



Project Title:

Stock Market Management System

Name for the Website:

www.myStocks.com

Project Description:

The stock or share market is the aggregation of buyers and sellers of stocks. The admin plays the role of a super user who is responsible for handling the security of users by managing their transactions limits. Various stock functionalities such as Short selling and Margin buying have been kept in mind while designing the system.

How our system works:

A user needs to create an account to be able to buy/sell stocks and from the amount that has been credited to their account which is handled by the super. The stock prices are the real-time using yahoo's live stock prices and a rest api call is used to get those prices.

The admin has rights to view transactions done by all the users and can also manage/edit the cash amount assigned to each user.

Assumption:

It is assumed that the settlement of actual cash transactions are handled between the user and the admin based on which the admin can update the cash amounts for each user.

Future Work:

We have left calculating the profit earned by each user depending on the price of the stock when it purchased to the current stock rate for future improvements to the system.

Database Design:

Table 1 : Stocks – for maintaining all the stocks and the image url from where the image for that specific stock is fetched.

```
CREATE TABLE IF NOT EXISTS `stocks` (
    `stock_name` varchar(30) NOT NULL,
    `img_link` varchar(300) NOT NULL,
    `stock_abbr` varchar(20) NOT NULL,
    PRIMARY KEY (`stock_name`),
    KEY `stock_name` (`stock_name`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1;
```

Move the columns by dragging them up and down.

[Print view](#) [Relation view](#) [Propose table structure](#) [Move columns](#)

Add 1 column(s) At End of Table At Beginning of Table After stock_name [Go](#)

[Indexes](#) [Edit](#) [Drop](#)

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Drop	PRIMARY	BTREE	Yes	No	stock_name	10	A	No	
Edit Drop	stock_name	BTREE	No	No	stock_name	10	A	No	

Table 2: Transaction table to maintain the values for all the transactions – buy/sell by any specific user.

```

CREATE TABLE IF NOT EXISTS `trans_table` (
    `trans_id` int(11) NOT NULL AUTO_INCREMENT,
    `uname` varchar(20) NOT NULL,
    `tot_price` float NOT NULL,
    `quantity` int(3) NOT NULL,
    `stock_name` varchar(30) NOT NULL,
    `trans_type` varchar(10) NOT NULL,
    PRIMARY KEY (`trans_id`),
    KEY `uname` (`uname`),
    KEY `uname_2` (`uname`),
    KEY `uname_3` (`uname`),
    KEY `stock_name` (`stock_name`),
    KEY `uname_4` (`uname`)
) ENGINE=InnoDB DEFAULT CHARSET=latin1 AUTO_INCREMENT=18 ;

```

Server: localhost:3306 » Database: cl10-stockdb » Table: trans_table

#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
1	<u>trans_id</u>	int(11)			No	None	AUTO_INCREMENT	Change Drop More
2	<u>uname</u>	varchar(20)	latin1_swedish_ci		No	None		Change Drop More
3	<u>tot_price</u>	float			No	None		Change Drop More
4	<u>quantity</u>	int(3)			No	None		Change Drop More
5	<u>stock_name</u>	varchar(30)	latin1_swedish_ci		No	None		Change Drop More
6	<u>trans_type</u>	varchar(10)	latin1_swedish_ci		No	None		Change Drop More

Move the columns by dragging them up and down.

Print view Relation view Propose table structure Move columns

Add | column(s) At End of Table At Beginning of Table After Go

- Indexes

Indexes

- The indexes uname and uname_4 seem to be equal and one of them could possibly be removed.
- The indexes uname and uname_3 seem to be equal and one of them could possibly be removed.
- The indexes uname and uname_2 seem to be equal and one of them could possibly be removed.

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
Edit Drop	PRIMARY	BTREE	Yes	No	trans_id	12	A	No	
Edit Drop	uname	BTREE	No	No	uname	4	A	No	
Edit Drop	uname_2	BTREE	No	No	uname	4	A	No	
Edit Drop	uname_3	BTREE	No	No	uname	4	A	No	
Edit Drop	stock_name	BTREE	No	No	stock_name	12	A	No	
Edit Drop	uname_4	BTREE	No	No	uname	4	A	No	

Table 3: The user data which is entered by the user while signing up is stored in this table. This users data is also used to create a session variable. The admin details are also stored in this table and are differentiated by the field flag which determines whether the user is an admin or a normal user.

```
CREATE TABLE IF NOT EXISTS `users` (
    `fname` text NOT NULL,
    `lname` text NOT NULL,
    `uname` varchar(20) NOT NULL,
    `password` text NOT NULL,
    `type` tinyint(1) NOT NULL,
    `email` text NOT NULL,
    `useramt` float NOT NULL,
```

PRIMARY KEY (`uname`)

) ENGINE=InnoDB DEFAULT CHARSET=latin1;

The screenshot shows the MySQL Workbench interface for the 'users' table in the 'cl10-stockdb' database. The 'Structure' tab is selected, displaying columns: #, Name, Type, Collation, Attributes, Null, Default, Extra, and Action. The primary key 'uname' is highlighted. Below the table, there are buttons for Check All, Browse, Change, Drop, Primary, Unique, and Index. The 'Indexes' section shows one index named 'PRIMARY' with type BTREE, unique Yes, packed No, column 'uname', cardinality 8, collation A, and null No.

#	Name	Type	Collation	Attributes	Null	Default	Extra	Action
1	fname	text	latin1_swedish_ci		No	None		Primary
2	lname	text	latin1_swedish_ci		No	None		Primary
3	uname	varchar(20)	latin1_swedish_ci		No	None		Primary
4	password	text	latin1_swedish_ci		No	None		Primary
5	type	tinyint(1)			No	None		Primary
6	email	text	latin1_swedish_ci		No	None		Primary
7	useramt	float			No	None		Primary

Move the columns by dragging them up and down.

Print view Relation view Propose table structure Go

Add 1 column(s) At End of Table At Beginning of Table After fname Go

- Indexes

Indexes

Action	Keyname	Type	Unique	Packed	Column	Cardinality	Collation	Null	Comment
	PRIMARY	BTREE	Yes	No	uname	8	A	No	

Foreign key constraint:

ALTER TABLE `trans_table`

ADD CONSTRAINT `trans_table_ibfk_2` FOREIGN KEY (`stock_name`) REFERENCES `stocks`(`stock_name`),

ADD CONSTRAINT `trans_table_ibfk_1` FOREIGN KEY (`uname`) REFERENCES `users`(`uname`);

Languages or Frameworks Used:

PHP – server side scripting

JavaScript- client side scripting,

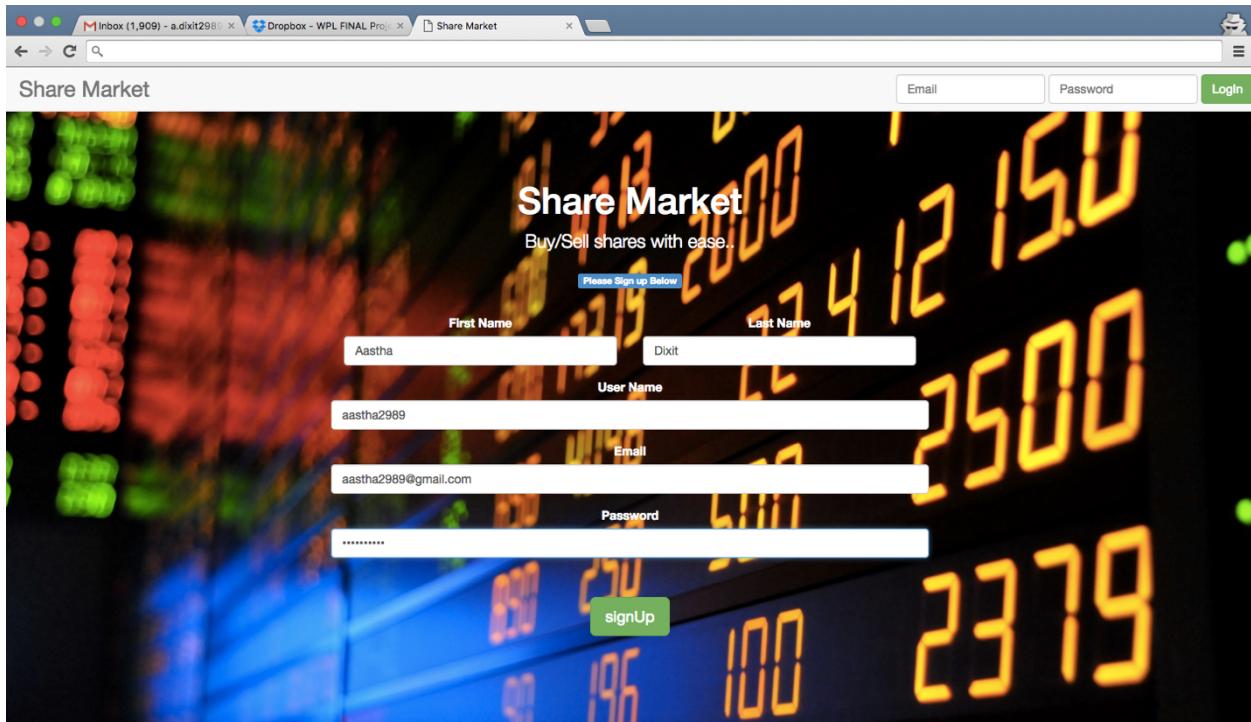
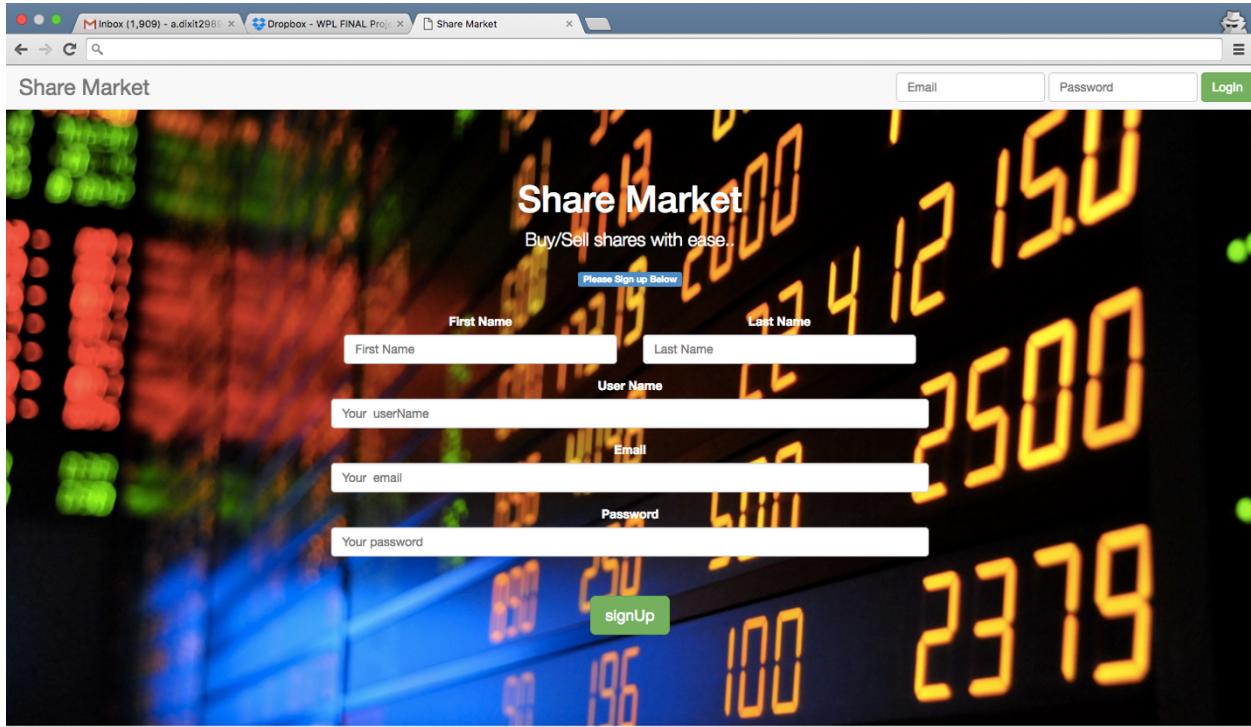
BootStrap and CSS – Designing,

Rest API – fetching the real-time details of any stock

JQuery – client side validation

AJAX – validation

HTML and JSON

Screenshots for main functionalities:**SIGN UP AND LOGIN PAGE:**

USER LOGIN:

Share Market

[Log out](#)

Mr. Seevagan
 EMAIL: seevagancs@gmail.com
 Amount: 525.85

[click here to sell/Buy stocks](#)

Transaction ID	Stock Name	Quantity	Transaction Type	Total Price
6	Intel	2	bought	223
7	Apple Inc	2	bought	195.64
8	Apple Inc	2	bought	195.64
9	Apple Inc	2	bought	195.64
10	Apple Inc	2	bought	189.66
11	Juniper Networks	4	bought	93.64

Share Market [Log out](#)

Search by Company name

Search Company
 eg: Apple Inc

 Amazon Buy/Sell	 Apple Inc Buy/Sell	 Expedia Buy/Sell
 Facebook Buy/Sell	 Google Buy/Sell	 Hewlett Packard Enterprise Buy/Sell
 IBM	 Intel	 Juniper Networks

STOCK MARKET SYSTEM

The screenshot shows a web browser window titled "Share Market". The address bar displays the URL "thilakg.com/projects/sharemarket/stocksearch.php". The main content area has a search bar labeled "Search by Company name" with the placeholder text "Search Company". Below it is a text input field containing "expedia" and a blue "Search" button. In the top right corner of the page, there is a "Log out" link.



The screenshot shows a web browser window titled "Share Market". The address bar is not visible. The main content area displays a company profile for "Apple Inc". It includes the company name in a blue header, followed by "Share Price:94.83", "P/E Ratio :9.98", and "EPS : 9.40". Below this, a light blue bar indicates "Summary" and "Purchase confirmed". At the bottom, there is a form with a label "No of shares :" and a text input field containing the number "5", followed by a blue "Buy" button.

ADMIN LOGIN:

Share Market - Admin

Search a particular user

Enter name

seev

Search

User Name	Transaction ID	Stock Name	Quantity	Transaction Type	Total Price
seev	6	Intel	2	bought	223
seev	7	Apple Inc	2	bought	195.64
seev	8	Apple Inc	2	bought	195.64
seev	9	Apple Inc	2	bought	195.64
seev	10	Apple Inc	2	bought	189.66
seev	11	Juniper Networks	4	bought	93.64
seev	12	IBM	2	bought	294.14
seev	13	IBM	2	bought	294.14
seev	14	HPE	3	bought	51.09
seev	15	Apple Inc	2	bought	189.66
seev	17	Apple Inc	2	bought	189.66
seev	18	Intel	2	bought	62.22

Share Market - Admin

Search

Modify

Modify user details

Enter username

seev

Enter Amount

1000

Modify

Summary:
User amount modified

Team Members and Net-id's:

Aastha Dixit (AXD155030@utdallas.edu)

Keerthi Bala Sundram (KXB152730@utdallas.edu)

Saurabh Chaudhary (SXC143430@utdallas.edu)

Work Division among team members:

1. Aastha Dixit
Sign Up Page
Admin panel/page
Fetching value for stock in customer portfolio
Transaction history
Updation of admin details
2. Keerthi Bala Sundram
Research on stock markets
Buying of stocks
Calculation of stock value
Stock history display
Updation of admin details
3. Saurabh Chaudhary
Home page
Login Page
Connection to database and database queries
Stock search feature for user
User search for admin