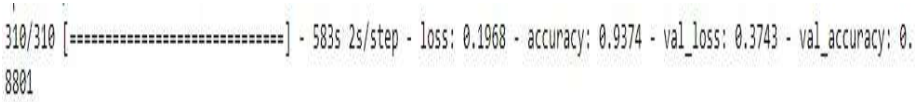


Project Development Phase
Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID35901
Project Name	Project - Natural Disasters Intensity Analysis and Classification using Artificial Intelligence
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	-	<pre> Model: "sequential" ----- Layer (type) Output Shape Param # ----- conv2d (Conv2D) (None, 297, 297, 32) 896 max_pooling2d (MaxPooling2D) (None, 148, 148, 32) 0 conv2d_1 (Conv2D) (None, 146, 146, 64) 18496 max_pooling2d_1 (MaxPooling2D) (None, 73, 73, 64) 0 dropout (Dropout) (None, 73, 73, 64) 0 conv2d_2 (Conv2D) (None, 71, 71, 32) 18464 max_pooling2d_2 (MaxPooling2D) (None, 35, 35, 32) 0 dropout_1 (Dropout) (None, 35, 35, 32) 0 flatten (Flatten) (None, 39200) 0 dense (Dense) (None, 256) 10035456 dropout_2 (Dropout) (None, 256) 0 dense_1 (Dense) (None, 4) 1028 ----- Total params: 10,074,340 Trainable params: 10,074,340 Non-trainable params: 0 </pre>
2.	Accuracy	Training Accuracy - 88.841% Validation Accuracy - 88.01%	 <pre> 310/310 [=====] - 583s 2s/step - loss: 0.1968 - accuracy: 0.9374 - val_loss: 0.3743 - val_accuracy: 0.8801 </pre>

3.	Confidence Score	Class Detected -	CNN Disaster Classification Model Accuracy on test set: 0.8881				
		0-Cyclone,	precision	recall	f1-score	support	
			0	0.96	0.90	0.93	94
		1-	1	0.86	0.92	0.89	136
		Earthquake	2	0.87	0.84	0.85	108
			3	0.90	0.88	0.89	109
		2-Flood	accuracy			0.89	447
			macro avg	0.89	0.89	0.89	447
		3-Wildfire	weighted avg	0.89	0.89	0.89	447
		Confidence Score –					
		Class 1-					
		0.93					
		Class 2-					
		0.89					
		Class 3-					
		0.85					
		Class 4-					
		0.89					