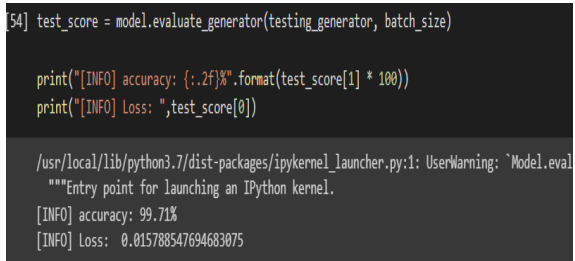
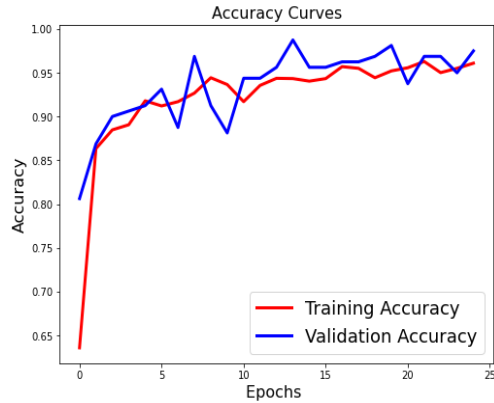


Project Development Phase Model Performance Test

| | |
|---------------|--|
| Date | 10 November 2022 |
| Team ID | PNT2022TMID23783 |
| Project Name | Fertilizers Recommendation System for Disease Prediction |
| Maximum Marks | 10 Marks |

Model Performance Testing:

Information in model performance testing .

| S.No. | Parameter | Values | Screenshot |
|-------|---------------|--|---|
| 1. | Model Summary | <pre> /usr/local/lib/python3.7/dist-packages/ipykernel_launcher.py:47: UserWarning: `Model.predict_generator` is deprecated Confusion Matrix Normalized confusion matrix Classification Report precision recall f1-score support Apple__Black_rot 0.98 1.00 0.99 181 Apple__healthy 0.99 1.00 1.00 445 Corn_(maize)__Northern_Leaf_Blight 1.00 1.00 1.00 217 Corn_(maize)__healthy 1.00 1.00 1.00 381 Peach__Bacterial_spot 0.99 0.99 0.99 493 Peach__healthy 1.00 0.90 0.95 49 Peppery_bell__Bacterial_spot 0.97 0.92 0.94 317 Peppery_bell__healthy 0.94 0.99 0.97 440 Potato__Early_blight 0.96 1.00 0.98 380 Potato__Late_blight 0.92 0.96 0.94 290 Potato__healthy 0.97 0.71 0.82 52 Tomato__Bacterial_spot 0.96 0.99 0.97 667 Tomato__Late_blight 0.96 0.95 0.96 599 Tomato__Leaf_Mold 0.96 0.91 0.94 322 Tomato__Septoria_leaf_spot 0.94 0.92 0.93 421 accuracy 0.97 5102 macro avg 0.97 0.95 0.96 5102 weighted avg 0.97 0.97 0.97 5102 </pre> |  <pre> [54] test_score = model.evaluate_generator(testing_generator, batch_size) print("[INFO] accuracy: {:.2f}%".format(test_score[1] * 100)) print("[INFO] Loss: ",test_score[0]) /usr/local/lib/python3.7/dist-packages/ipykernel_launcher.py:1: UserWarning: `Model.evaluate_generator` is deprecated """Entry point for launching an IPython kernel. [INFO] accuracy: 99.71% [INFO] Loss: 0.015788547694683075 </pre> |
| 2. | Accuracy | <p>Training Accuracy - 0.95</p> <p>Validation Accuracy – 0.98</p> |  <p>The graph shows Training Accuracy (red line) and Validation Accuracy (blue line) over 25 epochs. The y-axis represents Accuracy from 0.65 to 1.00, and the x-axis represents Epochs from 0 to 25. Both accuracies start around 0.65 and rise sharply to above 0.90 by epoch 5, then fluctuate between 0.90 and 0.98.</p> |

