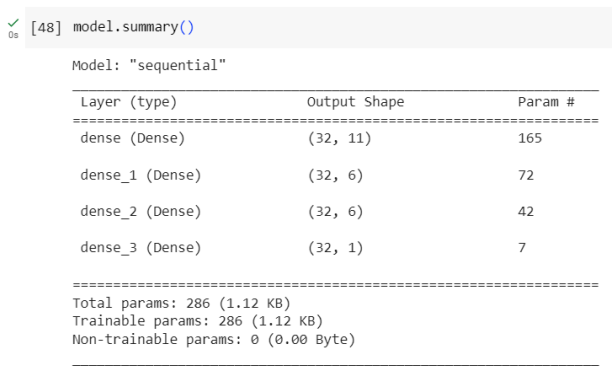
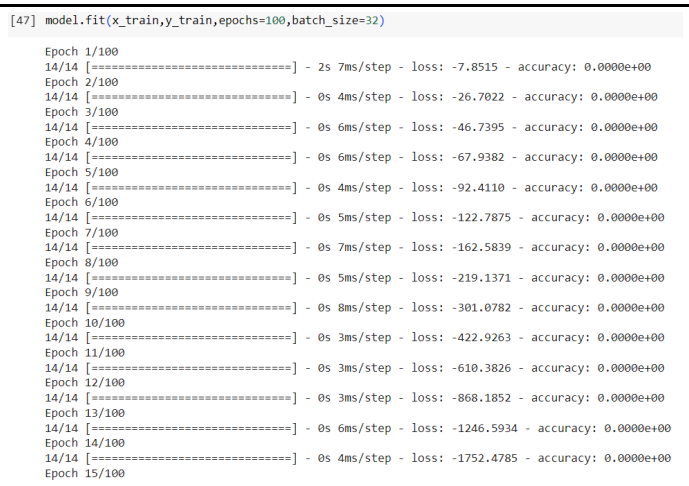
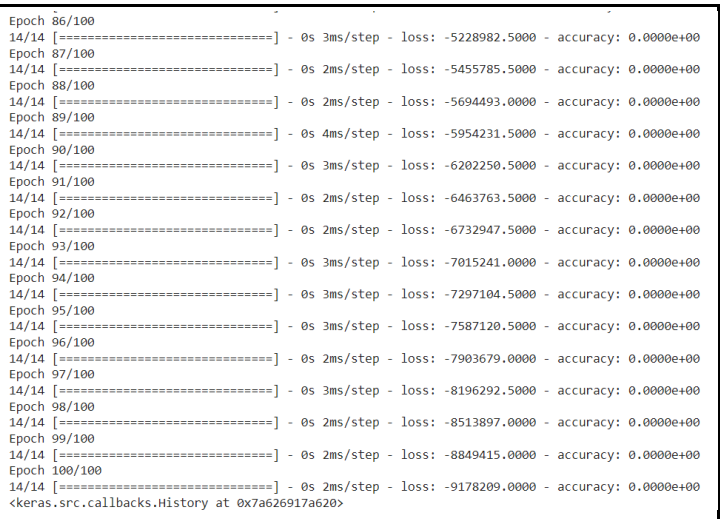
Project Development Phase
Model Performance Test

Date	15 November 2023
Team ID	592670
Project Name	Rainfall Prediction using Machine Learning
Maximum Marks	10 Marks

Model Performance Testing:

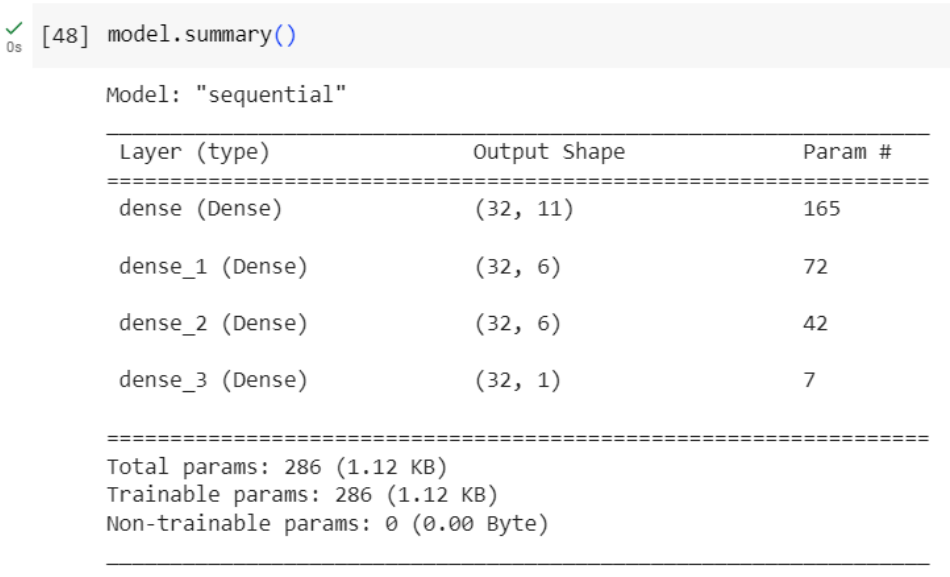
Project team shall fill the following information in model performance testing template.

S.No	Parameter	Values	Screenshot
1.	Model Summary	**Total params: 286** **Trainable params: 286** **Non-trainable params: 0**	
2.	Accuracy	Training Accuracy – 73.64	

			
3.	Confidence Score (Only Yolo Projects)	Class Detected - NA Confidence Score - NA	Not Applicable

Screenshot:

Model Summary



```
[48] model.summary()

Model: "sequential"
_________________________________________________________________
 Layer (type)                Output Shape              Param #
=================================================================
 dense (Dense)               (32, 11)                  165

 dense_1 (Dense)             (32, 6)                   72

 dense_2 (Dense)             (32, 6)                   42

 dense_3 (Dense)             (32, 1)                   7

=================================================================
Total params: 286 (1.12 KB)
Trainable params: 286 (1.12 KB)
Non-trainable params: 0 (0.00 Byte)
_________________________________________________________________
```

Accuracy

```
[47] model.fit(x_train,y_train,epochs=100,batch_size=32)
```

```
Epoch 1/100
14/14 [==============================] - 2s 7ms/step - loss: -7.8515 - accuracy: 0.0000e+00
Epoch 2/100
14/14 [==============================] - 0s 4ms/step - loss: -26.7022 - accuracy: 0.0000e+00
Epoch 3/100
14/14 [==============================] - 0s 6ms/step - loss: -46.7395 - accuracy: 0.0000e+00
Epoch 4/100
14/14 [==============================] - 0s 6ms/step - loss: -67.9382 - accuracy: 0.0000e+00
Epoch 5/100
14/14 [==============================] - 0s 4ms/step - loss: -92.4110 - accuracy: 0.0000e+00
Epoch 6/100
14/14 [==============================] - 0s 5ms/step - loss: -122.7875 - accuracy: 0.0000e+00
Epoch 7/100
14/14 [==============================] - 0s 7ms/step - loss: -162.5839 - accuracy: 0.0000e+00
Epoch 8/100
14/14 [==============================] - 0s 5ms/step - loss: -219.1371 - accuracy: 0.0000e+00
Epoch 9/100
14/14 [==============================] - 0s 8ms/step - loss: -301.0782 - accuracy: 0.0000e+00
Epoch 10/100
14/14 [==============================] - 0s 3ms/step - loss: -422.9263 - accuracy: 0.0000e+00
Epoch 11/100
14/14 [==============================] - 0s 3ms/step - loss: -610.3826 - accuracy: 0.0000e+00
Epoch 12/100
14/14 [==============================] - 0s 3ms/step - loss: -868.1852 - accuracy: 0.0000e+00
Epoch 13/100
14/14 [==============================] - 0s 6ms/step - loss: -1246.5934 - accuracy: 0.0000e+00
Epoch 14/100
14/14 [==============================] - 0s 4ms/step - loss: -1752.4785 - accuracy: 0.0000e+00
Epoch 15/100
Epoch 86/100
14/14 [==============================] - 0s 3ms/step - loss: -5228982.5000 - accuracy: 0.0000e+00
Epoch 87/100
14/14 [==============================] - 0s 2ms/step - loss: -5455785.5000 - accuracy: 0.0000e+00
Epoch 88/100
14/14 [==============================] - 0s 2ms/step - loss: -5694493.0000 - accuracy: 0.0000e+00
Epoch 89/100
14/14 [==============================] - 0s 4ms/step - loss: -5954231.5000 - accuracy: 0.0000e+00
Epoch 90/100
14/14 [==============================] - 0s 3ms/step - loss: -6202250.5000 - accuracy: 0.0000e+00
Epoch 91/100
14/14 [==============================] - 0s 2ms/step - loss: -6463763.5000 - accuracy: 0.0000e+00
Epoch 92/100
14/14 [==============================] - 0s 2ms/step - loss: -6732947.5000 - accuracy: 0.0000e+00
Epoch 93/100
14/14 [==============================] - 0s 3ms/step - loss: -7015241.0000 - accuracy: 0.0000e+00
Epoch 94/100
14/14 [==============================] - 0s 3ms/step - loss: -7297104.5000 - accuracy: 0.0000e+00
Epoch 95/100
14/14 [==============================] - 0s 3ms/step - loss: -7587120.5000 - accuracy: 0.0000e+00
Epoch 96/100
14/14 [==============================] - 0s 2ms/step - loss: -7903679.0000 - accuracy: 0.0000e+00
Epoch 97/100
14/14 [==============================] - 0s 3ms/step - loss: -8196292.5000 - accuracy: 0.0000e+00
Epoch 98/100
14/14 [==============================] - 0s 2ms/step - loss: -8513897.0000 - accuracy: 0.0000e+00
Epoch 99/100
14/14 [==============================] - 0s 2ms/step - loss: -8849415.0000 - accuracy: 0.0000e+00
Epoch 100/100
14/14 [==============================] - 0s 2ms/step - loss: -9178209.0000 - accuracy: 0.0000e+00
<keras.src.callbacks.History at 0x7a626917a620>
```