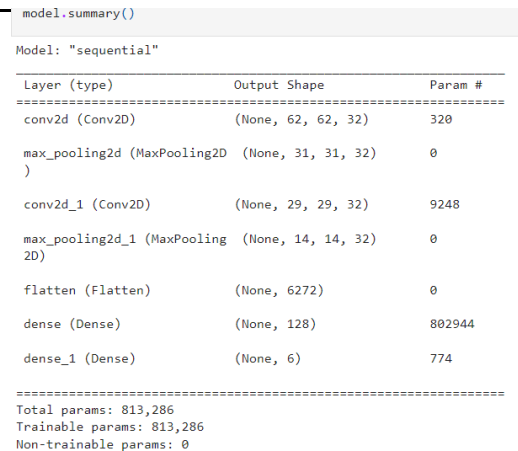


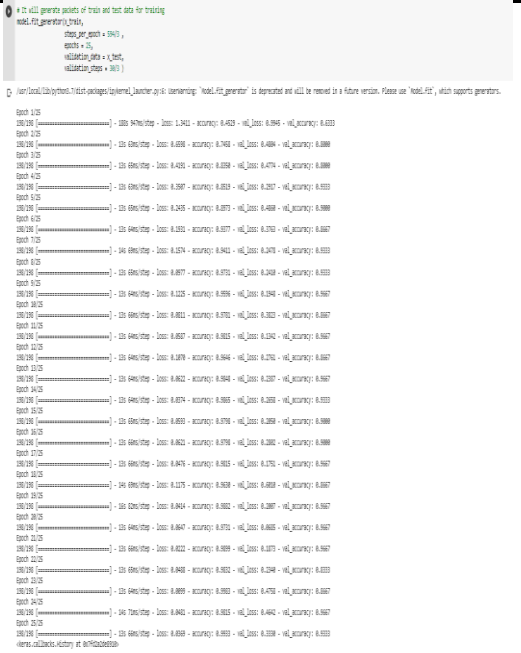
## Project Development Phase Model Performance Test

Date	18 Nov 2022
Team ID	PNT2022TMID39604
Project Name	Project-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	Screen Shot
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) - 802944 dense_1 (Dense) - 774 ===== Total params: 813,286 Trainable params: 813,286 Non-trainable params: 0 </pre>	 <pre> 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, 128)                 802944 dense_1 (Dense)              (None, 6)                   774 ===== Total params: 813,286 Trainable params: 813,286 Non-trainable params: 0 </pre>

2.	Accuracy	<p>Training Accuracy-99%</p> <p>Validation Accuracy-93%</p>	 <pre> # It will generate points of train and test data for training model_fit_generator(train,                     train_per_batch = 1000,                     epochs = 10,                     validation_per_batch = 1000,                     validation_per_epoch = 100)  C:\Users\johndoe&gt; python model_fit_generator.py --train_per_batch 1000 --epochs 10 --validation_per_batch 1000 --validation_per_epoch 100  Epoch 1/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 1.2411 - accuracy: 0.9933 - val_loss: 0.9994 - val_accuracy: 0.9333 Epoch 2/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.9208 - accuracy: 0.9968 - val_loss: 0.9486 - val_accuracy: 0.9389 Epoch 3/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.9193 - accuracy: 0.9959 - val_loss: 0.9474 - val_accuracy: 0.9389 Epoch 4/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.9207 - accuracy: 0.9959 - val_loss: 0.9207 - val_accuracy: 0.9333 Epoch 5/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.9205 - accuracy: 0.9973 - val_loss: 0.9488 - val_accuracy: 0.9389 Epoch 6/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.9192 - accuracy: 0.9977 - val_loss: 0.9701 - val_accuracy: 0.9367 Epoch 7/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.9174 - accuracy: 0.9981 - val_loss: 0.9476 - val_accuracy: 0.9333 Epoch 8/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.8977 - accuracy: 0.9981 - val_loss: 0.9488 - val_accuracy: 0.9333 Epoch 9/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.9125 - accuracy: 0.9996 - val_loss: 0.9294 - val_accuracy: 0.9367 Epoch 10/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.8811 - accuracy: 0.9981 - val_loss: 0.9302 - val_accuracy: 0.9367 Epoch 11/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.8807 - accuracy: 0.9981 - val_loss: 0.9291 - val_accuracy: 0.9367 Epoch 12/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.9199 - accuracy: 0.9994 - val_loss: 0.9701 - val_accuracy: 0.9367 Epoch 13/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.8802 - accuracy: 0.9994 - val_loss: 0.9207 - val_accuracy: 0.9367 Epoch 14/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.8774 - accuracy: 0.9988 - val_loss: 0.9205 - val_accuracy: 0.9333 Epoch 15/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.8899 - accuracy: 0.9991 - val_loss: 0.9299 - val_accuracy: 0.9389 Epoch 16/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.8821 - accuracy: 0.9991 - val_loss: 0.9300 - val_accuracy: 0.9389 Epoch 17/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.8475 - accuracy: 0.9981 - val_loss: 0.9701 - val_accuracy: 0.9367 Epoch 18/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.9175 - accuracy: 0.9991 - val_loss: 0.9807 - val_accuracy: 0.9367 Epoch 19/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.8454 - accuracy: 0.9981 - val_loss: 0.9307 - val_accuracy: 0.9367 Epoch 20/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.8847 - accuracy: 0.9981 - val_loss: 0.9301 - val_accuracy: 0.9367 Epoch 21/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.8812 - accuracy: 0.9989 - val_loss: 0.9373 - val_accuracy: 0.9367 Epoch 22/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.8448 - accuracy: 0.9981 - val_loss: 0.9294 - val_accuracy: 0.9333 Epoch 23/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.8899 - accuracy: 0.9981 - val_loss: 0.9475 - val_accuracy: 0.9367 Epoch 24/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.8461 - accuracy: 0.9981 - val_loss: 0.9492 - val_accuracy: 0.9367 Epoch 25/10 train: 1000/1000 [=====] 100% 1000/1000 - Loss: 0.8468 - accuracy: 0.9981 - val_loss: 0.9398 - val_accuracy: 0.9333 C:\Users\johndoe&gt; python model_fit_generator.py --train_per_batch 1000 --epochs 10 --validation_per_batch 1000 --validation_per_epoch 100 </pre>
3.	Confidence Score(Only Yolo Projects)	<p>Class Detected-</p> <p>Confidence Score</p>	NA