**DAY 03**

**Dataset**

Examination dataset have been shared with three folders namely train, validation, validation2 and a Jupyter notebook. The shared dataset is a multi-class dataset. Each folder of Examination dataset has five more folders namely normal, cheat, phone, paperseeing, paperexchange.

Train set: train

Test set: validation

Validation set: validation2

*Google Drive*

<https://drive.google.com/drive/folders/1Zc0bVs66paccr6-yCYT8yI9lgqajFwBv?usp=sharing>

**Google Colab**

import pandas as pd

import numpy as np

import matplotlib.pyplot as plt

import seaborn as sns

import plotly.express as px

import os

import tensorflow as tf

from tensorflow.keras.preprocessing.image import ImageDataGenerator

from sklearn.preprocessing import LabelBinarizer

from sklearn.metrics import roc\_curve, auc, roc\_auc\_score

# from IPython.display import clear\_output

import warnings

warnings.filterwarnings('ignore')

train\_dir = "/content/drive/MyDrive/EXAMDATASET/train"

test\_dir = "/content/drive/MyDrive/EXAMDATASET/validation"

SEED = 12

IMG\_HEIGHT = 64

IMG\_WIDTH = 64

BATCH\_SIZE = 64      #Was 46

EPOCHS = 1

LR =  0.001

NUM\_CLASSES = 14

CLASS\_LABELS = ['cheat','normal','peperexchange','paperseeing','phone']

train\_dir = "/content/drive/MyDrive/EXAMDATASET/train"

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SEED = 12

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from tensorflow.keras.callbacks import ModelCheckpoint

filepath="weights-improvementResnet50-{epoch:02d}-{val\_accuracy:.2f}.hdf5"

checkpoint = ModelCheckpoint(filepath, monitor='val\_accuracy', verbose=1, save\_best\_only=True, mode='max')

callbacks\_list = [checkpoint]

history = model.fit(x = train\_generator,validation\_data=validation\_generator,epochs = 20,callbacks=callbacks\_list)

#history = model.fit(x = train\_generator,validation\_split=0.2,epochs = EPOCHS)









