

# PROJECT DEVELOPMENT PHASE

## SPRINT-II

Date	O9 November 2022
TeamID	PNT2022TMID12839
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)
```