**Functional Specification**. The document should have the following sections:

* Use cases. Describing at least two use cases. For each, describe: (a) the objective of the user interaction (e.g., withdraw money from an ATM); and (b) the expected interactions between the user and your system.

# Background

Daily News have strong effects on Stock Market.

* Boeing 737 Max crash revelations could cost shareholders $53 billions
* Fitbit surges 17% after Google egress to buy the company for $2.1 billion

We want to use Daily News to Predict Stock Market Performance (whether the DJIA increases or not)

* **News data** was obtained from Reddit WorldNews Channel Top 25 headlines were voted by reddit users for a single date. (Range: 2008-06-08 to 2016-07-01)
* **Stock data**: Dow Jones Industrial Average (DJIA) is used as the label to supervise model training . (Range: 2008-08-08 to 2016-07-01)

# User profile

Stock buyer will use the system.

They need to be able to collect top 25 headlines from reddit and then input the data in the system. The system will return a binary output saying whether the DJIA will increase or decrease. Given this information, the user should be able to combine their domain knowledge in stock market and make decisions on buying or selling.

The user needs to be able to read, browse website, and have basic knowledge on stock market, who need extra information to help them make decision.

Data socurses

* Data sources. What data you will use and how it is structured.