

Project Development Phase

Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID52144
Project Name	Project – Natural Disaster 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	<p>Total params: 813,604</p> <p>Trainable params: 813,604</p> <p>Non-Trainable params: 0</p>	<pre> In [7]: model.summary() Model: "sequential" Layer (type) Output Shape Param # ----- conv2d (Conv2D) (None, 62, 62, 32) 896 max_pooling2d (MaxPooling2D) (None, 31, 31, 32) 0 conv2d_1 (Conv2D) (None, 29, 29, 32) 9248 max_pooling2d_1 (MaxPooling2D) (None, 14, 14, 32) 0 flatten (Flatten) (None, 6272) 0 dense (Dense) (None, 128) 802944 dense_1 (Dense) (None, 4) 516 Total params: 813,604 Trainable params: 813,604 Non-trainable params: 0 </pre>
2.	Accuracy	<p>Training Accuracy – 0.5282</p> <p>Validation Accuracy - 0.7025</p>	<pre> [90] model.compile(optimizer='adam', loss='categorical_crossentropy', metrics=['accuracy']) [91] model.fit(X_train, y_train, epochs=10, validation_data=(X_test, y_test), validation_steps=10) Epoch 1/10 [-----] - 67s 409ms/step - loss: 1.48808 - accuracy: 0.5282 - val_loss: 0.7922 - val_accuracy: 0.7025 Epoch 2/10 [-----] - 52s 478ms/step - loss: 0.78022 - accuracy: 0.7322 - val_loss: 0.7058 - val_accuracy: 0.7353 Epoch 3/10 [-----] - 50s 448ms/step - loss: 0.63075 - accuracy: 0.7525 - val_loss: 1.1478 - val_accuracy: 0.6228 Epoch 4/10 [-----] - 47s 432ms/step - loss: 0.63075 - accuracy: 0.7525 - val_loss: 0.8129 - val_accuracy: 0.6888 Epoch 5/10 [-----] - 49s 432ms/step - loss: 0.5923 - accuracy: 0.7999 - val_loss: 0.6812 - val_accuracy: 0.7708 Epoch 6/10 [-----] - 52s 479ms/step - loss: 0.6448 - accuracy: 0.7923 - val_loss: 0.7817 - val_accuracy: 0.7848 Epoch 7/10 [-----] - 46s 412ms/step - loss: 0.6035 - accuracy: 0.8145 - val_loss: 0.6895 - val_accuracy: 0.7862 Epoch 8/10 [-----] - 45s 408ms/step - loss: 0.6554 - accuracy: 0.8363 - val_loss: 0.5888 - val_accuracy: 0.8111 Epoch 9/10 [-----] - 45s 405ms/step - loss: 0.6358 - accuracy: 0.8335 - val_loss: 0.6498 - val_accuracy: 0.7557 Epoch 10/10 [-----] - 45s 405ms/step - loss: 0.6308 - accuracy: 0.8438 - val_loss: 0.7511 - val_accuracy: 0.7517 </pre>