STOCK PORTFOLIO MANAGEMENT

High Level Design

Document Control :

Stock Portfolio Management								
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Date	**Version**	**Author**	**Brief Description of Changes**			**Approver Signature**		
7-12-2022	1.0	Group - 6	Create Design Overview			Manisha Chauhan		

Introduction

1. Purpose

The purpose of this project is to analyze the Stock transaction history that will help to create and maintain a personalized plan for investing over stocks in order to meet an individual's key financial goals over their investments.

This project is mean to selecting mix of investments done by individual in one more companies in previous time and give details of profit percentage and unrealized profit percentage. According to the fundamental and technical analysis one can plan and meet his financial goal. This project can play an important role in giving a client one-on-one to get detailed picture of person's current financial situation.

1.1 Intended Audience

There is no such specific audience, it could be a student or employee or an organization also.

1.2 Project Purpose

The purpose of this project is to analyze the Stock transaction history that will help to create and maintain a personalized plan for investing over stocks in order to meet an individual's key financial goals over their investments.

1.3 Key Project Objectives

1. Portfolio creation.
2. Add portfolio (details of investment holdings, buying & selling).
3. To display net profit and loss for user.

1.4 Project Scope and Limitation

- Investment alternatives and analysis.
- Portfolio Evaluation.

1.5 In Scope

We are helping our users to return transaction for add details.

1.6. Functional Overview

The following functions are included in the program :

A. void menu ();

This function takes the input from the user such as add transaction, display report & save files.

B. void doAddTransaction();

This function takes the input from user such as stock name, buy date, sell quantity, sell date, sell quantity, buy price & sell price.

C. void doFindReport ();

This function calculate the profit & loss of each company's share in history.

D. void selectChoice ();

This function takes the input from user the company name of stock.

E. void loadFromFile ();

This function load the transaction detail from CSV file.

F. void display_stock ();

This function used for display the stock.

G. void freeLinkedList ();

This function is used to free previous assign value in linked list.

H. void append ();

This function add the new transaction at the end of the linked list.

2. Design Overview

Stock Portfolio Management comprises of the following modules:

Name of the Module	Show report stock wise (Profit/Loss)
Handled by	Rashmi Bansal
Description	Compare the purchase price and sale price. Find the profit and loss of specific stock.

Name of the Module	Add transaction
Handled by	Vidhi
Description	Add the latest price in Stock file.

Name of the Module	Create CSV file
Handled by	Sonali
Description	Create the CSV file to add all details.

Name of the Module	Show report overall stock
Handled by	Manisha
Description	Compare the purchase price and sale price. Find the profit and loss of overall stock.

Name of the Module	Append linked list
Handled by	Mayuri
Description	Add the new details at the end of linked list.

2.1 Design Objectives

Stock Portfolio Management between investors & company, there are two objectives namely primary and secondary.

Primary:

The investors who commits capital with the expectation of receiving financial returns. This help to select the best investment option.

Secondary:

The company share a common purpose and unite to achieve specific, financial goals.

2.2 User Interface Paradigms

Console based menu system and reports.

2.3 Error Detection / Exceptional Handling

Users should add details and find the report after opening the file. If the file location is not found then it will show file doesn't exists.

2.4 Performance

The system will work on the client terminal. The performance depends on the hardware component of the user's system.

2.5 Maintenance

Very little maintenance should be required for this setup. An initial configuration will be the only system required interaction after system is put together. The only other user maintenance would be any changes to settings after setup, and any specified special cases where user settings or history need to be changed. Physical maintenance on the system's parts may be required, and would result in temporary loss of data or Internet. Upgrades of hardware and software should have little effect on this project but may result in downtime.

3. Environment Description:

3.1 Time Zone Support: IST- Kolkata

3.2 Language Support: English

3.3 User Desktop Requirements:

a. 64-bit processor, 1 GHz or faster

b. At least 2 GB free hard drive space
c. At least 1 GB RAM

3.3.1 Application Server Disk Space:

No such disk space is required as the program is fully functional on online IDE(s) as well. The Local Operating System is required and one text file to store the records of processes.

3.3.2 Database Server Disk Space:

No such disk space is required as the program is fully functional on online IDE(s) as well. The Local Operating System is required and one text file to store the records of processes.

3.3.3 Integration Requirements:

1. Language: C

2. Tools : Make, Valgrind, ctags

3. Complier : gcc

4. Environment : Linux Ubuntu 20.04

3.4 Configuration:

3.4.1 Operating System: Linux environment