

PROJECT DEVELOPMENT PHASE

MODEL PERFORMANCE TEST

Date	10 November 2022
Team ID	PNT2022TMID23611
Project Name	Project - Emerging Methods for Early Detection of Forest Fires
Maximum Marks	10 Marks

MODEL PERFORMANCE TEST

S.No.	Parameter	Values	Screenshot
1.	Model Summary	<p>Total params: 201,741</p> <p>Trainable params: 19,052,397</p> <p>Non-trainable params: 0</p>	<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, 150) 19051350 dense_1 (Dense) (None, 1) 151 ----- Total params: 19,052,397 Trainable params: 19,052,397 Non-trainable params: 0</pre>
2.	Accuracy	<p>Training Accuracy – 94.04</p> <p>Validation Accuracy -98.35</p>	<pre>Epoch 1/10 [=====] - 20s 2s/step - loss: 1.3500 - accuracy: 0.7590 - val_loss: 0.2007 - val_accuracy: 0.9339 Epoch 2/10 [=====] - 30s 1s/step - loss: 0.2377 - accuracy: 0.9300 - val_loss: 0.0910 - val_accuracy: 0.9835 Epoch 3/10 [=====] - 20s 1s/step - loss: 0.2209 - accuracy: 0.9300 - val_loss: 0.0610 - val_accuracy: 0.9835 Epoch 4/10 [=====] - 25s 2s/step - loss: 0.1652 - accuracy: 0.9310 - val_loss: 0.1118 - val_accuracy: 0.9840 Epoch 5/10 [=====] - 21s 2s/step - loss: 0.1569 - accuracy: 0.9350 - val_loss: 0.0705 - val_accuracy: 0.9835 Epoch 6/10 [=====] - 30s 1s/step - loss: 0.1586 - accuracy: 0.9345 - val_loss: 0.0562 - val_accuracy: 0.9835 Epoch 7/10 [=====] - 20s 1s/step - loss: 0.1536 - accuracy: 0.9350 - val_loss: 0.0530 - val_accuracy: 0.9835 Epoch 8/10 [=====] - 20s 1s/step - loss: 0.1574 - accuracy: 0.9320 - val_loss: 0.0402 - val_accuracy: 0.9917 Epoch 9/10 [=====] - 30s 1s/step - loss: 0.1113 - accuracy: 0.9320 - val_loss: 0.0408 - val_accuracy: 0.9835 Epoch 10/10 [=====] - 30s 1s/step - loss: 0.1158 - accuracy: 0.9448 - val_loss: 0.0403 - val_accuracy: 0.9835 INFO:tensorflow:History at 0.045500000000000005</pre>
3.	Confidence Score (Only Yolo Projects)	<p>Class Detected – No Danger</p> <p>Confidence Score – 93.067</p>	

