Stock Tracking System

(IEEE Pulchowk)

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*Abstract*—This Stock Tracking System is a program designed to help the investors to dive into the right way of choosing the price into which they are looking for a long time in the trading board. It uses simple concepts of programming to actually look over the updates of the trading board and help the user get notified once their desired price is reached. Moreover, it has some features of viewing stock information which is a plus point to analyze desired share value.

Keywords—stock, trading, libcurl, file handling, struct

# Introduction

Stock trading has become one of the vital financial activities. Nonetheless, it is getting tougher day by day. In spite of such hassle in investment in our market, we can never get the desired price for stock trading. To come up with a targeted solution, although very small, “Stock Trading System” program is built. It sums up to the easier mode of accessibility for us in the shares market.

C is a general-purpose programming language [1]. For this program, a simple yet powerful program is written in C Programming language with the use of basic concepts and techniques of procedural programming in C. The overall functionality of program is aimed to aid the enthusiastic investors on following the stocks of their wish without conventionally viewing through the ups and downs of the market.

# Features

## Easier handle

Firstly it is a stock trader program and secondly it is also a program that can give information of active shares. The ease of analysis of stocks is beneficial as it can upgrade one’s portfolio of investments.

## Procedure oriented and descriptive

The program is designed in such a way that leads the users to enter stock name and values following a procedure of its own. Moreover, the program is descriptive in a sense that any user can easily be directed to what one wishes to opt for.

# Whereabouts of the Program

The program uses the basic concepts that are used in programming in C. The looping structures, conditional statements, arrays, strings, struct and file handling, etc. are conceptually used in this program. The functions used are a part of the C Library and are installed via compiler.

On addition, the program has the essence of use of the libcurl library, which is a free URL transfer library. With the help of libcurl, or just curl, the program downloads the webpage scripts and stores them on to a separate file. These are briefly described below.

## Looping structures

Entry controlled loops and exit controlled loops, namely for loop and while loop are precisely used in the program to control the program flow, and file searching.

## Conditional statements

Conditional statements like if, if…else, else if and switch are widely used to test conditions before execution of the program. These statements are very vital in procedural programming language like C.

## Arrays, Strings and Functions

Arrays, strings and functions are also the key components of a better program whether it be procedural or object oriented. These concepts are also used in the program to opt for the desired task, alongside conditional statements and looping structures.

## Struct and File Handling

Struct and file handling are the most important of all that has the core concept of data retrieval in this program. Everything is done on the basis of these two features in C. The searching and storing of desired values from the URL transferred file is done using the idea of struct and file handling.

## Libcurl

Libcurl or simply curl is an essential tool to download the webpage scripts. The downloaded script is then used to work on the values entered by the users, followed by comparison, matching and finally delivering the results. libcurl is highly portable, it builds and works identically on numerous platforms [2].

# Using the Program

While using the program, the user must pre-decide about buying or selling the stock and the value of desired stock.

## Login and Menu

The login screen appears which asks a password to log into the menu screen. The menu screen displays options to select which involves names of all available stocks, stock information and follow stock. Exit option is to exit from the program.

## Name of available stocks

All available shares in the market are displayed by this function. It aids the user to know about the live market and the continuation of stocks in the market.

## Stock Information

#### The stock information is a really important function for the users to know about the stocks ready to be traded in the market. It gives all the value related to stocks like Last Trade Price(LTP), Percentage change, Quantity, High, Low, etc. Once the user enters the symbol of their desired stock, all important information related to the particular stock is displayed on the screen.

## Follow a Stock

#### This is where everything about the program sums up to. Once the user enters the symbol(short form) of the stock, they are directed to either buying or selling the stock. Once the price reaches, the program notifies with sound, depicting that they can trade the desired stock. Otherwise, the program seizes to stop.

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##### References

1. The C Programming Language By Brian W. Kernighan and Dennis M. Ritchie 1988
2. curl.se/libcurl