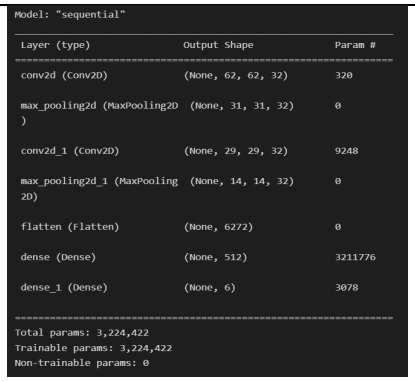
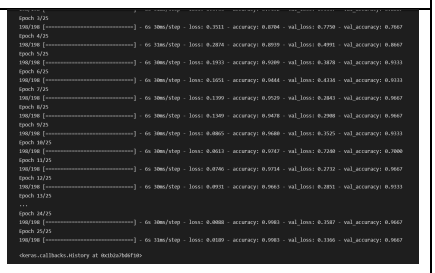
Project Development Phase
Model Performance Test

Date	14 November 2022
Team ID	PNT2022TMID04610
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	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 ========== Total params:3,224,422 Trainable params: 3,224,422 Non-trainable params: 0	
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"
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 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 (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 [==============================] - 6s 30ms/step - loss: 0.1933 - accuracy: 0.9209 - val_loss: 0.3878 - val_accuracy: 0.9333
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
198/198 [==============================] - 6s 30ms/step - loss: 0.1399 - accuracy: 0.9529 - val_loss: 0.2843 - val_accuracy: 0.9667
Epoch 8/25
198/198 [==============================] - 6s 30ms/step - loss: 0.1349 - accuracy: 0.9478 - val_loss: 0.2908 - val_accuracy: 0.9667
Epoch 9/25
198/198 [==============================] - 6s 30ms/step - loss: 0.0865 - accuracy: 0.9680 - val_loss: 0.3525 - val_accuracy: 0.9333
Epoch 10/25
198/198 [==============================] - 6s 30ms/step - loss: 0.0613 - accuracy: 0.9747 - val_loss: 0.7240 - val_accuracy: 0.7000
Epoch 11/25
198/198 [==============================] - 6s 30ms/step - loss: 0.0746 - accuracy: 0.9714 - val_loss: 0.2732 - val_accuracy: 0.9667
Epoch 12/25
198/198 [==============================] - 6s 30ms/step - loss: 0.0931 - accuracy: 0.9663 - val_loss: 0.2851 - val_accuracy: 0.9333
Epoch 13/25
...
Epoch 24/25
198/198 [==============================] - 6s 30ms/step - loss: 0.0088 - accuracy: 0.9983 - val_loss: 0.3587 - val_accuracy: 0.9667
Epoch 25/25
198/198 [==============================] - 6s 31ms/step - loss: 0.0189 - accuracy: 0.9983 - val_loss: 0.3366 - val_accuracy: 0.9667

<keras.callbacks.History at 0x1b2a7bd6f10>
```