

We can see the resulting model architecture with the following command:

```
model.summary()
```

The model is trained with the <code>fit()</code> method, through the following command that specifies the number of training epochs and the message level (how much information we want displayed on the screen during training).

```
model.fit(X, y, nb_epoch=1000, verbose=0)
```

**Note:** In Keras 1, nb\_epoch sets the number of epochs, but in Keras 2 this changes to the keyword epochs.

Finally, we can use the following command to evaluate the model:

```
model.evaluate()
```

Pretty simple, right? Let's put it into practice.

## Quiz

Let's start with the simplest example. In this quiz you will build a simple multi-layer feedforward neural network to solve the XOR problem.

- 1. Set the first layer to a Dense() layer with an output width of 8 nodes and the input\_dim set to the size of the training samples (in this case 2).
- 2. Add a tanh activation function.
- 3. Set the output layer width to 1, since the output has only two classes. (We can use 0 for one class and 1 for the other)
- 4. Use a sigmoid activation function after the output layer.
- 5. Run the model for 50 epochs.

This should give you an accuracy of 50%. That's ok, but certainly not great. Out of 4 input points, we're correctly classifying only 2 of them. Let's try to change some