Project Development Phase
Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID27548
Project Name	Project - Real-Time Communication System Powered by AI for Specially Abled
Maximum Marks	10 Marks

Model Performance Testing:

Project team shall fill the following information in model performance testing template.

S.No.	Parameter	Values
1.	Model Summary	Total params: 15,750,473 Trainable params: 15,750,473 Non-trainable params: 0
2.	Accuracy	Training Accuracy – 99.40% Validation Accuracy -90.44%

Screenshot:

1.Model Summary

```
Model: "sequential"

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 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.Accuracy

```
/usr/local/lib/python3.7/dist-packages/ipykernel_launcher.py:1: UserWarning: `Model.fit_generator` is deprecated and will be removed in a future version. Please u
  """Entry point for launching an IPython kernel.
Epoch 1/10
24/24 [==============================] - ETA: 0s - loss: 1.2284 - accuracy: 0.6308WARNING:tensorflow:Your input ran out of data; interrupting training. Make sure
24/24 [==============================] - 47s 2s/step - loss: 1.2284 - accuracy: 0.6308 - val_loss: 0.4589 - val_accuracy: 0.9044
Epoch 2/10
24/24 [==============================] - 34s 1s/step - loss: 0.2950 - accuracy: 0.9207
Epoch 3/10
24/24 [==============================] - 36s 1s/step - loss: 0.1729 - accuracy: 0.9519
Epoch 4/10
24/24 [==============================] - 35s 1s/step - loss: 0.1192 - accuracy: 0.9699
Epoch 5/10
24/24 [==============================] - 36s 1s/step - loss: 0.0775 - accuracy: 0.9800
Epoch 6/10
24/24 [==============================] - 36s 1s/step - loss: 0.0556 - accuracy: 0.9881
Epoch 7/10
24/24 [==============================] - 35s 1s/step - loss: 0.0473 - accuracy: 0.9890
Epoch 8/10
24/24 [==============================] - 36s 2s/step - loss: 0.0326 - accuracy: 0.9926
Epoch 9/10
24/24 [==============================] - 35s 1s/step - loss: 0.0246 - accuracy: 0.9943
Epoch 10/10
24/24 [==============================] - 36s 1s/step - loss: 0.0234 - accuracy: 0.9940
<keras.callbacks.History at 0x7f001e36c790>
```