Project Development Phase Model Performance Test

Date	14 November 2022	
Team ID	PNT2022TMID04639	
Project Name	A Gesture-based Tool for Sterile Browsing of Radiology Images	
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>conv2d (Conv2D) - 320 max_pooling2d (MaxPooling2D) - 0 conv2d_1 (Conv2D) - 9248 max_pooling2d_1 (MaxPooling2D) - 0 flatten (Flatten) - 0 dense (Dense) -3211776 dense_1 (Dense) - 3078</pre>	Model: "sequential"
		Total params:3,224,422 Trainable params: 3,224,422 Non-trainable params: 0	dense (Dense) (None, 512) 3211776 dense_1 (Dense) (None, 6) 3678
2.	Accuracy	Training Accuracy - 99.83% Validation Accuracy – 96.67%	
3.	Confidence Score (Only Yolo Projects)	Class Detected - Confidence Score -	NA

Screenshots:

1. Model Summary:

```
Model: "sequential"
 Layer (type)
                             Output Shape
                                                        Param #
                             (None, 62, 62, 32)
 conv2d (Conv2D)
                                                        320
max_pooling2d (MaxPooling2D (None, 31, 31, 32)
 conv2d 1 (Conv2D)
                             (None, 29, 29, 32)
                                                        9248
 max pooling2d 1 (MaxPooling (None, 14, 14, 32)
                                                        0
 2D)
 flatten (Flatten)
                             (None, 6272)
                                                        0
dense (Dense)
                             (None, 512)
                                                        3211776
dense 1 (Dense)
                             (None, 6)
                                                        3078
Total params: 3,224,422
Trainable params: 3,224,422
Non-trainable params: 0
```

2. Accuracy:

```
Epoch 3/25
198/198 [==
                           ==] - 6s 30ms/step - loss: 0.3511 - accuracy: 0.8704 - val_loss: 0.7750 - val_accuracy: 0.7667
Epoch 4/25
198/198 [==
                           :==] - 6s 31ms/step - loss: 0.2874 - accuracy: 0.8939 - val_loss: 0.4991 - val_accuracy: 0.8667
Epoch 5/25
                    198/198 [==
Epoch 6/25
198/198 [===
                      :======] - 6s 30ms/step - loss: 0.1651 - accuracy: 0.9444 - val_loss: 0.4334 - val_accuracy: 0.9333
Epoch 7/25
                           ==] - 6s 30ms/step - loss: 0.1399 - accuracy: 0.9529 - val_loss: 0.2843 - val_accuracy: 0.9667
198/198 [===
Epoch 8/25
                      =======] - 6s 30ms/step - loss: 0.1349 - accuracy: 0.9478 - val loss: 0.2908 - val accuracy: 0.9667
198/198 [===
Epoch 9/25
                           ==] - 6s 30ms/step - loss: 0.0865 - accuracy: 0.9680 - val loss: 0.3525 - val accuracy: 0.9333
198/198 [==:
Epoch 10/25
                           ==] - 6s 30ms/step - loss: 0.0613 - accuracy: 0.9747 - val loss: 0.7240 - val accuracy: 0.7000
198/198 [===
Epoch 11/25
                    ========] - 6s 30ms/step - loss: 0.0746 - accuracy: 0.9714 - val_loss: 0.2732 - val_accuracy: 0.9667
198/198 [===
Epoch 12/25
198/198 [===
                     Epoch 13/25
Epoch 24/25
                198/198 [===
Epoch 25/25
             <keras.callbacks.History at 0x1b2a7bd6f10>
```