08:49:08.669247: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
101 2021-09-27 08:49:08.743597: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
102 2021-09-27 08:49:13.978834: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
103 196/196 [============================] - 416s 2s/step - loss: 1.6743
    - accuracy: 0.4486 - val_loss: 1.4213 - val_accuracy: 0.4795
104 Epoch 2/10
105 196/196 [============================] - 555s 3s/step - loss: 1.4169
    - accuracy: 0.4540 - val_loss: 1.4022 - val_accuracy: 0.4795
106 Epoch 3/10
107 196/196 [============================] - 891s 5s/step - loss: 1.3901
    - accuracy: 0.4495 - val_loss: 1.3510 - val_accuracy: 0.4795
108 Epoch 4/10
```

```
109  196/196 [==============================] - 627s 3s/step - loss: 1.3743
       - accuracy: 0.4532 - val_loss: 1.3413 - val_accuracy: 0.4859
110  Epoch 5/10
111  196/196 [==============================] - 666s 3s/step - loss: 1.3600
       - accuracy: 0.4609 - val_loss: 1.3277 - val_accuracy: 0.4853
112  Epoch 6/10
113  196/196 [==============================] - 637s 3s/step - loss: 1.3480
       - accuracy: 0.4689 - val_loss: 1.3239 - val_accuracy: 0.4994
114  Epoch 7/10
115  196/196 [==============================] - 642s 3s/step - loss: 1.3364
       - accuracy: 0.4710 - val_loss: 1.3156 - val_accuracy: 0.4962
116  Epoch 8/10
117  196/196 [==============================] - 640s 3s/step - loss: 1.3305
       - accuracy: 0.4770 - val_loss: 1.3211 - val_accuracy: 0.4859
118  Epoch 9/10
119  196/196 [==============================] - 628s 3s/step - loss: 1.3252
       - accuracy: 0.4730 - val_loss: 1.3061 - val_accuracy: 0.4968
120  Epoch 10/10
121  196/196 [==============================] - 602s 3s/step - loss: 1.3158
       - accuracy: 0.4791 - val_loss: 1.2841 - val_accuracy: 0.5032
122  2021-09-27 10:28:09.645874: I tensorflow/core/kernels/data/
       shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
       while): 3 of 256
123  2021-09-27 10:28:19.297383: I tensorflow/core/kernels/data/
       shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
       while): 27 of 256
124  2021-09-27 10:28:29.550781: I tensorflow/core/kernels/data/
       shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
       while): 81 of 256
125  2021-09-27 10:28:38.740202: I tensorflow/core/kernels/data/
       shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
       while): 117 of 256
126  2021-09-27 10:28:48.998162: I tensorflow/core/kernels/data/
       shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
       while): 148 of 256
127  2021-09-27 10:28:57.348703: W tensorflow/core/lib/png/png_io.cc:88] PNG
       warning: iCCP: known incorrect sRGB profile
128  2021-09-27 10:29:00.847573: I tensorflow/core/kernels/data/
       shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
       while): 202 of 256
129  2021-09-27 10:29:09.167806: I tensorflow/core/kernels/data/
       shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
       while): 236 of 256
130  2021-09-27 10:29:12.982847: I tensorflow/core/kernels/data/
       shuffle_dataset_op.cc:228] Shuffle buffer filled.
131   3/27 [==>...........................] - ETA: 3:31 - loss: 1.2920 -
       accuracy: 0.58332021-09-27 10:29:39.101268: W tensorflow/core/lib/png/
       png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
132   9/27 [=========>....................] - ETA: 1:58 - loss: 1.2995 -
       accuracy: 0.52432021-09-27 10:30:17.559595: W tensorflow/core/lib/png/
       png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
133  10/27 [==========>...................] - ETA: 1:46 - loss: 1.3053 -
       accuracy: 0.52502021-09-27 10:30:18.908862: 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
134  2021-09-27 10:30:19.016615: W tensorflow/core/lib/png/png_io.cc:88] PNG
       warning: iCCP: profile 'ICC Profile': 'wtpt': ICC profile tag start not
```

```
134 a multiple of 4
135 2021-09-27 10:30:19.053599: 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
136 2021-09-27 10:30:19.054588: 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
137 2021-09-27 10:30:19.055555: 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
138 2021-09-27 10:30:19.056523: 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
139 2021-09-27 10:30:19.057491: 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
140 2021-09-27 10:30:19.114695: 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
141 2021-09-27 10:30:19.115639: 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
142 2021-09-27 10:30:19.116573: 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
143 2021-09-27 10:30:19.117514: 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
144 2021-09-27 10:30:19.118446: 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
145 2021-09-27 10:30:19.119107: 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
146 2021-09-27 10:30:19.119313: 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
147 2021-09-27 10:30:19.119522: 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
148 2021-09-27 10:30:19.119723: 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
149 2021-09-27 10:30:22.749606: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
150 17/27 [=================>...........] - ETA: 51s - loss: 1.3226 -
    accuracy: 0.52212021-09-27 10:30:44.423525: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
151 27/27 [============================] - 176s 4s/step - loss: 1.3297 -
    accuracy: 0.5150
152 Accuracy: 0.5150462985038757
153 Loss: 1.329714298248291
154 end
155
156 Process finished with exit code 0
157
```