Deep Learning: Coding Assignment 2 Task: Named Entity Recognition

Submission Date: 23.3.2023 (hard deadline)

Task description: Given a sentence, our objective is to identify all the named entities present in that sentence and predict their correct type (tag) from a predefined tag set.

Example:

Input sentence: Jim bought 300 shares of Acme Corp. in 2022.

Tagset: Person, Organization, Time

Output: [Jim]_{Person} bought 300 shares of [Acme Corp.]_{Organization} in [2022]_{Time}.

Dataset: https://multiconer.github.io/dataset **Language Domain:** English, Hindi, Bengali

Please follow the following program format:

- 1. Preprocessing (Data parsing and formatting)
- 2. Model Creation (Bi-LSTM)
- 3. Model Training (using train and dev set)
- 4. Model Evaluation on the Test set
- 5. function to predict the NERs present in the input sentence

Report the results at coarse-grained and fine-grained tagset. Your submission file should contain: 1) the **code notebook**, 2) a brief report of your model **hyperparameters** and **performance** 3) a **link to your 3 separate model files (for three different languages)**.

NB. You don't have to share the model file. Please ask the TAs for any confusion and queries.