EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRE MODEL BUILDING

IMPORTING THE MODEL BUILDING LIBRARIES

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|--------------|---|
| Project Name | Project- Emerging Methods For Early Detection of Forest Fire |

IMPORTING THE MODEL BUILDING LIBRARIES:

Import the libraries that are required to initialize the neural network layer, create and add different layers to the neural network model. The below libraries are imported and executed.

11/7/22, 12:35 AM

Untitled8.ipynb - Colaboratory

Importing Keras libraries

import keras

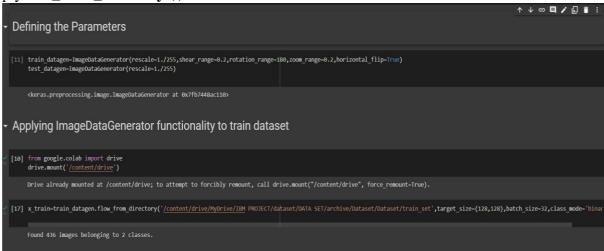
▼ Importing ImageDataGenerator from Keras

 ${\it from keras.preprocessing.image import ImageDataGenerator}$

| → Importing Ke | eras libraries |
|---|---|
| [1] import keras | |
| → Importing Im | nageDataGenerator from Keras |
| | ib import pyplot as plt eprocessing.image import ImageDataGenerator |
| → Defining the | Parameters |
| | =ImageDataGenerator(rescale=1./255,shear_range=0.2,rotation_range=180,zoom_range=0.2,horizontal_flip=True) ImageDataGenerator(rescale=1./255) |
| C→ <keras.preproc< td=""><th>cessing.image.ImageDataGenerator at 0x7fb7448ac110></th></keras.preproc<> | cessing.image.ImageDataGenerator at 0x7fb7448ac110> |

APPLYING ImageDataGenerator to train dataset:

plyflow_from_directory ()methodfor Train folder.



APPLYING ImageDataGenerator to test dataset:

Applying the **flow_from_directory** () methodfortest folder.



IMPORTING MODEL BUILDING LIBRARIES:

11/8/22, 1:16 AM Main code - Colaboratory

Importing Model Building Libraries

```
#to define the linear Initialisation import sequential
from keras.models import Sequential
#to add layers import Dense
from keras.layers import Dense
#to create Convolutional 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')
```