

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

Date	10 November 2022
Team ID	PNT2022TMID18207
Project Name	Project – Real time communication powered by AI for specially abled persons.
Maximum Marks	10 Marks

**Model Performance Testing:**

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

S.No.	Parameter	Values	Screenshot
	Model Summary	<b>Adding layers in the model</b>	<pre>model = tf.keras.models.Sequential([     tf.keras.layers.Conv2D(64, (3,3), activation='relu',input_shape=(     tf.keras.layers.MaxPooling2D(2, 2),     tf.keras.layers.Flatten(),     tf.keras.layers.Dropout(0.5),     tf.keras.layers.Dense(512, activation='relu'),     tf.keras.layers.Dense(9, activation='softmax') ])</pre>

1.	Accuracy	<div>Training Accuracy - 0.910</div> <div>Validation Accuracy 0.9011</div>	<div><pre>model.compile(loss = 'categorical_crossentropy', optimizer='adam', metrics=['accuracy']) history = model.fit(train_generator, epochs=10, validation_data=test_generator)</pre></div> <div>Epoch 1/10 525/525 [=====] - 221s 420ms/step - loss: 1.1309 - accuracy: 0.5965 - val_loss: 0.6454 - val_accuracy: 0.7764 Epoch 2/10 525/525 [=====] - 221s 420ms/step - loss: 0.5326 - accuracy: 0.8123 - val_loss: 0.5094 - val_accuracy: 0.8164 Epoch 3/10 525/525 [=====] - 221s 420ms/step - loss: 0.3985 - accuracy: 0.8589 - val_loss: 0.4112 - val_accuracy: 0.8631 Epoch 4/10 525/525 [=====] - 221s 420ms/step - loss: 0.3312 - accuracy: 0.8857 - val_loss: 0.3390 - val_accuracy: 0.8924 Epoch 5/10 525/525 [=====] - 224s 426ms/step - loss: 0.2943 - accuracy: 0.8970 - val_loss: 0.2790 - val_accuracy: 0.9169 Epoch 6/10 525/525 [=====] - 222s 424ms/step - loss: 0.2760 - accuracy: 0.9054 - val_loss: 0.2773 - val_accuracy: 0.9164 Epoch 7/10 525/525 [=====] - 223s 424ms/step - loss: 0.2630 - accuracy: 0.9115 - val_loss: 0.2251 - val_accuracy: 0.9338 Epoch 8/10 525/525 [=====] - 221s 420ms/step - loss: 0.2350 - accuracy: 0.9203 - val_loss: 0.2690 - val_accuracy: 0.9</div>
----	----------	--	--