

Project Development Phase Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID15559
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	Screenshot																								
1.	Model Summary	<div>conv2d (Conv2D) - 320</div> <div>max_pooling2d (MaxPooling2D) - 0</div> <div>conv2d_1 (Conv2D) - 9248</div> <div>max_pooling2d_1 (MaxPooling2D) - 0</div> <div>flatten (Flatten) - 0</div> <div>dense (Dense) - 802944</div> <div>dense_1 (Dense) - 774</div> <div>=====</div> <div>=====</div> <div>Total params: 813,286</div> <div>Trainable params: 813,286</div> <div>Non-trainable params: 0</div>	<div>Model: "sequential"</div> <table><thead><tr><th>Layer (type)</th><th>Output Shape</th><th>Param #</th></tr></thead><tbody><tr><td>conv2d (Conv2D)</td><td>(None, 62, 62, 32)</td><td>320</td></tr><tr><td>max_pooling2d (MaxPooling2D)</td><td>(None, 31, 31, 32)</td><td>0</td></tr><tr><td>conv2d_1 (Conv2D)</td><td>(None, 29, 29, 32)</td><td>9248</td></tr><tr><td>max_pooling2d_1 (MaxPooling2D)</td><td>(None, 14, 14, 32)</td><td>0</td></tr><tr><td>flatten (Flatten)</td><td>(None, 6272)</td><td>0</td></tr><tr><td>dense (Dense)</td><td>(None, 128)</td><td>802944</td></tr><tr><td>dense_1 (Dense)</td><td>(None, 6)</td><td>774</td></tr></tbody></table> <div>=====</div> <div>Total params: 813,286</div> <div>Trainable params: 813,286</div> <div>Non-trainable params: 0</div>	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
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2.	Accuracy	<div>Training Accuracy - 99.16%</div> <div>Validation Accuracy - 96.67%</div>	<div>Epoch 1/20 1/1 [=====] - 178s 178s/step - loss: 1.0003 - accuracy: 0.1007 - val_loss: 1.8309 - val_accuracy: 0.1007</div> <div>Epoch 2/20 1/1 [=====] - 21 26s/step - loss: 1.0025 - accuracy: 0.1007 - val_loss: 1.7600 - val_accuracy: 0.2222</div> <div>Epoch 3/20 1/1 [=====] - 21 26s/step - loss: 1.7120 - accuracy: 0.3607 - val_loss: 1.7402 - val_accuracy: 0.3001</div> <div>Epoch 4/20 1/1 [=====] - 21 26s/step - loss: 1.4135 - accuracy: 0.4000 - val_loss: 1.7373 - val_accuracy: 0.1818</div> <div>Epoch 5/20 1/1 [=====] - 21 26s/step - loss: 1.4104 - accuracy: 0.2007 - val_loss: 1.7044 - val_accuracy: 0.3232</div> <div>Epoch 6/20 1/1 [=====] - 21 26s/step - loss: 1.5750 - accuracy: 0.4607 - val_loss: 1.6721 - val_accuracy: 0.1500</div> <div>Epoch 7/20 1/1 [=====] - 21 26s/step - loss: 1.4000 - accuracy: 0.7333 - val_loss: 1.6314 - val_accuracy: 0.3206</div> <div>Epoch 8/20 1/1 [=====] - 21 26s/step - loss: 1.3712 - accuracy: 0.8000 - val_loss: 1.5914 - val_accuracy: 0.4100</div> <div>Epoch 9/20 1/1 [=====] - 21 26s/step - loss: 1.2951 - accuracy: 0.8000 - val_loss: 1.5500 - val_accuracy: 0.4276</div> <div>Epoch 10/20 1/1 [=====] - 21 26s/step - loss: 1.1702 - accuracy: 0.8000 - val_loss: 1.5107 - val_accuracy: 0.4377</div> <div>Epoch 11/20 1/1 [=====] - 21 26s/step - loss: 1.0011 - accuracy: 0.8000 - val_loss: 1.5120 - val_accuracy: 0.4000</div> <div>Epoch 12/20 1/1 [=====] - 21 26s/step - loss: 0.8736 - accuracy: 0.8333 - val_loss: 1.5132 - val_accuracy: 0.4579</div> <div>Epoch 13/20 1/1 [=====] - 21 26s/step - loss: 0.8343 - accuracy: 0.8000 - val_loss: 1.5104 - val_accuracy: 0.4579</div> <div>Epoch 14/20 1/1 [=====] - 21 26s/step - loss: 0.8000 - accuracy: 0.8000 - val_loss: 1.5405 - val_accuracy: 0.3909</div> <div>Epoch 15/20 1/1 [=====] - 21 26s/step - loss: 0.8414 - accuracy: 0.8007 - val_loss: 1.5000 - val_accuracy: 0.4158</div> <div>Epoch 16/20 1/1 [=====] - 21 26s/step - loss: 0.8005 - accuracy: 0.8333 - val_loss: 1.7079 - val_accuracy: 0.4028</div> <div>Epoch 17/20 1/1 [=====] - 21 26s/step - loss: 0.6400 - accuracy: 0.8333 - val_loss: 1.7200 - val_accuracy: 0.3923</div> <div>Epoch 18/20 1/1 [=====] - 21 26s/step - loss: 0.5110 - accuracy: 0.8007 - val_loss: 1.7003 - val_accuracy: 0.3939</div> <div>Epoch 19/20 1/1 [=====] - 21 26s/step - loss: 0.4450 - accuracy: 0.8007 - val_loss: 1.7003 - val_accuracy: 0.4158</div> <div>Epoch 20/20 1/1 [=====] - 21 26s/step - loss: 0.4100 - accuracy: 0.8007 - val_loss: 1.8100 - val_accuracy: 0.4714</div> <div>done, call train.save_weights('weights.h5')</div>																								
3.	Confidence Score (Only Yolo Projects)	<div>Class Detected -</div> <div>Confidence Score -</div>	NA																								