

Project Development Phase Model Performance Test

Date	21 November 2022
Team ID	PNT2022TMID07674
Project Name	Project - Real-Time Communication System Powered by AI for Specially Abled
Maximum Marks	10 Marks

Model Performance Testing:

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 – 99.91% Validation Accuracy -97.67%

Screenshot:

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. Accuracy

```
/usr/local/lib/python3.7/dist-packages/ipykernel_launcher.py:2: UserWarning: `Model.fit_generator` is deprecated and will be removed in a future version.
Epoch 1/10
18/18 [=====] - 97s 5s/step - loss: 0.0055 - accuracy: 0.9991 - val_loss: 0.2245 - val_accuracy: 0.9760
Epoch 2/10
18/18 [=====] - 86s 5s/step - loss: 0.0044 - accuracy: 0.9994 - val_loss: 0.2355 - val_accuracy: 0.9760
Epoch 3/10
18/18 [=====] - 85s 5s/step - loss: 0.0032 - accuracy: 0.9996 - val_loss: 0.2541 - val_accuracy: 0.9756
Epoch 4/10
18/18 [=====] - 88s 5s/step - loss: 0.0034 - accuracy: 0.9997 - val_loss: 0.2707 - val_accuracy: 0.9760
Epoch 5/10
18/18 [=====] - 86s 5s/step - loss: 0.0030 - accuracy: 0.9997 - val_loss: 0.2608 - val_accuracy: 0.9760
Epoch 6/10
18/18 [=====] - 85s 5s/step - loss: 0.0031 - accuracy: 0.9994 - val_loss: 0.2538 - val_accuracy: 0.9760
Epoch 7/10
18/18 [=====] - 84s 5s/step - loss: 0.0028 - accuracy: 0.9993 - val_loss: 0.2577 - val_accuracy: 0.9760
Epoch 8/10
18/18 [=====] - 86s 5s/step - loss: 0.0026 - accuracy: 0.9997 - val_loss: 0.2712 - val_accuracy: 0.9760
Epoch 9/10
18/18 [=====] - 83s 4s/step - loss: 0.0022 - accuracy: 0.9996 - val_loss: 0.2839 - val_accuracy: 0.9778
Epoch 10/10
18/18 [=====] - 83s 5s/step - loss: 0.0014 - accuracy: 0.9999 - val_loss: 0.2773 - val_accuracy: 0.9760
<keras.callbacks.History at 0x7f6ff9335350>
```