**INDIVIDUAL’S AGE RECOGNITION**

In this Artificial Intelligence assignment. A supervised model, image recognition is used to do detect the age.

**Real world problem**

There are many instances where we have to be concerned about perons'age before processing. But we are living in a world where everything can be manipulated and faked. And there have been numerous cases where people faked identification to create a false age and get things done. Most of the time, this results in accidents. Especially in drug stores, buses, retail areas, and public places where we have to verify ages, etc.

Age detection can help to avoid such problems. Using this, we can detect the age of the person using their facial image, thereby helping those who forget to take their IDs or avoiding people from faking it.

For example, if we use age detection in a drug store, it will help to detect the age of the customer from their facial image and thereby help to avoid selling illegal products to minors. It's time-consuming too.

**Aim**

The aim of the assignment is to detect the age of each individual from their facial image. This prediction method will help in many sectors, like drug stores, public transportation where we have to pay based on age, and commercial sectors so they can display the product based on the age of the customers visiting their store.

**Objective and solution by AI**

For the artificial model to work properly, it would need to use the dataset of images and compare it with the facial image of the individual.

Our objective for the project could be solved using an artificial model in the following ways:

1. Gather the images of individuals from the internet, social media, CCTV cameras, or datasets that contain images of individuals in different age groups.

2. Analyse the image data set, categorise it according to age group, and extract the features required for detection.

3. Detect the faces from the input image or video and analyse and manipulate the image in accordance with the specifications.

4. Visualize an image, train the age detection model with a dataset, and create it.

5. Train and test the model with an 80/20 split.

**Hypothesis:**

The AI model will assist in determining people's ages, help us in sectors like drug stores, public transportation where we have to pay based on age, and commercial sectors so they can display the product based on the age of the customers visiting their store.

**Data sources reference for project**

<https://www.kaggle.com/datasets/arashnic/faces-age-detection-dataset>

[UTKFace | Large Scale Face Dataset (susanqq.github.io)](https://susanqq.github.io/UTKFace/)