

PROJECT DEVELOPMENT PHASE

SPRINT-II

Date	O6 November 2022
TeamID	PNT2022TMID40228
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

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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)
```