TEAM ID : PNT2022TMID16369

PROJECT NAME : AI-powered Nutrition Analyzer for
Fitness Enthusiasts

Adding Dense Layers

A dense layer is a deeply connected neural network layer. It is the mostcommon
and frequently used layer.

```python
# Adding a fully connected layer
classifier.add(Dense(units=128, activation='relu'))
classifier.add(Dense(units=5, activation='softmax')) # softmax for more than 2
```

The number of neurons in the Dense layer is the same as the number of classes in
the training set. The neurons in the last Dense layer, use softmaxactivation to
convert their outputs into respective probabilities.

Understanding the model is a very important phase to properly using it fortraining
and prediction purposes. Keras provides a simple method, a summary to get the
full information about the model and its layers.

```
classifier.summary()#summary of our model
```

```
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 (MaxPooling2 (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
_____
```