Project 4

Project Tittle: Classifying Human emotions.

Team Members: Wilfred Andoh, Alam Parvez , Patel Kaushal & Frank Mckenzie.

Project description/ Outline:

Using different types of Human facial expression to classify emotions in eight categories, using Machine Learning Models.

Data would be obtained from Kaggle.

The Purpose of the project is to use data analytics tools to reveal human emotions through a machine Learning model. Our data set would indicate, Anger, Contempt, disgust, fear, happiness, neutrality, sadness, and surprise.

Research Question.

Depicting different facial expression and analysing the possible outcome of that emotion.

Breakdown of Task

* Data collection (There are 5,500 + images with 8 emotions categories – anger, contempt, disgust, fear, happiness, neutrality, sadness and surprise. All images contain grayscale human face (or sketch). Each image is 224 x 224 pixel grayscale in PNG format.)
* ETL process We will use Python Pandas, Python matplotlib, Google colab for visualisation
* Machine learning Model preparation We will use neural network to prepare a deep learning Model.
* Train the Model
* Test the Model
* Save the model
* Prepare a read me File
* Create a write-up summary based on our findings
* Presentation would be through PowerPoint.