

Model.py

This **is** a Python **class** definition for a neural network model that uses PyTorch. The neural network has three fully connected layers and uses the rectified linear unit (ReLU) activation function.

The constructor method initializes the three layers of the neural network by creating three instances of the **nn.Linear** class. The **nn.Linear** class creates a fully connected linear layer that transforms the input data by multiplying it with a weight matrix and adding a bias vector.

The **input_size** parameter specifies the size of the input layer, **hidden_size** specifies the number of neurons in the hidden layer(s), and **num_classes** specifies the number of classes that the neural network will classify data into.

The **forward** method specifies the forward **pass** of the neural network. During the forward **pass**, the input data **is** passed through the three layers of the neural network. The output of the first linear layer **is** passed through the ReLU activation function, **and** the output of the second linear layer **is** also passed through the ReLU activation function. The output of the third linear layer **is** returned **as** the final output of the neural network. There **is** no activation function **or** softmax layer at the end, which means that this **is** a regression model rather than a classification model.