```
/Users/andrey/miniforge3/bin/python /Users/andrey/python/oleg-semenovich/
main.py
Found 21544 files belonging to 2 classes.
Using 19390 files for training.
Found 21544 files belonging to 2 classes.
Using 2154 files for validation.
Found 5069 files belonging to 2 classes.
Model: "sequential_1"
```

Layer (type)	Output Shape	Param #
rescaling (Rescaling)	(None, 224, 224, 3)	0
random_zoom_1 (RandomZoom)	(None, 224, 224, 3)	0
random_flip_1 (RandomFlip)	(None, 224, 224, 3)	0
random_rotation (RandomRotation)	(None, 224, 224, 3)	0
conv2d (Conv2D)	(None, 222, 222, 8)	224
max_pooling2d (MaxPooling2D)	(None, 111, 111, 8)	0
conv2d_1 (Conv2D)	(None, 109, 109, 16)	1, 168
max_pooling2d_1 (MaxPooling2D)	(None, 54, 54, 16)	0
conv2d_2 (Conv2D)	(None, 52, 52, 32)	4, 640
conv2d_3 (Conv2D)	(None, 48, 48, 32)	25,

```
632  |
     |
  ─┤
  | max_pooling2d_2 (MaxPooling2D)  |  (None, 24, 24, 32)  |
0 |
  ─┤
  | flatten (Flatten)              |  (None, 18432)       |
0 |
  ─┤
  | dense (Dense)                  |  (None, 32)          |       589,
856 |
  ─┤
  | dense_1 (Dense)                |  (None, 16)          |
528 |
  ─┤
  | dense_2 (Dense)                |  (None, 2)           |
34 |
 ─┘
```

```
 Total params: 622,082 (2.37 MB)
 Trainable params: 622,082 (2.37 MB)
 Non-trainable params: 0 (0.00 B)
Epoch 1/10
152/152 ━━━━━━━━━━━━━ 166s 1s/step - accuracy: 0.6407 - loss: 0.
6418 - precision: 0.6407 - val_accuracy: 0.6291 - val_loss: 0.6421 -
val_precision: 0.6291 - learning_rate: 0.0010
Epoch 2/10
152/152 ━━━━━━━━━━━━━ 175s 1s/step - accuracy: 0.6662 - loss: 0.
6205 - precision: 0.6662 - val_accuracy: 0.6323 - val_loss: 0.6341 -
val_precision: 0.6323 - learning_rate: 0.0010
Epoch 3/10
152/152 ━━━━━━━━━━━━━ 167s 1s/step - accuracy: 0.6727 - loss: 0.
6105 - precision: 0.6727 - val_accuracy: 0.6323 - val_loss: 0.6320 -
val_precision: 0.6323 - learning_rate: 0.0010
Epoch 4/10
152/152 ━━━━━━━━━━━━━ 167s 1s/step - accuracy: 0.6735 - loss: 0.
6013 - precision: 0.6735 - val_accuracy: 0.6588 - val_loss: 0.6203 -
val_precision: 0.6588 - learning_rate: 0.0010
Epoch 5/10
152/152 ━━━━━━━━━━━━━ 166s 1s/step - accuracy: 0.6780 - loss: 0.
5965 - precision: 0.6780 - val_accuracy: 0.6634 - val_loss: 0.6045 -
val_precision: 0.6634 - learning_rate: 0.0010
Epoch 6/10
152/152 ━━━━━━━━━━━━━ 166s 1s/step - accuracy: 0.6789 - loss: 0.
5847 - precision: 0.6789 - val_accuracy: 0.6746 - val_loss: 0.6054 -
val_precision: 0.6746 - learning_rate: 0.0010
Epoch 7/10
152/152 ━━━━━━━━━━━━━ 167s 1s/step - accuracy: 0.6817 - loss: 0.
5835 - precision: 0.6817 - val_accuracy: 0.6448 - val_loss: 0.6186 -
```

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val_precision: 0.6448 - learning_rate: 0.0010
Epoch 8/10
152/152 ———————————————— 166s 1s/step - accuracy: 0.6846 - loss: 0.
5830 - precision: 0.6846 - val_accuracy: 0.6722 - val_loss: 0.5943 -
val_precision: 0.6722 - learning_rate: 0.0010
Epoch 9/10
152/152 ———————————————— 178s 1s/step - accuracy: 0.6908 - loss: 0.
5706 - precision: 0.6908 - val_accuracy: 0.6411 - val_loss: 0.6551 -
val_precision: 0.6411 - learning_rate: 0.0010
Epoch 10/10
152/152 ———————————————— 175s 1s/step - accuracy: 0.6869 - loss: 0.
5745 - precision: 0.6869 - val_accuracy: 0.6811 - val_loss: 0.5842 -
val_precision: 0.6811 - learning_rate: 0.0010
40/40 ———————————————— 14s 343ms/step - accuracy: 0.6888 - loss: 0.
5692 - precision: 0.6888
Test precision: 0.6883014440536499
Test accuracy: 0.6883014440536499

Process finished with exit code 0
```