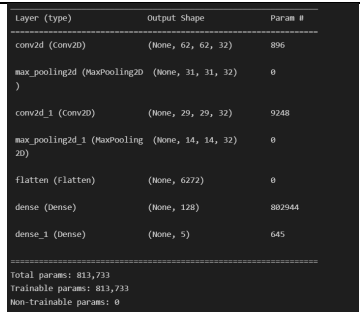
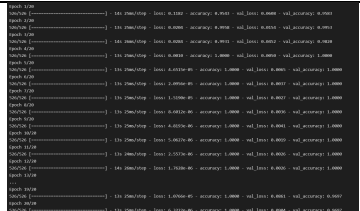


Project Development Phase Model Performance Test

Date	10 November 2022
Team ID	PNT2022TMID13551
Project Name	AI-powered Nutrition Analyzer for Fitness Enthusiasts
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: 813,733 Trainable params: 813,733 Non-trainable params: 0	 <pre> Layer (type) Output Shape Param # ----- conv2d (Conv2D) (None, 62, 62, 32) 896 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, 128) 802944 dense_1 (Dense) (None, 5) 645 ----- Total params: 813,733 Trainable params: 813,733 Non-trainable params: 0 </pre>
2.	Accuracy	Training Accuracy – 95.8 Validation Accuracy – 99.5	 <pre> Epoch 1/10: 100.000000 accuracy: 0.958000 val_accuracy: 0.995000 Epoch 2/10: 100.000000 accuracy: 0.958000 val_accuracy: 0.995000 Epoch 3/10: 100.000000 accuracy: 0.958000 val_accuracy: 0.995000 Epoch 4/10: 100.000000 accuracy: 0.958000 val_accuracy: 0.995000 Epoch 5/10: 100.000000 accuracy: 0.958000 val_accuracy: 0.995000 Epoch 6/10: 100.000000 accuracy: 0.958000 val_accuracy: 0.995000 Epoch 7/10: 100.000000 accuracy: 0.958000 val_accuracy: 0.995000 Epoch 8/10: 100.000000 accuracy: 0.958000 val_accuracy: 0.995000 Epoch 9/10: 100.000000 accuracy: 0.958000 val_accuracy: 0.995000 Epoch 10/10: 100.000000 accuracy: 0.958000 val_accuracy: 0.995000 </pre>

Model Summary:

Layer (type)	Output Shape	Param #
conv2d (Conv2D)	(None, 62, 62, 32)	896
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, 5)	645
Total params: 813,733		
Trainable params: 813,733		
Non-trainable params: 0		

Accuracy:

```
Epoch 1/20
526/526 [=====] - 14s 25ms/step - loss: 0.1182 - accuracy: 0.9543 - val_loss: 0.0608 - val_accuracy: 0.9583
Epoch 2/20
526/526 [=====] - 13s 25ms/step - loss: 0.0204 - accuracy: 0.9958 - val_loss: 0.0154 - val_accuracy: 0.9953
Epoch 3/20
526/526 [=====] - 14s 26ms/step - loss: 0.0284 - accuracy: 0.9931 - val_loss: 0.0452 - val_accuracy: 0.9820
Epoch 4/20
526/526 [=====] - 13s 25ms/step - loss: 0.0010 - accuracy: 1.0000 - val_loss: 0.0050 - val_accuracy: 1.0000
Epoch 5/20
526/526 [=====] - 13s 25ms/step - loss: 4.6515e-05 - accuracy: 1.0000 - val_loss: 0.0065 - val_accuracy: 1.0000
Epoch 6/20
526/526 [=====] - 13s 25ms/step - loss: 2.0956e-05 - accuracy: 1.0000 - val_loss: 0.0037 - val_accuracy: 1.0000
Epoch 7/20
526/526 [=====] - 13s 25ms/step - loss: 1.5190e-05 - accuracy: 1.0000 - val_loss: 0.0027 - val_accuracy: 1.0000
Epoch 8/20
526/526 [=====] - 13s 25ms/step - loss: 8.6012e-06 - accuracy: 1.0000 - val_loss: 0.0036 - val_accuracy: 1.0000
Epoch 9/20
526/526 [=====] - 13s 25ms/step - loss: 4.8193e-06 - accuracy: 1.0000 - val_loss: 0.0041 - val_accuracy: 1.0000
Epoch 10/20
526/526 [=====] - 13s 25ms/step - loss: 5.0627e-06 - accuracy: 1.0000 - val_loss: 0.0019 - val_accuracy: 1.0000
Epoch 11/20
526/526 [=====] - 13s 24ms/step - loss: 2.5573e-06 - accuracy: 1.0000 - val_loss: 0.0026 - val_accuracy: 1.0000
Epoch 12/20
526/526 [=====] - 14s 26ms/step - loss: 1.7628e-06 - accuracy: 1.0000 - val_loss: 0.0026 - val_accuracy: 1.0000
Epoch 13/20
...
Epoch 19/20
526/526 [=====] - 13s 25ms/step - loss: 1.0766e-05 - accuracy: 1.0000 - val_loss: 0.0861 - val_accuracy: 0.9697
Epoch 20/20
526/526 [=====] - 13s 25ms/step - loss: 6.3222e-06 - accuracy: 1.0000 - val_loss: 0.0904 - val_accuracy: 0.9697
```