EARLY DETECTION OF FOREST FIRE USING DEEP LEARNING

Performance Testing

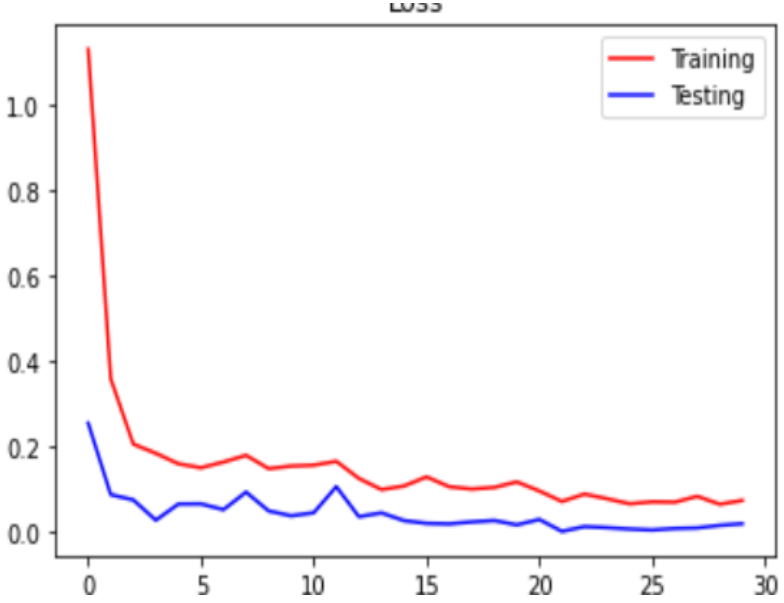
Team ID	PNT2022TMID03442
Project Name	Emerging Methods for Early Detection of Forest Fires

Model:-

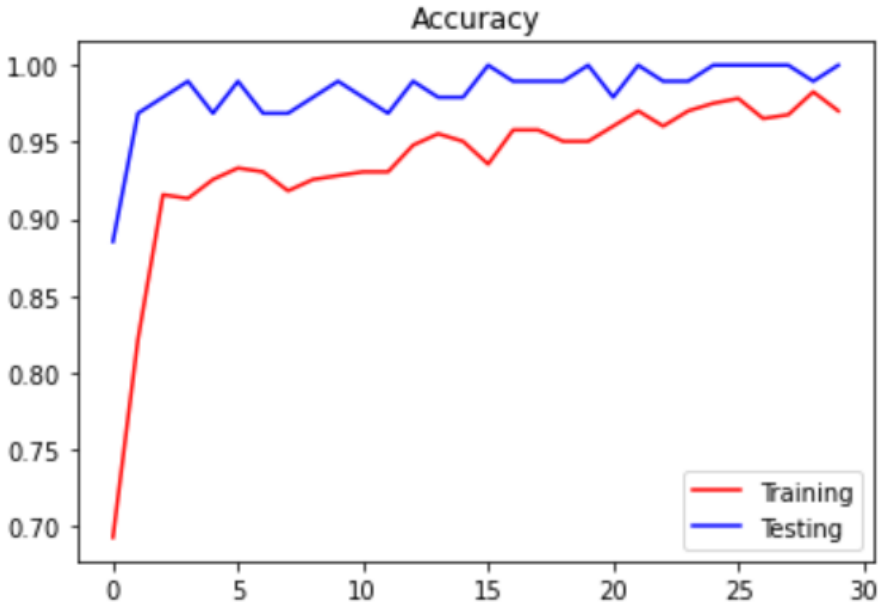
```
Model: "sequential"
_________________________________________________________________
 Layer (type)                Output Shape              Param #
=================================================================
 conv2d (Conv2D)             (None, 254, 254, 32)      896

 max_pooling2d (MaxPooling2D  (None, 127, 127, 32)     0
 )

 flatten (Flatten)           (None, 516128)            0

 dense (Dense)               (None, 300)               154838700

 dense_1 (Dense)             (None, 200)               60200

 dense_2 (Dense)             (None, 1)                 201

=================================================================
Total params: 154,899,997
Trainable params: 154,899,997
Non-trainable params: 0
_________________________________________________________________
```

Accuracy value:-

```
plt.figure(0)

plt.title("Loss")

plt.plot(hist.history['loss'], 'r', label='Training')

plt.plot(hist.history['val_loss'], 'b', label='Testing')

plt.legend()

plt.show()
```



```
plt.figure(1)

plt.title("Accuracy")

plt.plot(hist.history['accuracy'], 'r', label='Training')

plt.plot(hist.history['val_accuracy'], 'b', label='Testing')

plt.legend()

plt.show()
```



Confusion Matrix:-