Requirement Engineering

1. INTRODUCTION: Purpose of this Document

This is a requirements specification document for a web-based service that aims to supply data of the stocks of three companies, store and update the data, and predict future outcomes for better use. This document supplies the goal of the system; in addition to its non-functional requirements. In this document we also model the functional requirements with use cases and interaction diagrams.

2. USERS

Those who will interact with the system and those who will be affected by the system include

- Stock Traders: Once the system is up and running, traders will be able to keep records while staying up to date with the day to day changes of the company the are affiliated with. They will also be able to compare stock information with those of the two other companies whose data we also provide.

- Businesses: With the data the system will provide, affiliated businesses will be able to plan the next course of action based on the changes in stocks from the companies whose data we supply.

3. LOCATION

The system will be accessible to potential customers who have access to the internet.

4. RESPONSIBILITIES

The primary responsibilities of the system are:

- Provide customers with direct access to up-to-date, accurate stock information on which they make their decisions
- Give customer the chance to compare the stocks of their favored company with that of two others
- Display stock patterns from historical stock data giving the customer a better view of the market.

The system will not be responsible for the stocks the customer chooses to trade and is not an avenue for trading stocks.

5. **FUNCTIONAL OBJECTIVES**

- **High Priority**
    - ☐ The system will supply stock information from the last 30 days of trading.
    - ☐ The system will update this stock information with every new day .
    - ☐ The system will supply stock information based on: Date, open, close, low, volume, percentage change.

- **Low Priority**
    - ☐ The system will allow for the user's status to be stored for the next time they return to the website
    - ☐ The system will study and notify the user of patterns in the stock trading history of the involved companies.

6. **NON-FUNCTIONAL REQUIREMENTS**

- **Reliability**
    - ☐ The system will be completely operational 98% of the time, because it requires little manpower from the backend.
    - ☐ Down time after failure will be at maximum an hour.

- **Usability**
    - ☐ The costumer does not require special training to access the system, because most of the complicated work will be done on the backend.
    - ☐ The data will be presented to the user in tabular form, under categories like Date of Trade, Status of Trade, change over time, change percentage.

- **Performance**
    - ☐ The system should be able to support continuous data extraction from multiple users at the same time.

- **Supportability**
    - ☐ The system can be used on any version of Chrome, Firefox, Safari 13.0.2 and up.
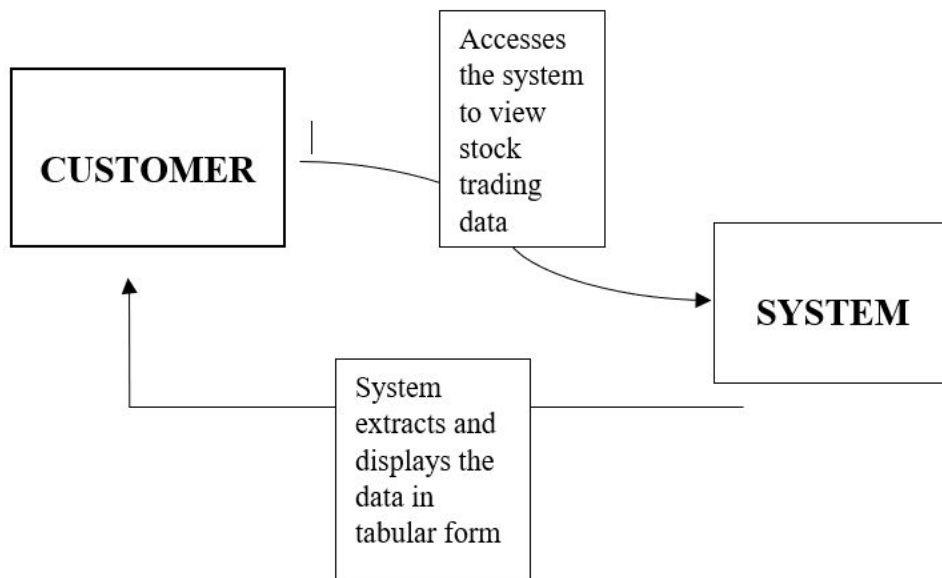
- **The system has a remarkably simple and interactive interface, therefore does not supply any online user documentation as it is not needed.**

7. CONTEXT MODEL

- **Goal Statement**

The goal of the system is to provide the customer with stock trading data from 3 different companies. Providing the customer with fast and up-to-date information.

- **Context Diagram**

8. **USE CASE DIAGRAM**

```
                                    Generate
            Request Data             Report


CUSTOMER




            View Data               SYSTEM


                        Processes
                        the Request



            Displays
            Requested Data
```