fullyConnectedLayer:

The fully connected layer takes inputs from neurons of the previous layer and outputs a set of neutrons. During the process, the input data is passed into functions such as this:

f(WX+B) Where ‘W’ is the weight, ‘X’ is the input data and ‘B’ is the bias

Weight:
Each input has a corresponding weight that when multiplied with the input data, affects the output of the function. It can be thought of as a factor to determine the strength of the data and the direction of the output.

Bias:
Each function has a bias that affects how much and in which direction the connection will be shifted.

Each output neuron has its own function that adds the weighted sum (W*X) and the bias together to determine their output.

*In the video, the OutputSize was adjusted to 3 because the user wished to have three categories of outputs.

softmaxLayer:

The layer takes raw data from the previous layer, and through some calculations, outputs probabilities of the input belonging in each of the categories. The layer also makes sure that the probabilities add up to one. The softmax function is given by:

$$\operatorname{softmax}(z_i) = \frac{e^{z_i}}{\sum_{j=1}^{n} e^{z_j}}$$

classificationLayer:

The classification layer takes probabilities from the softmax layer as inputs. Upon receiving the probabilities, the classification layer uses it to categorize the original input (e.g. a picture) into the category with the highest probability.