**Image documentation**

1. General information

* Name of dataset : Facial Recognition ( train.csv , test.csv)
* number of classes : 7
* Labels :
  + - 0 🡪 Angry
    - 1🡪 Disgust
    - 2 🡪 Fear
    - 3 🡪 Happy
    - 4🡪 Sad
    - 5🡪 Surprise
    - 6🡪 Neutral
* Number of samples : 35,887
  + - Train.csv : 28,709
    - Test.csv : 7,178
* Size of each : 48 x 48 pixels

1. Implementation Details

|  |  |  |
| --- | --- | --- |
| Model | Logistic Regression | Knn |
| Accuracy | 0.3564 | 0.339 |
| Confusion Matrix | A graph with numbers and a number in a row  Description automatically generated with medium confidence | A graph of a diagram  Description automatically generated with medium confidence |
| Loss | 1.7209 | 14.725 |
| Auc Scores and Roc | A graph of different colored lines  Description automatically generated Macro-Average AUC: 0.7374 | A graph of different colored lines  Description automatically generated Macro-Average AUC: 0.6867 |
| Precision and Recall | Precision for each class:  Class 0: 0.2412  Class 1: 0.2308  Class 2: 0.2349  Class 3: 0.4522  Class 4: 0.2809  Class 5: 0.4944  Class 6: 0.3070  Recall for each class:  Class 0: 0.1942  Class 1: 0.0811  Class 2: 0.1787  Class 3: 0.6048  Class 4: 0.2694  Class 5: 0.4789  Class 6: 0.3025  A graph of blue and orange bars  Description automatically generated | Precision for each class:  Class 0: 0.2310  Class 1: 0.2191  Class 2: 0.2869  Class 3: 0.4096  Class 4: 0.3377  Class 5: 0.6193  Class 6: 0.3193  Recall for each class:  Class 0: 0.3518  Class 1: 0.4955  Class 2: 0.3496  Class 3: 0.4098  Class 4: 0.1844  Class 5: 0.4091  Class 6: 0.3147  A graph of blue and orange bars  Description automatically generated |