ProjectDevelopmentPhas eModelPerformanceTest

| Date | 14November2022 | |
|--------------|---|--|
| Team ID | PNT2022TMID50430 | |
| ProjectName | AGesture- basedToolforSterileBrowsingofRadiolog ylmages | |
| MaximumMarks | 10Marks | |

ModelPerformanceTesting:

Project teams hall fill the following information in model performance testing template.

| S.No. | Parameter | Values | Screenshot |
|-------|---|--|--|
| 1. | ModelSu mmary | conv2d(Conv2D)-320max_pooling2d (MaxPooling2D) - 0conv2d_1(Conv2D)- 9248max_pooling2d_1 (MaxPooling2D) - 0flatten(Flatten)-0 dense (Dense) - 3211776dense_1(Dense)-30 78 | Nodel: "sequential" Layer (type) |
| | | Total params:3,224,422Trainableparams: 3,224,422 Non-trainableparams:0 | dense (Dense) (Mone, 512) 3211776 dense_1 (Dense) (Mone, 6) 3678 Total params: 3,224,422 Trainable params: 3,224,422 ton-trainable params: 0 |
| 2. | Accuracy | Training Accuracy - 99.83%Validation Accuracy-96.67% | |
| 3. | Confidenc eScore (OnlyYolo Projects) | ClassDetected- ConfidenceScore- | NA |



Screenshots:

1. ModelSummary:

```
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 (MaxPooling (None, 14, 14, 32)
 flatten (Flatten)
                             (None, 6272)
 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
                                  :==] - 6s 30ms/step - loss: 0.3511 - accuracy: 0.8704 - val loss: 0.7750 - val accuracy: 0.7667
198/198 [=:
Epoch 4/25
                                  ===] - 6s 31ms/step - loss: 0.2874 - accuracy: 0.8939 - val loss: 0.4991 - val accuracy: 0.8667
198/198 [==
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
                                   =] - 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 [===
                             =======] - 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
<keras.callbacks.History at 0x1b2a7bd6f10>
```

