Project Development Phase
Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID
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	**Vegetable model** **Fruit model**	Model: "sequential_3" _____ Layer (type) Output Shape Param # ===== conv2d_3 (Conv2D) (None, 126, 126, 32) 896 max_pooling2d_2 (MaxPooling 2D) (None, 63, 63, 32) 0 flatten_2 (Flatten) (None, 127008) 0 dense_6 (Dense) (None, 40) 5080360 dense_7 (Dense) (None, 20) 820 dense_8 (Dense) (None, 300) 6300 dense_9 (Dense) (None, 150) 45150 dense_10 (Dense) (None, 75) 11325 dense_11 (Dense) (None, 9) 684 ===== Total params: 5,145,535 Trainable params: 5,145,535 Non-trainable params: 0 Model: "sequential_2" _____ Layer (type) Output Shape Param # ===== conv2d_2 (Conv2D) (None, 126, 126, 32) 896 max_pooling2d_1 (MaxPooling 2D) (None, 63, 63, 32) 0 flatten_1 (Flatten) (None, 127008) 0 dense_3 (Dense) (None, 40) 5080360 dense_4 (Dense) (None, 20) 820 dense_5 (Dense) (None, 6) 126 ===== Total params: 5,082,202 Trainable params: 5,082,202 Non-trainable params: 0 _____
2.	Accuracy	Training Accuracy(fruit) – 0.8302 Validation Accuracy (fruit)- 0.6690	89/89 [==========] - 19s 213ms/step - loss: 2.0058 - accuracy: 0.2191 - val_loss: 7.0255 - val_accuracy: 0.1667 Epoch 20/20 89/89 [==========] - 21s 232ms/step - loss: 1.9033 - accuracy: 0.2978 - val_loss: 6.2714 - val_accuracy: 0.2407

		Training Accuracy (vegetable)-0.2978 Validation Accuracy (Vegetable)-0.2407	loss: 0.8639 - accuracy: 0.6643 - val_loss: 40.9182 - val_accuracy: 0.8488 loss: 0.4604 - accuracy: 0.8302 - val_loss: 184.6315 - val_accuracy: 0.6690
3.	Class Detected	Class Detected(fruit)- 6 Class detected (Vegetable)- 9	Found 1686 images belonging to 6 classes. Found 5384 images belonging to 6 classes. Found 3417 images belonging to 9 classes. Found 11386 images belonging to 9 classes.