Screenshots

Loading the Data

```
Number of COVID Images: 1252
Number of Non-COVID Images: 1231
```

Folder creation and storing data.

```
▼ 📁 LetsUpgradeProject
  ▶ 📁 COVID
  ▶ 📁 covid-resized
  ▼ 📁 data
    ▼ 📁 Test
      ▶ 📁 Covid
      ▶ 📁 Non-Covid
    ▼ 📁 Train
      ▶ 📁 Covid
      ▶ 📁 Non-Covid
  ▶ 📁 non-COVID
  ▶ 📁 non-covid-resized
```

Model creation

conv5_block3_add (Add)	(None, 7, 7, 2048)	0	['conv5_block2_out[0][0]', 'conv5_block3_3_bn[0][0]']
conv5_block3_out (Activation)	(None, 7, 7, 2048)	0	['conv5_block3_add[0][0]']
flatten (Flatten)	(None, 100352)	0	['conv5_block3_out[0][0]']
dense (Dense)	(None, 2)	200706	['flatten[0][0]']

```
==================================================================================
Total params: 23,788,418
Trainable params: 200,706
Non-trainable params: 23,587,712
```

Classifying images into 2 classes

```
Found 1862 images belonging to 2 classes.
Found 621 images belonging to 2 classes.
```

Model Training

```
Epoch 1/50
59/59 [==============================] - 59s 776ms/step - loss: 2.1884 - accuracy: 0.5462 - val_loss: 0.6
Epoch 2/50
59/59 [==============================] - 40s 676ms/step - loss: 0.6278 - accuracy: 0.6638 - val_loss: 0.8
Epoch 3/50
59/59 [==============================] - 48s 812ms/step - loss: 0.6497 - accuracy: 0.6810 - val_loss: 0.5
Epoch 4/50
59/59 [==============================] - 41s 703ms/step - loss: 0.6037 - accuracy: 0.6917 - val_loss: 0.5
Epoch 5/50
59/59 [==============================] - 42s 710ms/step - loss: 0.7091 - accuracy: 0.6751 - val_loss: 0.6
Epoch 6/50
59/59 [==============================] - 37s 632ms/step - loss: 0.5524 - accuracy: 0.7288 - val_loss: 0.5
Epoch 7/50
59/59 [==============================] - 37s 629ms/step - loss: 0.6156 - accuracy: 0.7256 - val_loss: 0.4
Epoch 8/50
59/59 [==============================] - 37s 626ms/step - loss: 0.6000 - accuracy: 0.7245 - val_loss: 0.5
Epoch 9/50
59/59 [==============================] - 37s 630ms/step - loss: 0.6118 - accuracy: 0.7207 - val_loss: 1.5
Epoch 10/50
59/59 [==============================] - 37s 627ms/step - loss: 0.7181 - accuracy: 0.7062 - val_loss: 0.6
Epoch 11/50
59/59 [==============================] - 39s 655ms/step - loss: 0.5062 - accuracy: 0.7691 - val_loss: 0.4
Epoch 12/50
59/59 [==============================] - 36s 602ms/step - loss: 0.5943 - accuracy: 0.7497 - val_loss: 0.5
Epoch 12: early stopping
```

Plotting model results

Training Accuracy on COVID-19 Dataset
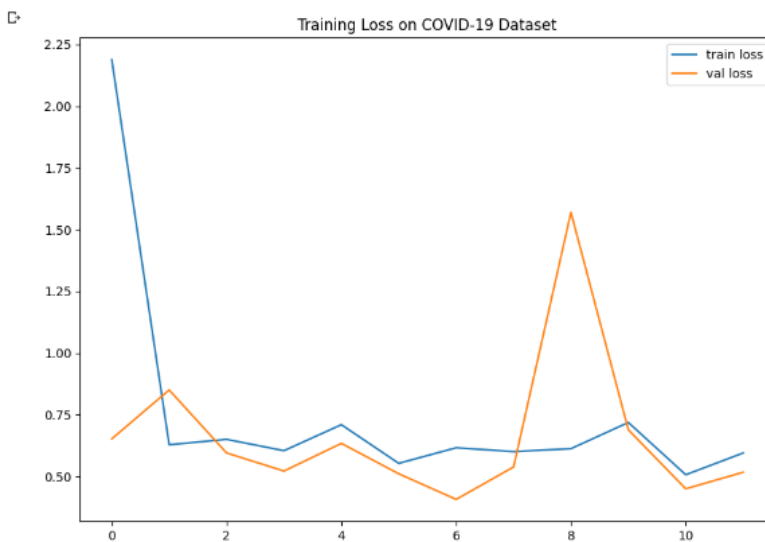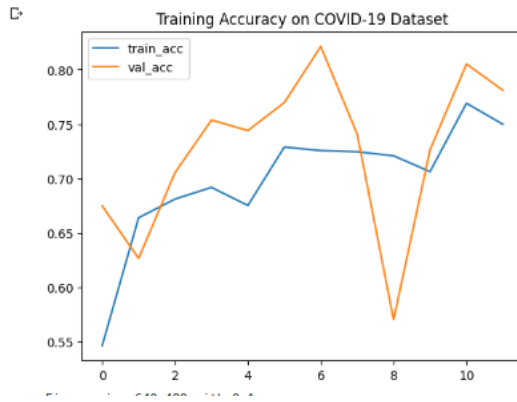
Predicting result

```
[72] def pred_img(a):
        if(a==1):
            print("The person does not have COVID-19")
        else:
            print("The person has COVID-19")
```

```
[73] pred_img(a1)

    The person does not have COVID-19
```