

## ##### Aspect-based financial sentiment analysis #####

### General Information:

Given a text instance in the financial domain (microblog message, news statement or headline) in English, detect the target aspects which are mentioned in the text (from a pre-defined list of aspect classes) and predict the sentiment score for each of the mentioned target aspect.

Sentiment scores will be defined using continuous numeric values ranged from -1(negative) to 1(positive). 686 annotated financial statements will be made available.

The FiQA task 1 data source contain information about aspect-based sentiment analysis information about posts and news headlines extracted from finance domain web pages like Wikinews, Stocktwits and Reddit, for example.

The train data source consists of two files:

- task1\_post\_ABSA\_train.json
- task1\_headlines\_ABSA\_train.json
- Readme.pdf

### Annotation Guideline:

To label each sentence we follow an aspect finance tree which node levels describe each aspect:

E.g.: **Stock** / **Price Action** / **Bullish** / **Bull Position**

Where:

**Level 1** **Level 2** **Level 3** **Level 4**

For this example above, we can say that:

Level 1 nodes represent the most generic financial aspect categories

Level 4 nodes are the most specific financial aspect categories

We have hundreds of different financial aspects divided into six levels. For the purpose of **this task** participants are expected to classify/predict at the **level two (only)** in the aspect ontology/tree

ie. **Stock** / **Price Action** . However we have trained to annotated to as fine grained, deep as level as possible for the sake of completeness.

## Data source description:

1- FiQA\_train\_ABSA\_financial\_post.json: This file contains information about Financial aspects in news headlines. It consists of a .json file where each JSON object represents a sample and its associated data.

JSON Fields:

- id: post id;
- sentence: post text;
- target: Entity which receives a opinion.
- sentiment score: true sentiment score for the headline(consists in a value ranged from -1 to 1);
- aspect\_category(1,2 and 3): financial aspect represent by different **node level**. The same sentence can have one or more aspects for different targets. The idea is to represent the level 2 node information as aspect output to train/test the model;
- aspect\_snippet(1,2 and 3): aspect text snippet which is more informative to identify aspect categories. The same sentence can have one or more snippets for different targets or not.

## How to send the predicted results?

After releasing the test set, every participant should submit a .json file containing the name of the team followed by the sample id:predicted aspect category for each test set sample following the example below:

```
{
  'team': "name of the team",
  'paper': 'paper title',
  'results': [
    { 'id': 'Num1',
      'snippet': 'snippet1'
      'aspect_categories': 'aspect11'
      'sentiment_scores': '0.2'

    }
    { 'id': 'Num2',
      'snippet': 'snippet2'
      'aspect_categories': 'aspect21'
      'sentiment_scores': '0.3'

    }
    ...
  ]
}
```

More information about the paper submission and the test results submission process for this open challenge, please visit this website <https://sites.google.com/view/fiqa>.

