EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRES

MODEL BUILDING

IMPORTING THE MODEL BUILDING LIBRARIES

Date	06 November 2022
Team ID	PNT2022TMID30907
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,rotati 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/MyDrive/Colab Notebooks/Dataset/trainset',target_size=(128,128),batch_size=32,
class_mode='binary')
```

Found 117 images belonging to 2 classes.

Applying ImageDataGenerator functionality to testset

```
x_train=train_datagen.flow_from_directory(r'/content/drive/MyDrive/Colab Notebooks/Dataset/testset',target_size=(128,128),batch_size=32,
class_mode='binary')
```

Found 117 images belonging to 2 classes.

Import model building libraries

```
#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')
```