
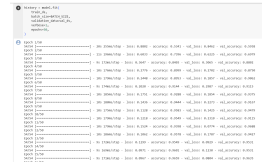


Project Development Phase Model Performance Test

Date	10 November 2023
Team ID	team-592909
Project Name	Project - Potato disease classifications
Maximum Marks	10 Marks

Model Performance Testing:

Project team shall fill the following information in the model performance testing template.

S.No.	Parameter	Values	Screenshot
1.	Model Summary	Total params: 183,747 Trainable params: 183,747 Non-trainable params: 0	
2.	Accuracy	Training Accuracy - 99.65 Validation Accuracy - 98.44	
3.	Confidence Score (Only Yolo Projects)	Class Detected - NA Confidence Score - NA	

model.summary()

Model: "sequential_2"

Layer (type)	Output Shape	Param #
sequential (Sequential)	(32, 256, 256, 3)	0
conv2d (Conv2D)	(32, 254, 254, 32)	896
max_pooling2d (MaxPooling2D)	(32, 127, 127, 32)	0
conv2d_1 (Conv2D)	(32, 125, 125, 64)	18496
max_pooling2d_1 (MaxPooling2D)	(32, 62, 62, 64)	0
conv2d_2 (Conv2D)	(32, 60, 60, 64)	36928
max_pooling2d_2 (MaxPooling2D)	(32, 30, 30, 64)	0
conv2d_3 (Conv2D)	(32, 28, 28, 64)	36928
max_pooling2d_3 (MaxPooling2D)	(32, 14, 14, 64)	0
conv2d_4 (Conv2D)	(32, 12, 12, 64)	36928
max_pooling2d_4 (MaxPooling2D)	(32, 6, 6, 64)	0
conv2d_5 (Conv2D)	(32, 4, 4, 64)	36928
max_pooling2d_5 (MaxPooling2D)	(32, 2, 2, 64)	0
flatten (Flatten)	(32, 256)	0
dense (Dense)	(32, 64)	16448
dense_1 (Dense)	(32, 3)	195
Total params: 183,747		
Trainable params: 183,747		

30°C
Partly sunny



Search



```
history = model.fit(  
    train_ds,  
    batch_size=BATCH_SIZE,  
    validation_data=val_ds,  
    verbose=1,  
    epochs=50,  
)
```

Epoch 1/50
54/54 [=====] - 20s 255ms/step - loss: 0.8802 - accuracy: 0.5341 - val_loss: 0.8462 - val_accuracy: 0.5938
Epoch 2/50
54/54 [=====] - 11s 196ms/step - loss: 0.6033 - accuracy: 0.7396 - val_loss: 0.6225 - val_accuracy: 0.6979
Epoch 3/50
54/54 [=====] - 9s 172ms/step - loss: 0.3647 - accuracy: 0.8403 - val_loss: 0.3065 - val_accuracy: 0.8802
Epoch 4/50
54/54 [=====] - 10s 176ms/step - loss: 0.2776 - accuracy: 0.8999 - val_loss: 0.2702 - val_accuracy: 0.8750
Epoch 5/50
54/54 [=====] - 10s 179ms/step - loss: 0.2448 - accuracy: 0.8953 - val_loss: 0.1857 - val_accuracy: 0.9062
Epoch 6/50
54/54 [=====] - 9s 174ms/step - loss: 0.2020 - accuracy: 0.9144 - val_loss: 0.2987 - val_accuracy: 0.9115
Epoch 7/50
54/54 [=====] - 10s 185ms/step - loss: 0.1751 - accuracy: 0.9288 - val_loss: 0.1854 - val_accuracy: 0.9375
Epoch 8/50
54/54 [=====] - 10s 180ms/step - loss: 0.1436 - accuracy: 0.9444 - val_loss: 0.2273 - val_accuracy: 0.9167
Epoch 9/50
54/54 [=====] - 10s 175ms/step - loss: 0.1128 - accuracy: 0.9583 - val_loss: 0.1425 - val_accuracy: 0.9479
Epoch 10/50
54/54 [=====] - 10s 179ms/step - loss: 0.1218 - accuracy: 0.9549 - val_loss: 0.2310 - val_accuracy: 0.9115
Epoch 11/50
54/54 [=====] - 10s 179ms/step - loss: 0.1524 - accuracy: 0.9398 - val_loss: 0.0774 - val_accuracy: 0.9688
Epoch 12/50
54/54 [=====] - 10s 186ms/step - loss: 0.1062 - accuracy: 0.9578 - val_loss: 0.1787 - val_accuracy: 0.9427
Epoch 13/50
54/54 [=====] - 9s 172ms/step - loss: 0.1299 - accuracy: 0.9549 - val_loss: 0.0929 - val_accuracy: 0.9531
Epoch 14/50
54/54 [=====] - 9s 169ms/step - loss: 0.0971 - accuracy: 0.9601 - val_loss: 0.1230 - val_accuracy: 0.9531
Epoch 15/50
54/54 [=====] - 9s 171ms/step - loss: 0.0967 - accuracy: 0.9659 - val_loss: 0.0804 - val_accuracy: 0.9635
Epoch 16/50