```
 1  C:\Users\jdeag\Desktop\project\ArtificialIntel\BuildingIdentifier\venv\
    Scripts\python.exe C:/Users/jdeag/Desktop/project/ArtificialIntel/
    BuildingIdentifier/ImageAnnotation/KerasTunerDeagan.py
 2  2021-09-24 14:03:20.193489: 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  2021-09-24 14:03:20.193712: 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  2021-09-24 14:03:32.039149: 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  2021-09-24 14:03:32.040149: 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  2021-09-24 14:03:32.041291: 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  2021-09-24 14:03:32.042279: 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  2021-09-24 14:03:32.043251: 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  2021-09-24 14:03:32.044179: 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  2021-09-24 14:03:32.045108: 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  2021-09-24 14:03:32.046040: 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  2021-09-24 14:03:32.046610: 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  2021-09-24 14:03:32.047962: 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 dropout (Dropout)            (None, 256)              0
50 _____
51 dense_1 (Dense)              (None, 128)              32896
52 _____
53 dense_2 (Dense)              (None, 6)                774
54 ========================================================
55 Total params: 29,618,374
56 Trainable params: 29,618,374
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 2021-09-24 14:03:33.233612: I tensorflow/compiler/mlir/
   mlir_graph_optimization_pass.cc:185] None of the MLIR Optimization Passes
   are enabled (registered 2)
63   1/196 [..........................] - ETA: 10:37 - loss: 1.7688 -
   accuracy: 0.28122021-09-24 14:03:36.144776: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
64   4/196 [..........................] - ETA: 5:21 - loss: 4.6904 -
   accuracy: 0.29692021-09-24 14:03:41.139125: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
65   5/196 [..........................] - ETA: 5:20 - loss: 4.0280 -
   accuracy: 0.33132021-09-24 14:03:42.852400: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
66  13/196 [>.........................] - ETA: 5:06 - loss: 2.4965 -
   accuracy: 0.35102021-09-24 14:03:56.202776: W tensorflow/core/lib/png/
   png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
```

```
67   46/196 [======>........................] - ETA: 4:12 - loss: 1.7447 -
     accuracy: 0.38452021-09-24 14:04:51.926128: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
68 2021-09-24 14:04:51.993737: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
69   56/196 [=======>.......................] - ETA: 3:55 - loss: 1.6774 -
     accuracy: 0.40012021-09-24 14:05:08.782643: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
70   58/196 [=======>.......................] - ETA: 3:52 - loss: 1.6684 -
     accuracy: 0.39922021-09-24 14:05:12.431810: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
71   60/196 [========>......................] - ETA: 3:49 - loss: 1.6601 -
     accuracy: 0.40052021-09-24 14:05:15.600712: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
72   65/196 [========>......................] - ETA: 3:40 - loss: 1.6380 -
     accuracy: 0.40002021-09-24 14:05:23.943038: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
73   73/196 [==========>....................] - ETA: 3:27 - loss: 1.6098 -
     accuracy: 0.39602021-09-24 14:05:37.541119: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
74   76/196 [==========>....................] - ETA: 3:22 - loss: 1.6000 -
     accuracy: 0.39602021-09-24 14:05:42.965151: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
75   82/196 [===========>...................] - ETA: 3:12 - loss: 1.5833 -
     accuracy: 0.39822021-09-24 14:05:52.894565: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
76   87/196 [============>..................] - ETA: 3:04 - loss: 1.5736 -
     accuracy: 0.39732021-09-24 14:06:01.425500: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
77   92/196 [=============>.................] - ETA: 2:55 - loss: 1.5609 -
     accuracy: 0.40182021-09-24 14:06:10.039002: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
78   96/196 [=============>.................] - ETA: 2:48 - loss: 1.5536 -
     accuracy: 0.40622021-09-24 14:06:16.892490: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
79  109/196 [================>..............] - ETA: 2:27 - loss: 1.5311 -
     accuracy: 0.41802021-09-24 14:06:39.289893: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
80  117/196 [=================>.............] - ETA: 2:14 - loss: 1.5193 -
     accuracy: 0.41962021-09-24 14:06:53.201781: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
81  119/196 [==================>............] - ETA: 2:10 - loss: 1.5177 -
     accuracy: 0.41892021-09-24 14:06:56.601510: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
82  122/196 [==================>............] - ETA: 2:05 - loss: 1.5111 -
     accuracy: 0.42142021-09-24 14:07:01.641071: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
83 2021-09-24 14:07:01.665719: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
84  127/196 [===================>...........] - ETA: 1:57 - loss: 1.5024 -
     accuracy: 0.42472021-09-24 14:07:10.352237: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
85  130/196 [===================>...........] - ETA: 1:52 - loss: 1.5046 -
     accuracy: 0.42452021-09-24 14:07:15.365044: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
86  131/196 [===================>...........] - ETA: 1:50 - loss: 1.5012 -
     accuracy: 0.42602021-09-24 14:07:17.146156: W tensorflow/core/lib/png/
```

```
 86  png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 87  135/196 [====================>..........] - ETA: 1:43 - loss: 1.4968 -
     accuracy: 0.42692021-09-24 14:07:22.756503: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 88  2021-09-24 14:07:24.241905: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 89  2021-09-24 14:07:24.296227: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 90  154/196 [=======================>.......] - ETA: 1:11 - loss: 1.4786 -
     accuracy: 0.43322021-09-24 14:07:58.079471: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 91  165/196 [=========================>.....] - ETA: 52s - loss: 1.4738 -
     accuracy: 0.43162021-09-24 14:08:16.643211: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 92  172/196 [==========================>....] - ETA: 41s - loss: 1.4669 -
     accuracy: 0.43482021-09-24 14:08:28.346744: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 93  173/196 [==========================>....] - ETA: 39s - loss: 1.4653 -
     accuracy: 0.43482021-09-24 14:08:30.088202: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 94  196/196 [==============================] - ETA: 0s - loss: 1.4530 -
     accuracy: 0.43382021-09-24 14:09:28.437855: W tensorflow/core/lib/png/
     png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
 95  2021-09-24 14:09:29.961461: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 96  2021-09-24 14:09:32.234678: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 97  2021-09-24 14:09:44.573144: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 98  2021-09-24 14:09:44.732178: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
 99  2021-09-24 14:09:48.932598: W tensorflow/core/lib/png/png_io.cc:88] PNG
     warning: iCCP: known incorrect sRGB profile
100  196/196 [==============================] - 382s 2s/step - loss: 1.4530
     - accuracy: 0.4338 - val_loss: 1.3118 - val_accuracy: 0.4795
101  Epoch 2/10
102  196/196 [==============================] - 569s 3s/step - loss: 1.3518
     - accuracy: 0.4538 - val_loss: 1.3040 - val_accuracy: 0.4795
103  Epoch 3/10
104  196/196 [==============================] - 521s 3s/step - loss: 1.3404
     - accuracy: 0.4540 - val_loss: 1.3141 - val_accuracy: 0.4795
105  Epoch 4/10
106  196/196 [==============================] - 587s 3s/step - loss: 1.3336
     - accuracy: 0.4524 - val_loss: 1.3071 - val_accuracy: 0.4808
107  Epoch 5/10
108  196/196 [==============================] - 594s 3s/step - loss: 1.3274
     - accuracy: 0.4554 - val_loss: 1.3093 - val_accuracy: 0.4641
109  Epoch 6/10
110  196/196 [==============================] - 566s 3s/step - loss: 1.3222
     - accuracy: 0.4548 - val_loss: 1.2694 - val_accuracy: 0.4840
111  Epoch 7/10
112  196/196 [==============================] - 818s 4s/step - loss: 1.3118
     - accuracy: 0.4620 - val_loss: 1.2622 - val_accuracy: 0.4936
113  Epoch 8/10
114  196/196 [==============================] - 631s 3s/step - loss: 1.3099
     - accuracy: 0.4646 - val_loss: 1.2740 - val_accuracy: 0.4962
115  Epoch 9/10
```

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116 196/196 [==============================] - 515s 3s/step - loss: 1.3014
    - accuracy: 0.4732 - val_loss: 1.2684 - val_accuracy: 0.4859
117 Epoch 10/10
118 196/196 [==============================] - 532s 3s/step - loss: 1.3013
    - accuracy: 0.4681 - val_loss: 1.2685 - val_accuracy: 0.4962
119 2021-09-24 15:39:18.937073: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 11 of 256
120 2021-09-24 15:39:29.873687: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 51 of 256
121 2021-09-24 15:39:40.213973: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 92 of 256
122 2021-09-24 15:39:50.093183: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 151 of 256
123 2021-09-24 15:39:58.193250: W tensorflow/core/lib/png/png_io.cc:88] PNG
    warning: iCCP: known incorrect sRGB profile
124 2021-09-24 15:39:59.001939: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:175] Filling up shuffle buffer (this may take a
    while): 192 of 256
125 2021-09-24 15:40:06.469498: I tensorflow/core/kernels/data/
    shuffle_dataset_op.cc:228] Shuffle buffer filled.
126  3/27 [==>...........................] - ETA: 3:16 - loss: 1.2622 -
    accuracy: 0.59382021-09-24 15:40:32.251092: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
127  9/27 [=========>....................] - ETA: 1:55 - loss: 1.2826 -
    accuracy: 0.53122021-09-24 15:41:11.715615: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
128 10/27 [==========>...................] - ETA: 1:45 - loss: 1.2917 -
    accuracy: 0.52812021-09-24 15:41:12.005111: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
129 2021-09-24 15:41:12.196853: 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
130 2021-09-24 15:41:12.213484: 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
131 2021-09-24 15:41:12.227616: 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
132 2021-09-24 15:41:12.227955: 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
133 2021-09-24 15:41:12.228325: 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
134 2021-09-24 15:41:12.273321: 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
135 2021-09-24 15:41:12.368635: 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
136 2021-09-24 15:41:12.416187: 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
```

```
137 2021-09-24 15:41:12.595219: 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
138 2021-09-24 15:41:12.595438: 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
139 2021-09-24 15:41:12.693863: 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
140 2021-09-24 15:41:12.694652: 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
141 2021-09-24 15:41:12.919171: 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
142 2021-09-24 15:41:12.919501: 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
143 2021-09-24 15:41:12.919733: 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
144 2021-09-24 15:41:12.919967: 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
145 17/27 [==================>...........] - ETA: 41s - loss: 1.3139 -
    accuracy: 0.52022021-09-24 15:41:23.266542: W tensorflow/core/lib/png/
    png_io.cc:88] PNG warning: iCCP: known incorrect sRGB profile
146 27/27 [==============================] - 140s 3s/step - loss: 1.3207 -
    accuracy: 0.5174
147 Accuracy: 0.5173611044883728
148 Loss: 1.3206504583358765
149 end
150
151 Process finished with exit code 0
152
```