

PROJECT DEVELOPMENT PHASE

PROJECT DEVELOPMENT – DELIVERY OF SPRINT II

DATE	16 November 2022
TEAM ID	PNT2022TMID47699
PROJECT NAME	Project – Intelligent Vehicle Damage Assessment and Cost Estimator for Insurance Companies

IMAGE PREPROCESSING :

#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)
```

