Project Progress Report

Twitter Sarcasm Classification Challenge

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Progress:

I have made two submissions for my challenge (username: reckoner) and have achieved a best rank of 8 (with only 3 epochs and small sequence lengths).

A majority of the time till now was spent on getting the framework and evaluation pipelines ready. The remaining time will be spent on training larger models with better parameter searching.

Task	Status	Comments/Challenge
Dataset Preparation	Done	We have to create dataset in a format so that we can try a variety of problem formulations
Framework	Done	**Model Supported:** Bert, Distilbert and RoBerta Models. **Task Supported:** Binary Classification Sentence Pair Classification
Method 1: (distilbert-base-uncased, Only Response, no pre-processing)	Done	**Got Rank 20** and F1_Score:0.73
Method 2: (distilbert-base-uncased,Response+Context, no pre-processing)	Done	**Got Rank 8** and F1_Score:0.756
Hyper Parameter Searching	In Progress	Due to GPU resource constraints we have not run this step.

Next Step:

- Add pre-processing.
- Try on larger models (Roberta-Large, bert-large)
- Do hyper parameter searching

Challenges

The challenge with deep learning models is the resource. Currently we have only used lighter models and smaller parameters of sequence length and epochs to save compute resources.

For the most competitive baselines we will have to do a hyperparameter grid search which is costly and the free google codelab resources might not be enough to run them. In that case we will have to spend some time in streamlining our pipeline and implementing early stopping metrics.
Currently it takes ~1:50 min to train 1 epoch of the model.