**Proposal**

Our idea for the project is to predict a range of values ​​of a single stock (DJIA - Dow Jones Industrial Average) using a machine learning model.

Dow Jones is a stock market index that measures the stock performance of 30 large companies listed on stock exchanges in the United States.

There are two channels of data provided in this dataset:

**News data:** include historical news headlines from

"Reddit-WorldNews Channel" (kind of online community).

the top 25 headlines chosen by users rank for each day. (features: 25 headlines, Date)

**Stock data:** Dow Jones Industrial Average (DJIA). The stock data have 7 features: **Date**, **Open** - opening price, **high** - the maximum price, **low** - the minimum price, **close** - the closing price, **adj. close** - the closing price after adjustments, **volume** - the amount of a security that was traded during the day.

The Range of this data is between 08/08/2008 to 07/01/2016.

The dataset we extract is taken from the website:<https://www.kaggle.com/aaron7sun/stocknews?select=Combined_News_DJIA.csv>

other resources:

<https://en.wikipedia.org/wiki/Volume_(finance)>

<https://www.investopedia.com/terms/a/adjusted_closing_price.asp>