{

"nbformat": 4,

"nbformat\_minor": 0,

"metadata": {

"colab": {

"provenance": [],

"collapsed\_sections": []

},

"kernelspec": {

"name": "python3",

"display\_name": "Python 3"

},

"language\_info": {

"name": "python"

}

},

"cells": [

{

"cell\_type": "markdown",

"source": [

"Team Id: PNT2022TMID21192\n"

],

"metadata": {

"id": "fi5v0gjYEkk0"

}

},

{

"cell\_type": "markdown",

"source": [

"# Project: Real-Time Communication system powered by AI for specially abled"

],

"metadata": {

"id": "32dw23fwFj7V"

}

},

{

"cell\_type": "markdown",

"source": [

"\*\*Image processing\*\*"

],

"metadata": {

"id": "QXFlhlTgEn-a"

}

},

{

"cell\_type": "markdown",

"source": [

"\*Import ImageDataGenerator Library And Configure It\*"

],

"metadata": {

"id": "TDTIZVOeFOul"

}

},

{

"cell\_type": "code",

"execution\_count": 1,

"metadata": {

"id": "I\_mHw62oEUqr"

},

"outputs": [],

"source": [

"#import imagedatagenerator\n",

"from keras.preprocessing.image import ImageDataGenerator"

]

},

{

"cell\_type": "code",

"source": [

"#training datagen\n",

"train\_datagen=ImageDataGenerator(rescale=1./255,shear\_range=0.2,zoom\_range=0.2,horizontal\_flip=True)"

],

"metadata": {

"id": "ya-UCz3tF1U1"

},

"execution\_count": 2,

"outputs": []

},

{

"cell\_type": "code",

"source": [

"#testing datagen\n",

"test\_datagen=ImageDataGenerator(rescale=1./255)"

],

"metadata": {

"id": "UISsIzIDh\_iv"

},

"execution\_count": 3,

"outputs": []

},

{

"cell\_type": "markdown",

"source": [

"IMPORTING tensorflow"

],

"metadata": {

"id": "c0mnRWJhikOJ"

}

},

{

"cell\_type": "code",

"source": [

"import tensorflow as tf\n",

"import os"

],

"metadata": {

"id": "iKW85AEOiO2Q"

},

"execution\_count": 4,

"outputs": []

},

{

"cell\_type": "markdown",

"source": [

"IMPORTING SEQUENTIAL, DENSE, FLATTEN LAYER"

],

"metadata": {

"id": "fWc7iOwskUou"

}

},

{

"cell\_type": "code",

"source": [

"from tensorflow.keras.models import Sequential\n",

"from tensorflow.keras.layers import Dense, Conv2D, Flatten, Dropout, MaxPooling2D\n",

"from tensorflow.keras.preprocessing.image import ImageDataGenerator"

],

"metadata": {

"id": "p2aNVlq5ijV5"

},

"execution\_count": 5,

"outputs": []

},

{

"cell\_type": "code",

"source": [

"import numpy as np\n",

"import matplotlib.pyplot as plt #to view graph in colab itself\n",

"import IPython.display as display\n",

"from PIL import Image\n",

"import pathlib"

],

"metadata": {

"id": "3-tqQA1JkmBo"

},

"execution\_count": 6,

"outputs": []

}

]

}