Here are some tips for you to build you method on our framework.

1. About the model

The name of our model is “GenEncShareModel”, and you can find it in the directory “ FR/code/model.py”.

“self.enc” is the shared encoder. The input is a sequence with a shape [batch_size, sequence_len, word_embed_dim]. Then, it output the representation of the sentence: [batch_size, sequence_len, hidden_dim].

“self.gen_fc” gets an input of [batch_size, sequence_len, hidden_dim] and output [batch_size, sequence_len, 2]. Yes, we denote the mask of a token as a 2-dimensional vector. [batch_size, sequence_len, 2] is then fed into the gumbel-softmax layer (before a layernorm and a dropout). So, the mask of a token is [0,1] or [1,0]. And [0,1] means the token is selected as part of the rationale. So the rationale “z”=[batch_size, sequence_len, 2]

For a normal predictor to do the classification, it gets an input with a shape of x=[batch_size, sequence_len, word_embed_dim]. Here we mask it with z: cls_embedding=x*z[:,:,1]. Then it’s trained in the same way as a normal classifier.