

## PROJECT DEVELOPMENT PHASE

### SPRINT-II

Date	5 November 2022
TeamID	PNT2022TMID34712
Project Name	Intelligent vehicle damage assessment & cost estimator for insurance companies.
MaximumMarks	4 Marks

## Image Pre-processing

### **#Import The ImageDataGenerator Library:**

```
# Import required lib
from tensorflow.keras.preprocessing.image import ImageDataGenerator
```

### **#Configure ImageDataGenerator Class :**

```
#Creating augmentation on training variable
train_datagen = ImageDataGenerator(rescale=1./255,
                                   zoom_range=0.2,
                                   horizontal_flip=True)

# Creating augmentation on testing variable test_datagen
= ImageDataGenerator(rescale=1./255)
```

### **#Apply ImageDataGenerator Functionality To Trainset And Testset :**

#### **For Body Damage:**

```
# Passing training data to train variable for body xtrain =
train_datagen.flow_from_directory('/content/damage vehicle/body/training',
                                  target_size=(224,224),
                                  class_mode='categorical',
                                  batch_size=10)

# Passing testing data to test variable for body
xtest = test_datagen.flow_from_directory('/content/damage
vehicle/body/validation', target_size=(224,224),
class_mode='categorical',
batch_size=10)
```

#### **For Level Damage:**

```
# Passing training data to train variable for body
x_train = train_datagen.flow_from_directory('/content/damage
vehicle/level/training', target_size=(224,224),
class_mode='categorical',
batch_size=10)
```

```
# Passing training data to test variable for body
x_test = test_datagen.flow_from_directory('/content/damage
    vehicle/level/validation', target_size=(224,224),
    class_mode='categorical',
    batch_size=10)
```