

## Assignment-2

### Sentiment Analysis Using LSTM Model

Build a LSTM model to detect sentiment (i.e. detect if a sentence is positive or negative) using PyTorch and TorchText. This will be done by using the provided IMDb dataset. Dataset has been uploaded in “Files” section.

#### Steps to follow:

1. Load in and visualize the data (0.5 point)
2. Data Processing (1 point point)
3. Splitting to train and test data (1 point)
4. Analysing sentiment ( 0.5 point)
5. Tokenization (1 point)
6. Analysis of review length (0.5 point)
7. Padding (0.5 point)
8. Batching and loading as tensor (batch size =50) (1 point)
9. Model Designing (2 point)
10. Training (Calculate training lose and training accuracy) (2 point)

**Description:** Pad each of the sequence to max length. You need to add an embedding layer and use that layer as a lookup table. You can train that embedding layer using Word2Vec.

#### Instruction for submission:

- You have to submit single python notebook.
- Mention each step clearly