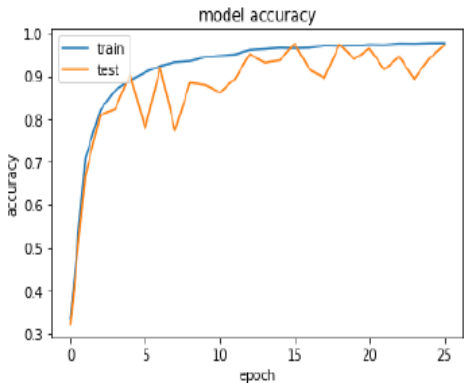


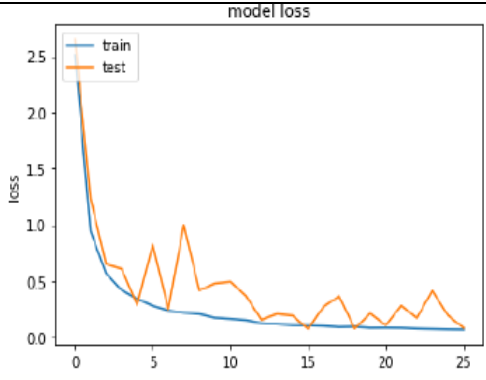
## Project Development Phase Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID35172
Project Name	Project – A Novel Method for Handwritten digit Recognition
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	-	<div><p>Model: "sequential_1"</p><table><thead><tr><th>Layer (type)</th><th>Output Shape</th><th>Param #</th></tr></thead><tbody><tr><td>conv2d_2 (conv2D)</td><td>(None, 26, 26, 64)</td><td>640</td></tr><tr><td>conv2d_3 (Conv2D)</td><td>(None, 24, 24, 32)</td><td>18464</td></tr><tr><td>flatten_1 (Flatten)</td><td>(None, 18432)</td><td>0</td></tr><tr><td>dense_1 (Dense)</td><td>(None, 10)</td><td>184330</td></tr></tbody></table><p>=====</p><p>Total params: 203,434 Trainable params: 203,434 Non-trainable params: 0</p></div>	Layer (type)	Output Shape	Param #	conv2d_2 (conv2D)	(None, 26, 26, 64)	640	conv2d_3 (Conv2D)	(None, 24, 24, 32)	18464	flatten_1 (Flatten)	(None, 18432)	0	dense_1 (Dense)	(None, 10)	184330
Layer (type)	Output Shape	Param #																
conv2d_2 (conv2D)	(None, 26, 26, 64)	640																
conv2d_3 (Conv2D)	(None, 24, 24, 32)	18464																
flatten_1 (Flatten)	(None, 18432)	0																
dense_1 (Dense)	(None, 10)	184330																
2.	Accuracy	Training Accuracy – 99.45%  Validation/test Accuracy -97.56%	<div></div>															

3.	Loss	Training Loss-3.80%  Validation/test loss-9.66%	 <table><caption>Approximate data points from the 'model loss' graph</caption><tr><th>Epoch</th><th>Train Loss</th><th>Test Loss</th></tr><tr><td>0</td><td>2.3</td><td>2.3</td></tr><tr><td>5</td><td>0.4</td><td>0.4</td></tr><tr><td>10</td><td>0.2</td><td>0.5</td></tr><tr><td>15</td><td>0.1</td><td>0.2</td></tr><tr><td>20</td><td>0.1</td><td>0.3</td></tr><tr><td>25</td><td>0.1</td><td>0.2</td></tr></table>	Epoch	Train Loss	Test Loss	0	2.3	2.3	5	0.4	0.4	10	0.2	0.5	15	0.1	0.2	20	0.1	0.3	25	0.1	0.2
Epoch	Train Loss	Test Loss																						
0	2.3	2.3																						
5	0.4	0.4																						
10	0.2	0.5																						
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