MODEL BUILDING

IMPORTING THE MODEL BUILDING LIBRARIES

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Project Name	Emerging Methods for Early Detection of Forest Fires

Importing The ImageDataGenerator Library *import keras* from keras.preprocessing.image import ImageDataGenerator ***Define the parameters/arguments for ImageDataGenerator class*** train_datagen=ImageDataGenerator(rescale=1./255,shear_range=0.2,rot ati on_range=180,zoom_range=0.2, horizontal_flip=True) test_datagen=ImageDataGenerator(rescale=1./255) ***Applying ImageDataGenerator functionality to trainset*** x_train=train_datagen.flow_from_directory(r'/content/drive/MyDriv e/ Dataset/train_set',target_size=(128,128),batch_size=32, class_mode='binary')

Found 436 images belonging to 2 classes.

Applying ImageDataGenerator functionality to testset

x_test=test_datagen.flow_from_directory(r'/content/drive/MyDrive / Dataset/test_set',target_size=(128,128),batch_size=32, class_mode='binary')

Found 121 images belonging to 2 classes.

Import model building libraries

```python
#To define Linear initialisation import Sequential
from keras.models import Sequential #To add
layers import Dense from keras.layers import
Dense
#To create Convolution kernel import Convolution2D from
keras.layers import Convolution2D
#import Maxpooling layer
from keras.layers import MaxPooling2D
#import flatten layer from
keras.layers import Flatten
import warnings
warnings.filterwarnings('ignore')
```