

**AI - POWERED NUTRITION ANALYZER FOR
FITNESS ENTHUSIASTS**

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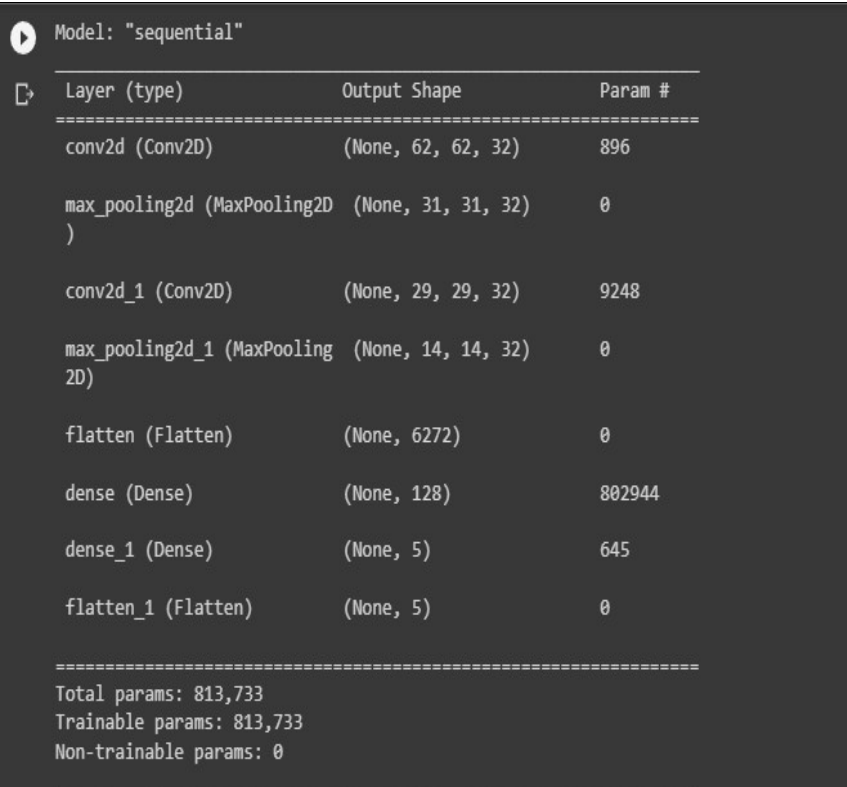
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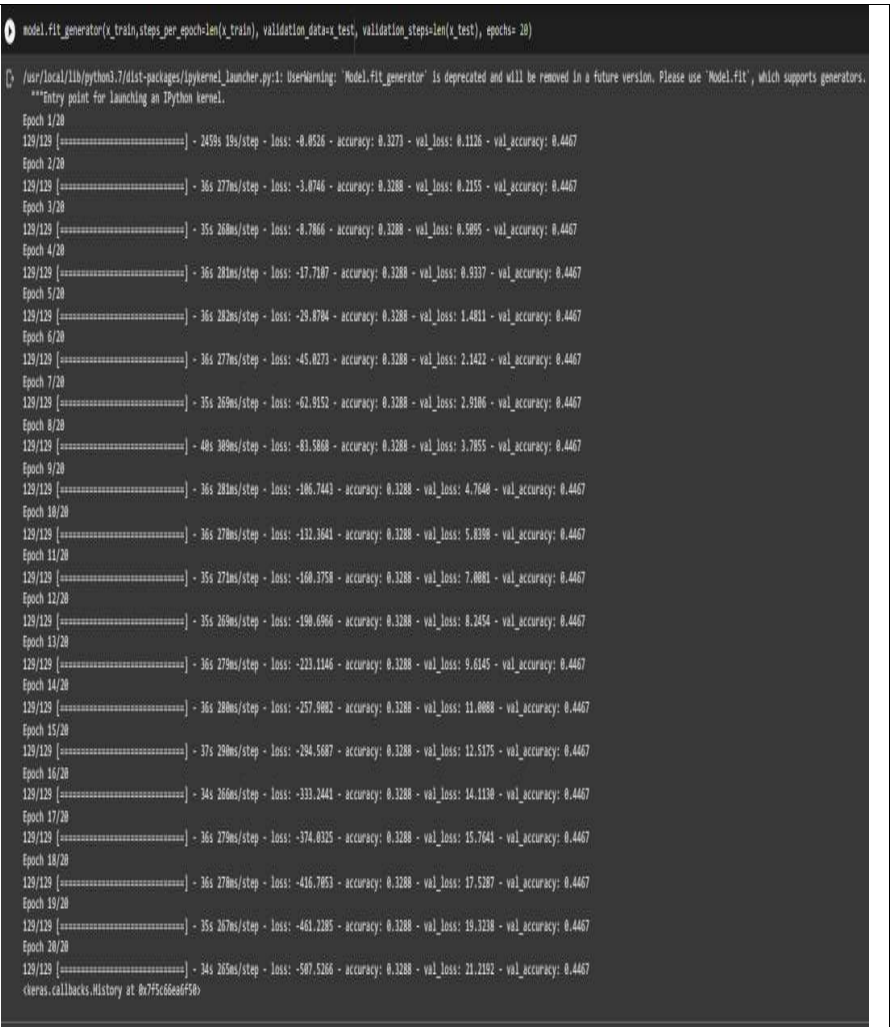
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S. N O.	Parameter	Values	Screenshot
1	Model Summary	Total params : 813,733 Trainable params: 813,733 Non-trainable params: 0	 <p>The screenshot shows the output of the <code>model.summary()</code> command in a terminal window. It details a sequential model with 8 layers: Conv2D, MaxPooling2D, Conv2D, MaxPooling2D, Flatten, Dense, Dense, and another Flatten layer. The total number of parameters is 813,733, all of which are trainable.</p> <pre> 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 (MaxPooling2D) │ (None, 14, 14, 32) │ 0 │ │ │ │ │ │ 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 Trainable params: 813,733 Non-trainable params: 0 </pre>

2	Accuracy	<div>Training Accuracy – 96.55</div> <div>Validation Accuracy- 97.45</div>	<div></div>
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MODEL SUMMARY

```
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 (MaxPooling2D) (None, 14, 14, 32)         0

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
Trainable params: 813,733
Non-trainable params: 0
```

ACCURACY

```
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: -17.7107 - 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: 11.0888 - 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: -416.7053 - 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 0x7f5c66e0f50>
```