Project Development Phase Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID09247
Project Name	Real-Time Communication System Powered by AI for Specially Abled
Maximum Marks	10 Marks

1. Model Summary

Model: "sequential"			
Layer (type)	Output Shape	Param #	
conv2d (Conv2D)	(None, 62, 62, 32)	320	
max_pooling2d (MaxPooling2D)	(None, 31, 31, 32)	0	
flatten (Flatten)	(None, 30752)	0	
dense (Dense)	(None, 512)	15745536	
dense_1 (Dense)	(None, 9)	4617	
Total params: 15,750,473 Trainable params: 15,750,473		=======================================	
Non-trainable params: 0			

2. Confusion Matrix and Classification Report

```
Confusion Matrix
[[38 31 33 26 29 22 31 19 21]
 [31 28 25 27 26 26 33 26 28]
 [22 18 28 34 30 36 33 21 28]
 [32 21 23 34 30 24 42 22 22]
 [29 23 29 18 25 30 32 30 34]
 [20 29 27 26 32 25 32 22 37]
 [27 30 26 32 21 31 33 26 24]
 [26 41 25 26 24 26 30 25 27]
 [25 29 33 28 33 30 29 14 29]]
Classification Report
             precision
                        recall f1-score
                                            support
                  0.15
                           0.15
                                     0.15
                                                250
          В
                  0.11
                           0.11
                                     0.11
                                                250
          C
                  0.11
                           0.11
                                     0.11
                                                250
          D
                 0.14
                           0.14
                                     0.14
                                                250
          E
                 0.10
                          0.10
                                    0.10
                                                250
          F
                 0.10
                          0.10
                                   0.10
                                                250
          G
                 0.11
                          0.13
                                     0.12
                                                250
          H
                 0.12
                          0.10
                                     0.11
                                                250
          I
                 0.12
                           0.12
                                     0.12
                                                250
                                     0.12
                                               2250
    accuracy
   macro avg
                  0.12
                            0.12
                                     0.12
                                               2250
weighted avg
                  0.12
                            0.12
                                     0.12
                                               2250
```

3. Accuracy

