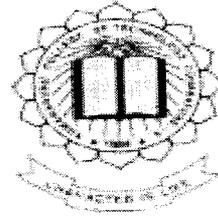


P-2732



Online Share Trading System

By

Sabitha.V.Menon

Register Number: 71206621043

Of

**KUMARAGURU COLLEGE OF TECHNOLOGY
COIMBATORE**



A PROJECT REPORT

Submitted to the

FACULTY OF INFORMATION AND COMMUNICATION ENGINEERING

In partial fulfillment of the requirements

for the award of the degree

Of

MASTER OF COMPUTER APPLICATIONS

**ANNA UNIVERSITY
CHENNAI 600 025**

July 2009

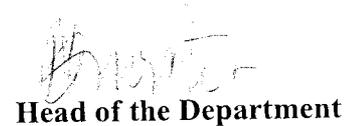
KUMARAGURU COLLEGE OF TECHNOLOGY

COIMBATORE - 641006

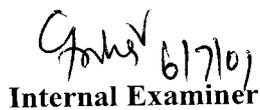
BONAFIDE CERTIFICATE

Certified that this project report titled “**Online Share Trading System**” is the bonafide work of “**Ms. Sabitha.V.Menon**” (Register Number: **71206621043**) who carried out the research under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.


Supervisor


Head of the Department

Submitted to Project and Viva Examination held on 6-7-2009


Internal Examiner


External Examiner



SOFT

...innovation every moment

Date: 22/06/2009

CERTIFICATE

To whom it may ever concern

This is to certify that the project titled "ONLINE SHARE TRADING SYSTEM" submitted by **Ms SABITHA V MENON (RegNo: 71206621043)** from **KUMARAGURU COLLEGE OF TECHNOLOGY, COIMBATORE**. In partial fulfillment of **MASTER OF COMPUTER APPLICATIONS** is a bonafide work of original project work done at **CEGONSOFT** between Nov 2008 to May 2009.

It is seen that the project was successfully completed and complies with all the requirements suggested initially.



ACKNOWLEDGEMENT

First and foremost I thank God for his good will and blessings showered on me throughout the project. The success of this project needs cooperation and encouragement from different quarters.

I wish to express my deep unfathomable feeling of gratitude and indebtedness to **Professor V. Annamalai**, Vice Principal, Kumaraguru College of Technology, **Coimbatore** for the successful completion of the project work.

I am very gladly taking this opportunity to express a special word of thanks to **Dr. M. Gururajan**, Head, Department of Computer Applications, and to **Asst. Professor V. Geetha**, Kumaraguru College of Technology, Coimbatore for encouraging me to do this work.

I am very much indebted to **Senior Lecturer S. Ganesh Babu**, Kumaraguru College of Technology, Coimbatore, for their complete assistance, guidance and support given to me throughout my project.

It's always a pleasure and privileges to be associated with a prestigious outstanding esteemed organization "**Cegonsoft**", **Coimbatore**.

My hearty thanks to my Guide **Mr. Anand** of **Cegonsoft**, for their valuable guidance throughout the project. Also, I am grateful to my parents and friends who were the real source of my project.

SABITHA.V.MENON

ABSTRACT

ONLINE SHARE TRADING SYSTEM is developed for the share brokerage firm in the process of their activities to automate their operations. The system is dealing with the selling and buying the shares. Online brokers allow one to buy and sell shares via Internet.

The main objective of the **ONLINE SHARE TRADING SYSTEM** is to give complete solution that helps the user to view detailed information about all the shares in their place and trade according to their convenience. The user can obtain the current values of all the available shares in the market and this in turn helps the user to sell their shares or to buy new shares in NSE (National Stock Exchange) and in BSE (Bombay Stock Exchange) or in MSE (Madras Stock Exchange).

The user can view detailed information about all the shares in his place and trade according to his convenience. The user can obtain the current values of all shares available in the market and this in turn helps the user to sell his shares or to buy new shares. Sensex graph of market and company show the financial strength of the company and trend of the market. Shares are kept in electronic format using demote account. Security is tightened. Money transaction is done online.

Front end: PHP 4.0

Back end: My SQL Server 2000

TABLE OF CONTENTS

ACKNOWLEDGEMENT	iv
ABSTRACT	v
Table of Contents.....	vi
List of Tables.....	vii
List of Figures.....	ix
List of Abbreviations.....	x

CHAPTER NO	CONTENTS	PAGE NO
1	INTRODUCTION	1
	1.1 Organization Profile	1
	1.2 Project Overview	2
2	SYSTEM ANALYSIS	3
	2.1 Problem Definition	3
	2.2 Existing System Architecture	4
	2.3 Proposed System Architecture	5
	2.4 User Interface Module	6
	2.3.1 Stock Exchange	6
	2.3.2 Customer Information	6
	2.3.3 Investment Information	7
	2.3.4 Bank Transaction	7
	2.3.5 Trade Management	7
	2.3.6 Brokerage	7
3	DEVELOPMENT ENVIRONMENT	8
	3.1 Hardware Specification	8
	3.2 Software Specification	8
4	SYSTEM DESIGN AND IMPLEMENTATION	9
	4.1 Data Model	9
	4.1.1 E-R Diagram	10
	4.2 Process Model	11

	4.2.1 Data Flow Diagram	11
	4.3 Database Model	16
5	ARCHITECTURAL DETAILS	19
	5.1 Programming Design Language	19
	5.1.1 Overview of Technology	19
6	TESTING	28
	6.1 Test Case Reports	28
	6.1.1 Testing Methodologies	30
	6.1.1.1 Unit Testing	30
	6.1.1.2 Integration Testing	30
	6.1.1.3 User Acceptance Testing	31
	6.1.1.4 Output Testing	32
	6.1.1.5 Validation Testing	32
7	PERFORMANCE AND LIMITATION	33
	7.1 System Implementation	33
	7.2 Future Enhancement	33
8	APPENDICES	34
	8.1 Screen Shots	34
9	REFERENCES	46
10	CONCLUSION	47

LIST OF TABLES

TABLE .NO	TABLE	PAGE NO
4.3.1	Customer Information	16
4.3.2	Broker Login	17
4.3.3	Bank Transaction	17
4.3.4	Add Trading	17
4.3.5	Market Status	18

LIST OF FIGURES

FIGURE .NO	TITLE	PAGE NO
4.1.1	E-R Diagram	10
4.2.1.1	Overall Data Flow Diagram	12
4.2.1.2	Stock Exchange Data Flow Diagram	13
4.2.1.3	Investment Information Data Flow Diagram	13
4.2.1.4	Bank Transaction Data Flow Diagram	14
4.2.1.5	Customer Information Data Flow Diagram	14
4.2.1.6	Trade Management Data Flow Diagram	15
8.1.1	Login	34
8.1.2	Account Settings	35
8.1.3	Admin Home Page	36
8.1.4	Client Home Page	37
8.1.5	Client Details	38
8.1.6	Edit Client	39
8.1.7	Add Client	40
8.1.8	Edit Trading	41
8.1.9	Add New Trading	42
8.1.10	Broker Transaction Details	43
8.1.11	Edit Market Status	44
8.1.12	View Market Status	45

LIST OF ABBREVIATIONS

BSE	Bombay Stock Exchange
NSE	National Stock Exchange
CTS	Compatibility Test Suite
HTML	Hyper Text Markup Language
IL	Intermediate Language
IIS	Internet Information Server
SQL	Structured Query Language
URL	Uniform Resource Locator
XML	Extended Markup Language
ISO	International Standard Organization

CHAPTER 1

INTRODUCTION

1.1 ORGANIZATON PROFILE

Cegonsoft Pvt. Ltd., is an IT solution provider for a dynamic environment where business and technology strategies converge. Their approach focuses on new ways of business combining IT innovation and adoption while also leveraging an organization's current IT assets. Their work with large global corporations and risk path to achieve results. Our track record is testimony to complex projects delivered within and evens before schedule. Our teams combine cutting edge technology skills with rich domain expertise. What's equally important - they share a strong customer orientation that means they actually start by listening to the customer. They're focused on coming up with solutions that serve customer requirements today and anticipate future needs.

MISSION

Develop easy to use package to make your job easier, cost effective utility software solutions for everyone. Cegonsoft Pvt. Ltd., mission is to develop and provide technologies, products and services to the clients.

1.2 PROJECT OVERVIEW

ONLINE SHARE TRADING SYSTEM is developed for the share brokerage firm in the process of their activities to automate their operations. The system is dealing with the selling and buying the shares. Online brokers allow one to buy and sell shares via Internet.

The main objective of the **ONLINE SHARE TRADING SYSTEM** is to give complete solution that helps the user to view detailed information about all the shares in their place and trade according to their convenience. The user can obtain the current values of all the available shares in the market and this in turn helps the user to sell their shares or to buy new shares in NSE , BSE or in MSE .

The user can view detailed information about all the shares in his place and trade according to his convenience. The user can obtain the current values of all shares available in the market and this in turn helps the user to sell his shares or to buy new shares. Sensex graph of market and company show the financial strength of the company and trend of the market. Shares are kept in electronic format using demote account. Security is tightened. Money transaction is done online.

CHAPTER 2

SYSTEM ARCHITECTURE

2.1 PROBLEM DEFINITION

Online trading transaction system is developed for the share brokerage firm in the process of their activities to automate their operations. The system is dealing with the selling and buying the shares. Online brokers allow one to buy and sell shares via Internet.

To develop the **Online Trading Transaction System** site for turn helps the user to sell their shares or to buy new shares in **NSE** (National Stock Exchange) and in **BSE** (Bombay Stock Exchange) or in **MSE** (Madras Stock Exchange). Keeps track of a lot of information in records which will very useful to the buyers and sellers.

Sensex graph of market and company show the financial strength of the company and trend of the market. Shares are kept in electronic format using demate account. Security is tightened. Money transaction is done on online.

The customer can view detailed information about all the shares in his place and trade according to his convenience. The user can obtain the current values of all shares available in the market and this in turn helps the user to sell his shares or to buy new shares.

2.2 EXISTING SYSTEM ARCHITECTURE

The existing system is done manual starting from the entry process. It is difficult to update the information. The validations of the field are not done. The stock exchange keeps a note of all transactions and at the end of the day starts a process of settlement. It ensures that the shares bought by the customer. Each and every transaction is done manually. Here user has to go to share broker's office. The maintenance of the record is very difficult. It also needs more manpower.

2.2.1 Limitations of Existing System

The limitations of the existing system are

- a. In the Existing system nothing can be done online.
- b. It is difficult to update information's
- c. Inconvenient to go to share broker's office and to trade.
- d. Forgery of shares is possible.

2.3 PROPOSED SYSTEM ARCHITECTURE

The proposed system is the website through which an authorized user can trade. He can view detailed information about all the shares in his place and trade according to his convenience. The user can obtain the current values of all shares available in the market and this in turn helps the user to sell his shares or to buy new shares. Shares are kept in electronic format using demote account. Security is tightened. Money transaction is done online.

2.3.1 Advantages of Proposed System

- a. Replace Manual Processing system with an automated one.
- b. Speedup Transactions
- c. Reduce the workload involved in processing
- d. Update information system and provide easy access to corresponding information.
- e. Full automated control through online

2.4 USER INTERFACE MODULE

The **ONLINE SHARE TRADING SYSTEM** comprises of the following modules. To make the job easier and initiative the systems are divided into the following modules based on the identified user roles that access and operate the system. This system helps the user to view detailed information about all the shares in their place and trade according to their convenience. The user can obtain the current values of all the available shares in the market and this in turn helps the user to sell their shares or to buy new shares in NSE (National Stock Exchange) and in BSE (Bombay Stock Exchange) or in MSE (Madras Stock Exchange). Each module and their appropriate functionality are described below:

1. Stock Exchange Module
2. Customer Information Module
3. Investment Information Module
4. Bank Transaction Module
5. Trade Management Module
6. Brokerage Module

1. Stock Exchange

Detailed information about each share is deal by this module. As there are three famous stock markets, NSE, BSE and MSE. Each company has unique code in each market. Share bought in one market can't be sold in another market. The information displayed in each Stock exchange is company name, best buying price, number of shares, etc.

2. Customer Information

In this module, it maintains the information about the customer. It may be edit by the customer. It maintain the information of the demote number, customer number, pan card number, trading account number, bank account number and his personal details.

3. Investment Information

In this module, it maintains the information about the shares in hand. It maintains the information of the company name, number of shares, purchase date, purchase rate.

4. Bank Transaction

In this module, customer can transfer money from his bank account to trading account. Demote account is updated to hold the correct number of shares. Share count will be incremented in the demote account of buyer and decremented in seller account. It also maintains the customer credit card number transaction.

5. Trade Management

In this module, customer can transfer money from his trading account to bank account. Trade management maintains balance of trading account, demote number and account number.

6. Brokerage

In this module, it maintains the company details and the no.of.shares issued by the company. The unit price of each share is also determined. This module deal with the commission issued to the broker by the company. It maintains the details about the number of shares purchased and sold by the customer.

CHAPTER 3

DEVELOPMENT ENVIRONMENT

To run the application and to have an effective result from the application, the following hardware and software requirements have to meet.

3.1 HARDWARE ENVIRONMENT

Processor	:	Pentium III (800MHz) and above
RAM	:	128 MB and above
Hard disk	:	40GB and above
Keyboard	:	Standard Keyboard
Mouse	:	Scrolling Mouse

3.2 SOFTWARE ENVIRONMENT

Front end	:	PHP 4.0
Back end	:	My SQL Server 2000
Operating System	:	Windows 2000 & XP
Application Server	:	wampserver.

CHAPTER 4

SYSTEM DESIGN AND IMPLEMENTATION

4.1 DATA MODEL

Data model is a representation of logical relationship among individual elements of data. Because the structure of information will invariably affects the final procedural design, data structure is very important as the program structure to the representation of the software architecture. Data model indicates the organization, methods of access, degree of associatively, and processing alternatives for information. The organization and complexity of a data structure are limited only by the ingenuity of the designer. Scalar item array and linked list are some of the representations of the data structure.

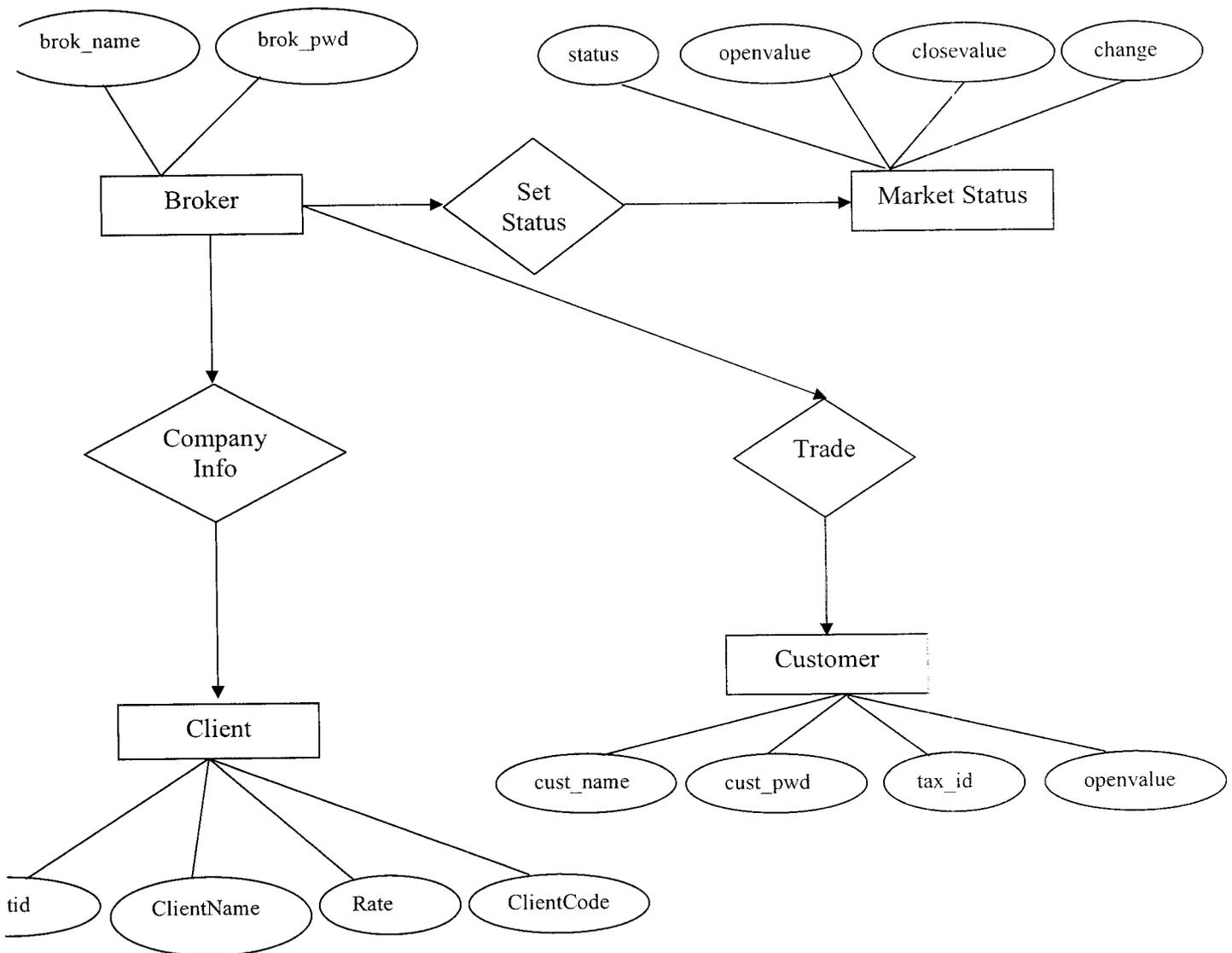


Fig 4.1.1 E-R Diagram

4.2 PROCESS MODEL

Process is defining a model of the new system and continues by converting this model to a new system. The method is used to convert the model of the proposed system into computer specification. Data models are converted to a database and processes and flows to user procedures and computer programs. Design proposes the new system that meets these requirements. This new system may be built by a fresh or by changing the existing system. The detailed design starts with three activities, database design, user design and program design. Database design uses conceptual data model to produce a database design. User procedure design uses those parts of the DFD outside the automation boundary to design user procedures.

4.2.1 Data Flow Diagram

The graphical description of the system's data and how the processes transform the data is known as Data Flow Diagram.

A graphic picture of the logical steps and sequence involved in a procedure or a program is called a flow chart.

Unlike detailed flowchart, Data Flow Diagrams do not supply detailed description of the modules but graphically describes a system's data and how the data interact with the system.

To construct a Data Flow Diagram, we use,

1. Arrow
2. Circles
3. Open End Box
4. Squares



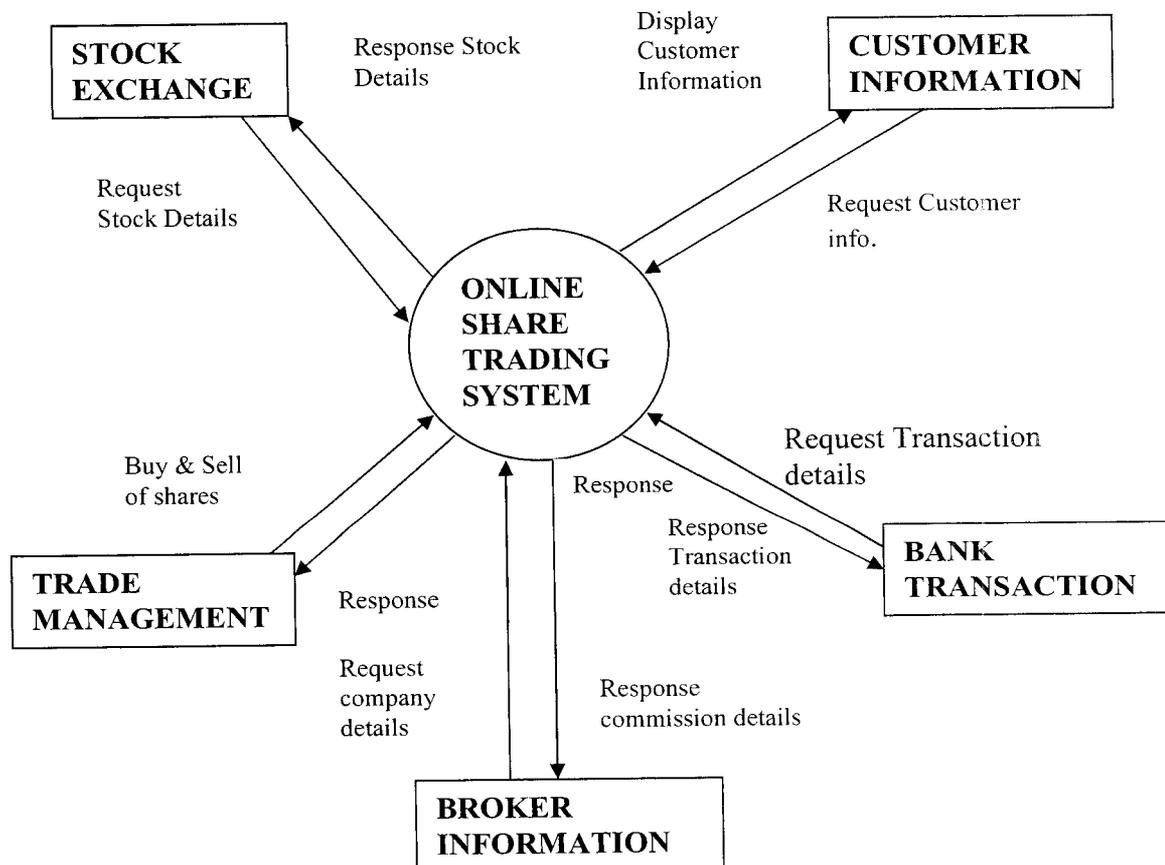
An arrow identifies the data flow in motion. It is a pipeline through which information is flown like the rectangle in the flowchart. A circle stands for process that converts data into information. An open-ended box represents a data store, data at rest or a temporary repository of data. A square defines a source or destination of system data.

Six rules for constructing a Data Flow Diagram

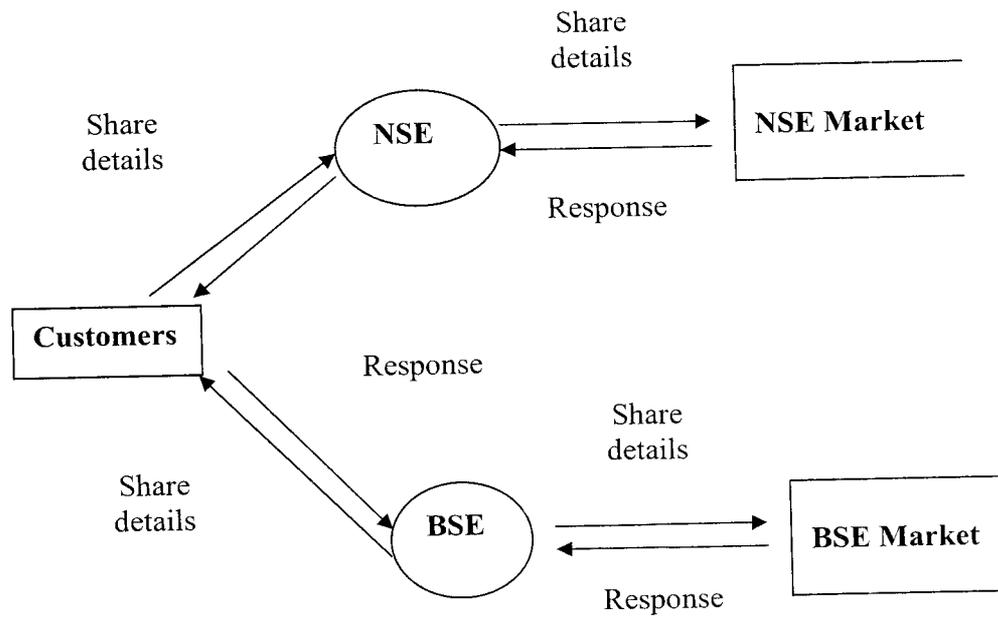
1. Arrows should not cross each other.
2. Squares, circles and files must bear names.
3. Decomposed data flow squares and circles can have same names.
4. Choose meaningful names for data flow
5. Draw all data flows around the outside of the diagram.

Control information such as record count, passwords and validation requirement are not pertinent to Data Flow Diagram.

4.2.1.1 Overall Data Flow Diagram (DFD)



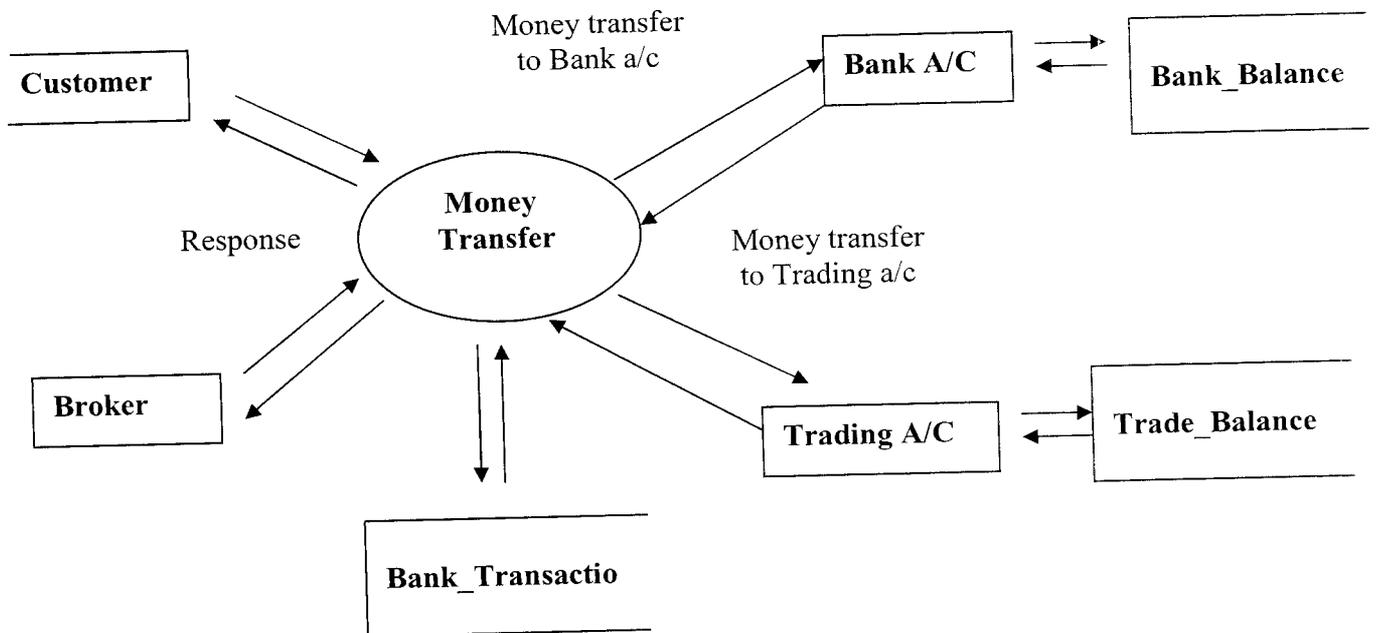
4.2.1.2 Stock Exchange Data Flow Diagram



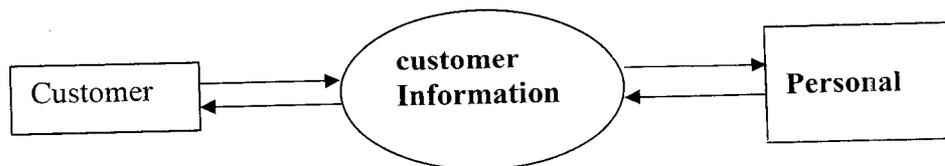
4.2.1.3 Investment Information Data Flow Diagram



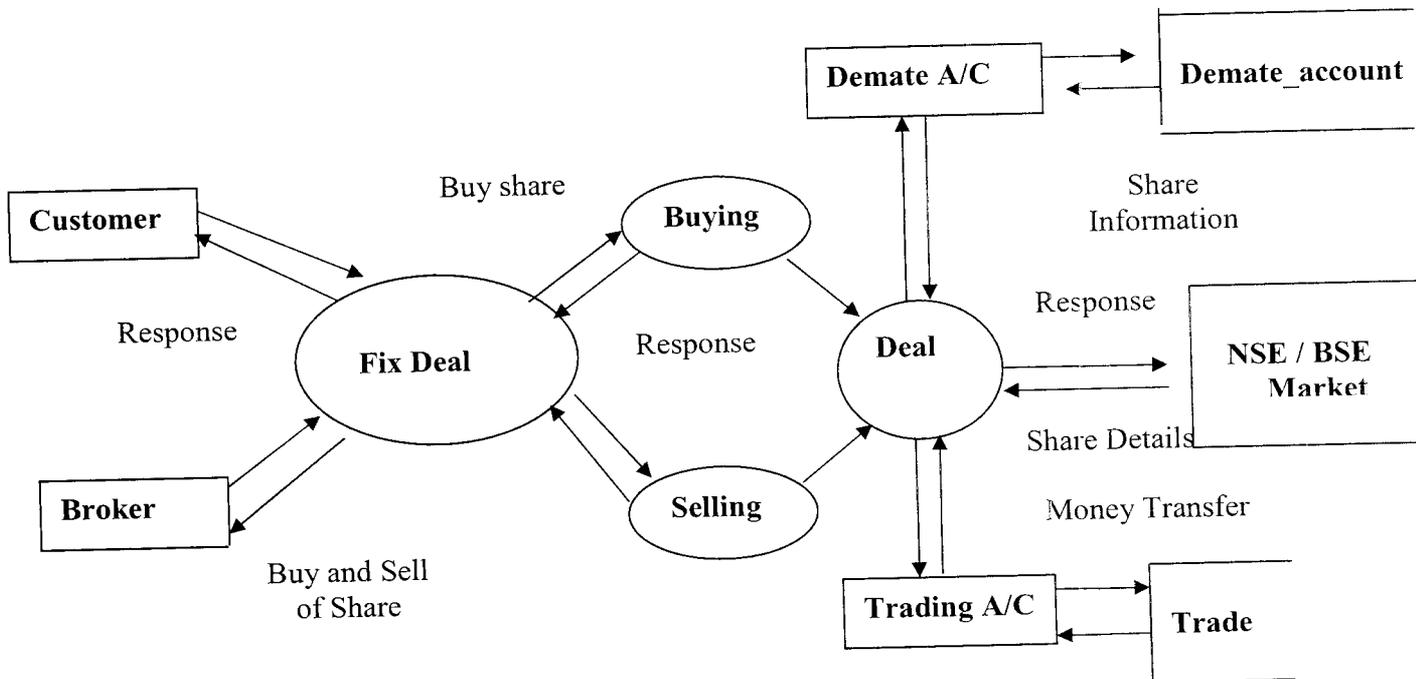
4.2.1.4 Bank Transaction Data Flow Diagram



4.2.1.5 Customer Information Data Flow Diagram



4.2.1.6 Trade Management Data Flow Diagram



4.3 DATABASE MODEL

Table 4.3.1 Customer Information

Column Name	Data Type	Not Null	Description
Customer_name	Varchar(50)	Yes	Customer Name
Cust_pwd	Varchar(50)	Yes	Customer Password
Cust_comm	Varchar(50)	No	Customer comments
Comp_name	Varchar(50)	No	Company Name
Pan_id*	Varchar(50)	No	Pan id
Phone_no	Integer	No	Phone Number
Fax_no	Integer	No	Fax Number
Fis_name	Varchar(50)	No	First Name
Ls_name	Varchar(50)	No	Last Name
Address	Varchar(50)	No	Address
City	Varchar(50)	No	City
State	Varchar(50)	No	State
Zip	Integer	No	Zip
Mail	Varchar(50)	No	Mail Id
Balance	Double	No	Balance
Acono	Integer	No	Account number
Trade acno	Integer	No	Trade Account number
Taddress	Varchar(50)	No	Trade Address
Tcity	Varchar(50)	No	Trade City
Tstate	Varchar(50)	No	Trade State
Tzip	Integer	No	Trade Zipcode

Table 4.3.2 Broker Login

Column Name	Data Type	Length
*BrokerId	Varchar	20
Password	Varchar	20

Table 4.3.4 Bank Transaction

Column Name	Data Type	Not Null	Description
Date	Date time	No	Date
Description	Varchar(50)	No	Description
Cr	Float(10,3)	No	Credit
Dr	Float(10,3)	No	Debit

Table 4.3.4 Add trading

Column Name	Data Type	Not Null	Description
Client id	Integer	No	Client id
Client name	Varchar(50)	No	Client name
Client code	Varchar(50)	No	Client code
Rate	Float(5,3)	No	Rate
No of Shares	Integer	No	No of Shares

Table 4.3.5 Market Status

Column Name	Data Type	Not Null	Description
Status	Varchar(50)	No	Market status
Open date	Datetime	No	Open date
Open time	Datetime	No	Open time
Open value	Float(8)	No	Open value
Closed value	Float(8)	No	Closed value
Change	Float(8)	No	Changed value

CHAPTER 5

ARCHITECTURAL DETAILS

5.1 PROGRAM DESIGN LANGUAGE

5.1.1 Over view of Techonology

Introduction To PHP

PHP (acronym for: PHP Hypertext Preprocessor), is a server-side embedded scripting language. This means that it works within an HTML document to confer to it the capacity of generating content on demand. You can convert your site into a web application, not just a collection of static pages with information that may not get updated quite so often, which may be alright for a "personal" web site.

PHP is the widely-used, free, and efficient alternative to competitors such as Microsoft's ASP. PHP is perfectly suited for Web development and can be embedded directly into the HTML code.

The PHP syntax is very similar to Perl and C. PHP is often used together with Apache (web server) on various operating systems. It also supports ISAPI and can be used with Microsoft's IIS on Windows.

A PHP file may contain text, HTML tags and scripts. Scripts in a PHP file are executed on the server. Of course general scripting or programming languages like Perl, Python, etc. have also platform independence, and are open source.

PHP was designed to work on the web, and in this ambit it excels connecting and querying a database is a simple task that can be handled in 2 or 3 lines of code. The PHP scripting engine is well optimized for the response times needed on web applications, it can even be part of the web server itself improving the throughput even more.

The PHP language features the usual complement of control structures, operators, variable types, function declarations and class/object declarations that we have been accustomed to expect from any compiled or interpreted language, and yet it also has features of its own. For example, in C you employ pointers, in other scripting languages this can be cumbersome or even not possible, but in PHP this is just one use of variable variables.

PHP comes with a myriad of options, both to build the distribution and also to configure an installation. PHP supports several APIs and interfaces to other programming tools. The sheer number of these tools is daunting, not to speak of the configuration possibilities for each of these.

Before we get involved in the detail of installing PHP, it would be worthwhile to consider what we would expect to do with PHP in the near future. Depending on this we need to include only those particular modules that are germane to the kind of stuff we plan to do with the installation.

A PHP file may contain text, HTML tags and scripts. Scripts in a PHP file are executed on the server.

What is PHP?

- PHP stands for **PHP: Hypertext Preprocessor**
- PHP is a server-side scripting language, like ASP
- PHP scripts are executed on the server
- PHP supports many databases (MySQL, Informix, Oracle, Sybase, Solid, PostgreSQL, Generic ODBC, etc.)
- PHP is an open source software (OSS)
- PHP is free to download and use

What is a PHP File?

- PHP files may contain text, HTML tags and scripts
- PHP files are returned to the browser as plain HTML

- PHP files have a file extension of ".php", ".php3", or ".phtml"

Why PHP?

- PHP runs on different platforms (Windows, Linux, Unix, etc.)
- PHP is compatible with almost all servers used today (Apache, IIS, etc.)
- PHP is easy to learn and runs efficiently on the server side

Basic PHP Syntax

A PHP scripting block always starts with `<?php` and ends with `?>`. A PHP scripting block can be placed anywhere in the document.

On servers with shorthand support enabled you can start a scripting block with `<?` and end with `?>`.

However, for maximum compatibility, we recommend that you use the standard form (`<?php`) rather than the shorthand form.

```
<?php
?>
```

PHP (recursive acronym for "PHP: Hypertext Preprocessor") is a widely-used Open Source general-purpose scripting language that is especially suited for Web development and can be embedded into HTML.

Notice how this is different from a script written in other languages like Perl or C -- instead of writing a program with lots of commands to output HTML, you write an HTML script with some embedded code to do something (in this case, output some text). The PHP code is enclosed in special start and end tags that allow you to jump into and out of "PHP mode".

What distinguishes PHP from something like client-side JavaScript is that the code is executed on the server. If you were to have a script similar to the above on your server, the client would receive the results of running that script, with no way of determining what the underlying code may be. You can even configure your web server

to process all your HTML files with PHP, and then there's really no way that users can tell what you have up your sleeve.

The best things in using PHP are that it is extremely simple for a newcomer, but offers many advanced features for a professional programmer. Don't be afraid reading the long list of PHP's features. You can jump in, in a short time, and start writing simple scripts in a few hours. Although PHP's development is focused on server-side scripting, you can do much more with it. Read on, and see more in the What can PHP do? section, or go right to the introductory tutorial if you are only interested in web programming.

Back-End Tool with Version

MY-SQL 4.0

The MySQL Database Server is very fast, reliable, and easy to use. If that is what we are looking for, we should give it a try. MySQL Server also has a practical set of features developed in close cooperation with users.

MySQL Server was originally developed to handle large databases much faster than existing solutions and has been successfully used in highly demanding production environments for several years. Though under constant development, MySQL Server today offers a rich and useful set of functions. Its connectivity, speed, and security make MySQL Server highly suited for accessing databases on the Internet.

The technical features of MySQL Server

The MySQL Database Software is a client/server system that consists of a multi-threaded SQL server that supports different backend, several different client programs and libraries, administrative tools, and a wide range of application programming interfaces (APIs).

MySQL Server provides a multi-threaded library which you can link into your application to get a smaller, faster, easier-to-manage product. There is a large amount of

contributed MySQL software available. It is very likely that you will find that your favorite application or language already supports the MySQL Database Server.

The Main Features of MySQL

The following list describes some of the important characteristics of the MySQL Database Software.

Internals and Portability

- Written in C and C++.
- Tested with a broad range of different compilers.
- Works on many different platforms.
- Uses GNU Automake, Autoconf, and Libtool for portability.
- APIs for C, C++, Eiffel, Java, Perl, PHP, Python, Ruby, and Tcl are available.
- Fully multi-threaded using kernel threads. This means it can easily use multiple CPUs if they are available.
- Provides transactional and non-transactional storage engines.
- Uses very fast B-tree disk tables (MyISAM) with index compression.
- Relatively easy to add another storage engine. This is useful if we want to add an SQL interface to an in-house database.
- A very fast thread-based memory allocation system.
- Very fast joins using an optimized one-sweep multi-join.
- In-memory hash tables which are used as temporary tables.
- SQL functions are implemented using a highly optimized class library and should be as fast as possible. Usually there is no memory allocation at all after query initialization.
- The MySQL code is tested with Purify (a commercial memory leakage detector) as well as with Valgrind, a GPL tool.
- The server is available as a separate program for use in a client/server networked environment. It is also available as a library that can be embedded (linked) into

standalone applications. Such applications can be used in isolation or in environments where no network is available.

Column Types

- Many column types: signed/unsigned integers 1, 2, 3, 4, and 8 bytes long, FLOAT, DOUBLE, CHAR, VARCHAR, TEXT, BLOB, DATE, TIME, DATETIME, TIMESTAMP, YEAR, SET, ENUM, and OpenGIS geometry types.
- Fixed-length and variable-length records.

Commands and Functions

- Full operator and function support in the SELECT and WHERE clauses of queries.

For example: `mysql> SELECT CONCAT (first_name, ', ', last_name)`

`-> FROM tbl_name`

`-> WHERE income/dependents > 10000 AND age > 30;`

- Full support for SQL GROUP BY and ORDER BY clauses. Support for group functions (COUNT(), COUNT(DISTINCT ...), AVG(), STD(), SUM(), MAX(), MIN(), and GROUP_CONCAT()).
- Support for LEFT OUTER JOIN and RIGHT OUTER JOIN with both standard SQL and ODBC syntax.
- Support for aliases on tables and columns as required by standard SQL.
- DELETE, INSERT, REPLACE, and UPDATE return the number of rows that were changed (affected). It is possible to return the number of rows matched instead by setting a flag when connecting to the server.
- The MySQL-specific SHOW command can be used to retrieve information about databases, tables, and indexes. The EXPLAIN command can be used to determine how the optimizer resolves a query.
- Function names do not clash with table or column names. The only restriction is that for a function call, no spaces are allowed between the function name and the '(' that follows it.
- We can mix tables from different databases in the same query

Security

- A privilege and password system that is very flexible and secure, and allows host-based verification. Passwords are secure because all password traffic is encrypted when you connect to a server.

Scalability and Limits

Handles large databases. We use MySQL Server with databases that contain 50 million records. We also know of users that use MySQL Server with 60,000 tables and about 5,000,000,000 rows.

- Up to 32 indexes per table are allowed. Each index may consist of 1 to 16 columns or parts of columns. The maximum index width is 500 bytes (this may be changed when compiling MySQL Server). An index may use a prefix of a CHAR or VARCHAR column.

Connectivity

- Clients may connect to the MySQL server using TCP/IP sockets on any platform. On Windows systems in the NT family (NT, 2000, or XP), clients may connect using named pipes. On UNIX systems, clients may connect using UNIX domain socket files.
- The Connector/ODBC interface provides MySQL support for client programs that use ODBC (Open-Database-Connectivity) connections. For example, you can use MS Access to connect to your MySQL server. Clients may be run on Windows or UNIX. Connector/ODBC source is available. All ODBC 2.5 functions are supported, as are many others.
- The Connector/JDBC interface provides MySQL support for Java client programs that use JDBC connections. Clients may be run on Windows or UNIX. Connector/JDBC source is available.

Localization

- The server can provide error messages to clients in many languages.
- Full support for several different character sets.
- All data is saved in the chosen character set. All comparisons for normal string columns are case-insensitive.
- Sorting is done according to the chosen character set.

Clients and Tools

- The MySQL server has built-in support for SQL statements to check, optimize, and repair tables. These statements are available from the command line through the `mysqlcheck` client.
- All MySQL programs can be invoked with the `--help` or `-?` options to obtain Online assistance.

MySQL Stability

This section addresses the questions “How stable is MySQL Server?” and “Can I depend on MySQL Server in this project?” We will try to clarify these issues and answer some important questions that concern many potential users. The information in this section is based on data gathered from the mailing list, which is very active in identifying problems as well as reporting types of use.

The MySQL Server design is multi-layered with independent modules. Some of the newer modules are listed here with an indication of how well-tested each of them is:

Replication — Gamma Large groups of servers using replication are in production use, with good results.

BDB tables — Gamma

The Berkeley DB code is very stable, but we are still improving the BDB transactional storage engine interface in MySQL Server, so it will take some time before this is as well tested as the other table types.

Full-text searches — Beta

Full-text searching works but is not yet widely used. Important enhancements have been implemented in MySQL 4.0.

Connector/ODBC 3.51 (uses ODBC SDK 3.51) — Stable

In wide production use. Some issues brought up appear to be application related and independent of the ODBC driver or underlying database server.

Automatic recovery of MyISAM tables — Gamma

This status applies only to the new code in the MyISAM storage engine that checks if the table was closed properly on open and executes an automatic check or repair of the table if it wasn't. Paying customers receive high-quality support directly from MySQL AB. MySQL AB also provides the MySQL mailing list as a community resource where anyone may ask questions. Bugs are usually fixed right away with a patch. For serious bugs, there is almost always a new release.

How Big MySQL Tables Can Be

MySQL Version 3.22 had a 4GB (4 gigabyte) limit on table size. With the MyISAM storage engine in MySQL Version 3.23, the maximum table size was increased to 8 million terabytes (2^{63} bytes). With this larger allowed table size, the maximum effective table size for MySQL databases now normally is determined by operating system constraints on file sizes, not by MySQL internal limits.

The InnoDB storage engine maintains InnoDB tables within a table space that can be created from several files. This allows a table to exceed the maximum individual file size. The table space can include raw disk partitions, which allows extremely large tables. The maximum table space size is 64 TB.

CHAPTER 6

TESTING

6.1 TEST CASE REPORTS

System testing is actually a series of different tests whose primary purpose is to fully exercise the computer-based system. Although each test has a different purpose, all work to verify that all system elements have been properly integrated and perform allocated functions.

During testing I tried to make sure that the product does exactly what is supposed to do. Testing is the final verification and validation activity within the organization itself. In the testing stage, I try to achieve the following goals; to affirm the quality of the product, to find and eliminate any residual errors from previous stages, to validate the software as a solution to the original problem, to demonstrate the presence of all specified functionality in the product, to estimate the operational reliability of the system. During testing the major activities are concentrated on the examination and modification of the source code.

S.no	Module	Error Checking	Description	Result
1.	Home page	Wrong password has been entered in login page	Enter valid password	Passed
2.	Stock Exchange	Each company has unique code in each market	Check with the valid unique code	Passed
3.	Stock Exchange	Share bought in one market can't be sold in another market.	The Share is already sold.	Passed
4.	Customer Information	Customer page click submit without filling the all the fields	Must fill all the information	Passed
5.	Bank Transaction	If click the Transferred, Check with the bank account to demate account.	Your amount will be transferred bank ac to demate	Passed
6.	Trading Management	If click the Transferred, Check with the demate account to bank account.	Your amount will be transferred demate to bank ac	Passed
7.	Brokerage	Wrong password has been entered in admin page	Enter the valid admin name & password	Passed
8.	Brokerage	Enter the password with less than 6 character in customer page	Enter password with minimum of 6 character	Passed
9.	Brokerage	In change password page click submit without filling the new password.	Enter new password and retype password	Passed
10.	Brokerage	Investment page the share is beyond the available shares	You entered the greater the available shares	Passed

6.1.1 TESTING METHODOLOGIES

The following are the Testing Methodologies:

1. Unit Testing.
2. Integration Testing.
3. User Acceptance Testing.
4. Output Testing.
5. Validation Testing.

6.1.1.1 Unit Testing

Unit testing focuses verification effort on the smallest unit of Software design that is the module. Unit testing exercises specific paths in a module's control structure to ensure complete coverage and maximum error detection. This test focuses on each module individually, ensuring that it functions properly as a unit. Hence, the naming is Unit Testing.

6.1.1.2 Integration Testing

Integration testing addresses the issues associated with the dual problems of verification and program construction. After the software has been integrated a set of high order tests are conducted. The main objective in this testing process is to take unit tested modules and builds a program structure that has been dictated by design.

The following are the types of Integration Testing:

1. Top down Integration
2. Bottom-up Integration

Top down Integration

This method is an incremental approach to the construction of program structure. Modules are integrated by moving downward through the control hierarchy, beginning with the main program module. The module subordinates to the main program module are incorporated into the structure in either a depth first or breathe first manner.

Bottom –Up Integration

This method begins the construction and testing with the modules at the lowest level in the program structure. Since the modules are integrated from the bottom up, processing required for modules subordinate to a given level is always available and the need for stubs is eliminated. The bottom up integration strategy may be implemented with the following steps:

1. The low-level modules are combined into clusters into clusters that perform a specific Software sub-function.
2. A driver (i.e.) the control program for testing is written to coordinate test case input and output.
3. The cluster is tested.
4. Drivers are removed and clusters are combined moving upward in the program structure

6.1.1.3 User Acceptance Testing

User Acceptance of a system is the key factor for the success of any system. The system under consideration is tested for user acceptance by constantly in touch with the prospective system users at time of developing and making changes wherever required is done in regard to the following point:

1. Input Screen design
2. Output Screen design
3. Menu driven system

6.1.1.4 Output Testing

After performing the validation testing, the next step is output testing of the proposed system, since no system could be useful if it does not produce the required output in the specified format. The outputs generated or displayed by the system under consideration are tested by asking the users about the format required by them. Hence the output format is considered in 2 ways – one is on screen and another in printed format.

6.1.1.5 Validation Testing

Validation checks are performed on the following fields.

Text Field

The text field can contain only the number of characters lesser than or equal to its size. The text fields are alphanumeric in some tables and alphabetic in other tables. Incorrect entry always flashes and error message.

Numeric Field

The numeric field can contain only numbers from 0 to 9. An entry of any character flashes an error messages. The individual modules are checked for accuracy and what it has to perform. Each module is subjected to test run along with sample data. The individually tested modules are integrated into a single system. Testing involves executing the real data information is used in the program the existence of any program defect is inferred from the output. The testing should be planned so that all the requirements are individually tested. A successful test is one that gives out the defects for the inappropriate data and produces and output revealing the errors in the system.

CHAPTER 7

PERFORMANCE AND LIMITATION

7.1 SYSTEM IMPLEMENTATION

System implementation is a stage in a project where the theoretical designs turned into working system. The most crucial stage the user confidence that the new system will work effectively and efficiently.

The performance of reliability of the system was tested and it gained acceptance. The system was implemented successfully. Implementation is a process that means converting a new system into operation.

Proper implementation is essential to provide a reliable system to meet organization requirements. During the implementation stage a live demon was undertaker. and made in front of end-users.

Implementation is a stage of project when the system design is turned into a working system. The stage consists of the following steps.

1. Testing the developed program with sample data.
2. Detection and correction of internal error.
3. Testing the system to meet the user requirement.
4. Feeding the real time data and retesting.
5. Making necessary change as described by the user.

7.2 FUTURE ENHANCEMENTS

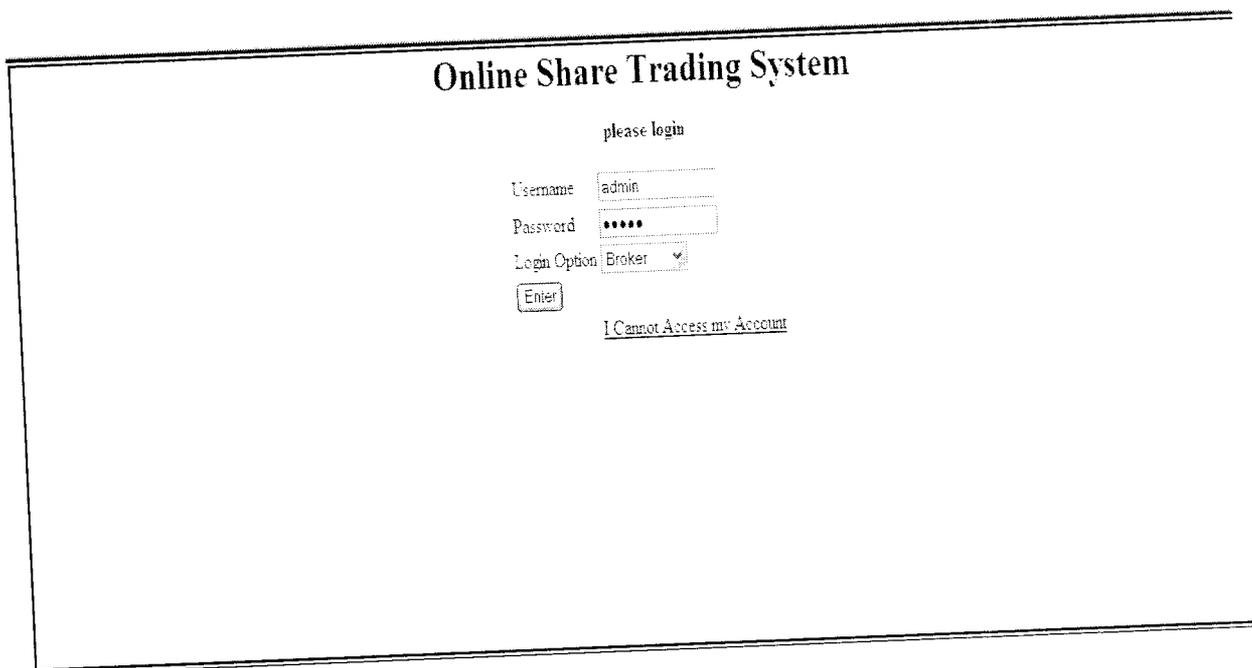
The **Online Share Trading System** has been designed in a manner to any further enhancement or further modification in future. The user can be provided with more interactive screens, this project is mainly focused upon the transaction of the shares of Software Company in future it can be modified for all other companies. This companies can be added in future who are going to convert their shares into demate format.

CHAPTER 8

APPENDICES

8.1 SCREEN SHOTS

8.1.1 Login



The screenshot displays the login interface for the Online Share Trading System. The title "Online Share Trading System" is centered at the top. Below it, the text "please login" is displayed. The login form includes three input fields: "Username" with the value "admin", "Password" with masked characters "*****", and "Login Option" with a dropdown menu set to "Broker". An "Enter" button is positioned below the "Login Option" field. At the bottom right of the form, there is a link that reads "[I Cannot Access my Account](#)".

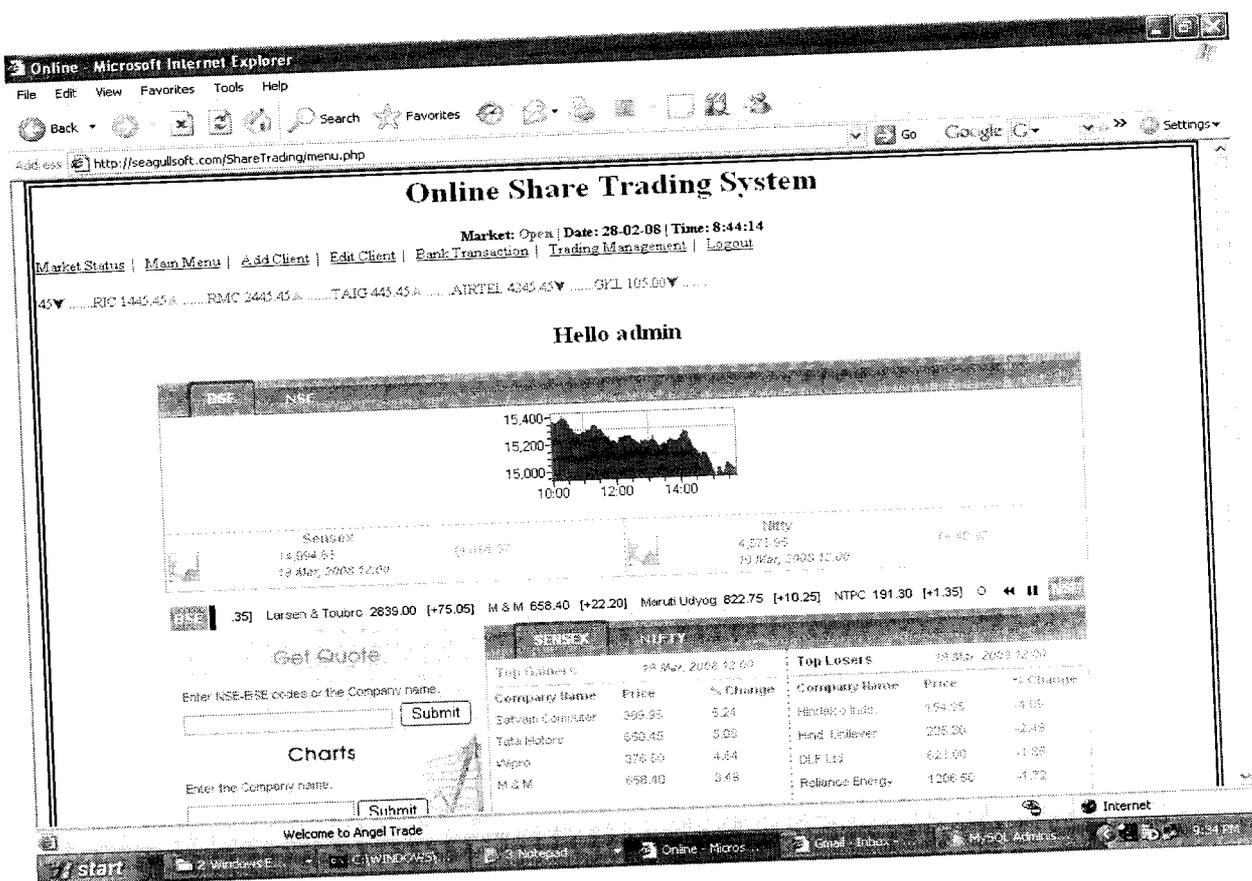
8.1.2 Account Settings

Online Share Trading System

Account Settings

Email ID

8.1.3 Admin Home Page



8.1.4 Client Home Page

Online - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites

Address http://seagullsoft.com/ShareTrading/menu.php

Go Google Settings

Online Share Trading System

Market: Open | Date: 28-02-08 | Time: 8:44:14

Market Status | Main Menu | Add Client | Edit Client | Bank Transaction | Trading Management | Logout

47 RJC 1445.45A ... RMC 2445.45A ... TAG 445.45A ... AIRTEL 4245.45V ... GPL 105.00V

Hello client

NSE

Sensex

14,744.94

28 Jun 2005 02:50

Nifty

4,275.00

28 Jun 2005 02:50

Get Quote

Enter NSE-BSE codes or the Company name.

Charts

NSE			NIFTY		
Top Gainers			Top Losers		
Company Name	Price	% Change	Company Name	Price	% Change
ICICI Bank	754.35	0.00	Sun Pharma BSE	1140.40	-0.17
Wipro Ltd.	612.05	0.31	Tata Steel	207.50	-2.37

Welcome to Angel Trade

start | Windows Explorer | My Documents | My Recent Places | Online - Microsoft Internet Explorer | My SQL Admin | 8:44 PM

8.1.5 Client details

Online - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Search Favorites

Address http://seagullsoft.com/ShareTrading/Client.php

Go Google Settings

Online Share Trading System

Market: Open | Date: 28-02-08 | Time: 8:44:14

[Market Status](#) | [Main Menu](#) | [Add Client](#) | [Edit Client](#) | [Bank Transaction](#) | [Trading Management](#) | [Logout](#)

ANL 000.45VR10 1-445.40

Clients

Client ID	Username	Company	Email	Address	Phone	Fax		
9	cegon	cegn	cegon@cegon.com	23, ramnagar - cbe, tamilnadu 625001	--	--	[View/Edit]	[delete]
17	admin	cegon	admin@admin.com	ramnagar - coimbatore, tamilnadu 625001	--	--	[View/Edit]	[delete]
18	i	i	i	i - i i i	--	--	[View/Edit]	[delete]
19	1111	211	11	11 - 11, 11 11	--	--	[View/Edit]	[delete]
20	a	a	a	a - a, a a	--	--	[View/Edit]	[delete]

©. All Rights Reserved . Powered by Cegonsoft

start Windows C:\WINDOWS Notepad Online - Mic... Gmail - Inb MySQL Ad... sharetrading 9:38 PM

8.1.6 Edit client

Online - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites

Address http://seagullsoft.com/ShareTrading/EditClient.php?id=9

Go Google

Online Share Trading System

Market: Open | Date: 28-02-06 | Time: 8:44:14

Market Status | Main Menu | Add Client | Edit Client | Bank Transaction | Trading Management | Logout

AKL 200.45 ▼ RIC 1445.45 ▲ RMO 3445.45 ▲ TAIG 442.45 ▲ AIRTEL 4245.45 ▼ OKL 105.00 ▼

Edit client # 9

9 | [Next -> 17](#)

Login Information:	
Username:	cegon
User Password:	cegon
Comments:	123
Contact Information:	
Company:	cegn
Tax ID:	1
Phone:	
Fax:	
Contact First name:	cegon
Contact Last name:	cegn

Done

start

Windows Explorer C:\WINDOWS\... Notepad Online - Mic... Gmail - In... MySQL Ad... shera@adn... 9:52 PM

8.1.7 Add client

The screenshot shows a Microsoft Internet Explorer browser window displaying a web application. The address bar shows the URL `http://seegullsoft.com/ShareTrading/EdtClient.php`. The page title is "Add new client". At the top, there is a navigation menu with links: "Market Status", "Main Menu", "Add Client", "Edit Client", "Bank Transaction", "Trading Management", and "Logout". The current page is "Add Client".

Market information is displayed at the top: "Market: Open | Date: 28-02-08 | Time: 8:44:14". Below this, there is a row of market data: "AKL 200.45", "RIC 1445.45", "RMC 2445.45", "TAIG 445.45", "AIRTEL 4245.45", "GNL 105.00".

The main form is titled "Add new client" and is divided into two sections:

- Login Information:**
 - Client's Username:
 - Password:
 - Retype Password:
 - Comments:
- Contact Information:**
 - Company:
 - Tax ID:
 - Phone:
 - Fax:
 - Contact First name:
 - Contact Last name:
 - Address:

The browser's taskbar at the bottom shows several open windows: "start", "3 Windo...", "C:\WINED...", "3 Notepad", "Online - Mc...", "Gmail - Inb...", "NySQL Ad...", "ShareTradin...", and "Internet". The system clock shows "9:36 PM".

8.1.8 Edit trading

Online - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites

Address <http://seagullsoft.com/ShareTrading/editTrade.php?id=R00001> Go Google Settings

Online Share Trading System

Market: Open | Date: 28-02-08 | Time: 8:44:14

[Market Status](#) | [Main Menu](#) | [Add Client](#) | [Edit Client](#) | [Bank Transaction](#) | [Trading Management](#) | [Logout](#)

AYL 200 45... RIC 1445 45A... RMO 2445 45A...

Edit Trading # R00001

[G00001 < Prev](#) | **R00001** | [Next > R00002](#)

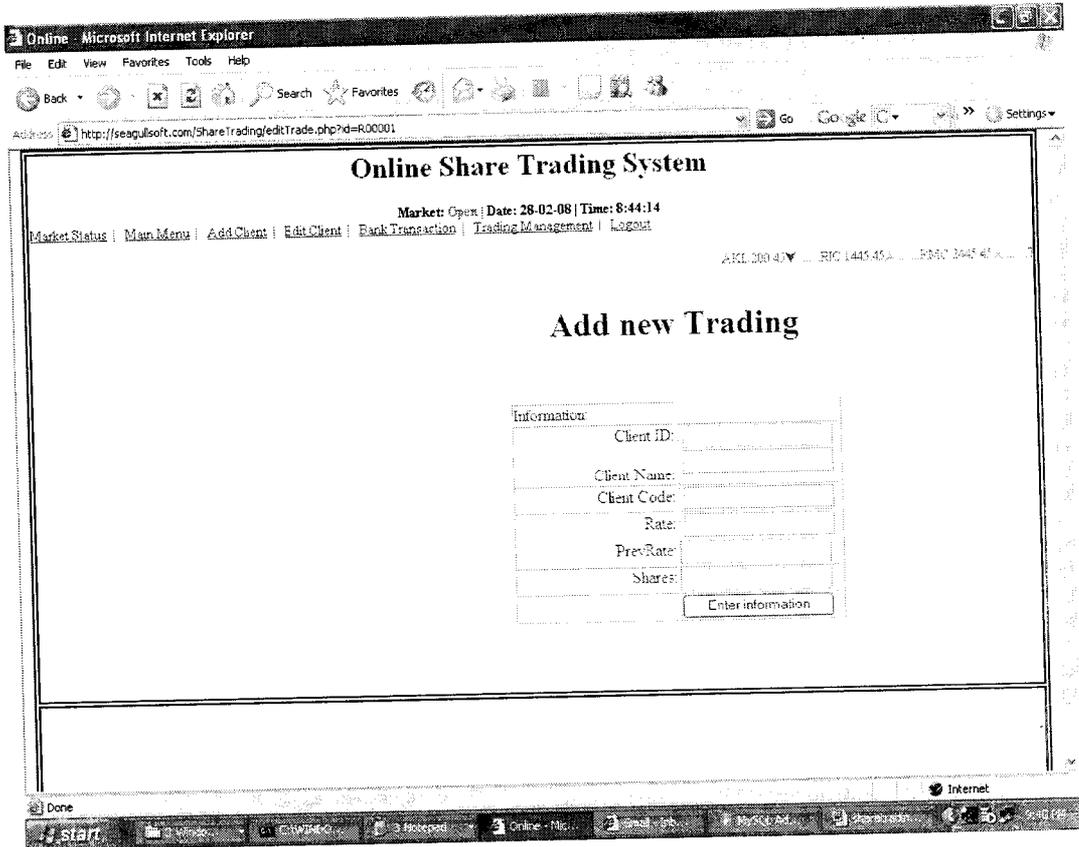
Information:

Client ID:	R00001
Client Name:	RELIANCE INSURANCE
Client Code:	PIC
Rate:	1445.45
PrevRate:	
Shares:	

Done

start 5 Windo... C:\W\BDO... 3 Notepad Online - Mic... Gmail - Int... Physic Ad... sharetradi... 8:40 PM

8.1.9 Add new trading



8.1.10 Broker trasaction details

The screenshot shows a web browser window titled "Online - Microsoft Internet Explorer" displaying the "Online Share Trading System". The browser's address bar shows the URL "http://seagullsoft.com/ShareTrading/Trading.php". The page content includes a navigation menu with links for "Market Status", "Main Menu", "Add Client", "Edit Client", "Bank Transaction", "Trading Management", and "Logout". The market status is "Market: Open | Date: 28-02-08 | Time: 8:44:14". A link "<< ADD NEW >>" is visible. The main section is titled "Broker Transaction Details" and contains a table with the following data:

Name	ID	Code	Rate	PrevRate	OPTIONS
AKL	A00001	AKL	200.45	0.00	[View/Edit]
RELIANCE INSURANCE	R00001	RIC	1,445.45	0.00	[View/Edit]
RELIANCE MOBILE	R00002	RMC	2,445.45	0.00	[View/Edit]
TATA AIG	R00003	TAIG	445.45	0.00	[View/Edit]
AIRTEL MOBILE	R00004	AIRTEL	4,245.45	0.00	[View/Edit]
GKL PVT LTD.,	G00001	GKL	105.00	0.00	[View/Edit]

At the bottom of the page, it says "©. All Rights Reserved - Powered by Cegonsoft". The Windows taskbar at the bottom shows the Start button, taskbar, and several open applications including "start", "3 windows", "C:\WINDOWS...", "Notepad", "Online - Mic...", "Gmail - Inb...", "MySQL Ad...", and "sharetradin...". The system clock shows "9:40 PM".

8.1.11 Edit market status

Online - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Stop Home Search Favorites Home

Address http://seagulfsoft.com/ShareTrading/editMarket.php?id=Open

Go Google Settings

Online Share Trading System

Market: Open | Date: 28-02-08 | Time: 8:44:14

Market Status | [Main Menu](#) | [Add Client](#) | [Edit Client](#) | [Back Transaction](#) | [Trading Management](#) | [Logout](#)

ASX 200.43

Edit Market Status

Market Status	
Status	Close
Market Close Date	March 19, 2008
Market Close Time	11:05:08
Market Value	
Market Close Value	4562.18
Market Open Value	42.00
Change (%)	-99.08
<input type="button" value="Update Information"/>	

©. All Rights Reserved - Powered by Cegonsoft

Done

start Windows C:\WINDOWS Internet Online - Mic... Email Int... MySQL Ad... sharetradm... 2:35 PM

8.1.12 View market status

Online - Microsoft Internet Explorer
File Edit View Favorites Tools Help

Address <http://seagullsoft.com/ShareTrading/Market.php>

Online Share Trading System

Market: Open | Date: 28-02-08 | Time: 8:44:14

Market Status | [Main Menu](#) | [Add Client](#) | [Edit Client](#) | [Bank Transaction](#) | [Trading Management](#) | [Logout](#)

ASL 200 (U) ... RIC 1445.45 ... RMC 20

Market Status

Status	Date	Time	Open Value	Close Value	%	
Open	28-02-08	8:44:14	4562.18	42.00	-99.08	[View/Edit]

©. All Rights Reserved - Powered by Cegonsoft

start | 3 Winda... | C:\WINDO... | 3 Notepad | Online - Mic... | Gmail - trb... | MySQL Ad... | sharetradin... | 4:54 PM

CHAPTER 9

REFERENCES

1. **Barlow Ressman William Stalling** 'Software Engineering BPB .
2. **Elias M. Awad**, "System Analysis and Design", Galgotia Publications (P) Ltd, Second Edition, 1996.
3. **Roger S Pressman** "Software Engineering", Addison Wesley king man publication , Fourth Edition, 1996.
- 4 **"Professional PHP Programming"** - Jesus Castagnetto
Sascha Schumann
- 5 **"MY SQL/PHP Database Applications"** - Jay Greenspan
Brad Bulgar

WEB SITES:

MySQL site: <http://www.mysql.com/>

PHP main site <http://www.php.net>

PHP Tutorial : <http://www.w3schools.com>

CHAPTER 10

CONCLUSION

“Online Trading Transaction System” deals with the buying and selling of shares through online. This project highly reduces the work done manually. Each and every activity done manually in the share process had been computerized. The redundancy involved in the manual process had been completely irradiated in this project.

The project undergoes the system study, analysis, and design phase in order to make the system as a perfect and dynamic system. The system is successfully implemented after the testing phase and maintenance.

This Project provides an effective Application Integration for huge volume business houses. The system helps the administrator to monitor the services response from the customer and send to the web site company. This would enhance the business value of internet service provider and thus is helpful for the growth of the organization.