

# Performance Testing

Date	18-11-2022
Team ID	PNT2022TMID24275
Project Name	A Gesture – Based Tool for Sterile Browsing of Radiology Images
Maximum Marks	10 Marks

## MODEL SUMMARY:

Model: "sequential"

Layer (type)	Output Shape	Param #
conv2d (Conv2D)	(None, 62, 62, 32)	320
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, 512)	3211776
dense_1 (Dense)	(None, 6)	3078
Total params: 3,224,422		
Trainable params: 3,224,422		
Non-trainable params: 0		

## ACCURACY:

CONTENT	VALUE
Training Accuracy	99.16%
Validation Accuracy	96.67%

```
In [13]: model.fit_generator(x_train,
                             steps_per_epoch=504/3,
                             epochs=25,
                             validation_data=x_test,
                             validation_steps=30/3)
```

C:\Users\adhar\AppData\Local\Programs\Python\Python37\lib\site-packages\tensorflow\python\keras\engine\training.py:1940: UserWarning: 'Model.fit\_generator' is deprecated and will be removed in a future version. Please use 'Model.fit', which supports generators.  
warnings.warn('Model.fit\_generator' is deprecated and '

Epoch 1/25  
198/198 [-----] - 7s 32ms/step - loss: 0.7883 - accuracy: 0.7222 - val\_loss: 0.0635 - val\_accuracy: 1.0000  
Epoch 2/25  
198/198 [-----] - 6s 30ms/step - loss: 0.1845 - accuracy: 0.9343 - val\_loss: 0.0007 - val\_accuracy: 0.9667  
Epoch 3/25  
198/198 [-----] - 6s 30ms/step - loss: 0.1161 - accuracy: 0.9646 - val\_loss: 0.1865 - val\_accuracy: 0.9333  
Epoch 4/25  
198/198 [-----] - 6s 32ms/step - loss: 0.0608 - accuracy: 0.9815 - val\_loss: 0.1234 - val\_accuracy: 0.9667  
Epoch 5/25  
198/198 [-----] - 6s 32ms/step - loss: 0.0837 - accuracy: 0.9731 - val\_loss: 0.0094 - val\_accuracy: 1.0000  
Epoch 6/25  
198/198 [-----] - 6s 32ms/step - loss: 0.0352 - accuracy: 0.9882 - val\_loss: 0.1159 - val\_accuracy: 0.9667  
Epoch 7/25  
198/198 [-----] - 6s 32ms/step - loss: 0.0494 - accuracy: 0.9815 - val\_loss: 0.0077 - val\_accuracy: 1.0000  
Epoch 8/25  
198/198 [-----] - 6s 29ms/step - loss: 0.0486 - accuracy: 0.9848 - val\_loss: 0.0354 - val\_accuracy: 0.9667  
Epoch 9/25  
198/198 [-----] - 5s 27ms/step - loss: 0.0588 - accuracy: 0.9848 - val\_loss: 0.0023 - val\_accuracy: 1.0000  
Epoch 10/25  
198/198 [-----] - 5s 27ms/step - loss: 0.0102 - accuracy: 0.9966 - val\_loss: 0.0026 - val\_accuracy: 1.0000  
Epoch 11/25  
198/198 [-----] - 6s 28ms/step - loss: 0.0389 - accuracy: 0.9865 - val\_loss: 0.0022 - val\_accuracy: 1.0000  
Epoch 12/25  
198/198 [-----] - 5s 28ms/step - loss: 0.0275 - accuracy: 0.9899 - val\_loss: 0.0343 - val\_accuracy: 0.9667  
Epoch 13/25  
198/198 [-----] - 5s 26ms/step - loss: 0.0005 - accuracy: 0.9815 - val\_loss: 0.0038 - val\_accuracy: 1.0000  
Epoch 14/25  
198/198 [-----] - 5s 25ms/step - loss: 0.0233 - accuracy: 0.9933 - val\_loss: 3.5359e-04 - val\_accuracy: 1.0000  
Epoch 15/25  
198/198 [-----] - 5s 25ms/step - loss: 0.0346 - accuracy: 0.9882 - val\_loss: 0.0023 - val\_accuracy: 1.0000  
Epoch 16/25  
198/198 [-----] - 5s 25ms/step - loss: 0.0103 - accuracy: 0.9949 - val\_loss: 9.7517e-04 - val\_accuracy: 1.0000  
Epoch 17/25  
198/198 [-----] - 5s 24ms/step - loss: 0.0151 - accuracy: 0.9949 - val\_loss: 0.0000 - val\_accuracy: 1.0000  
Epoch 18/25  
198/198 [-----] - 5s 24ms/step - loss: 0.0290 - accuracy: 0.9899 - val\_loss: 0.0032 - val\_accuracy: 1.0000  
Epoch 19/25  
198/198 [-----] - 5s 24ms/step - loss: 0.0067 - accuracy: 0.9966 - val\_loss: 1.4579e-04 - val\_accuracy: 1.0000  
Epoch 20/25  
198/198 [-----] - 5s 24ms/step - loss: 0.0104 - accuracy: 0.9966 - val\_loss: 0.0035 - val\_accuracy: 1.0000  
Epoch 21/25  
198/198 [-----] - 5s 24ms/step - loss: 0.0104 - accuracy: 0.9949 - val\_loss: 0.0034 - val\_accuracy: 1.0000  
Epoch 22/25  
198/198 [-----] - 5s 24ms/step - loss: 0.0087 - accuracy: 0.9966 - val\_loss: 1.2008e-05 - val\_accuracy: 1.0000  
Epoch 23/25  
198/198 [-----] - 5s 23ms/step - loss: 0.0224 - accuracy: 0.9899 - val\_loss: 0.0019 - val\_accuracy: 1.0000  
Epoch 24/25  
198/198 [-----] - 5s 23ms/step - loss: 0.0318 - accuracy: 0.9899 - val\_loss: 2.6262e-04 - val\_accuracy: 1.0000  
Epoch 25/25  
198/198 [-----] - 4s 22ms/step - loss: 0.0159 - accuracy: 0.9933 - val\_loss: 2.3526e-05 - val\_accuracy: 1.0000