## Vision Statement

Project name: Sentiment analysis of tweets

## Research goals:

Our idea is to analyze tweets and to classify each tweet into one of the three categories: Negative, Neutral, Positive.

Using this information we would like to find correlation between the sentiment that arise from each tweet to several subjects such as: the gender of the writer, the weather at the user country, the festivals or big events at the same time of a given tweet.

In our research we're hoping to create a strong model with low error as possible for the sentiment analysis<sup>1</sup> so that we'll be able to use the model we created in other twitter datasets<sup>2</sup> that contain different features(gender,location etc.).

The main goal of our research is to find the best machine learning algorithms for text analysis, and hopefully we could use it for other texts rather than twitter such as books, articles and more.

Algorithms approaches we would like to use :Naive Bayes,Logistic regression,SVM. And later we will get to more advanced algorithms like: RNN,CNN,LSTM,BERT,Transformers,AutoEncoder,word2Vec.

<sup>&</sup>lt;sup>1</sup> https://www.kaggle.com/kazanova/sentiment140

<sup>&</sup>lt;sup>2</sup> https://www.kaggle.com/crowdflower/twitter-user-gender-classification