```
1 /Users/andrey/python/oleg-semenovich/venv/bin/python /Users/andrey/
  python/oleg-semenovich/main.py
 2 2024-06-01 14:56:57.029454: I tensorflow/core/platform/
  cpu_feature_guard.cc:182] This TensorFlow binary is optimized to use
  available CPU instructions in performance-critical operations.
 3 To enable the following instructions: SSE4.1 SSE4.2, in other
  operations, rebuild TensorFlow with the appropriate compiler flags.
 4 Found 2000 files belonging to 3 classes.
 5 Found 150 files belonging to 3 classes.
 6 Found 600 files belonging to 3 classes.
 7 Model: "sequential"
9 Layer (type)
                     Output Shape Param #
11 mobilenetv2_1.00_224 (Funct (None, 7, 7, 1280)
                                                    2257984
12 ional)
13
14 flatten (Flatten)
                             (None, 62720)
15
16 dense (Dense)
                             (None, 128)
                                                    8028288
17
18 dense_1 (Dense)
                             (None, 32)
                                                    4128
19
20 dense_2 (Dense)
                                                    99
                             (None, 3)
21
23 Total params: 10,290,499
24 Trainable params: 8,032,515
25 Non-trainable params: 2,257,984
27 2024-06-01 14:56:59.803405: I tensorflow/core/common_runtime/executor.
  cc:1197] [/device:CPU:0] (DEBUG INFO) Executor start aborting (this
  does not indicate an error and you can ignore this message):
  INVALID_ARGUMENT: You must feed a value for placeholder tensor '
  Placeholder/_4' with dtype int32 and shape [2000]
28
       [[{{node Placeholder/_4}}]]
29 2024-06-01 14:56:59.803653: I tensorflow/core/common_runtime/executor.
  cc:1197] [/device:CPU:0] (DEBUG INFO) Executor start aborting (this
  does not indicate an error and you can ignore this message):
  INVALID_ARGUMENT: You must feed a value for placeholder tensor '
  Placeholder/_0' with dtype string and shape [2000]
30
       [[{{node Placeholder/_0}}]]
31 Epoch 1/15
categorical_accuracy: 0.67252024-06-01 14:58:11.755457: I tensorflow/
  core/common_runtime/executor.cc:1197] [/device:CPU:0] (DEBUG INFO)
  Executor start aborting (this does not indicate an error and you can
  ignore this message): INVALID_ARGUMENT: You must feed a value for
  placeholder tensor 'Placeholder/_0' with dtype string and shape [150]
       [[{{node Placeholder/_0}}]]
33
34 2024-06-01 14:58:11.758951: I tensorflow/core/common_runtime/executor.
  cc:1197] [/device:CPU:0] (DEBUG INFO) Executor start aborting (this
  does not indicate an error and you can ignore this message):
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34 INVALID_ARGUMENT: You must feed a value for placeholder tensor '
  Placeholder/_4' with dtype int32 and shape [150]
     [[{{node Placeholder/_4}}]]
categorical_accuracy: 0.6725 - val_loss: 0.9396 -
  val_categorical_accuracy: 0.5267
37 Epoch 2/15
categorical_accuracy: 0.7230 - val_loss: 0.8430 -
  val_categorical_accuracy: 0.5867
39 Epoch 3/15
categorical_accuracy: 0.7705 - val_loss: 0.7859 -
  val_categorical_accuracy: 0.6533
41 Epoch 4/15
categorical_accuracy: 0.7970 - val_loss: 0.7652 -
 val_categorical_accuracy: 0.6600
43 Epoch 5/15
categorical_accuracy: 0.8300 - val_loss: 0.7603 -
  val_categorical_accuracy: 0.6600
45 Epoch 6/15
categorical_accuracy: 0.8590 - val_loss: 0.7472 -
  val_categorical_accuracy: 0.6800
47 Epoch 7/15
categorical_accuracy: 0.8695 - val_loss: 0.7457 -
  val_categorical_accuracy: 0.6667
49 Epoch 8/15
categorical_accuracy: 0.8875 - val_loss: 0.7272 -
  val_categorical_accuracy: 0.6733
51 Epoch 9/15
categorical_accuracy: 0.9020 - val_loss: 0.7279 -
  val_categorical_accuracy: 0.7000
53 Epoch 10/15
categorical_accuracy: 0.9170 - val_loss: 0.7540 -
  val_categorical_accuracy: 0.6533
55 Epoch 11/15
categorical_accuracy: 0.9260 - val_loss: 0.7289 -
 val_categorical_accuracy: 0.6667
57 Epoch 12/15
58 16/16 [============= ] - 85s 3s/step - loss: 0.2485 -
 categorical_accuracy: 0.9335 - val_loss: 0.7194 -
  val_categorical_accuracy: 0.6600
59 Epoch 13/15
categorical_accuracy: 0.9380 - val_loss: 0.7392 -
```

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60 val_categorical_accuracy: 0.6667
61 Epoch 14/15
- categorical_accuracy: 0.9510 - val_loss: 0.6943 -
  val_categorical_accuracy: 0.7133
63 Epoch 15/15
- categorical_accuracy: 0.9575 - val_loss: 0.7215 -
  val_categorical_accuracy: 0.7067
65 2024-06-01 15:17:59.939970: I tensorflow/core/common_runtime/executor
  .cc:1197] [/device:CPU:0] (DEBUG INFO) Executor start aborting (this
  does not indicate an error and you can ignore this message):
  INVALID_ARGUMENT: You must feed a value for placeholder tensor '
  Placeholder/_0' with dtype string and shape [600]
      [[{{node Placeholder/_0}}]]
67 2024-06-01 15:17:59.941826: I tensorflow/core/common_runtime/executor
  .cc:1197] [/device:CPU:0] (DEBUG INFO) Executor start aborting (this
  does not indicate an error and you can ignore this message):
  INVALID_ARGUMENT: You must feed a value for placeholder tensor '
  Placeholder/_0' with dtype string and shape [600]
      [[{{node Placeholder/_0}}]]
68
categorical_accuracy: 0.7433
70 Test result: 0.7433333396911621
72 Process finished with exit code 0
73
```