

CONFIGURE IMAGE DATAGENERATOR CLASS

Date	19 September 2022
Team ID	PNT2022TMID43802
Project Name	AI-powered nutrition analyzer for fitness enthusiasts
Maximum Marks	4 Marks

IMAGEDATAGENERATOR CLASS IS INSTANTIATED AND THE CONFIGURATION FOR THE TYPES OF DATA AUGMENTATION

THERE ARE FIVE MAIN TYPES OF DATA AUGMENTATION TECHNIQUES FOR IMAGE DATA; SPECIFICALLY:

IMAGE SHIFTS VIA THE WIDTH_SHIFT_RANGE AND HEIGHT_SHIFT_RANGE ARGUMENTS.

THE IMAGE FLIPS VIA THE HORIZONTAL_FLIP AND VERTICAL_FLIP ARGUMENTS. IMAGE ROTATIONS VIA THE ROTATION_RANGE ARGUMENT IMAGE BRIGHTNESS VIA THE BRIGHTNESS_RANGE ARGUMENT.

IMAGE ZOOM VIA THE ZOOM_RANGE ARGUMENT.

AN INSTANCE OF THE IMAGEDATAGENERATOR CLASS CAN BE CONSTRUCTED FOR TRAIN AND TEST.

Image Data Agumentation

```
#setting parameter for Image Data agumentation to the traing data
train_datagen = ImageDataGenerator(rescale=1./255,shear_range=0.2,zoom_range=0.2,horizontal_flip=True)
#Image Data agumentation to the testing data
test_datagen=ImageDataGenerator(rescale=1./255)
```