

<b>PROJECT TITLE</b>	<b>EMDFGNG METHODS FOR EARLY DETECTION OF FOREST FIRES</b>
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## Applying ImageDataGenerator Functionality To Trainset And Testset

The ImageDataGenerator class has three methods **flow ( )**, **flow\_from\_directory ( )**, and **flow\_from\_dataframe ( )** to read the images from a big numpy array and folders containing images.

**flow\_from\_directory ( )** expects at least one directory under the given directory path.

**Task1:** Apply **flow\_from\_directory ( )** method for Train folder.

```
In [ ]: #: Applying ImageDataGenerator functionality to trainset.
x_train = train_datagen.flow_from_directory(r'./Main Project/Dataset Main/train_set',
                                           target_size = (128,128),
                                           batch_size = 32,
                                           class_mode = 'binary')
```

**Task 2:** Now will apply the **flow\_from\_directory ( )** method for test folder.

```
In [ ]: #: Applying ImageDataGenerator functionality to testset.
x_test = test_datagen.flow_from_directory(r'./Main Project/Dataset Main/test_set',
                                          target_size = (128,128),
                                          batch_size = 32,
                                          class_mode = 'binary')
```

- The directory must be set to the path where your training folders are present.
- The target\_size is the size of your input images, every image will be resized to this size.
- batch\_size: No. of images to be yielded from the generator per batch.
- “batch\_size” in both train and test generators is to some number that divides your total number of images in your train set and train set respectively.
- class\_mode: Set “binary” if you have only two classes to predict, if not set to “categorical”.