

Project Development Phase Model Performance Test

Date	19 November 2022
Team ID	PNT2022TMID33187
Project Name	Intelligent Vehicle Damage Assessment and Cost Estimator for Insurance Companies
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	-	Submitted below
2.	Accuracy	Training Accuracy - Validation Accuracy -	Submitted below
3.	Confidence Score (Only Yolo Projects)	Class Detected - Confidence Score -	-

1. Model Summary:

The screenshot shows a Google Colab notebook interface. The notebook is titled "Model_building(level).ipynb" and is open to a cell containing the command `model.summary()`. The output of this command is displayed as a table with three columns: "Layer (type)", "Output Shape", and "Param #". The table lists the following layers and their details:

Layer (type)	Output Shape	Param #
input_1 (InputLayer)	[(None, 224, 224, 3)]	0
block1_conv1 (Conv2D)	(None, 224, 224, 64)	1792
block1_conv2 (Conv2D)	(None, 224, 224, 64)	36928
block1_pool (MaxPooling2D)	(None, 112, 112, 64)	0
block2_conv1 (Conv2D)	(None, 112, 112, 128)	73856
block2_conv2 (Conv2D)	(None, 112, 112, 128)	147584
block2_pool (MaxPooling2D)	(None, 56, 56, 128)	0
block3_conv1 (Conv2D)	(None, 56, 56, 256)	295168
block3_conv2 (Conv2D)	(None, 56, 56, 256)	590080
block3_conv3 (Conv2D)	(None, 56, 56, 256)	590080
block3_pool (MaxPooling2D)	(None, 28, 28, 256)	0
block4_conv1 (Conv2D)	(None, 28, 28, 512)	1180160
block4_conv2 (Conv2D)	(None, 28, 28, 512)	2359808

The bottom of the screenshot shows the Colab interface with a toolbar and a status bar indicating the execution time (1h 46m 24s) and the current cell's execution status (Executing).

2.Accuracy:

The screenshot displays a Google Colab notebook titled "Model_building(body).ipynb". The interface includes a file explorer on the left showing a folder named "sample_data". The main area contains a code cell with the following output:

```
[ ]
98/98 [=====] - 645s 7s/step - loss: 1.2343 - accuracy: 0.5128 - val_loss: 0.8886 - val_accuracy: 0.6491
Epoch 2/25
98/98 [=====] - 633s 6s/step - loss: 0.6810 - accuracy: 0.7487 - val_loss: 0.8953 - val_accuracy: 0.6667
Epoch 3/25
98/98 [=====] - 636s 6s/step - loss: 0.5376 - accuracy: 0.7967 - val_loss: 0.9198 - val_accuracy: 0.6374
Epoch 4/25
98/98 [=====] - 635s 6s/step - loss: 0.4057 - accuracy: 0.8458 - val_loss: 1.2112 - val_accuracy: 0.6199
Epoch 5/25
98/98 [=====] - 639s 7s/step - loss: 0.3807 - accuracy: 0.8570 - val_loss: 1.4361 - val_accuracy: 0.6608
Epoch 6/25
98/98 [=====] - 635s 6s/step - loss: 0.2567 - accuracy: 0.9101 - val_loss: 1.0055 - val_accuracy: 0.6550
Epoch 7/25
98/98 [=====] - 637s 6s/step - loss: 0.1830 - accuracy: 0.9367 - val_loss: 1.2198 - val_accuracy: 0.6667
Epoch 8/25
98/98 [=====] - 637s 7s/step - loss: 0.1320 - accuracy: 0.9581 - val_loss: 1.0035 - val_accuracy: 0.6959
Epoch 9/25
98/98 [=====] - 634s 6s/step - loss: 0.1484 - accuracy: 0.9479 - val_loss: 1.0932 - val_accuracy: 0.6608
Epoch 10/25
98/98 [=====] - 635s 6s/step - loss: 0.1204 - accuracy: 0.9642 - val_loss: 1.0959 - val_accuracy: 0.7018
Epoch 11/25
98/98 [=====] - 638s 7s/step - loss: 0.1449 - accuracy: 0.9479 - val_loss: 1.1143 - val_accuracy: 0.7135
Epoch 12/25
98/98 [=====] - 634s 6s/step - loss: 0.1245 - accuracy: 0.9663 - val_loss: 1.3534 - val_accuracy: 0.6725
Epoch 13/25
98/98 [=====] - 630s 6s/step - loss: 0.0775 - accuracy: 0.9826 - val_loss: 1.2147 - val_accuracy: 0.6608
Epoch 14/25
98/98 [=====] - 626s 6s/step - loss: 0.0912 - accuracy: 0.9796 - val_loss: 1.1118 - val_accuracy: 0.7018
Epoch 15/25
98/98 [=====] - 624s 6s/step - loss: 0.0582 - accuracy: 0.9918 - val_loss: 1.1216 - val_accuracy: 0.6901
Epoch 16/25
98/98 [=====] - 624s 6s/step - loss: 0.0690 - accuracy: 0.9816 - val_loss: 1.1281 - val_accuracy: 0.6959
Epoch 17/25
98/98 [=====] - 625s 6s/step - loss: 0.0501 - accuracy: 0.9867 - val_loss: 1.1887 - val_accuracy: 0.6667
Epoch 18/25
98/98 [=====] - 624s 6s/step - loss: 0.0663 - accuracy: 0.9867 - val_loss: 1.1870 - val_accuracy: 0.6842
Epoch 19/25
```

The bottom status bar indicates the training process is completed at 11:39 PM. The system tray shows a temperature of 23°C, partly cloudy weather, and the date 19-11-2022.

