A. Aspect (= Topic) -> Entities generic term of aspects) -> Sentiments

-> If no aspect detected -> aspect-free SA

-> manually labelled data used for training

-> manually created lemmatisation list used

-> manually created entity-list used

B. Methodology:

-> BERT

-> Distil-BERT

-> LCF-BERT (for aspect based SA)

Implementation:

-> GPUs via Google Coloboratory

-> PyTorch (transformers package)

C. Application:

1) Aspect detection -> Distil-BERT with multiple classes & multi-label case (= more than only 1 aspect enabled)

2) Aspect based Sentiment Prediction -> ABSA & LCF-BERT

3) Aspect Entity modeling -> f.e. 8 groups, easy visualization; FastText embeddings, cosine similarity

4) Aspect Free Sentiment Prediction -> Distil-BERT with 3 classes (multiclass)

D. Pipeline Score-Building:

