

PROJECT DEVELOPMENT PHASE

SPRINT-II

Project Name	Intelligent vehicle damage assessment & cost estimator for insurance companies.
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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)
```

```
# 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)
```