

Layer (type)	Output Shape	Param #	Connected to
input_2 (InputLayer)	(None, 224, 224, 3)	0	
conv2d_120 (Conv2D)	(None, 112, 112, 64)	9408	input_2[0][0]
batch_normalization_v1_121 (Batch Normalization)	(None, 112, 112, 64)	256	conv2d_120[0][0]
activation_121 (Activation)	(None, 112, 112, 64)	0	batch_normalization_v1_121[0][0]
max_pooling2d_1 (MaxPooling2D)	(None, 56, 56, 64)	0	activation_121[0][0]
batch_normalization_v1_122 (Batch Normalization)	(None, 56, 56, 64)	256	max_pooling2d_1[0][0]
activation_122 (Activation)	(None, 56, 56, 64)	0	batch_normalization_v1_122[0][0]
conv2d_121 (Conv2D)	(None, 56, 56, 128)	8192	activation_122[0][0]
batch_normalization_v1_123 (Batch Normalization)	(None, 56, 56, 128)	512	conv2d_121[0][0]
activation_123 (Activation)	(None, 56, 56, 128)	0	batch_normalization_v1_123[0][0]
conv2d_122 (Conv2D)	(None, 56, 56, 32)	36864	activation_123[0][0]
concatenate_58 (Concatenate)	(None, 56, 56, 96)	0	max_pooling2d_1[0][0] conv2d_122[0][0]
batch_normalization_v1_124 (Batch Normalization)	(None, 56, 56, 96)	384	concatenate_58[0][0]
activation_124 (Activation)	(None, 56, 56, 96)	0	batch_normalization_v1_124[0][0]
conv2d_123 (Conv2D)	(None, 56, 56, 128)	12288	activation_124[0][0]
batch_normalization_v1_125 (Batch Normalization)	(None, 56, 56, 128)	512	conv2d_123[0][0]
activation_125 (Activation)	(None, 56, 56, 128)	0	batch_normalization_v1_125[0][0]
conv2d_124 (Conv2D)	(None, 56, 56, 32)	36864	activation_125[0][0]
concatenate_59 (Concatenate)	(None, 56, 56, 128)	0	concatenate_58[0][0] conv2d_124[0][0]
batch_normalization_v1_126 (Batch Normalization)	(None, 56, 56, 128)	512	concatenate_59[0][0]
activation_126 (Activation)	(None, 56, 56, 128)	0	batch_normalization_v1_126[0][0]
conv2d_125 (Conv2D)	(None, 56, 56, 128)	16384	activation_126[0][0]
batch_normalization_v1_127 (Batch Normalization)	(None, 56, 56, 128)	512	conv2d_125[0][0]
activation_127 (Activation)	(None, 56, 56, 128)	0	batch_normalization_v1_127[0][0]
conv2d_126 (Conv2D)	(None, 56, 56, 32)	36864	activation_127[0][0]
concatenate_60 (Concatenate)	(None, 56, 56, 160)	0	concatenate_59[0][0] conv2d_126[0][0]
batch_normalization_v1_128 (Batch Normalization)	(None, 56, 56, 160)	640	concatenate_60[0][0]
activation_128 (Activation)	(None, 56, 56, 160)	0	batch_normalization_v1_128[0][0]
conv2d_127 (Conv2D)	(None, 56, 56, 128)	20480	activation_128[0][0]
batch_normalization_v1_129 (Batch Normalization)	(None, 56, 56, 128)	512	conv2d_127[0][0]
activation_129 (Activation)	(None, 56, 56, 128)	0	batch_normalization_v1_129[0][0]
conv2d_128 (Conv2D)	(None, 56, 56, 32)	36864	activation_129[0][0]
concatenate_61 (Concatenate)	(None, 56, 56, 192)	0	concatenate_60[0][0] conv2d_128[0][0]
batch_normalization_v1_130 (Batch Normalization)	(None, 56, 56, 192)	768	concatenate_61[0][0]
activation_130 (Activation)	(None, 56, 56, 192)	0	batch_normalization_v1_130[0][0]
conv2d_129 (Conv2D)	(None, 56, 56, 128)	24576	activation_130[0][0]
batch_normalization_v1_131 (Batch Normalization)	(None, 56, 56, 128)	512	conv2d_129[0][0]
activation_131 (Activation)	(None, 56, 56, 128)	0	batch_normalization_v1_131[0][0]
conv2d_130 (Conv2D)	(None, 56, 56, 32)	36864	activation_131[0][0]

concatenate_62 (Concatenate)	(None, 56, 56, 224)	0	concatenate_61[0][0] conv2d_130[0][0]
batch_normalization_v1_132 (Batch Normalization)	(None, 56, 56, 224)	896	concatenate_62[0][0]
activation_132 (Activation)	(None, 56, 56, 224)	0	batch_normalization_v1_132[0][0]
conv2d_131 (Conv2D)	(None, 56, 56, 128)	28672	activation_132[0][0]
batch_normalization_v1_133 (Batch Normalization)	(None, 56, 56, 128)	512	conv2d_131[0][0]
activation_133 (Activation)	(None, 56, 56, 128)	0	batch_normalization_v1_133[0][0]
conv2d_132 (Conv2D)	(None, 56, 56, 32)	36864	activation_133[0][0]
concatenate_63 (Concatenate)	(None, 56, 56, 256)	0	concatenate_62[0][0] conv2d_132[0][0]
batch_normalization_v1_134 (Batch Normalization)	(None, 56, 56, 256)	1024	concatenate_63[0][0]
activation_134 (Activation)	(None, 56, 56, 256)	0	batch_normalization_v1_134[0][0]
conv2d_133 (Conv2D)	(None, 56, 56, 128)	32768	activation_134[0][0]
average_pooling2d_3 (Average Pooling)	(None, 28, 28, 128)	0	conv2d_133[0][0]
batch_normalization_v1_135 (Batch Normalization)	(None, 28, 28, 128)	512	average_pooling2d_3[0][0]
activation_135 (Activation)	(None, 28, 28, 128)	0	batch_normalization_v1_135[0][0]
conv2d_134 (Conv2D)	(None, 28, 28, 128)	16384	activation_135[0][0]
batch_normalization_v1_136 (Batch Normalization)	(None, 28, 28, 128)	512	conv2d_134[0][0]
activation_136 (Activation)	(None, 28, 28, 128)	0	batch_normalization_v1_136[0][0]
conv2d_135 (Conv2D)	(None, 28, 28, 32)	36864	activation_136[0][0]
concatenate_64 (Concatenate)	(None, 28, 28, 160)	0	average_pooling2d_3[0][0] conv2d_135[0][0]
batch_normalization_v1_137 (Batch Normalization)	(None, 28, 28, 160)	640	concatenate_64[0][0]
activation_137 (Activation)	(None, 28, 28, 160)	0	batch_normalization_v1_137[0][0]
conv2d_136 (Conv2D)	(None, 28, 28, 128)	20480	activation_137[0][0]
batch_normalization_v1_138 (Batch Normalization)	(None, 28, 28, 128)	512	conv2d_136[0][0]
activation_138 (Activation)	(None, 28, 28, 128)	0	batch_normalization_v1_138[0][0]
conv2d_137 (Conv2D)	(None, 28, 28, 32)	36864	activation_138[0][0]
concatenate_65 (Concatenate)	(None, 28, 28, 192)	0	concatenate_64[0][0] conv2d_137[0][0]
batch_normalization_v1_139 (Batch Normalization)	(None, 28, 28, 192)	768	concatenate_65[0][0]
activation_139 (Activation)	(None, 28, 28, 192)	0	batch_normalization_v1_139[0][0]
conv2d_138 (Conv2D)	(None, 28, 28, 128)	24576	activation_139[0][0]
batch_normalization_v1_140 (Batch Normalization)	(None, 28, 28, 128)	512	conv2d_138[0][0]
activation_140 (Activation)	(None, 28, 28, 128)	0	batch_normalization_v1_140[0][0]
conv2d_139 (Conv2D)	(None, 28, 28, 32)	36864	activation_140[0][0]
concatenate_66 (Concatenate)	(None, 28, 28, 224)	0	concatenate_65[0][0] conv2d_139[0][0]
batch_normalization_v1_141 (Batch Normalization)	(None, 28, 28, 224)	896	concatenate_66[0][0]
activation_141 (Activation)	(None, 28, 28, 224)	0	batch_normalization_v1_141[0][0]
conv2d_140 (Conv2D)	(None, 28, 28, 128)	28672	activation_141[0][0]
batch_normalization_v1_142 (Batch Normalization)	(None, 28, 28, 128)	512	conv2d_140[0][0]
activation_142 (Activation)	(None, 28, 28, 128)	0	batch_normalization_v1_142[0][0]
conv2d_141 (Conv2D)	(None, 28, 28, 32)	36864	activation_142[0][0]
concatenate_67 (Concatenate)	(None, 28, 28, 256)	0	concatenate_66[0][0] conv2d_141[0][0]

batch_normalization_v1_143 (Batch Normalization)	(None, 28, 28, 256)	1024	concatenate_67[0][0]
activation_143 (Activation)	(None, 28, 28, 256)	0	batch_normalization_v1_143[0][0]
conv2d_142 (Conv2D)	(None, 28, 28, 128)	32768	activation_143[0][0]
batch_normalization_v1_144 (Batch Normalization)	(None, 28, 28, 128)	512	conv2d_142[0][0]
activation_144 (Activation)	(None, 28, 28, 128)	0	batch_normalization_v1_144[0][0]
conv2d_143 (Conv2D)	(None, 28, 28, 32)	36864	activation_144[0][0]
concatenate_68 (Concatenate)	(None, 28, 28, 288)	0	concatenate_67[0][0] conv2d_143[0][0]
batch_normalization_v1_145 (Batch Normalization)	(None, 28, 28, 288)	1152	concatenate_68[0][0]
activation_145 (Activation)	(None, 28, 28, 288)	0	batch_normalization_v1_145[0][0]
conv2d_144 (Conv2D)	(None, 28, 28, 128)	36864	activation_145[0][0]
batch_normalization_v1_146 (Batch Normalization)	(None, 28, 28, 128)	512	conv2d_144[0][0]
activation_146 (Activation)	(None, 28, 28, 128)	0	batch_normalization_v1_146[0][0]
conv2d_145 (Conv2D)	(None, 28, 28, 32)	36864	activation_146[0][0]
concatenate_69 (Concatenate)	(None, 28, 28, 320)	0	concatenate_68[0][0] conv2d_145[0][0]
batch_normalization_v1_147 (Batch Normalization)	(None, 28, 28, 320)	1280	concatenate_69[0][0]
activation_147 (Activation)	(None, 28, 28, 320)	0	batch_normalization_v1_147[0][0]
conv2d_146 (Conv2D)	(None, 28, 28, 128)	40960	activation_147[0][0]
batch_normalization_v1_148 (Batch Normalization)	(None, 28, 28, 128)	512	conv2d_146[0][0]
activation_148 (Activation)	(None, 28, 28, 128)	0	batch_normalization_v1_148[0][0]
conv2d_147 (Conv2D)	(None, 28, 28, 32)	36864	activation_148[0][0]
concatenate_70 (Concatenate)	(None, 28, 28, 352)	0	concatenate_69[0][0] conv2d_147[0][0]
batch_normalization_v1_149 (Batch Normalization)	(None, 28, 28, 352)	1408	concatenate_70[0][0]
activation_149 (Activation)	(None, 28, 28, 352)	0	batch_normalization_v1_149[0][0]
conv2d_148 (Conv2D)	(None, 28, 28, 128)	45056	activation_149[0][0]
batch_normalization_v1_150 (Batch Normalization)	(None, 28, 28, 128)	512	conv2d_148[0][0]
activation_150 (Activation)	(None, 28, 28, 128)	0	batch_normalization_v1_150[0][0]
conv2d_149 (Conv2D)	(None, 28, 28, 32)	36864	activation_150[0][0]
concatenate_71 (Concatenate)	(None, 28, 28, 384)	0	concatenate_70[0][0] conv2d_149[0][0]
batch_normalization_v1_151 (Batch Normalization)	(None, 28, 28, 384)	1536	concatenate_71[0][0]
activation_151 (Activation)	(None, 28, 28, 384)	0	batch_normalization_v1_151[0][0]
conv2d_150 (Conv2D)	(None, 28, 28, 128)	49152	activation_151[0][0]
batch_normalization_v1_152 (Batch Normalization)	(None, 28, 28, 128)	512	conv2d_150[0][0]
activation_152 (Activation)	(None, 28, 28, 128)	0	batch_normalization_v1_152[0][0]
conv2d_151 (Conv2D)	(None, 28, 28, 32)	36864	activation_152[0][0]
concatenate_72 (Concatenate)	(None, 28, 28, 416)	0	concatenate_71[0][0] conv2d_151[0][0]
batch_normalization_v1_153 (Batch Normalization)	(None, 28, 28, 416)	1664	concatenate_72[0][0]
activation_153 (Activation)	(None, 28, 28, 416)	0	batch_normalization_v1_153[0][0]
conv2d_152 (Conv2D)	(None, 28, 28, 128)	53248	activation_153[0][0]
batch_normalization_v1_154 (Batch Normalization)	(None, 28, 28, 128)	512	conv2d_152[0][0]
activation_154 (Activation)	(None, 28, 28, 128)	0	batch_normalization_v1_154[0][0]
conv2d_153 (Conv2D)	(None, 28, 28, 32)	36864	activation_154[0][0]

concatenate_73 (Concatenate)	(None, 28, 28, 448)	0	concatenate_72[0][0] conv2d_153[0][0]
batch_normalization_v1_155 (Batch Normalization)	(None, 28, 28, 448)	1792	concatenate_73[0][0]
activation_155 (Activation)	(None, 28, 28, 448)	0	batch_normalization_v1_155[0][0]
conv2d_154 (Conv2D)	(None, 28, 28, 128)	57344	activation_155[0][0]
batch_normalization_v1_156 (Batch Normalization)	(None, 28, 28, 128)	512	conv2d_154[0][0]
activation_156 (Activation)	(None, 28, 28, 128)	0	batch_normalization_v1_156[0][0]
conv2d_155 (Conv2D)	(None, 28, 28, 32)	36864	activation_156[0][0]
concatenate_74 (Concatenate)	(None, 28, 28, 480)	0	concatenate_73[0][0] conv2d_155[0][0]
batch_normalization_v1_157 (Batch Normalization)	(None, 28, 28, 480)	1920	concatenate_74[0][0]
activation_157 (Activation)	(None, 28, 28, 480)	0	batch_normalization_v1_157[0][0]
conv2d_156 (Conv2D)	(None, 28, 28, 128)	61440	activation_157[0][0]
batch_normalization_v1_158 (Batch Normalization)	(None, 28, 28, 128)	512	conv2d_156[0][0]
activation_158 (Activation)	(None, 28, 28, 128)	0	batch_normalization_v1_158[0][0]
conv2d_157 (Conv2D)	(None, 28, 28, 32)	36864	activation_158[0][0]
concatenate_75 (Concatenate)	(None, 28, 28, 512)	0	concatenate_74[0][0] conv2d_157[0][0]
batch_normalization_v1_159 (Batch Normalization)	(None, 28, 28, 512)	2048	concatenate_75[0][0]
activation_159 (Activation)	(None, 28, 28, 512)	0	batch_normalization_v1_159[0][0]
conv2d_158 (Conv2D)	(None, 28, 28, 256)	131072	activation_159[0][0]
average_pooling2d_4 (Average Pooling)	(None, 14, 14, 256)	0	conv2d_158[0][0]
batch_normalization_v1_160 (Batch Normalization)	(None, 14, 14, 256)	1024	average_pooling2d_4[0][0]
activation_160 (Activation)	(None, 14, 14, 256)	0	batch_normalization_v1_160[0][0]
conv2d_159 (Conv2D)	(None, 14, 14, 128)	32768	activation_160[0][0]
batch_normalization_v1_161 (Batch Normalization)	(None, 14, 14, 128)	512	conv2d_159[0][0]
activation_161 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_161[0][0]
conv2d_160 (Conv2D)	(None, 14, 14, 32)	36864	activation_161[0][0]
concatenate_76 (Concatenate)	(None, 14, 14, 288)	0	average_pooling2d_4[0][0] conv2d_160[0][0]
batch_normalization_v1_162 (Batch Normalization)	(None, 14, 14, 288)	1152	concatenate_76[0][0]
activation_162 (Activation)	(None, 14, 14, 288)	0	batch_normalization_v1_162[0][0]
conv2d_161 (Conv2D)	(None, 14, 14, 128)	36864	activation_162[0][0]
batch_normalization_v1_163 (Batch Normalization)	(None, 14, 14, 128)	512	conv2d_161[0][0]
activation_163 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_163[0][0]
conv2d_162 (Conv2D)	(None, 14, 14, 32)	36864	activation_163[0][0]
concatenate_77 (Concatenate)	(None, 14, 14, 320)	0	concatenate_76[0][0] conv2d_162[0][0]
batch_normalization_v1_164 (Batch Normalization)	(None, 14, 14, 320)	1280	concatenate_77[0][0]
activation_164 (Activation)	(None, 14, 14, 320)	0	batch_normalization_v1_164[0][0]
conv2d_163 (Conv2D)	(None, 14, 14, 128)	40960	activation_164[0][0]
batch_normalization_v1_165 (Batch Normalization)	(None, 14, 14, 128)	512	conv2d_163[0][0]
activation_165 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_165[0][0]
conv2d_164 (Conv2D)	(None, 14, 14, 32)	36864	activation_165[0][0]
concatenate_78 (Concatenate)	(None, 14, 14, 352)	0	concatenate_77[0][0] conv2d_164[0][0]

batch_normalization_v1_166 (Bat	(None, 14, 14, 352)	1408	concatenate_78[0][0]
activation_166 (Activation)	(None, 14, 14, 352)	0	batch_normalization_v1_166[0][0]
conv2d_165 (Conv2D)	(None, 14, 14, 128)	45056	activation_166[0][0]
batch_normalization_v1_167 (Bat	(None, 14, 14, 128)	512	conv2d_165[0][0]
activation_167 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_167[0][0]
conv2d_166 (Conv2D)	(None, 14, 14, 32)	36864	activation_167[0][0]
concatenate_79 (Concatenate)	(None, 14, 14, 384)	0	concatenate_78[0][0] conv2d_166[0][0]
batch_normalization_v1_168 (Bat	(None, 14, 14, 384)	1536	concatenate_79[0][0]
activation_168 (Activation)	(None, 14, 14, 384)	0	batch_normalization_v1_168[0][0]
conv2d_167 (Conv2D)	(None, 14, 14, 128)	49152	activation_168[0][0]
batch_normalization_v1_169 (Bat	(None, 14, 14, 128)	512	conv2d_167[0][0]
activation_169 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_169[0][0]
conv2d_168 (Conv2D)	(None, 14, 14, 32)	36864	activation_169[0][0]
concatenate_80 (Concatenate)	(None, 14, 14, 416)	0	concatenate_79[0][0] conv2d_168[0][0]
batch_normalization_v1_170 (Bat	(None, 14, 14, 416)	1664	concatenate_80[0][0]
activation_170 (Activation)	(None, 14, 14, 416)	0	batch_normalization_v1_170[0][0]
conv2d_169 (Conv2D)	(None, 14, 14, 128)	53248	activation_170[0][0]
batch_normalization_v1_171 (Bat	(None, 14, 14, 128)	512	conv2d_169[0][0]
activation_171 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_171[0][0]
conv2d_170 (Conv2D)	(None, 14, 14, 32)	36864	activation_171[0][0]
concatenate_81 (Concatenate)	(None, 14, 14, 448)	0	concatenate_80[0][0] conv2d_170[0][0]
batch_normalization_v1_172 (Bat	(None, 14, 14, 448)	1792	concatenate_81[0][0]
activation_172 (Activation)	(None, 14, 14, 448)	0	batch_normalization_v1_172[0][0]
conv2d_171 (Conv2D)	(None, 14, 14, 128)	57344	activation_172[0][0]
batch_normalization_v1_173 (Bat	(None, 14, 14, 128)	512	conv2d_171[0][0]
activation_173 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_173[0][0]
conv2d_172 (Conv2D)	(None, 14, 14, 32)	36864	activation_173[0][0]
concatenate_82 (Concatenate)	(None, 14, 14, 480)	0	concatenate_81[0][0] conv2d_172[0][0]
batch_normalization_v1_174 (Bat	(None, 14, 14, 480)	1920	concatenate_82[0][0]
activation_174 (Activation)	(None, 14, 14, 480)	0	batch_normalization_v1_174[0][0]
conv2d_173 (Conv2D)	(None, 14, 14, 128)	61440	activation_174[0][0]
batch_normalization_v1_175 (Bat	(None, 14, 14, 128)	512	conv2d_173[0][0]
activation_175 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_175[0][0]
conv2d_174 (Conv2D)	(None, 14, 14, 32)	36864	activation_175[0][0]
concatenate_83 (Concatenate)	(None, 14, 14, 512)	0	concatenate_82[0][0] conv2d_174[0][0]
batch_normalization_v1_176 (Bat	(None, 14, 14, 512)	2048	concatenate_83[0][0]
activation_176 (Activation)	(None, 14, 14, 512)	0	batch_normalization_v1_176[0][0]
conv2d_175 (Conv2D)	(None, 14, 14, 128)	65536	activation_176[0][0]
batch_normalization_v1_177 (Bat	(None, 14, 14, 128)	512	conv2d_175[0][0]
activation_177 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_177[0][0]

conv2d_176 (Conv2D)	(None, 14, 14, 32)	36864	activation_177[0][0]
concatenate_84 (Concatenate)	(None, 14, 14, 544)	0	concatenate_83[0][0] conv2d_176[0][0]
batch_normalization_v1_178 (Bat	(None, 14, 14, 544)	2176	concatenate_84[0][0]
activation_178 (Activation)	(None, 14, 14, 544)	0	batch_normalization_v1_178[0][0]
conv2d_177 (Conv2D)	(None, 14, 14, 128)	69632	activation_178[0][0]
batch_normalization_v1_179 (Bat	(None, 14, 14, 128)	512	conv2d_177[0][0]
activation_179 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_179[0][0]
conv2d_178 (Conv2D)	(None, 14, 14, 32)	36864	activation_179[0][0]
concatenate_85 (Concatenate)	(None, 14, 14, 576)	0	concatenate_84[0][0] conv2d_178[0][0]
batch_normalization_v1_180 (Bat	(None, 14, 14, 576)	2304	concatenate_85[0][0]
activation_180 (Activation)	(None, 14, 14, 576)	0	batch_normalization_v1_180[0][0]
conv2d_179 (Conv2D)	(None, 14, 14, 128)	73728	activation_180[0][0]
batch_normalization_v1_181 (Bat	(None, 14, 14, 128)	512	conv2d_179[0][0]
activation_181 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_181[0][0]
conv2d_180 (Conv2D)	(None, 14, 14, 32)	36864	activation_181[0][0]
concatenate_86 (Concatenate)	(None, 14, 14, 608)	0	concatenate_85[0][0] conv2d_180[0][0]
batch_normalization_v1_182 (Bat	(None, 14, 14, 608)	2432	concatenate_86[0][0]
activation_182 (Activation)	(None, 14, 14, 608)	0	batch_normalization_v1_182[0][0]
conv2d_181 (Conv2D)	(None, 14, 14, 128)	77824	activation_182[0][0]
batch_normalization_v1_183 (Bat	(None, 14, 14, 128)	512	conv2d_181[0][0]
activation_183 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_183[0][0]
conv2d_182 (Conv2D)	(None, 14, 14, 32)	36864	activation_183[0][0]
concatenate_87 (Concatenate)	(None, 14, 14, 640)	0	concatenate_86[0][0] conv2d_182[0][0]
batch_normalization_v1_184 (Bat	(None, 14, 14, 640)	2560	concatenate_87[0][0]
activation_184 (Activation)	(None, 14, 14, 640)	0	batch_normalization_v1_184[0][0]
conv2d_183 (Conv2D)	(None, 14, 14, 128)	81920	activation_184[0][0]
batch_normalization_v1_185 (Bat	(None, 14, 14, 128)	512	conv2d_183[0][0]
activation_185 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_185[0][0]
conv2d_184 (Conv2D)	(None, 14, 14, 32)	36864	activation_185[0][0]
concatenate_88 (Concatenate)	(None, 14, 14, 672)	0	concatenate_87[0][0] conv2d_184[0][0]
batch_normalization_v1_186 (Bat	(None, 14, 14, 672)	2688	concatenate_88[0][0]
activation_186 (Activation)	(None, 14, 14, 672)	0	batch_normalization_v1_186[0][0]
conv2d_185 (Conv2D)	(None, 14, 14, 128)	86016	activation_186[0][0]
batch_normalization_v1_187 (Bat	(None, 14, 14, 128)	512	conv2d_185[0][0]
activation_187 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_187[0][0]
conv2d_186 (Conv2D)	(None, 14, 14, 32)	36864	activation_187[0][0]
concatenate_89 (Concatenate)	(None, 14, 14, 704)	0	concatenate_88[0][0] conv2d_186[0][0]
batch_normalization_v1_188 (Bat	(None, 14, 14, 704)	2816	concatenate_89[0][0]
activation_188 (Activation)	(None, 14, 14, 704)	0	batch_normalization_v1_188[0][0]
conv2d_187 (Conv2D)	(None, 14, 14, 128)	90112	activation_188[0][0]

batch_normalization_v1_189	(Bat	(None, 14, 14, 128)	512	conv2d_187[0][0]
activation_189	(Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_189[0][0]
conv2d_188	(Conv2D)	(None, 14, 14, 32)	36864	activation_189[0][0]
concatenate_90	(Concatenate)	(None, 14, 14, 736)	0	concatenate_89[0][0] conv2d_188[0][0]
batch_normalization_v1_190	(Bat	(None, 14, 14, 736)	2944	concatenate_90[0][0]
activation_190	(Activation)	(None, 14, 14, 736)	0	batch_normalization_v1_190[0][0]
conv2d_189	(Conv2D)	(None, 14, 14, 128)	94208	activation_190[0][0]
batch_normalization_v1_191	(Bat	(None, 14, 14, 128)	512	conv2d_189[0][0]
activation_191	(Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_191[0][0]
conv2d_190	(Conv2D)	(None, 14, 14, 32)	36864	activation_191[0][0]
concatenate_91	(Concatenate)	(None, 14, 14, 768)	0	concatenate_90[0][0] conv2d_190[0][0]
batch_normalization_v1_192	(Bat	(None, 14, 14, 768)	3072	concatenate_91[0][0]
activation_192	(Activation)	(None, 14, 14, 768)	0	batch_normalization_v1_192[0][0]
conv2d_191	(Conv2D)	(None, 14, 14, 128)	98304	activation_192[0][0]
batch_normalization_v1_193	(Bat	(None, 14, 14, 128)	512	conv2d_191[0][0]
activation_193	(Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_193[0][0]
conv2d_192	(Conv2D)	(None, 14, 14, 32)	36864	activation_193[0][0]
concatenate_92	(Concatenate)	(None, 14, 14, 800)	0	concatenate_91[0][0] conv2d_192[0][0]
batch_normalization_v1_194	(Bat	(None, 14, 14, 800)	3200	concatenate_92[0][0]
activation_194	(Activation)	(None, 14, 14, 800)	0	batch_normalization_v1_194[0][0]
conv2d_193	(Conv2D)	(None, 14, 14, 128)	102400	activation_194[0][0]
batch_normalization_v1_195	(Bat	(None, 14, 14, 128)	512	conv2d_193[0][0]
activation_195	(Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_195[0][0]
conv2d_194	(Conv2D)	(None, 14, 14, 32)	36864	activation_195[0][0]
concatenate_93	(Concatenate)	(None, 14, 14, 832)	0	concatenate_92[0][0] conv2d_194[0][0]
batch_normalization_v1_196	(Bat	(None, 14, 14, 832)	3328	concatenate_93[0][0]
activation_196	(Activation)	(None, 14, 14, 832)	0	batch_normalization_v1_196[0][0]
conv2d_195	(Conv2D)	(None, 14, 14, 128)	106496	activation_196[0][0]
batch_normalization_v1_197	(Bat	(None, 14, 14, 128)	512	conv2d_195[0][0]
activation_197	(Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_197[0][0]
conv2d_196	(Conv2D)	(None, 14, 14, 32)	36864	activation_197[0][0]
concatenate_94	(Concatenate)	(None, 14, 14, 864)	0	concatenate_93[0][0] conv2d_196[0][0]
batch_normalization_v1_198	(Bat	(None, 14, 14, 864)	3456	concatenate_94[0][0]
activation_198	(Activation)	(None, 14, 14, 864)	0	batch_normalization_v1_198[0][0]
conv2d_197	(Conv2D)	(None, 14, 14, 128)	110592	activation_198[0][0]
batch_normalization_v1_199	(Bat	(None, 14, 14, 128)	512	conv2d_197[0][0]
activation_199	(Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_199[0][0]
conv2d_198	(Conv2D)	(None, 14, 14, 32)	36864	activation_199[0][0]
concatenate_95	(Concatenate)	(None, 14, 14, 896)	0	concatenate_94[0][0] conv2d_198[0][0]
batch_normalization_v1_200	(Bat	(None, 14, 14, 896)	3584	concatenate_95[0][0]

activation_200 (Activation)	(None, 14, 14, 896)	0	batch_normalization_v1_200[0][0]
conv2d_199 (Conv2D)	(None, 14, 14, 128)	114688	activation_200[0][0]
batch_normalization_v1_201 (Bat	(None, 14, 14, 128)	512	conv2d_199[0][0]
activation_201 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_201[0][0]
conv2d_200 (Conv2D)	(None, 14, 14, 32)	36864	activation_201[0][0]
concatenate_96 (Concatenate)	(None, 14, 14, 928)	0	concatenate_95[0][0] conv2d_200[0][0]
batch_normalization_v1_202 (Bat	(None, 14, 14, 928)	3712	concatenate_96[0][0]
activation_202 (Activation)	(None, 14, 14, 928)	0	batch_normalization_v1_202[0][0]
conv2d_201 (Conv2D)	(None, 14, 14, 128)	118784	activation_202[0][0]
batch_normalization_v1_203 (Bat	(None, 14, 14, 128)	512	conv2d_201[0][0]
activation_203 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_203[0][0]
conv2d_202 (Conv2D)	(None, 14, 14, 32)	36864	activation_203[0][0]
concatenate_97 (Concatenate)	(None, 14, 14, 960)	0	concatenate_96[0][0] conv2d_202[0][0]
batch_normalization_v1_204 (Bat	(None, 14, 14, 960)	3840	concatenate_97[0][0]
activation_204 (Activation)	(None, 14, 14, 960)	0	batch_normalization_v1_204[0][0]
conv2d_203 (Conv2D)	(None, 14, 14, 128)	122880	activation_204[0][0]
batch_normalization_v1_205 (Bat	(None, 14, 14, 128)	512	conv2d_203[0][0]
activation_205 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_205[0][0]
conv2d_204 (Conv2D)	(None, 14, 14, 32)	36864	activation_205[0][0]
concatenate_98 (Concatenate)	(None, 14, 14, 992)	0	concatenate_97[0][0] conv2d_204[0][0]
batch_normalization_v1_206 (Bat	(None, 14, 14, 992)	3968	concatenate_98[0][0]
activation_206 (Activation)	(None, 14, 14, 992)	0	batch_normalization_v1_206[0][0]
conv2d_205 (Conv2D)	(None, 14, 14, 128)	126976	activation_206[0][0]
batch_normalization_v1_207 (Bat	(None, 14, 14, 128)	512	conv2d_205[0][0]
activation_207 (Activation)	(None, 14, 14, 128)	0	batch_normalization_v1_207[0][0]
conv2d_206 (Conv2D)	(None, 14, 14, 32)	36864	activation_207[0][0]
concatenate_99 (Concatenate)	(None, 14, 14, 1024)	0	concatenate_98[0][0] conv2d_206[0][0]
batch_normalization_v1_208 (Bat	(None, 14, 14, 1024)	4096	concatenate_99[0][0]
activation_208 (Activation)	(None, 14, 14, 1024)	0	batch_normalization_v1_208[0][0]
conv2d_207 (Conv2D)	(None, 14, 14, 512)	524288	activation_208[0][0]
average_pooling2d_5 (AveragePoo	(None, 7, 7, 512)	0	conv2d_207[0][0]
batch_normalization_v1_209 (Bat	(None, 7, 7, 512)	2048	average_pooling2d_5[0][0]
activation_209 (Activation)	(None, 7, 7, 512)	0	batch_normalization_v1_209[0][0]
conv2d_208 (Conv2D)	(None, 7, 7, 128)	65536	activation_209[0][0]
batch_normalization_v1_210 (Bat	(None, 7, 7, 128)	512	conv2d_208[0][0]
activation_210 (Activation)	(None, 7, 7, 128)	0	batch_normalization_v1_210[0][0]
conv2d_209 (Conv2D)	(None, 7, 7, 32)	36864	activation_210[0][0]
concatenate_100 (Concatenate)	(None, 7, 7, 544)	0	average_pooling2d_5[0][0] conv2d_209[0][0]
batch_normalization_v1_211 (Bat	(None, 7, 7, 544)	2176	concatenate_100[0][0]
activation_211 (Activation)	(None, 7, 7, 544)	0	batch_normalization_v1_211[0][0]
conv2d_210 (Conv2D)	(None, 7, 7, 128)	69632	activation_211[0][0]

batch_normalization_v1_212 (Batch Normalization)	(None, 7, 7, 128)	512	conv2d_210[0][0]
activation_212 (Activation)	(None, 7, 7, 128)	0	batch_normalization_v1_212[0][0]
conv2d_211 (Conv2D)	(None, 7, 7, 32)	36864	activation_212[0][0]
concatenate_101 (Concatenate)	(None, 7, 7, 576)	0	concatenate_100[0][0] conv2d_211[0][0]
batch_normalization_v1_213 (Batch Normalization)	(None, 7, 7, 576)	2304	concatenate_101[0][0]
activation_213 (Activation)	(None, 7, 7, 576)	0	batch_normalization_v1_213[0][0]
conv2d_212 (Conv2D)	(None, 7, 7, 128)	73728	activation_213[0][0]
batch_normalization_v1_214 (Batch Normalization)	(None, 7, 7, 128)	512	conv2d_212[0][0]
activation_214 (Activation)	(None, 7, 7, 128)	0	batch_normalization_v1_214[0][0]
conv2d_213 (Conv2D)	(None, 7, 7, 32)	36864	activation_214[0][0]
concatenate_102 (Concatenate)	(None, 7, 7, 608)	0	concatenate_101[0][0] conv2d_213[0][0]
batch_normalization_v1_215 (Batch Normalization)	(None, 7, 7, 608)	2432	concatenate_102[0][0]
activation_215 (Activation)	(None, 7, 7, 608)	0	batch_normalization_v1_215[0][0]
conv2d_214 (Conv2D)	(None, 7, 7, 128)	77824	activation_215[0][0]
batch_normalization_v1_216 (Batch Normalization)	(None, 7, 7, 128)	512	conv2d_214[0][0]
activation_216 (Activation)	(None, 7, 7, 128)	0	batch_normalization_v1_216[0][0]
conv2d_215 (Conv2D)	(None, 7, 7, 32)	36864	activation_216[0][0]
concatenate_103 (Concatenate)	(None, 7, 7, 640)	0	concatenate_102[0][0] conv2d_215[0][0]
batch_normalization_v1_217 (Batch Normalization)	(None, 7, 7, 640)	2560	concatenate_103[0][0]
activation_217 (Activation)	(None, 7, 7, 640)	0	batch_normalization_v1_217[0][0]
conv2d_216 (Conv2D)	(None, 7, 7, 128)	81920	activation_217[0][0]
batch_normalization_v1_218 (Batch Normalization)	(None, 7, 7, 128)	512	conv2d_216[0][0]
activation_218 (Activation)	(None, 7, 7, 128)	0	batch_normalization_v1_218[0][0]
conv2d_217 (Conv2D)	(None, 7, 7, 32)	36864	activation_218[0][0]
concatenate_104 (Concatenate)	(None, 7, 7, 672)	0	concatenate_103[0][0] conv2d_217[0][0]
batch_normalization_v1_219 (Batch Normalization)	(None, 7, 7, 672)	2688	concatenate_104[0][0]
activation_219 (Activation)	(None, 7, 7, 672)	0	batch_normalization_v1_219[0][0]
conv2d_218 (Conv2D)	(None, 7, 7, 128)	86016	activation_219[0][0]
batch_normalization_v1_220 (Batch Normalization)	(None, 7, 7, 128)	512	conv2d_218[0][0]
activation_220 (Activation)	(None, 7, 7, 128)	0	batch_normalization_v1_220[0][0]
conv2d_219 (Conv2D)	(None, 7, 7, 32)	36864	activation_220[0][0]
concatenate_105 (Concatenate)	(None, 7, 7, 704)	0	concatenate_104[0][0] conv2d_219[0][0]
batch_normalization_v1_221 (Batch Normalization)	(None, 7, 7, 704)	2816	concatenate_105[0][0]
activation_221 (Activation)	(None, 7, 7, 704)	0	batch_normalization_v1_221[0][0]
conv2d_220 (Conv2D)	(None, 7, 7, 128)	90112	activation_221[0][0]
batch_normalization_v1_222 (Batch Normalization)	(None, 7, 7, 128)	512	conv2d_220[0][0]
activation_222 (Activation)	(None, 7, 7, 128)	0	batch_normalization_v1_222[0][0]
conv2d_221 (Conv2D)	(None, 7, 7, 32)	36864	activation_222[0][0]
concatenate_106 (Concatenate)	(None, 7, 7, 736)	0	concatenate_105[0][0] conv2d_221[0][0]
batch_normalization_v1_223 (Batch Normalization)	(None, 7, 7, 736)	2944	concatenate_106[0][0]

activation_223 (Activation)	(None, 7, 7, 736)	0	batch_normalization_v1_223[0][0]
conv2d_222 (Conv2D)	(None, 7, 7, 128)	94208	activation_223[0][0]
batch_normalization_v1_224 (Bat	(None, 7, 7, 128)	512	conv2d_222[0][0]
activation_224 (Activation)	(None, 7, 7, 128)	0	batch_normalization_v1_224[0][0]
conv2d_223 (Conv2D)	(None, 7, 7, 32)	36864	activation_224[0][0]
concatenate_107 (Concatenate)	(None, 7, 7, 768)	0	concatenate_106[0][0] conv2d_223[0][0]
batch_normalization_v1_225 (Bat	(None, 7, 7, 768)	3072	concatenate_107[0][0]
activation_225 (Activation)	(None, 7, 7, 768)	0	batch_normalization_v1_225[0][0]
conv2d_224 (Conv2D)	(None, 7, 7, 128)	98304	activation_225[0][0]
batch_normalization_v1_226 (Bat	(None, 7, 7, 128)	512	conv2d_224[0][0]
activation_226 (Activation)	(None, 7, 7, 128)	0	batch_normalization_v1_226[0][0]
conv2d_225 (Conv2D)	(None, 7, 7, 32)	36864	activation_226[0][0]
concatenate_108 (Concatenate)	(None, 7, 7, 800)	0	concatenate_107[0][0] conv2d_225[0][0]
batch_normalization_v1_227 (Bat	(None, 7, 7, 800)	3200	concatenate_108[0][0]
activation_227 (Activation)	(None, 7, 7, 800)	0	batch_normalization_v1_227[0][0]
conv2d_226 (Conv2D)	(None, 7, 7, 128)	102400	activation_227[0][0]
batch_normalization_v1_228 (Bat	(None, 7, 7, 128)	512	conv2d_226[0][0]
activation_228 (Activation)	(None, 7, 7, 128)	0	batch_normalization_v1_228[0][0]
conv2d_227 (Conv2D)	(None, 7, 7, 32)	36864	activation_228[0][0]
concatenate_109 (Concatenate)	(None, 7, 7, 832)	0	concatenate_108[0][0] conv2d_227[0][0]
batch_normalization_v1_229 (Bat	(None, 7, 7, 832)	3328	concatenate_109[0][0]
activation_229 (Activation)	(None, 7, 7, 832)	0	batch_normalization_v1_229[0][0]
conv2d_228 (Conv2D)	(None, 7, 7, 128)	106496	activation_229[0][0]
batch_normalization_v1_230 (Bat	(None, 7, 7, 128)	512	conv2d_228[0][0]
activation_230 (Activation)	(None, 7, 7, 128)	0	batch_normalization_v1_230[0][0]
conv2d_229 (Conv2D)	(None, 7, 7, 32)	36864	activation_230[0][0]
concatenate_110 (Concatenate)	(None, 7, 7, 864)	0	concatenate_109[0][0] conv2d_229[0][0]
batch_normalization_v1_231 (Bat	(None, 7, 7, 864)	3456	concatenate_110[0][0]
activation_231 (Activation)	(None, 7, 7, 864)	0	batch_normalization_v1_231[0][0]
conv2d_230 (Conv2D)	(None, 7, 7, 128)	110592	activation_231[0][0]
batch_normalization_v1_232 (Bat	(None, 7, 7, 128)	512	conv2d_230[0][0]
activation_232 (Activation)	(None, 7, 7, 128)	0	batch_normalization_v1_232[0][0]
conv2d_231 (Conv2D)	(None, 7, 7, 32)	36864	activation_232[0][0]
concatenate_111 (Concatenate)	(None, 7, 7, 896)	0	concatenate_110[0][0] conv2d_231[0][0]
batch_normalization_v1_233 (Bat	(None, 7, 7, 896)	3584	concatenate_111[0][0]
activation_233 (Activation)	(None, 7, 7, 896)	0	batch_normalization_v1_233[0][0]
conv2d_232 (Conv2D)	(None, 7, 7, 128)	114688	activation_233[0][0]
batch_normalization_v1_234 (Bat	(None, 7, 7, 128)	512	conv2d_232[0][0]
activation_234 (Activation)	(None, 7, 7, 128)	0	batch_normalization_v1_234[0][0]
conv2d_233 (Conv2D)	(None, 7, 7, 32)	36864	activation_234[0][0]

concatenate_112 (Concatenate)	(None, 7, 7, 928)	0	concatenate_111[0][0] conv2d_233[0][0]
batch_normalization_v1_235 (Batch Normalization)	(None, 7, 7, 928)	3712	concatenate_112[0][0]
activation_235 (Activation)	(None, 7, 7, 928)	0	batch_normalization_v1_235[0][0]
conv2d_234 (Conv2D)	(None, 7, 7, 128)	118784	activation_235[0][0]
batch_normalization_v1_236 (Batch Normalization)	(None, 7, 7, 128)	512	conv2d_234[0][0]
activation_236 (Activation)	(None, 7, 7, 128)	0	batch_normalization_v1_236[0][0]
conv2d_235 (Conv2D)	(None, 7, 7, 32)	36864	activation_236[0][0]
concatenate_113 (Concatenate)	(None, 7, 7, 960)	0	concatenate_112[0][0] conv2d_235[0][0]
batch_normalization_v1_237 (Batch Normalization)	(None, 7, 7, 960)	3840	concatenate_113[0][0]
activation_237 (Activation)	(None, 7, 7, 960)	0	batch_normalization_v1_237[0][0]
conv2d_236 (Conv2D)	(None, 7, 7, 128)	122880	activation_237[0][0]
batch_normalization_v1_238 (Batch Normalization)	(None, 7, 7, 128)	512	conv2d_236[0][0]
activation_238 (Activation)	(None, 7, 7, 128)	0	batch_normalization_v1_238[0][0]
conv2d_237 (Conv2D)	(None, 7, 7, 32)	36864	activation_238[0][0]
concatenate_114 (Concatenate)	(None, 7, 7, 992)	0	concatenate_113[0][0] conv2d_237[0][0]
batch_normalization_v1_239 (Batch Normalization)	(None, 7, 7, 992)	3968	concatenate_114[0][0]
activation_239 (Activation)	(None, 7, 7, 992)	0	batch_normalization_v1_239[0][0]
conv2d_238 (Conv2D)	(None, 7, 7, 128)	126976	activation_239[0][0]
batch_normalization_v1_240 (Batch Normalization)	(None, 7, 7, 128)	512	conv2d_238[0][0]
activation_240 (Activation)	(None, 7, 7, 128)	0	batch_normalization_v1_240[0][0]
conv2d_239 (Conv2D)	(None, 7, 7, 32)	36864	activation_240[0][0]
concatenate_115 (Concatenate)	(None, 7, 7, 1024)	0	concatenate_114[0][0] conv2d_239[0][0]
batch_normalization_v1_241 (Batch Normalization)	(None, 7, 7, 1024)	4096	concatenate_115[0][0]
activation_241 (Activation)	(None, 7, 7, 1024)	0	batch_normalization_v1_241[0][0]
global_avg_pooling (Global Average Pooling)	(None, 1024)	0	activation_241[0][0]
dense_1 (Dense)	(None, 5)	5125	global_avg_pooling[0][0]

=====
Total params: 7,042,629
Trainable params: 6,958,981
Non-trainable params: 83,648

Using Enhanced Data Generation

Found 24216 images belonging to 5 classes.

Found 6063 images belonging to 5 classes.

JSON Mapping for the model classes saved to /content/drive/My Drive/images/json/model_class.json

Number of experiments (Epochs) : 50

Epoch 1/50

190/190 [=====] - 2875s 15s/step - loss: 4.1740 - acc: 0.1856

Epoch 00001: saving model to /content/drive/My Drive/images/models/model_ex-001_acc-0.185552.h5

757/757 [=====] - 13927s 18s/step - loss: 2.4242 - acc: 0.3492 - val_loss: 4.1740 - val_acc: 0.1856

Epoch 2/50

190/190 [=====] - 49s 256ms/step - loss: 1.5915 - acc: 0.4237

Epoch 00002: saving model to /content/drive/My Drive/images/models/model_ex-002_acc-0.423718.h5

757/757 [=====] - 720s 951ms/step - loss: 1.5249 - acc: 0.4877 - val_loss: 1.5915 - val_acc: 0.4237

Epoch 3/50

190/190 [=====] - 49s 257ms/step - loss: 1.3237 - acc: 0.5245

Epoch 00003: saving model to /content/drive/My Drive/images/models/model_ex-003_acc-0.524493.h5

757/757 [=====] - 720s 951ms/step - loss: 1.2561 - acc: 0.5704 - val_loss: 1.3237 - val_acc: 0.5245

Epoch 4/50

190/190 [=====] - 49s 256ms/step - loss: 1.1719 - acc: 0.5951

Epoch 00004: saving model to /content/drive/My Drive/images/models/model_ex-004_acc-0.595085.h5

757/757 [=====] - 720s 951ms/step - loss: 1.1386 - acc: 0.6076 - val_loss: 1.1719 - val_acc: 0.5951

Epoch 5/50

190/190 [=====] - 49s 259ms/step - loss: 1.3468 - acc: 0.4915

Epoch 00005: saving model to /content/drive/My Drive/images/models/model_ex-005_acc-0.491506.h5
757/757 [=====] - 720s 951ms/step - loss: 1.0640 - acc: 0.6373 - val_loss: 1.3468 - val_acc: 0.4915
Epoch 6/50
190/190 [=====] - 49s 256ms/step - loss: 1.4606 - acc: 0.5181

Epoch 00006: saving model to /content/drive/My Drive/images/models/model_ex-006_acc-0.518060.h5
757/757 [=====] - 720s 951ms/step - loss: 1.0140 - acc: 0.6516 - val_loss: 1.4606 - val_acc: 0.5181
Epoch 7/50
190/190 [=====] - 49s 257ms/step - loss: 1.1777 - acc: 0.5794

Epoch 00007: saving model to /content/drive/My Drive/images/models/model_ex-007_acc-0.579416.h5
757/757 [=====] - 720s 951ms/step - loss: 0.9694 - acc: 0.6717 - val_loss: 1.1777 - val_acc: 0.5794
Epoch 8/50
190/190 [=====] - 49s 256ms/step - loss: 1.0298 - acc: 0.6418

Epoch 00008: saving model to /content/drive/My Drive/images/models/model_ex-008_acc-0.641761.h5
757/757 [=====] - 720s 951ms/step - loss: 0.9305 - acc: 0.6846 - val_loss: 1.0298 - val_acc: 0.6418
Epoch 9/50
190/190 [=====] - 49s 258ms/step - loss: 0.9637 - acc: 0.6772

Epoch 00009: saving model to /content/drive/My Drive/images/models/model_ex-009_acc-0.677222.h5
757/757 [=====] - 720s 951ms/step - loss: 0.8974 - acc: 0.6966 - val_loss: 0.9637 - val_acc: 0.6772
Epoch 10/50
190/190 [=====] - 49s 257ms/step - loss: 1.0885 - acc: 0.6312

Epoch 00010: saving model to /content/drive/My Drive/images/models/model_ex-010_acc-0.631206.h5
757/757 [=====] - 720s 951ms/step - loss: 0.8738 - acc: 0.7029 - val_loss: 1.0885 - val_acc: 0.6312
Epoch 11/50
190/190 [=====] - 49s 258ms/step - loss: 0.9627 - acc: 0.6667

Epoch 00011: saving model to /content/drive/My Drive/images/models/model_ex-011_acc-0.666667.h5
757/757 [=====] - 720s 951ms/step - loss: 0.8482 - acc: 0.7139 - val_loss: 0.9627 - val_acc: 0.6667
Epoch 12/50
190/190 [=====] - 49s 258ms/step - loss: 0.9118 - acc: 0.6968

Epoch 00012: saving model to /content/drive/My Drive/images/models/model_ex-012_acc-0.696850.h5
757/757 [=====] - 721s 952ms/step - loss: 0.8320 - acc: 0.7208 - val_loss: 0.9118 - val_acc: 0.6968
Epoch 13/50
190/190 [=====] - 49s 257ms/step - loss: 1.2922 - acc: 0.5159

Epoch 00013: saving model to /content/drive/My Drive/images/models/model_ex-013_acc-0.515916.h5
757/757 [=====] - 719s 949ms/step - loss: 0.8141 - acc: 0.7292 - val_loss: 1.2922 - val_acc: 0.5159
Epoch 14/50
190/190 [=====] - 48s 254ms/step - loss: 0.9858 - acc: 0.6634

Epoch 00014: saving model to /content/drive/My Drive/images/models/model_ex-014_acc-0.663368.h5
757/757 [=====] - 717s 948ms/step - loss: 0.7938 - acc: 0.7370 - val_loss: 0.9858 - val_acc: 0.6634
Epoch 15/50
190/190 [=====] - 49s 257ms/step - loss: 0.8869 - acc: 0.7000

Epoch 00015: saving model to /content/drive/My Drive/images/models/model_ex-015_acc-0.699983.h5
757/757 [=====] - 716s 946ms/step - loss: 0.7738 - acc: 0.7439 - val_loss: 0.8869 - val_acc: 0.7000
Epoch 16/50
190/190 [=====] - 49s 260ms/step - loss: 0.9211 - acc: 0.6904

Epoch 00016: saving model to /content/drive/My Drive/images/models/model_ex-016_acc-0.690417.h5
757/757 [=====] - 723s 955ms/step - loss: 0.7605 - acc: 0.7451 - val_loss: 0.9211 - val_acc: 0.6904
Epoch 17/50
190/190 [=====] - 49s 258ms/step - loss: 0.8142 - acc: 0.7328

Epoch 00017: saving model to /content/drive/My Drive/images/models/model_ex-017_acc-0.732806.h5
757/757 [=====] - 721s 952ms/step - loss: 0.7416 - acc: 0.7554 - val_loss: 0.8142 - val_acc: 0.7328
Epoch 18/50
190/190 [=====] - 48s 254ms/step - loss: 0.8390 - acc: 0.7153

Epoch 00018: saving model to /content/drive/My Drive/images/models/model_ex-018_acc-0.715322.h5
757/757 [=====] - 721s 953ms/step - loss: 0.7274 - acc: 0.7599 - val_loss: 0.8390 - val_acc: 0.7153
Epoch 19/50
190/190 [=====] - 48s 255ms/step - loss: 0.8461 - acc: 0.7211

Epoch 00019: saving model to /content/drive/My Drive/images/models/model_ex-019_acc-0.721095.h5
757/757 [=====] - 718s 949ms/step - loss: 0.7130 - acc: 0.7655 - val_loss: 0.8461 - val_acc: 0.7211
Epoch 20/50
190/190 [=====] - 49s 257ms/step - loss: 0.8741 - acc: 0.7041

Epoch 00020: saving model to /content/drive/My Drive/images/models/model_ex-020_acc-0.704107.h5
757/757 [=====] - 720s 951ms/step - loss: 0.7002 - acc: 0.7694 - val_loss: 0.8741 - val_acc: 0.7041
Epoch 21/50
190/190 [=====] - 50s 263ms/step - loss: 0.8927 - acc: 0.7104

Epoch 00021: saving model to /content/drive/My Drive/images/models/model_ex-021_acc-0.710374.h5
757/757 [=====] - 722s 954ms/step - loss: 0.6782 - acc: 0.7796 - val_loss: 0.8927 - val_acc: 0.7104
Epoch 22/50
190/190 [=====] - 49s 257ms/step - loss: 0.7590 - acc: 0.7602

Epoch 00022: saving model to /content/drive/My Drive/images/models/model_ex-022_acc-0.760185.h5
757/757 [=====] - 721s 952ms/step - loss: 0.5970 - acc: 0.8140 - val_loss: 0.7590 - val_acc: 0.7602
Epoch 23/50
190/190 [=====] - 49s 258ms/step - loss: 0.7577 - acc: 0.7610

Epoch 00023: saving model to /content/drive/My Drive/images/models/model_ex-023_acc-0.761009.h5
757/757 [=====] - 721s 952ms/step - loss: 0.5673 - acc: 0.8227 - val_loss: 0.7577 - val_acc: 0.7610
Epoch 24/50
190/190 [=====] - 49s 257ms/step - loss: 0.7621 - acc: 0.7575

Epoch 00024: saving model to /content/drive/My Drive/images/models/model_ex-024_acc-0.757546.h5
757/757 [=====] - 720s 951ms/step - loss: 0.5557 - acc: 0.8302 - val_loss: 0.7621 - val_acc: 0.7575
Epoch 25/50
190/190 [=====] - 49s 257ms/step - loss: 0.7665 - acc: 0.7605

Epoch 00025: saving model to /content/drive/My Drive/images/models/model_ex-025_acc-0.760515.h5
757/757 [=====] - 720s 951ms/step - loss: 0.5424 - acc: 0.8303 - val_loss: 0.7665 - val_acc: 0.7605
Epoch 26/50
190/190 [=====] - 49s 256ms/step - loss: 0.7747 - acc: 0.7531

Epoch 00026: saving model to /content/drive/My Drive/images/models/model_ex-026_acc-0.753093.h5
757/757 [=====] - 721s 952ms/step - loss: 0.5308 - acc: 0.8388 - val_loss: 0.7747 - val_acc: 0.7531
Epoch 27/50
190/190 [=====] - 49s 258ms/step - loss: 0.7821 - acc: 0.7594

Epoch 00027: saving model to /content/drive/My Drive/images/models/model_ex-027_acc-0.759360.h5
757/757 [=====] - 720s 951ms/step - loss: 0.5178 - acc: 0.8422 - val_loss: 0.7821 - val_acc: 0.7594
Epoch 28/50
190/190 [=====] - 49s 257ms/step - loss: 0.7870 - acc: 0.7618

Epoch 00028: saving model to /content/drive/My Drive/images/models/model_ex-028_acc-0.761834.h5
757/757 [=====] - 720s 951ms/step - loss: 0.5124 - acc: 0.8436 - val_loss: 0.7870 - val_acc: 0.7618
Epoch 29/50
190/190 [=====] - 49s 259ms/step - loss: 0.7861 - acc: 0.7595

Epoch 00029: saving model to /content/drive/My Drive/images/models/model_ex-029_acc-0.759525.h5
757/757 [=====] - 721s 952ms/step - loss: 0.5038 - acc: 0.8466 - val_loss: 0.7861 - val_acc: 0.7595
Epoch 30/50
190/190 [=====] - 49s 256ms/step - loss: 0.7851 - acc: 0.7594

Epoch 00030: saving model to /content/drive/My Drive/images/models/model_ex-030_acc-0.759360.h5
757/757 [=====] - 720s 952ms/step - loss: 0.4986 - acc: 0.8500 - val_loss: 0.7851 - val_acc: 0.7594
Epoch 31/50
190/190 [=====] - 49s 257ms/step - loss: 0.7878 - acc: 0.7584

Epoch 00031: saving model to /content/drive/My Drive/images/models/model_ex-031_acc-0.758370.h5
757/757 [=====] - 721s 952ms/step - loss: 0.4870 - acc: 0.8539 - val_loss: 0.7878 - val_acc: 0.7584
Epoch 32/50
190/190 [=====] - 49s 256ms/step - loss: 0.7909 - acc: 0.7587

Epoch 00032: saving model to /content/drive/My Drive/images/models/model_ex-032_acc-0.758700.h5
757/757 [=====] - 721s 952ms/step - loss: 0.4709 - acc: 0.8586 - val_loss: 0.7909 - val_acc: 0.7587
Epoch 33/50
190/190 [=====] - 49s 258ms/step - loss: 0.7929 - acc: 0.7600

Epoch 00033: saving model to /content/drive/My Drive/images/models/model_ex-033_acc-0.760020.h5
757/757 [=====] - 722s 954ms/step - loss: 0.4681 - acc: 0.8614 - val_loss: 0.7929 - val_acc: 0.7600
Epoch 34/50
190/190 [=====] - 49s 256ms/step - loss: 0.7934 - acc: 0.7592

Epoch 00034: saving model to /content/drive/My Drive/images/models/model_ex-034_acc-0.759195.h5
757/757 [=====] - 721s 953ms/step - loss: 0.4692 - acc: 0.8619 - val_loss: 0.7934 - val_acc: 0.7592
Epoch 35/50
190/190 [=====] - 49s 261ms/step - loss: 0.7924 - acc: 0.7599

Epoch 00035: saving model to /content/drive/My Drive/images/models/model_ex-035_acc-0.759855.h5
757/757 [=====] - 722s 953ms/step - loss: 0.4640 - acc: 0.8614 - val_loss: 0.7924 - val_acc: 0.7599
Epoch 36/50
190/190 [=====] - 49s 256ms/step - loss: 0.7961 - acc: 0.7607

Epoch 00036: saving model to /content/drive/My Drive/images/models/model_ex-036_acc-0.760680.h5
757/757 [=====] - 721s 952ms/step - loss: 0.4650 - acc: 0.8615 - val_loss: 0.7961 - val_acc: 0.7607
Epoch 37/50
190/190 [=====] - 49s 259ms/step - loss: 0.7998 - acc: 0.7607

Epoch 00037: saving model to /content/drive/My Drive/images/models/model_ex-037_acc-0.760680.h5
757/757 [=====] - 720s 951ms/step - loss: 0.4631 - acc: 0.8615 - val_loss: 0.7998 - val_acc: 0.7607
Epoch 38/50
190/190 [=====] - 49s 256ms/step - loss: 0.7987 - acc: 0.7618

Epoch 00038: saving model to /content/drive/My Drive/images/models/model_ex-038_acc-0.761834.h5
757/757 [=====] - 720s 952ms/step - loss: 0.4624 - acc: 0.8635 - val_loss: 0.7987 - val_acc: 0.7618
Epoch 39/50
190/190 [=====] - 49s 258ms/step - loss: 0.7983 - acc: 0.7610

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Epoch 00039: saving model to /content/drive/My Drive/images/models/model_ex-039_acc-0.761009.h5
757/757 [=====] - 721s 952ms/step - loss: 0.4600 - acc: 0.8646 - val_loss: 0.7983 - val_acc: 0.7610
Epoch 40/50
190/190 [=====] - 49s 258ms/step - loss: 0.8004 - acc: 0.7610

Epoch 00040: saving model to /content/drive/My Drive/images/models/model_ex-040_acc-0.761009.h5
757/757 [=====] - 721s 953ms/step - loss: 0.4606 - acc: 0.8648 - val_loss: 0.8004 - val_acc: 0.7610
Epoch 41/50
490/757 [=====>.....] - ETA: 3:55 - loss: 0.4545 - acc: 0.8653
```