Project Development Phase
Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID35935
Project Name	Project - 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		

```
Model: "sequential_1"
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Layer (type)                 Output Shape              Param #
=================================================================
conv2d_13 (Conv2D)           (None, 224, 224, 64)      1792

conv2d_14 (Conv2D)           (None, 224, 224, 64)      36928

max_pooling2d_5 (MaxPooling  (None, 112, 112, 64)      0
2D)

conv2d_15 (Conv2D)           (None, 112, 112, 128)     73856

conv2d_16 (Conv2D)           (None, 112, 112, 128)     147584

max_pooling2d_6 (MaxPooling  (None, 56, 56, 128)       0
2D)

conv2d_17 (Conv2D)           (None, 56, 56, 256)       295168

conv2d_18 (Conv2D)           (None, 56, 56, 256)       590080

conv2d_19 (Conv2D)           (None, 56, 56, 256)       590080

max_pooling2d_7 (MaxPooling  (None, 28, 28, 256)       0
2D)

conv2d_20 (Conv2D)           (None, 28, 28, 512)       1180160

conv2d_21 (Conv2D)           (None, 28, 28, 512)       2359808

conv2d_22 (Conv2D)           (None, 28, 28, 512)       2359808

max_pooling2d_8 (MaxPooling  (None, 14, 14, 512)       0
2D)

conv2d_23 (Conv2D)           (None, 14, 14, 512)       2359808

conv2d_24 (Conv2D)           (None, 14, 14, 512)       2359808

conv2d_25 (Conv2D)           (None, 14, 14, 512)       2359808

max_pooling2d_9 (MaxPooling  (None, 7, 7, 512)         0
2D)

flatten_1 (Flatten)          (None, 25088)             0

dense_3 (Dense)              (None, 4096)              102764544

dense_4 (Dense)              (None, 4096)              16781312

dense_5 (Dense)              (None, 3)                 12291

=================================================================
Total params: 134,272,835
Trainable params: 134,272,835
Non-trainable params: 0
_________________________________________________________________
```

2	Accuracy	Training Accuracy - 98.66% Validation Accuracy - 73.53%	

```
[33]
1 r = model.fit_generator(
2     training_set,
3     validation_data = test_set,
4     epochs = 25,
5     steps_per_epoch=979//10,
6     validation_steps = 171//10
7 )
```

```
/tmp/wsuser/ipykernel_164/289406290.py:1: UserWarning: `Model.fit_generator` is deprecated and will be removed in a future
  r = model.fit_generator(

Output exceeds the size limit. Open the full output data in a text editor
Epoch 1/25
97/97 [==============================] - 339s 3s/step - loss: 1.1511 - acc: 0.5459 - val_loss: 0.9324 - val_acc: 0.6294
Epoch 2/25
97/97 [==============================] - 328s 3s/step - loss: 0.6237 - acc: 0.7534 - val_loss: 0.7954 - val_acc: 0.6941
Epoch 3/25
97/97 [==============================] - 331s 3s/step - loss: 0.4937 - acc: 0.8070 - val_loss: 1.1732 - val_acc: 0.6176
Epoch 4/25
97/97 [==============================] - 326s 3s/step - loss: 0.4349 - acc: 0.8411 - val_loss: 0.9766 - val_acc: 0.6824
Epoch 5/25
97/97 [==============================] - 326s 3s/step - loss: 0.3661 - acc: 0.8617 - val_loss: 1.1987 - val_acc: 0.6529
Epoch 6/25
97/97 [==============================] - 325s 3s/step - loss: 0.2681 - acc: 0.8875 - val_loss: 0.9087 - val_acc: 0.6941
Epoch 7/25
97/97 [==============================] - 325s 3s/step - loss: 0.2292 - acc: 0.9195 - val_loss: 1.0251 - val_acc: 0.6647
Epoch 8/25
97/97 [==============================] - 326s 3s/step - loss: 0.1248 - acc: 0.9659 - val_loss: 1.0597 - val_acc: 0.6706
Epoch 9/25
97/97 [==============================] - 323s 3s/step - loss: 0.1315 - acc: 0.9639 - val_loss: 1.0529 - val_acc: 0.6647
Epoch 10/25
97/97 [==============================] - 322s 3s/step - loss: 0.0922 - acc: 0.9752 - val_loss: 0.9898 - val_acc: 0.6588
Epoch 11/25
97/97 [==============================] - 323s 3s/step - loss: 0.0913 - acc: 0.9825 - val_loss: 1.5796 - val_acc: 0.6529
Epoch 12/25
97/97 [==============================] - 322s 3s/step - loss: 0.1447 - acc: 0.9536 - val_loss: 1.1999 - val_acc: 0.6706
Epoch 13/25
...
Epoch 24/25
97/97 [==============================] - 327s 3s/step - loss: 0.0756 - acc: 0.9814 - val_loss: 1.5177 - val_acc: 0.6588
Epoch 25/25
97/97 [==============================] - 327s 3s/step - loss: 0.0480 - acc: 0.9866 - val_loss: 1.3861 - val_acc: 0.7353
```