# Sentiment analysis and Game Stop Stock price

Here with the help of the R markdown, Shiny presentation Application was created. It is written in the R markdown format but requires to compiled using the shiny.

Advantage of the shiny presentation markdown format is that, since it’s a shiny app, it’s interactive. While presenting data it ca also be interactive. Also creating an markdown which can be presented in the presentation format solves the issue of making additional efforts.

Graphical user interface, text, application

Description automatically generated

Following is markdown code of the first section of the PPT,

Graphical user interface, text, application

Description automatically generated

In this first section of the code, library “sentimentr” is called, later reddit data is read from the csv.

CSV has the “timestamp” column which is the timestamp of the post creation. Which is converted to the datetime format. So that any date time related operations can be accommodated.

Later title of the reddit are stored in new variable to extract the sentiment of it (Which is implemented in later part of the code). Here basically from multiple sentence a single sentence is created to avoid conflits in the sentiment library.

Lastly a new column is created named “Date” which only considers the Data from the datetime. And used to aggregate and to make hourly data.

In between there are other sections where the descriptions is mentioned.

In following segment, a code for an interactive shiny app is written

Graphical user interface

Description automatically generated with medium confidence

Here are the slider inputs which helps to select the date rage, a starting rage and ending rage to see the more specific data. Here it’s histogram of the sentiment.

This section of markdown won’t run as a normal markdown cell’s do, since it’s shiny presentation. It runs all the section of markdown and renders the presentation.

Following is the output of it,

Chart, histogram

Description automatically generated

And following is similar to previous but for the timeseries instead of histogram,

A picture containing chart

Description automatically generated

And following for the daily average,

Graphical user interface, text, application

Description automatically generated

And following is the output of it

Graphical user interface, chart, scatter chart

Description automatically generatedChart, scatter chart

Description automatically generated

In following section, Stock price of the game stop is collected using the “tidyquant” library,

Graphical user interface, text, application

Description automatically generated

Here, we need to stock ticker to it and it will download the data and store it in data frame for the given time duration.

Here for game stop ticker is “GME”

This will give the daily stock price, and this daily stock price is merged with that daily sentiment dataset.

Following sections is to show the overall stock price as well as for interactive page,

Text, application

Description automatically generated

Following is the output of the game stop stock price,

Graphical user interface, chart

Description automatically generated

These last 3 sections, are for the scatter plot, correlation and the liner regression.

Graphical user interface, text, application, email

Description automatically generated