```
 1 C:\Users\jdeag\Desktop\project\ArtificialIntel\BuildingIdentifier\venv\
   Scripts\python.exe C:/Users/jdeag/Desktop/project/ArtificialIntel/
   BuildingIdentifier/ImageAnnotation/KerasTunerDeagan.py
 2 2021-09-28 17:07:46.643991: 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 2021-09-28 17:07:46.644321: 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 2021-09-28 17:07:59.789030: 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 2021-09-28 17:07:59.789976: 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 2021-09-28 17:07:59.790887: 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 2021-09-28 17:07:59.791801: 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 2021-09-28 17:07:59.792701: 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 2021-09-28 17:07:59.793612: 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 2021-09-28 17:07:59.794528: 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 2021-09-28 17:07:59.795435: 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 2021-09-28 17:07:59.796024: 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 2021-09-28 17:07:59.797315: 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, 256)              65792
50  _____
51  dense_2 (Dense)              (None, 6)                1542
52  =============================================================
53  Total params: 29,652,038
54  Trainable params: 29,652,038
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  2021-09-28 17:08:00.934094: I tensorflow/compiler/mlir/
    mlir_graph_optimization_pass.cc:185] None of the MLIR Optimization Passes
     are enabled (registered 2)
61    1/196 [..............................] - ETA: 9:33 - loss: 1.8119 -
    accuracy: 0.0000e+002021-09-28 17:08:03.540117: W tensorflow/core/lib/png
    /png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
62    4/196 [..............................] - ETA: 5:24 - loss: 2.8573 -
    accuracy: 0.17972021-09-28 17:08:08.584153: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
63    5/196 [..............................] - ETA: 5:19 - loss: 2.5911 -
    accuracy: 0.20002021-09-28 17:08:10.221327: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
64   13/196 [>.............................] - ETA: 5:08 - loss: 1.9449 -
    accuracy: 0.33892021-09-28 17:08:23.745733: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
65   46/196 [======>.......................] - ETA: 4:15 - loss: 1.5476 -
    accuracy: 0.40012021-09-28 17:09:20.015687: W tensorflow/core/lib/png/
```

65 png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
66 2021-09-28 17:09:20.110288: W tensorflow/core/lib/png/png_io.cc:88] PNG
   warning: iCCP: known incorrect sRGB profile
67 56/196 [=======>......................] - ETA: 3:58 - loss: 1.5102 -
   accuracy: 0.41292021-09-28 17:09:37.014306: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
68 58/196 [=======>......................] - ETA: 3:54 - loss: 1.5040 -
   accuracy: 0.41272021-09-28 17:09:40.585962: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
69 60/196 [========>.....................] - ETA: 3:51 - loss: 1.5029 -
   accuracy: 0.41412021-09-28 17:09:43.899483: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
70 65/196 [========>.....................] - ETA: 3:43 - loss: 1.4912 -
   accuracy: 0.41442021-09-28 17:09:52.424040: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
71 73/196 [==========>...................] - ETA: 3:29 - loss: 1.4767 -
   accuracy: 0.41482021-09-28 17:10:06.219214: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
72 76/196 [==========>...................] - ETA: 3:24 - loss: 1.4700 -
   accuracy: 0.41652021-09-28 17:10:11.345082: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
73 82/196 [===========>..................] - ETA: 3:14 - loss: 1.4607 -
   accuracy: 0.41732021-09-28 17:10:21.484681: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
74 87/196 [============>.................] - ETA: 3:05 - loss: 1.4544 -
   accuracy: 0.41702021-09-28 17:10:30.035067: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
75 92/196 [=============>................] - ETA: 2:57 - loss: 1.4488 -
   accuracy: 0.41542021-09-28 17:10:38.726339: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
76 96/196 [=============>................] - ETA: 2:50 - loss: 1.4442 -
   accuracy: 0.41862021-09-28 17:10:45.498187: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
77 109/196 [================>.............] - ETA: 2:28 - loss: 1.4299 -
   accuracy: 0.42922021-09-28 17:11:07.990425: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
78 117/196 [==================>...........] - ETA: 2:14 - loss: 1.4234 -
   accuracy: 0.42982021-09-28 17:11:21.772759: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
79 119/196 [==================>...........] - ETA: 2:11 - loss: 1.4237 -
   accuracy: 0.42832021-09-28 17:11:25.209571: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
80 122/196 [==================>...........] - ETA: 2:06 - loss: 1.4207 -
   accuracy: 0.42902021-09-28 17:11:30.310558: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
81 2021-09-28 17:11:30.323612: W tensorflow/core/lib/png/png_io.cc:88] PNG
   warning: iCCP: known incorrect sRGB profile
82 127/196 [===================>..........] - ETA: 1:57 - loss: 1.4144 -
   accuracy: 0.43182021-09-28 17:11:38.981848: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
83 130/196 [===================>..........] - ETA: 1:52 - loss: 1.4192 -
   accuracy: 0.43172021-09-28 17:11:44.164909: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
84 131/196 [===================>..........] - ETA: 1:51 - loss: 1.4163 -
   accuracy: 0.43322021-09-28 17:11:45.984622: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
85 134/196 [===================>..........] - ETA: 1:46 - loss: 1.4151 -

```
 85  accuracy: 0.43382021-09-28 17:11:51.881511: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 86  135/196 [====================>..........] - ETA: 1:44 - loss: 1.4139 -
     accuracy: 0.43402021-09-28 17:11:53.283277: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 87  2021-09-28 17:11:53.359812: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 88  154/196 [=======================>.......] - ETA: 1:12 - loss: 1.4034 -
     accuracy: 0.43912021-09-28 17:12:26.911412: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 89  166/196 [========================>.....] - ETA: 51s - loss: 1.4003 -
     accuracy: 0.43752021-09-28 17:12:47.718167: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 90  172/196 [=========================>....] - ETA: 41s - loss: 1.3963 -
     accuracy: 0.44042021-09-28 17:12:58.099749: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 91  174/196 [==========================>....] - ETA: 37s - loss: 1.3952 -
     accuracy: 0.44092021-09-28 17:13:01.351173: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 92  196/196 [==============================] - ETA: 0s - loss: 1.3867 -
     accuracy: 0.44102021-09-28 17:13:46.948771: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 93  2021-09-28 17:13:47.570792: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 94  2021-09-28 17:13:48.386906: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 95  2021-09-28 17:13:56.556674: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 96  2021-09-28 17:13:56.942294: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 97  2021-09-28 17:14:02.477120: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 98  196/196 [==============================] - 369s 2s/step - loss: 1.3867
     - accuracy: 0.4410 - val_loss: 1.3306 - val_accuracy: 0.4603
 99  Epoch 2/10
100  196/196 [==============================] - 453s 2s/step - loss: 1.3082
     - accuracy: 0.4687 - val_loss: 1.3141 - val_accuracy: 0.4245
101  Epoch 3/10
102  196/196 [==============================] - 449s 2s/step - loss: 1.2998
     - accuracy: 0.4718 - val_loss: 1.2738 - val_accuracy: 0.4885
103  Epoch 4/10
104  196/196 [==============================] - 508s 3s/step - loss: 1.3000
     - accuracy: 0.4703 - val_loss: 1.2740 - val_accuracy: 0.4962
105  Epoch 5/10
106  196/196 [==============================] - 470s 2s/step - loss: 1.2821
     - accuracy: 0.4719 - val_loss: 1.2602 - val_accuracy: 0.5070
107  Epoch 6/10
108  196/196 [==============================] - 493s 3s/step - loss: 1.2755
     - accuracy: 0.4793 - val_loss: 1.2498 - val_accuracy: 0.5064
109  Epoch 7/10
110  196/196 [==============================] - 485s 2s/step - loss: 1.2672
     - accuracy: 0.4850 - val_loss: 1.2864 - val_accuracy: 0.4930
111  Epoch 8/10
112  196/196 [==============================] - 533s 3s/step - loss: 1.2674
     - accuracy: 0.4828 - val_loss: 1.2529 - val_accuracy: 0.5064
113  Epoch 9/10
114  196/196 [==============================] - 551s 3s/step - loss: 1.2612
```

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114  - accuracy: 0.4790 - val_loss: 1.2520 - val_accuracy: 0.4949
115 Epoch 10/10
116 196/196 [==============================] - 484s 2s/step - loss: 1.2559
     - accuracy: 0.4895 - val_loss: 1.2264 - val_accuracy: 0.5070
117 2021-09-28 18:28:22.714315: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 16 of 256
118 2021-09-28 18:28:36.103324: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 86 of 256
119 2021-09-28 18:28:45.067275: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 128 of 256
120 2021-09-28 18:28:52.721096: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 187 of 256
121 2021-09-28 18:28:56.482078: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
122 2021-09-28 18:29:03.214321: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 230 of 256
123 2021-09-28 18:29:05.051768: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:228] Shuffle buffer filled.
124  3/27 [==>...........................] - ETA: 40s - loss: 1.2500 -
    accuracy: 0.60422021-09-28 18:29:10.337589: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
125  9/27 [=========>....................] - ETA: 31s - loss: 1.2489 -
    accuracy: 0.55212021-09-28 18:29:21.027100: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
126 10/27 [==========>...................] - ETA: 27s - loss: 1.2499 -
    accuracy: 0.5500.394609: 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 2021-09-28 18:29:21.462859: 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 2021-09-28 18:29:21.463100: 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 2021-09-28 18:29:21.463330: 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 2021-09-28 18:29:21.463579: 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 2021-09-28 18:29:21.463810: 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 2021-09-28 18:29:21.464059: 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 2021-09-28 18:29:21.464314: 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 2021-09-28 18:29:21.464559: 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 2021-09-28 18:29:21.464808: 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 2021-09-28 18:29:21.465048: 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
137 2021-09-28 18:29:21.465286: 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 2021-09-28 18:29:21.465525: 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 2021-09-28 18:29:21.465753: 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 2021-09-28 18:29:21.465980: 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 2021-09-28 18:29:21.466215: 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 2021-09-28 18:29:21.485004: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
143 17/27 [==================>............] - ETA: 19s - loss: 1.2711 -
    accuracy: 0.54042021-09-28 18:29:38.581219: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
144 27/27 [==============================] - 90s 1s/step - loss: 1.2793 -
    accuracy: 0.5324
145 Accuracy: 0.53240740299224485
146 Loss: 1.279335856437683
147 end
148
149 Process finished with exit code 0
150
```