PROJECTDEVELOPMENTPHASE
SPRINT-II

Date	09November2022
TeamID	PNT2022TMID09778
ProjectName	Intelligent vehicle damage assessment & cost estimator forinsurance companies.
MaximumMarks	4Marks

ImagePre-processing

#ImportTheImageDataGeneratorLibrary:

#Importrequiredlib
fromtensorflow.keras.preprocessing.imageimportImageDataGenerator

#ConfigureImageDataGeneratorClass:

#Creating augmentation on training
variabletrain_datagen=ImageDataGenerator(rescale=1./2
55,

        zoom_range=0.2,horizontal_flip=Tru
        e)

#Creatingaugmentationontestingvariabletest_datagen
=ImageDataGenerator(rescale=1./255)

#ApplyImageDataGeneratorFunctionalityToTrainsetAndTestset:

For BodyDamage:
```
# Passing training data to train variable for body xtrain
 =train_datagen.flow_from_directory('/content/damagevehicle/body/training',
                target_size=(224,224),cla
                ss_mode='categorical',bat
                ch_size=10)
```

```
#Passingtestingdatatotestvariableforbody
xtest = test_datagen.flow_from_directory('/content/damage
                vehicle/body/validation',target_size=(224,224),
                class_mode='categorical',
                batch_size=10)
```

ForLevelDamage:

```
#Passingtrainingdatatotrainvariablefor body
x_train=train_datagen.flow_from_directory('/content/damagevehicle/level/training',target_size=(224,224),
                class_mode='categorical',
                 batch_size=10)
```

```
#Passingtrainingdatatotestvariablefor body
x_test=test_datagen.flow_from_directory('/content/damagevehicle/level/validation',
                        target_size=(224,224),cla
                        ss_mode='categorical',bat
                        ch_size=10)
```