Project Development Phase
Model Performance Test

Date	18 November 2022
Team ID	PNT2022TMID39552
Project Name	Emerging methods for early detection of forest fire

Model Performance Testing:

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

S.No.	Parameter	Values	Screenshot
1.	Model Summary	Total params : 201,741 Trainable params : 201,741 Non-Trainable params : 0	Screenshot 1
2.	Accuracy	Training Accuracy - 94.50 Validation Accuracy -99.17	Screenshot 2

Screenshot 1 :

```
⊳ ⌄      model.summary()
[99]   ✓ 0.8s

...  Output exceeds the size limit. Open the full output data in a text editor
     Model: "sequential_1"
     _____
      Layer (type)              Output Shape            Param #
     ===============================================================
      conv2d_4 (Conv2D)          (None, 126, 126, 32)     896

      max_pooling2d_4 (MaxPooling (None, 63, 63, 32)       0
      2D)

      conv2d_5 (Conv2D)          (None, 61, 61, 32)       9248

      max_pooling2d_5 (MaxPooling (None, 30, 30, 32)       0
      2D)

      conv2d_6 (Conv2D)          (None, 28, 28, 32)       9248

      max_pooling2d_6 (MaxPooling (None, 14, 14, 32)       0
      2D)

      conv2d_7 (Conv2D)          (None, 12, 12, 32)       9248

      max_pooling2d_7 (MaxPooling (None, 6, 6, 32)         0
      2D)

      flatten_1 (Flatten)        (None, 1152)             0
      ...
     Total params: 201,741
     Trainable params: 201,741
     Non-trainable params: 0
     _____
```

Screenshot 2:

```
Epoch 1/5
14/14 [==============================] - 12s 813ms/step - loss: 0.6062 - accuracy: 0.6835 - val_loss: 0.4334 - val_accuracy: 0.8017
Epoch 2/5
14/14 [==============================] - 11s 796ms/step - loss: 0.3958 - accuracy: 0.8142 - val_loss: 0.1323 - val_accuracy: 0.9752
Epoch 3/5
14/14 [==============================] - 10s 721ms/step - loss: 0.1914 - accuracy: 0.9358 - val_loss: 0.0568 - val_accuracy: 0.9669
Epoch 4/5
14/14 [==============================] - 11s 773ms/step - loss: 0.1876 - accuracy: 0.9151 - val_loss: 0.0692 - val_accuracy: 0.9917
Epoch 5/5
14/14 [==============================] - 10s 747ms/step - loss: 0.1438 - accuracy: 0.9450 - val_loss: 0.0596 - val_accuracy: 0.9752
```