

Project Development Phase Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID14753
Project Name	Project - A Novel Method for Handwritten Digit Recognition System
Maximum Marks	10 Marks

Model Performance Testing:

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

S.No.	Parameter	Values	Screenshot
1.	Metrics	Classification Model: Confusion Matrix	<pre>[] metrics=model.evaluate(x_test,y_test,verbose=0) print("Metric(Test loss & Test Accuracy):") print(metrics) Metric(Test loss & Test Accuracy): [0.09839355200529099, 0.9810000061988831]</pre>
		Accuracy Score	<pre>[] metrics=model.evaluate(x_test,y_test,verbose=0) print("Metric(Test loss & Test Accuracy):") print(metrics) Metric(Test loss & Test Accuracy): [0.09839355200529099, 0.9810000061988831]</pre>
		Classification Report	<pre>[] img 0 [] imgarr = np.array(img) #converting to image imgarr = imgarr.reshape(-1, 28, 28, 1) #reshaping according to our requirement [] pred = model.predict(imgarr) print(pred) [[9.9121300e-01 4.1121870e-14 5.6992020e-12 1.1119554e-08 3.7519144e-05 4.4051827e-08 2.5928620e-07 3.3480915e-08 1.4120091e-07 8.7489956e-03]] [] print(np.argmax(pred, axis=1)) #printing our labels [0]</pre>
2.	Tune the Model	Hyperparameter Tuning - Validation Method -	<pre>[] y_train = np_utils.to_categorical (y_train, classes) y_test = np_utils.to_categorical (y_test, classes)</pre>