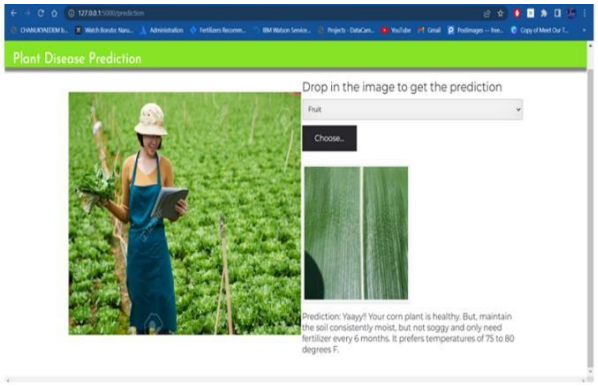
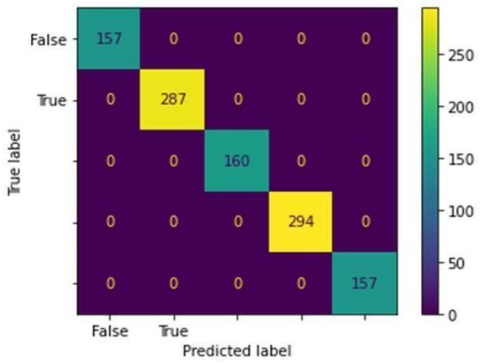
Project Development Phase
Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID43438
Project Name	Fertilizer Recommendation System For Disease Prediction
Maximum Marks	10 Marks

Model Performance Testing:

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

S.No.	Parameter	Values	Screenshot
1.	Model Summary	-	 

2.	Accuracy	Training Accuracy – 96.7% Validation Accuracy -96.9%	1. Confusion Matrix 

```
print(metrics.classification_report(test_data['label'].values, test_data['model_preds'].values)
```

	precision	recall	f1-score	support
0	1.00	1.00	1.00	157
1	1.00	1.00	1.00	287
2	1.00	1.00	1.00	160
3	1.00	1.00	1.00	294
4	1.00	1.00	1.00	157
accuracy			1.00	1055
macro avg	1.00	1.00	1.00	1055
weighted avg	1.00	1.00	1.00	1055

2. Accuracy – 100 %

```
[8] print(f"the accuracy is {metrics.accuracy_score(test_data['label'].values, test_data['model_preds'].values)}")
    the accuracy is 1.0
```

3. Precision – 100 %

```
[11] print(f"the precision is {metrics.precision_score(test_data['label'].values, test_data['model_preds'].values, average = 'weighted')}")
     the precision is 1.0
```

4. Recall – 100 %

```
[12] print(f"the recall is {metrics.recall_score(test_data['label'].values, test_data['model_preds'].values, average = 'weighted')}")
     the recall is 1.0
```

5. Specificity – 100 %

```
print(f"the specificity is {metrics.recall_score(test_data['label'].values, test_data['model_preds'].values, pos_label=0,average = 'weighted')}")
the specificity is 1.0
```

6. F1-Score – 100 %

```
[13] print(f"the f1 score is {metrics.f1_score(test_data['label'].values, test_data['model_preds'].values,average = 'weighted')}")
     the f1 score is 1.0
```