

**Project Development Phase**  
**Model Performance Test**

Date	17 November 2022
Team ID	PNT2022TMID10824
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	Screenshot																														
1.	Model Summary	Total params: 1,103,721 Trainable params: 1,103,721 Non-trainable params: 0	<div><div>Model: "sequential"</div><table><tr><th>Layer (type)</th><th>Output Shape</th><th>Param #</th></tr><tr><td>conv2d (Conv2D)</td><td>(None, 62, 62, 32)</td><td>320</td></tr><tr><td>max_pooling2d (MaxPooling2D)</td><td>(None, 31, 31, 32)</td><td>0</td></tr><tr><td>conv2d_1 (Conv2D)</td><td>(None, 29, 29, 512)</td><td>147968</td></tr><tr><td>max_pooling2d_1 (MaxPooling2D)</td><td>(None, 14, 14, 512)</td><td>0</td></tr><tr><td>conv2d_2 (Conv2D)</td><td>(None, 14, 14, 32)</td><td>147488</td></tr><tr><td>max_pooling2d_2 (MaxPooling2D)</td><td>(None, 7, 7, 32)</td><td>0</td></tr><tr><td>flatten (Flatten)</td><td>(None, 1568)</td><td>0</td></tr><tr><td>dense (Dense)</td><td>(None, 512)</td><td>803328</td></tr><tr><td>dense_1 (Dense)</td><td>(None, 9)</td><td>4617</td></tr></table><div>Total params: 1,103,721 Trainable params: 1,103,721 Non-trainable params: 0</div></div>	Layer (type)	Output Shape	Param #	conv2d (Conv2D)	(None, 62, 62, 32)	320	max_pooling2d (MaxPooling2D)	(None, 31, 31, 32)	0	conv2d_1 (Conv2D)	(None, 29, 29, 512)	147968	max_pooling2d_1 (MaxPooling2D)	(None, 14, 14, 512)	0	conv2d_2 (Conv2D)	(None, 14, 14, 32)	147488	max_pooling2d_2 (MaxPooling2D)	(None, 7, 7, 32)	0	flatten (Flatten)	(None, 1568)	0	dense (Dense)	(None, 512)	803328	dense_1 (Dense)	(None, 9)	4617
Layer (type)	Output Shape	Param #																															
conv2d (Conv2D)	(None, 62, 62, 32)	320																															
max_pooling2d (MaxPooling2D)	(None, 31, 31, 32)	0																															
conv2d_1 (Conv2D)	(None, 29, 29, 512)	147968																															
max_pooling2d_1 (MaxPooling2D)	(None, 14, 14, 512)	0																															
conv2d_2 (Conv2D)	(None, 14, 14, 32)	147488																															
max_pooling2d_2 (MaxPooling2D)	(None, 7, 7, 32)	0																															
flatten (Flatten)	(None, 1568)	0																															
dense (Dense)	(None, 512)	803328																															
dense_1 (Dense)	(None, 9)	4617																															

2.	Accuracy	<div>Training Accuracy - 0.9994</div> <div>Validation Accuracy -0.9969</div>	<div>Epoch 13/25</div> <div>53/53 [=====] - 196s 4s/step - loss: 0.0050 - accuracy: 0.9982 - val_loss: 0.0647 - val_accuracy: 0.9844</div> <div>Epoch 14/25</div> <div>53/53 [=====] - 196s 4s/step - loss: 0.0024 - accuracy: 0.9990 - val_loss: 0.2113 - val_accuracy: 0.9751</div> <div>Epoch 15/25</div> <div>53/53 [=====] - 197s 4s/step - loss: 0.0062 - accuracy: 0.9982 - val_loss: 0.2393 - val_accuracy: 0.9720</div> <div>Epoch 16/25</div> <div>53/53 [=====] - 197s 4s/step - loss: 0.0022 - accuracy: 0.9994 - val_loss: 0.0172 - val_accuracy: 0.9969</div> <div>Epoch 17/25</div> <div>53/53 [=====] - 195s 4s/step - loss: 6.0413e-04 - accuracy: 0.9998 - val_loss: 0.0504 - val_accuracy: 0.9893</div> <div>Epoch 18/25</div> <div>53/53 [=====] - 196s 4s/step - loss: 2.1259e-04 - accuracy: 1.0000 - val_loss: 0.1009 - val_accuracy: 0.9849</div> <div>Epoch 19/25</div> <div>53/53 [=====] - 196s 4s/step - loss: 0.0036 - accuracy: 0.9987 - val_loss: 0.0669 - val_accuracy: 0.9853</div> <div>Epoch 20/25</div> <div>53/53 [=====] - 197s 4s/step - loss: 0.0068 - accuracy: 0.9981 - val_loss: 0.3904 - val_accuracy: 0.9787</div> <div>Epoch 21/25</div> <div>53/53 [=====] - 196s 4s/step - loss: 0.0034 - accuracy: 0.9987 - val_loss:</div>
----	----------	--	--