Project Development Phase
Model Performance Test

Date	09 November 2023
Team ID	592247
Project Name	Deep Learning Model For Detecting Diseases In Tea Leaves
Maximum Marks	10 Marks

Model Performance Testing:

S.No.	Parameter	Values
1.	Accuracy	Training Accuracy – 83.12% Validation Accuracy – 79.54%

Screenshot:

```
Epoch 1/20
23/23 [==============================] - 378s 16s/step - loss: 0.9977 - accuracy: 0.6385 - val_loss: 1.1958 - val_accuracy: 0.5287
Epoch 2/20
23/23 [==============================] - 373s 16s/step - loss: 0.9142 - accuracy: 0.6582 - val_loss: 1.1785 - val_accuracy: 0.5230
Epoch 3/20
23/23 [==============================] - 378s 17s/step - loss: 0.8304 - accuracy: 0.6850 - val_loss: 1.1787 - val_accuracy: 0.5230
Epoch 4/20
23/23 [==============================] - 387s 17s/step - loss: 0.8175 - accuracy: 0.6920 - val_loss: 1.0315 - val_accuracy: 0.6034
Epoch 5/20
23/23 [==============================] - 377s 16s/step - loss: 0.7261 - accuracy: 0.7201 - val_loss: 1.1311 - val_accuracy: 0.5057
Epoch 6/20
23/23 [==============================] - 378s 17s/step - loss: 0.6895 - accuracy: 0.7454 - val_loss: 1.0417 - val_accuracy: 0.5977
Epoch 7/20
23/23 [==============================] - 368s 16s/step - loss: 0.6154 - accuracy: 0.7651 - val_loss: 1.0819 - val_accuracy: 0.5690
Epoch 8/20
23/23 [==============================] - 378s 16s/step - loss: 0.5774 - accuracy: 0.7792 - val_loss: 1.1198 - val_accuracy: 0.5977
Epoch 9/20
23/23 [==============================] - 378s 17s/step - loss: 0.5657 - accuracy: 0.7778 - val_loss: 1.0566 - val_accuracy: 0.5977
Epoch 10/20
23/23 [==============================] - 368s 16s/step - loss: 0.5515 - accuracy: 0.7834 - val_loss: 0.9993 - val_accuracy: 0.5977
Epoch 11/20
23/23 [==============================] - 377s 16s/step - loss: 0.4368 - accuracy: 0.8439 - val_loss: 0.9618 - val_accuracy: 0.5862
Epoch 12/20
23/23 [==============================] - 376s 16s/step - loss: 0.4750 - accuracy: 0.8059 - val_loss: 0.9399 - val_accuracy: 0.6552
Epoch 13/20
23/23 [==============================] - 377s 16s/step - loss: 0.4489 - accuracy: 0.8158 - val_loss: 0.9944 - val_accuracy: 0.6264
Epoch 14/20
23/23 [==============================] - 376s 17s/step - loss: 0.4529 - accuracy: 0.8200 - val_loss: 0.9982 - val_accuracy: 0.6552
Epoch 15/20
23/23 [==============================] - 376s 16s/step - loss: 0.4725 - accuracy: 0.8087 - val_loss: 1.0498 - val_accuracy: 0.6149
Epoch 16/20
23/23 [==============================] - 377s 16s/step - loss: 0.5128 - accuracy: 0.8031 - val_loss: 0.9353 - val_accuracy: 0.6379
Epoch 17/20
23/23 [==============================] - 377s 16s/step - loss: 0.4548 - accuracy: 0.8383 - val_loss: 0.9923 - val_accuracy: 0.6667
Epoch 18/20
23/23 [==============================] - 379s 17s/step - loss: 0.5476 - accuracy: 0.7961 - val_loss: 1.1818 - val_accuracy: 0.6264
Epoch 19/20
23/23 [==============================] - 376s 16s/step - loss: 0.5200 - accuracy: 0.8003 - val_loss: 1.0011 - val_accuracy: 0.6322
Epoch 20/20
23/23 [==============================] - 377s 16s/step - loss: 0.4029 - accuracy: 0.8312 - val_loss: 0.9670 - val_accuracy: 0.6437

17/17 [==============================] - 218s 13s/step - loss: 0.5358 - accuracy: 0.7955
Test Loss: 0.5358235836029053
Test Accuracy: 0.7954545617103577
```