



Team 6

Mobile Application Development

Project Topic : Audio Emotion Detection

Final Lab Evaluation

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Name of the Guide : Guruprakash Sir

**Model Comparison Table**

|  |  |
| --- | --- |
| **Model** | **Accuracy** |
| Gated Recurrent Unit(GRU) | 0.8819444179534912(88%) |
| Improved CNN-BiLSTM Hybrid Model | 0.9583333134651184(95%) |
| Multilayer Perceptron(MLP) | 0.9340277777777778(93%) |
| Graph Neural Network(GNN) | 0.8455(84.5%) |
| Convolutional Neural Networks(CNN) | 0.9444444179534912(94.4%) |

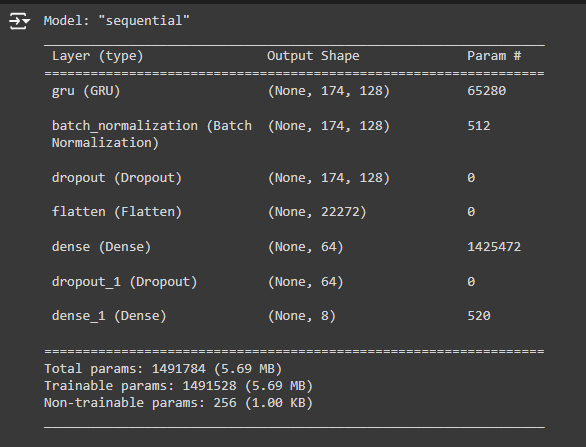
**Application architecture:**

A diagram of a process

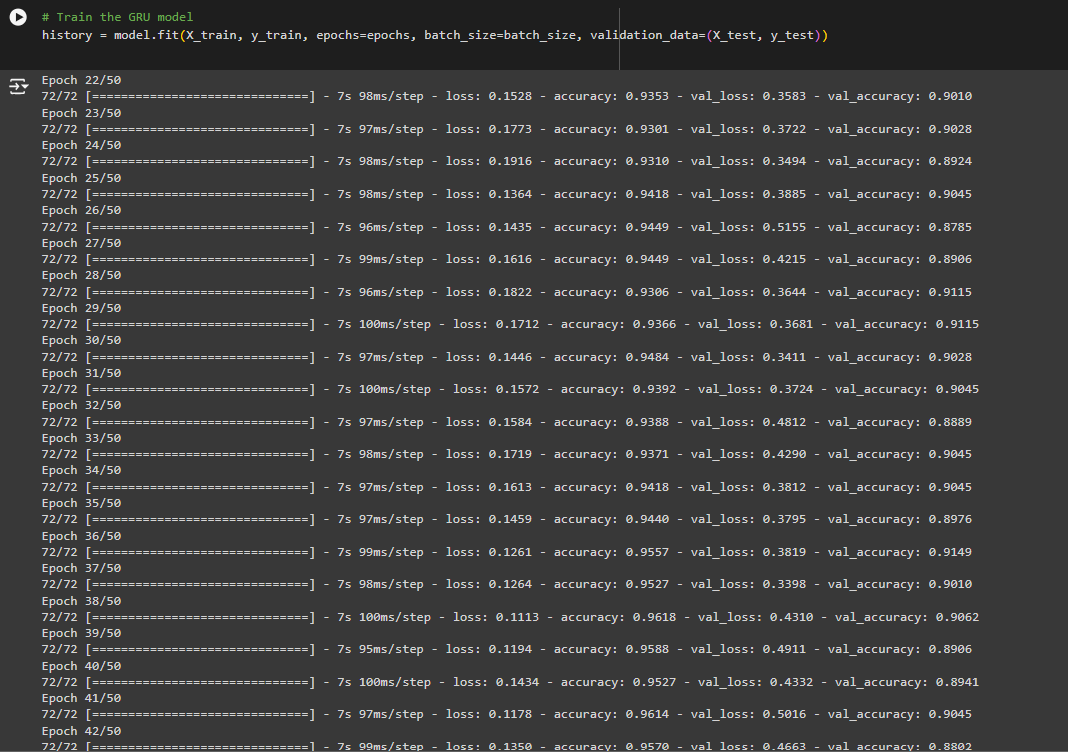
Description automatically generated

1. **Gated Recurrent Unit (GRU)**

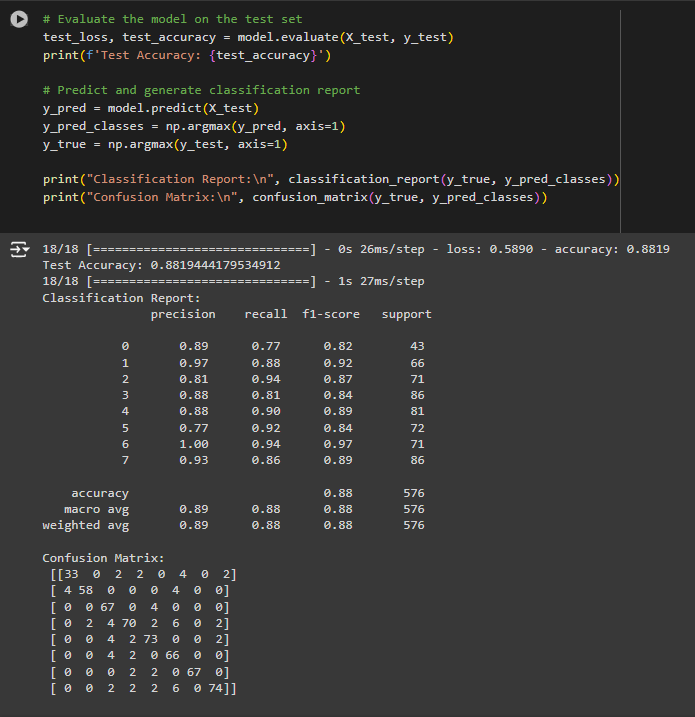
**Model summary**:



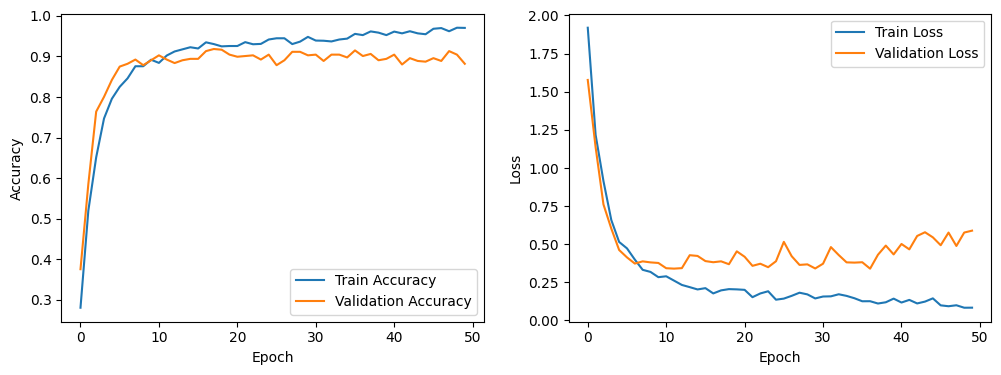
**Training and Testing**:



**Metrics**:

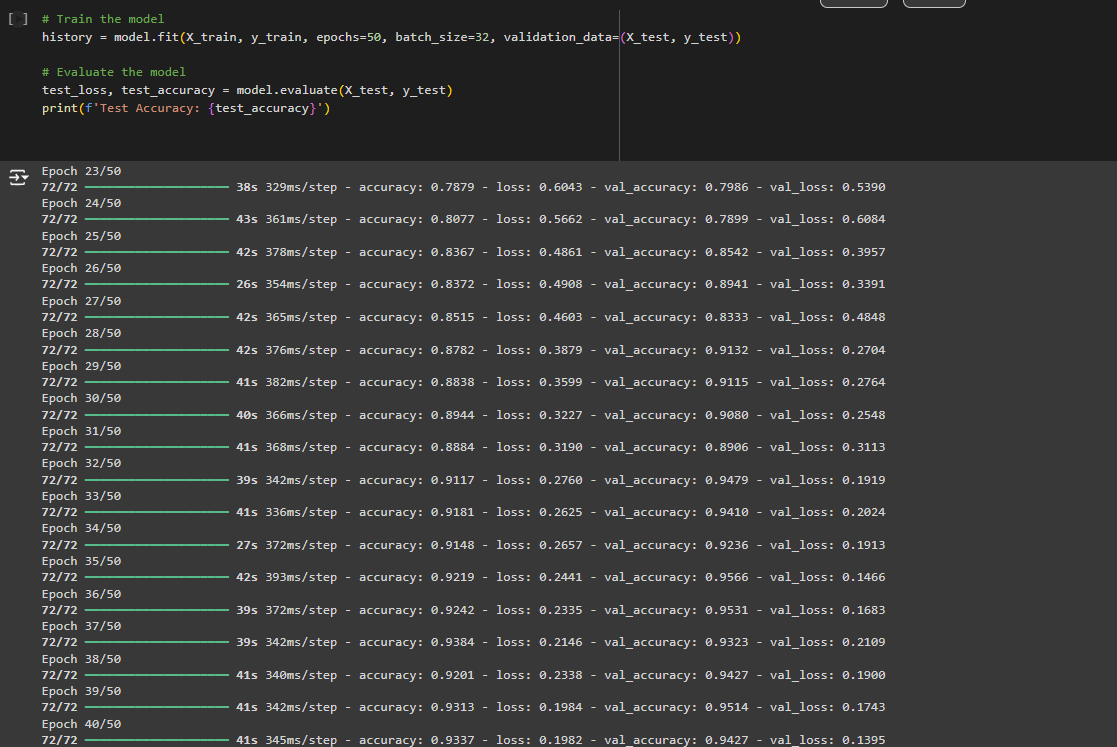


**Graphs and Plots**:

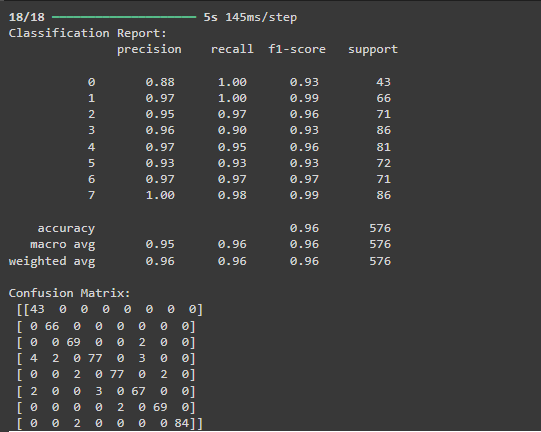


1. **Improved CNN-BiLSTM Hybrid Model:**

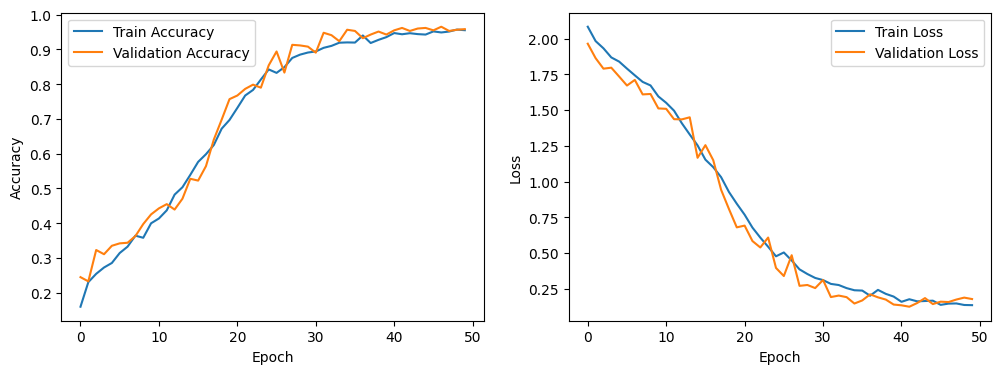
**Model training**:



**Performance metrics**:

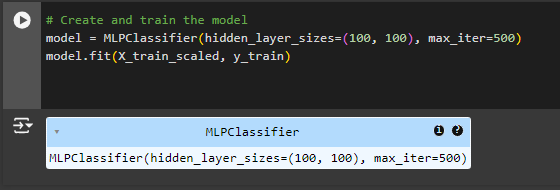


**Graphs and Plots**:

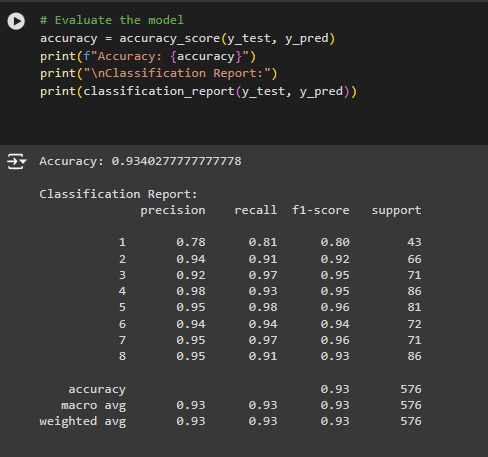


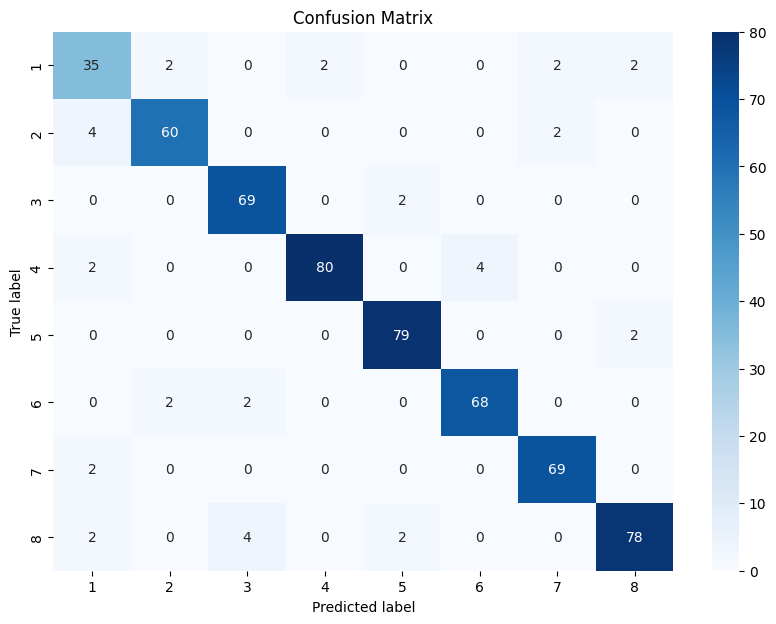
1. **Multi-Layer Perceptron(MLP)**

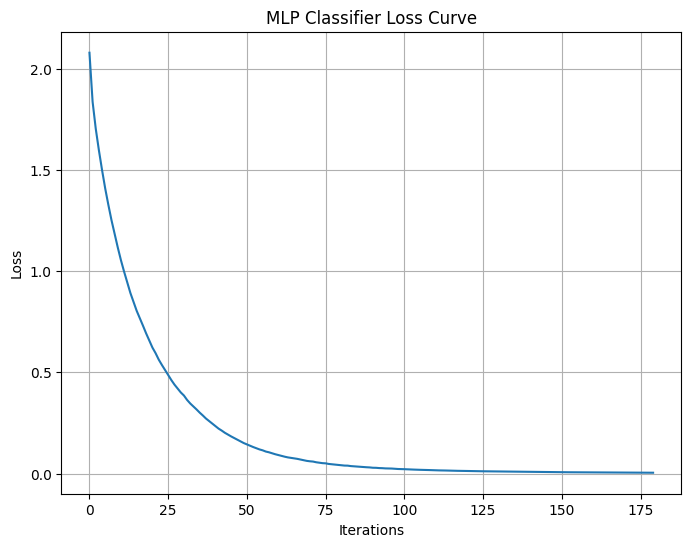
**Training the Model**:



**Model Metrics**:

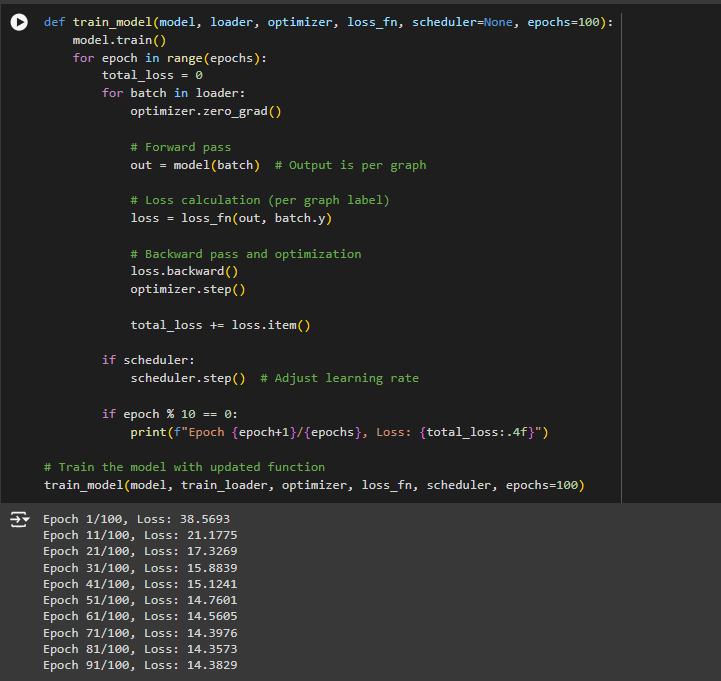




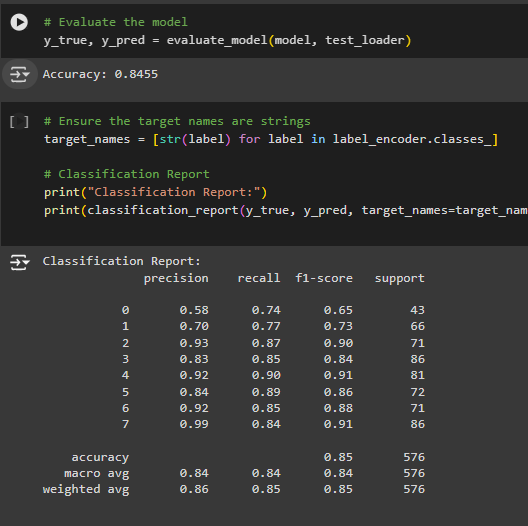


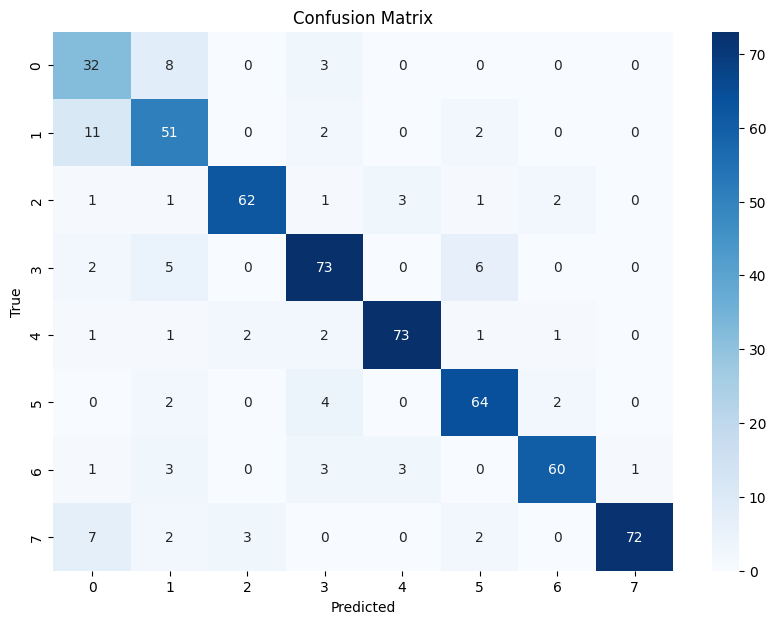
1. **Graph Neural Networks(GNN)**

**Training and testing the model**:



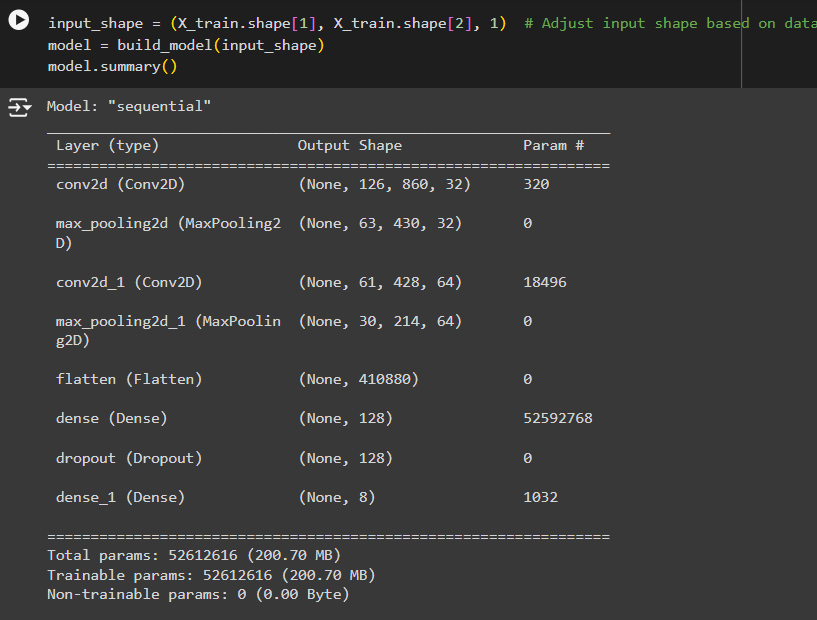
**Accuracy and Metrics**:



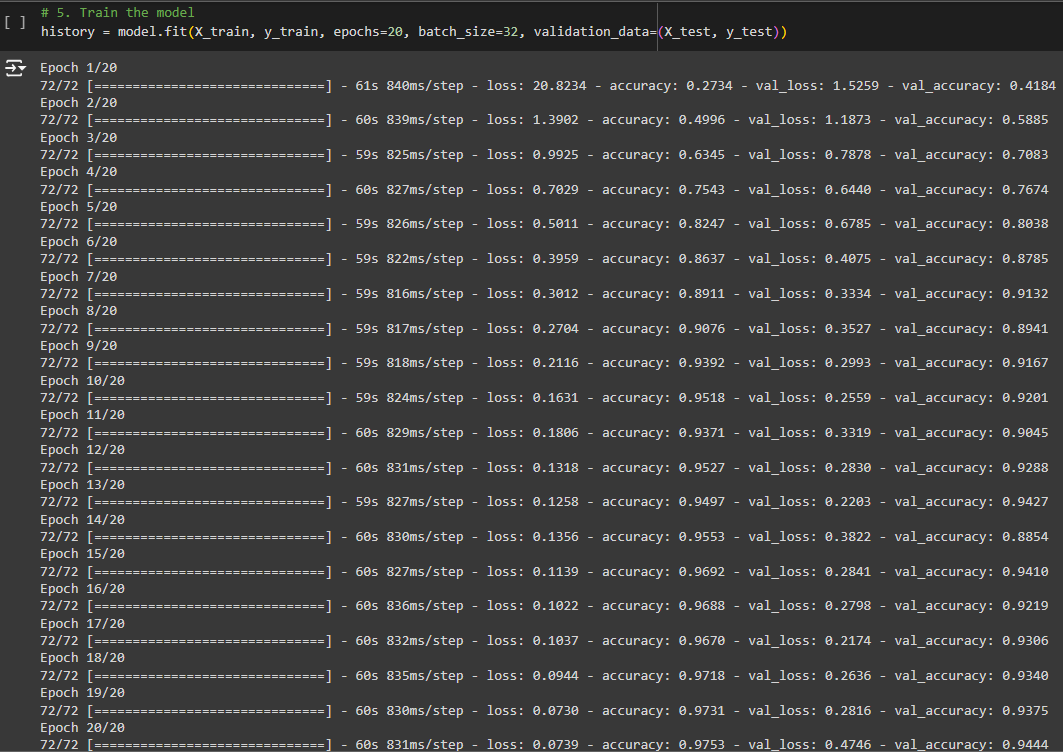


1. **Convolutional Neural Network(CNN)**:

**Model Summary**:



**Training and Testing**:



**Graphs and Plots**:

