Adding Dense Layers

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

```
# 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 softmax activation to convert their outputs into respective probabilities.

Understanding the model is a very important phase to properly using it for training 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
_____
```