# 1 Architecture

Each module implements the following functions :

**forward(self, *input)** The function computes the output from the given input and the parameters of the module.

**backward(self, *gradwrtoutput)** The function computes the derivative of the loss with respect to the input. In the case of a linear layer, in addition to the derivative, it accumulates the gradient of the loss with respect to its parameters.

**param(self)** Returns a tuple of tenors containing the parameters of the model and their corresponding derivatives.

**reset(self)** Resets the gradient accumulation of the linear layer to 0

**update(self,eta)** Updates the parameters of the module according to the gradient. The size of the step is given by the parameter eta defined by the user.