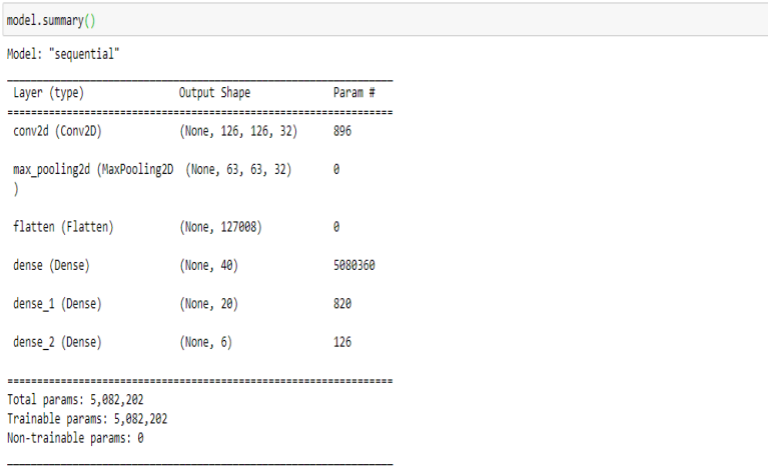
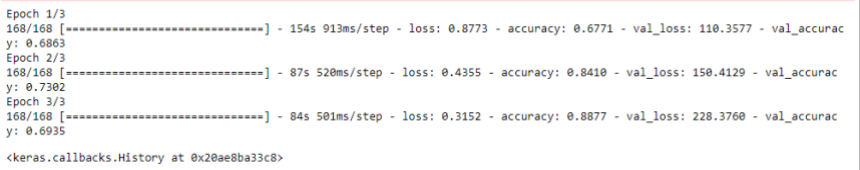


Project Development Phase

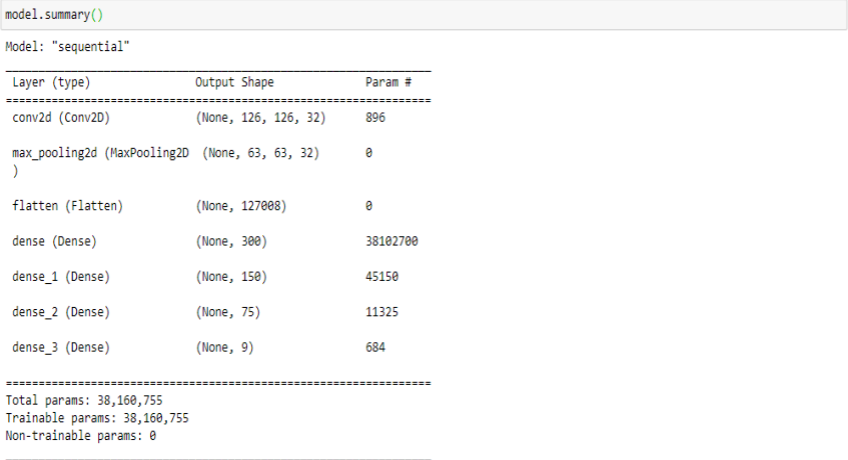
Model Performance Testing

Date	19 November 2022
Team ID	PNT2022TMID21501
Project name	Fertilizers Recommendation System For Disease Prediction
Maximum Marks	10 Marks

Model Performance Testing : Fruit model

S.No	Parameter	Values	Screenshot
1	Fruit model summary	Total p arams: 5,082, 202 Traina ble par ams: 5, 082,20 2 Non-tr ainabl e para ms: 0	 <pre>model.summary() Model: "sequential" Layer (type) Output Shape Param # ----- conv2d (Conv2D) (None, 126, 126, 32) 896 max_pooling2d (MaxPooling2D) (None, 63, 63, 32) 0 flatten (Flatten) (None, 127008) 0 dense (Dense) (None, 40) 5080360 dense_1 (Dense) (None, 20) 820 dense_2 (Dense) (None, 6) 126 ----- Total params: 5,082,202 Trainable params: 5,082,202 Non-trainable params: 0</pre>
2	Accuracy	Traini ng acc uracy- 0.8877 Validat ion acc uracy- 0.7302	 <pre>Epoch 1/3 168/168 [=====] - 154s 913ms/step - loss: 0.8773 - accuracy: 0.6771 - val_loss: 110.3577 - val_accu racy: 0.6863 Epoch 2/3 168/168 [=====] - 87s 520ms/step - loss: 0.4355 - accuracy: 0.8410 - val_loss: 150.4129 - val_accu racy: 0.7302 Epoch 3/3 168/168 [=====] - 84s 501ms/step - loss: 0.3152 - accuracy: 0.8877 - val_loss: 228.3760 - val_accu racy: 0.6935 <keras.callbacks.History at 0x20ae8ba33c8></pre>

Model Performance Testing : Vegetable model

S.No	Parameter	Values	Screenshot
1	Vegetable model summary	Total p arams: 38,160,755 Trainable par ams: 38,160,755 Non-trainabl e para ms: 0	 <pre> model.summary() Model: "sequential" Layer (type) Output Shape Param # ----- conv2d (Conv2D) (None, 126, 126, 32) 896 max_pooling2d (MaxPooling2D) (None, 63, 63, 32) 0 flatten (Flatten) (None, 127008) 0 dense (Dense) (None, 300) 38102700 dense_1 (Dense) (None, 150) 45150 dense_2 (Dense) (None, 75) 11325 dense_3 (Dense) (None, 9) 684 Total params: 38,160,755 Trainable params: 38,160,755 Non-trainable params: 0 </pre>
2	Accuracy	Traini ng acc uracy- 0.9744 Validat ion acc uracy- 0.7996	<pre> Epoch 1/6 138/138 [=====] - 99s 717ms/step - loss: 0.0863 - accuracy: 0.9698 - val_loss: 3588.3496 - val_accuracy: 0.7569 Epoch 2/6 138/138 [=====] - 95s 685ms/step - loss: 0.0823 - accuracy: 0.9744 - val_loss: 3614.9036 - val_accuracy: 0.7792 Epoch 3/6 138/138 [=====] - 101s 729ms/step - loss: 0.1203 - accuracy: 0.9626 - val_loss: 3540.5193 - val_accuracy: 0.7014 Epoch 4/6 138/138 [=====] - 104s 749ms/step - loss: 0.0764 - accuracy: 0.9737 - val_loss: 4707.6504 - val_accuracy: 0.7762 Epoch 5/6 138/138 [=====] - 100s 727ms/step - loss: 0.0967 - accuracy: 0.9692 - val_loss: 2704.9729 - val_accuracy: 0.7750 Epoch 6/6 138/138 [=====] - 99s 715ms/step - loss: 0.0762 - accuracy: 0.9721 - val_loss: 5017.3809 - val_accuracy: 0.7996 </pre>