AI - POWERED NUTRITION ANALYZER FOR FITNESS ENTHUSIASTS

TEAM ID : PNT2022TMID44704

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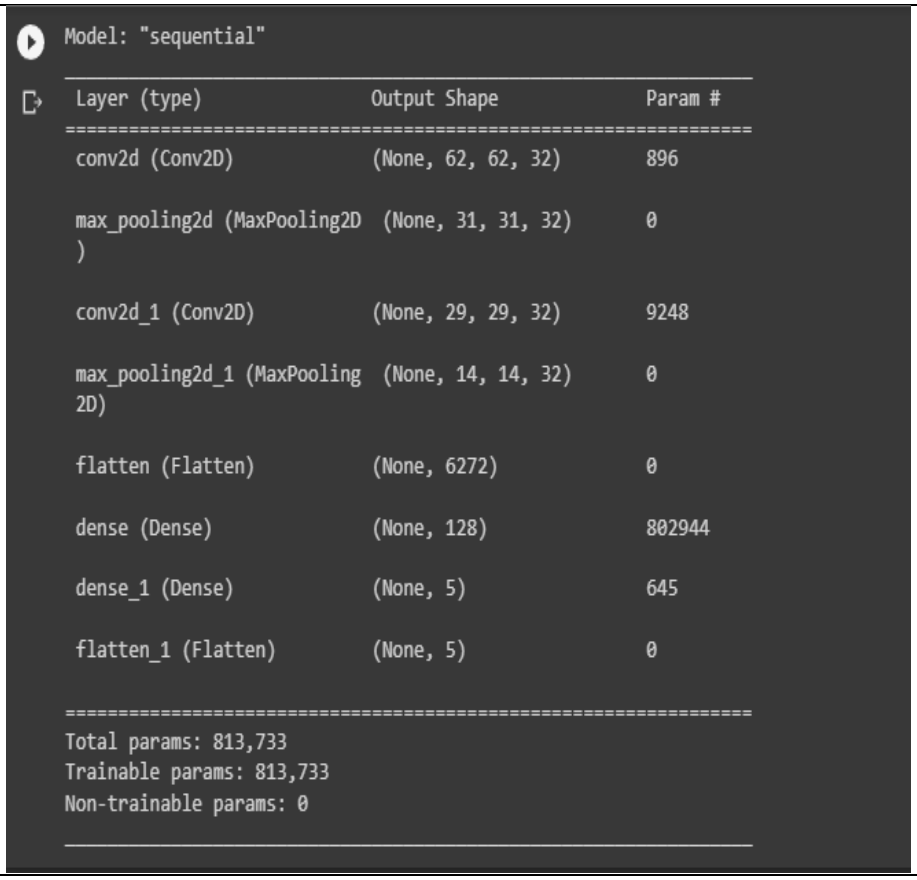
DEPARTMENT : COMPUTER SCIENCE & ENGINEERING

COLLEGE NAME : SHREE VENKATESHWARA HI-TECH ENGINEERING COLLEGE

S. NO.	Parameter	Values	Screenshot
1	Model Summary	Total params : 813,733 Trainable params: 813,733 Non-trainable params: 0	

```
Model: "sequential"
_________________________________________________________________
 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

 flatten_1 (Flatten)         (None, 5)                 0

=================================================================
Total params: 813,733
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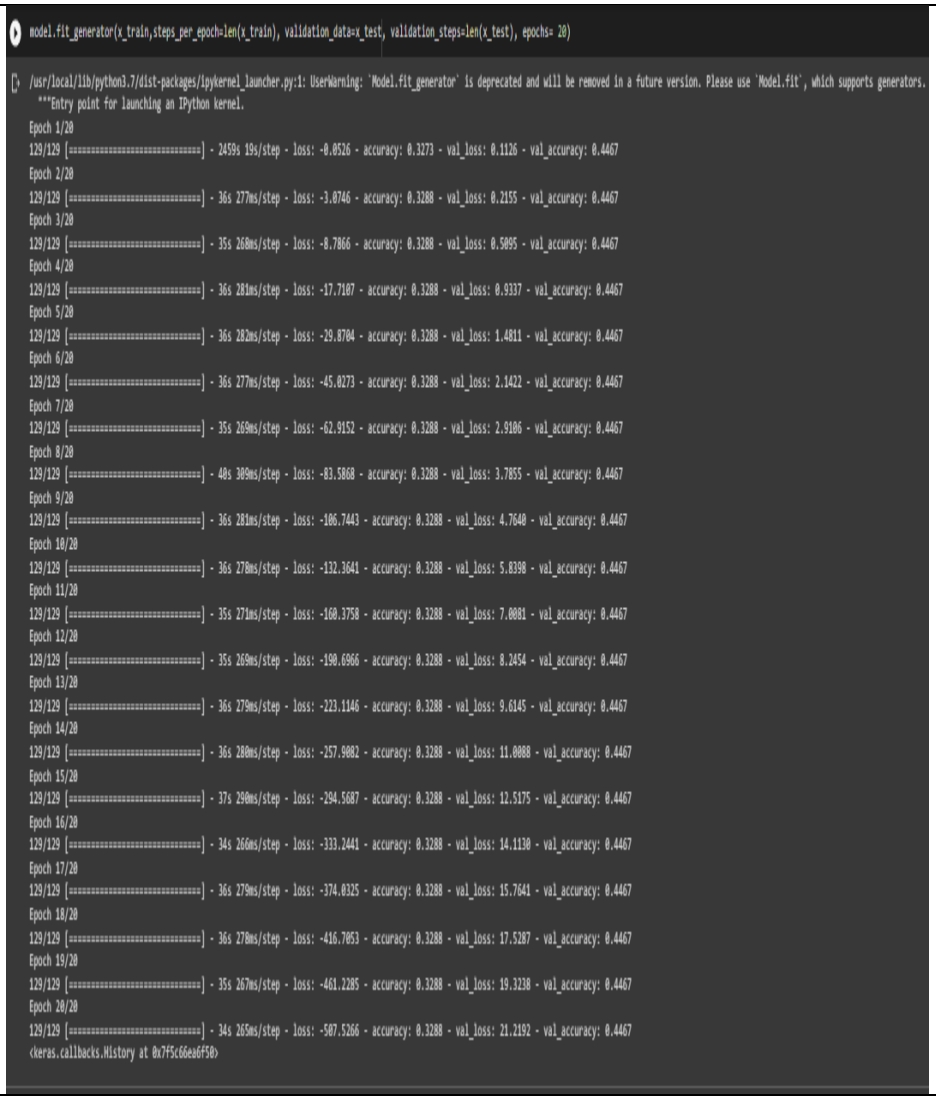
_________________________________________________________________
```

2	Accuracy	Training Accuracy – 96.55 Validation Accuracy- 97.45	

```
model.fit_generator(x_train,steps_per_epoch=len(x_train), validation_data=x_test, validation_steps=len(x_test), epochs= 20)

/usr/local/lib/python3.7/dist-packages/ipykernel_launcher.py:1: UserWarning: `Model.fit_generator` is deprecated and will be removed in a future version. Please use `Model.fit`, which supports generators.
  """Entry point for launching an IPython kernel.
Epoch 1/20
129/129 [==============================] - 2459s 19s/step - loss: -0.0526 - accuracy: 0.3273 - val_loss: 0.1126 - val_accuracy: 0.4467
Epoch 2/20
129/129 [==============================] - 36s 277ms/step - loss: -3.0746 - accuracy: 0.3288 - val_loss: 0.2155 - val_accuracy: 0.4467
Epoch 3/20
129/129 [==============================] - 35s 268ms/step - loss: -8.7866 - accuracy: 0.3288 - val_loss: 0.5095 - val_accuracy: 0.4467
Epoch 4/20
129/129 [==============================] - 36s 281ms/step - loss: -17.7187 - accuracy: 0.3288 - val_loss: 0.9337 - val_accuracy: 0.4467
Epoch 5/20
129/129 [==============================] - 36s 282ms/step - loss: -29.8704 - accuracy: 0.3288 - val_loss: 1.4811 - val_accuracy: 0.4467
Epoch 6/20
129/129 [==============================] - 36s 277ms/step - loss: -45.0273 - accuracy: 0.3288 - val_loss: 2.1422 - val_accuracy: 0.4467
Epoch 7/20
129/129 [==============================] - 35s 269ms/step - loss: -62.9152 - accuracy: 0.3288 - val_loss: 2.9106 - val_accuracy: 0.4467
Epoch 8/20
129/129 [==============================] - 40s 309ms/step - loss: -83.5868 - accuracy: 0.3288 - val_loss: 3.7855 - val_accuracy: 0.4467
Epoch 9/20
129/129 [==============================] - 36s 281ms/step - loss: -106.7443 - accuracy: 0.3288 - val_loss: 4.7640 - val_accuracy: 0.4467
Epoch 10/20
129/129 [==============================] - 36s 278ms/step - loss: -132.3641 - accuracy: 0.3288 - val_loss: 5.8398 - val_accuracy: 0.4467
Epoch 11/20
129/129 [==============================] - 35s 271ms/step - loss: -160.3758 - accuracy: 0.3288 - val_loss: 7.0081 - val_accuracy: 0.4467
Epoch 12/20
129/129 [==============================] - 35s 269ms/step - loss: -190.6966 - accuracy: 0.3288 - val_loss: 8.2454 - val_accuracy: 0.4467
Epoch 13/20
129/129 [==============================] - 36s 279ms/step - loss: -223.1146 - accuracy: 0.3288 - val_loss: 9.6145 - val_accuracy: 0.4467
Epoch 14/20
129/129 [==============================] - 36s 280ms/step - loss: -257.9082 - accuracy: 0.3288 - val_loss: 11.0088 - val_accuracy: 0.4467
Epoch 15/20
129/129 [==============================] - 37s 290ms/step - loss: -294.5687 - accuracy: 0.3288 - val_loss: 12.5175 - val_accuracy: 0.4467
Epoch 16/20
129/129 [==============================] - 34s 266ms/step - loss: -333.2441 - accuracy: 0.3288 - val_loss: 14.1130 - val_accuracy: 0.4467
Epoch 17/20
129/129 [==============================] - 36s 279ms/step - loss: -374.0325 - accuracy: 0.3288 - val_loss: 15.7641 - val_accuracy: 0.4467
Epoch 18/20
129/129 [==============================] - 36s 278ms/step - loss: -416.7853 - accuracy: 0.3288 - val_loss: 17.5287 - val_accuracy: 0.4467
Epoch 19/20
129/129 [==============================] - 35s 267ms/step - loss: -461.2285 - accuracy: 0.3288 - val_loss: 19.3238 - val_accuracy: 0.4467
Epoch 20/20
129/129 [==============================] - 34s 265ms/step - loss: -507.5266 - accuracy: 0.3288 - val_loss: 21.2192 - val_accuracy: 0.4467
<keras.callbacks.History at 0x7f5c66ea6f50>
```

MODEL SUMMARY

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ACCURACY

```
model.fit_generator(x_train,steps_per_epoch=len(x_train), validation_data=x_test, validation_steps=len(x_test), epochs= 20)

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