OUTPUT:

Save the model

In [13]:
```
model.save("forest1.h5")
```

In [14]:
```
print(x_train.class_indices)
```

```
{'forest': 0, 'with fire': 1}
```

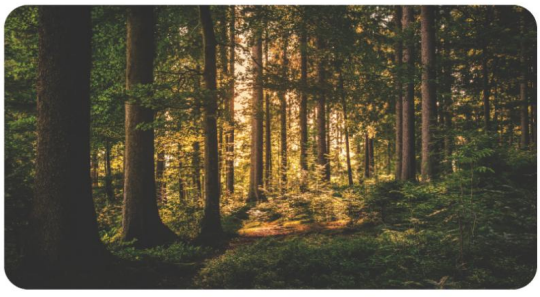
In [15]:
```
import numpy as np
from tensorflow.keras.models import load_model
from tensorflow.keras.preprocessing import image
import tensorflow as tf
import cv2
model=load_model("forest1.h5")
img=tf.keras.preprocessing.image.load_img(r'E:\InternshipProject\Dataset\Dataset\test_set\forest\1.jpg',
                                          target_size=(128,128))
```

In [16]:
```
img
```

Out[16]:

In [17]:
```
x=tf.keras.preprocessing.image.img_to_array(img)
x=np.expand_dims(x,axis=0)
pred=np.argmax(model.predict(x))
pred
```

```
1/1 [==============================] - 1s 727ms/step
```

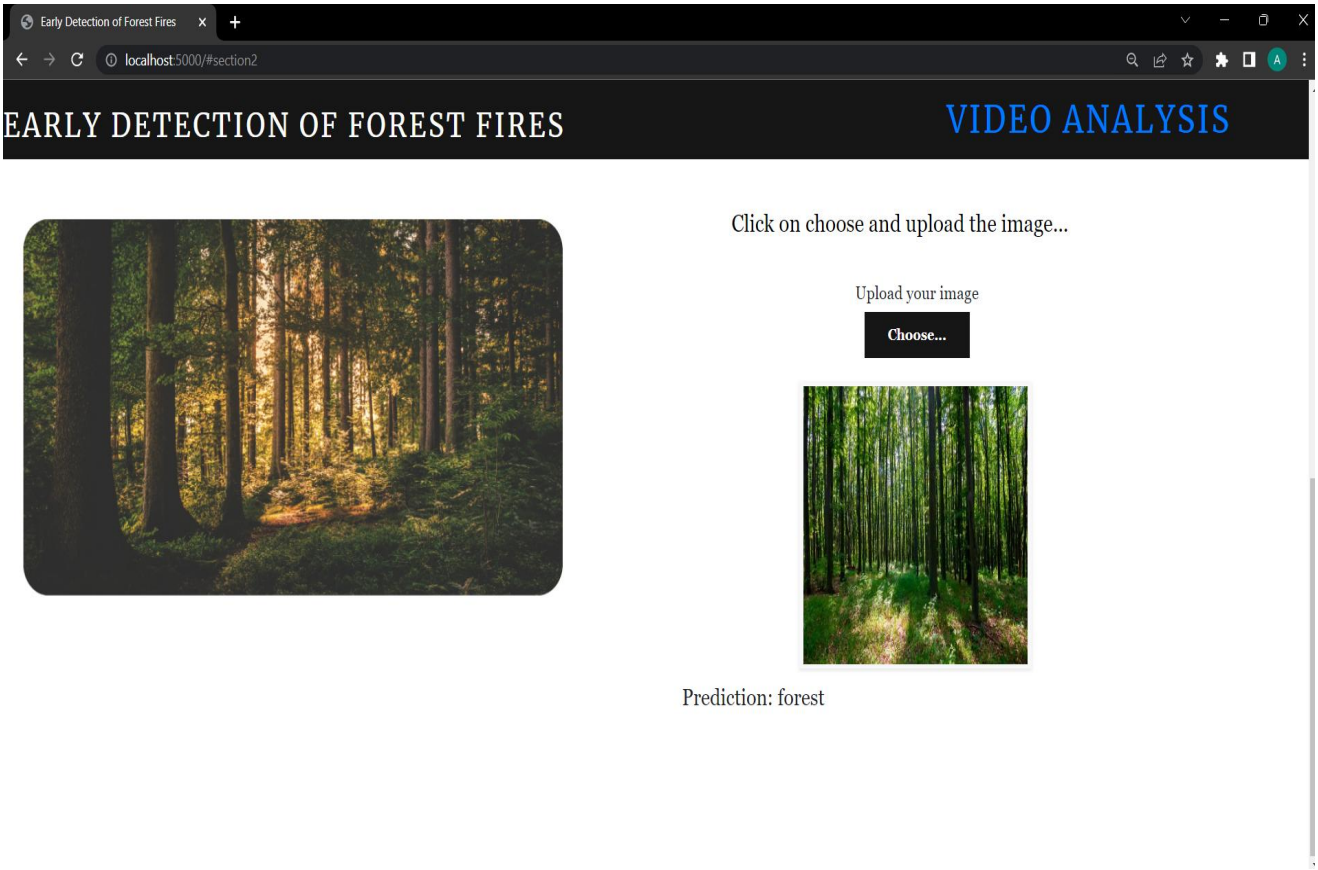


Click on choose and upload the image...

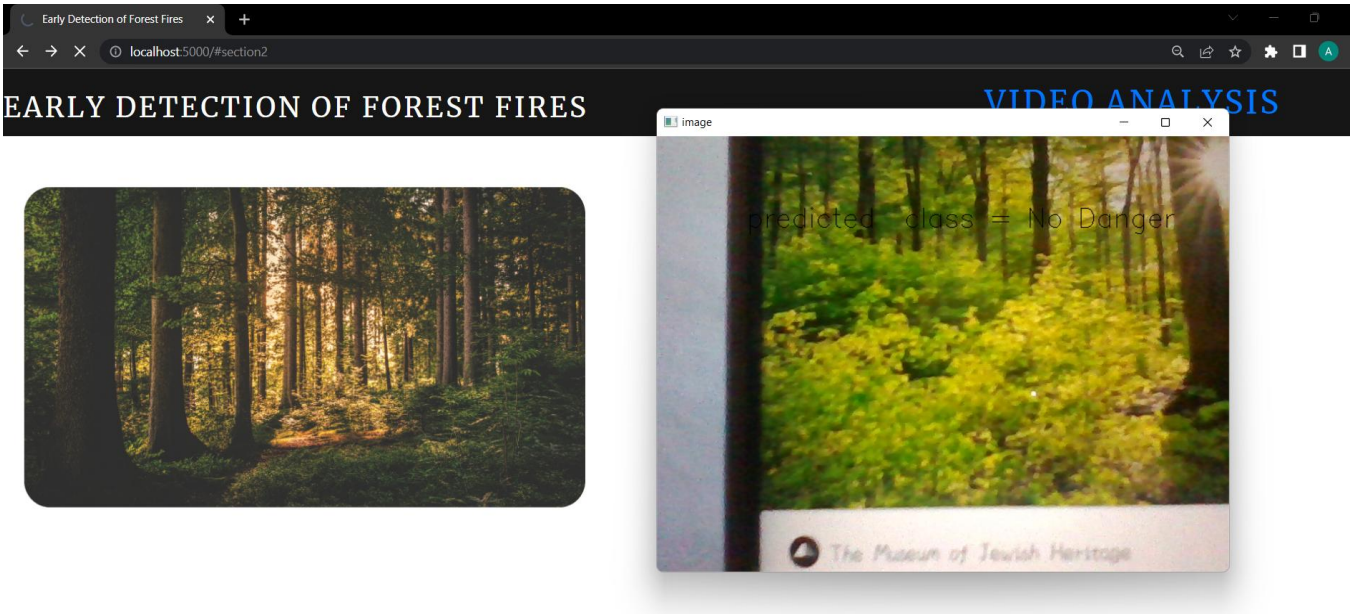
Upload your image

Choose...

Prediction: with fire



- In Video Analysis we can capture the image of forest through OpenCV window:



- But when we try to show the fire video the OpenCV window does not open and simply send SMS to phone number that registered

Sent from your Twilio trial account - Forest Fire is detected, stay alert

Sent from your Twilio trial account - Forest Fire is detected, stay alert