

JAMAPUNJI –
STOCK TRADING
SIMULATOR

TUTORIAL

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About this Document

This document is about the features and functionality of Jamapunji Stock Trading Simulator though which a user can place order either buy or sell and perform trades along with the functionality to view market stats in real time. This document intends to guide the user of the application about all views and windows along with customization options available so that user of the application can use it effectively.

Audience

This document is all about the features and usage of Jamapunji – Stock Trading Simulator. It is intended for all the users of online trading.

Introduction

Jamapunji – Stock Trading Simulator is an online trading application that offers the ability to buy and sell shares and stock information in real time. The Trading Terminal is a browser supported system and application based on JAVA which supports Google Chrome, Mozilla Fire Fox ,IE9, Opera and Safari.

Startup

After verification of the user name and password, application will load the main page. The Main page consists of all the information required for the user.

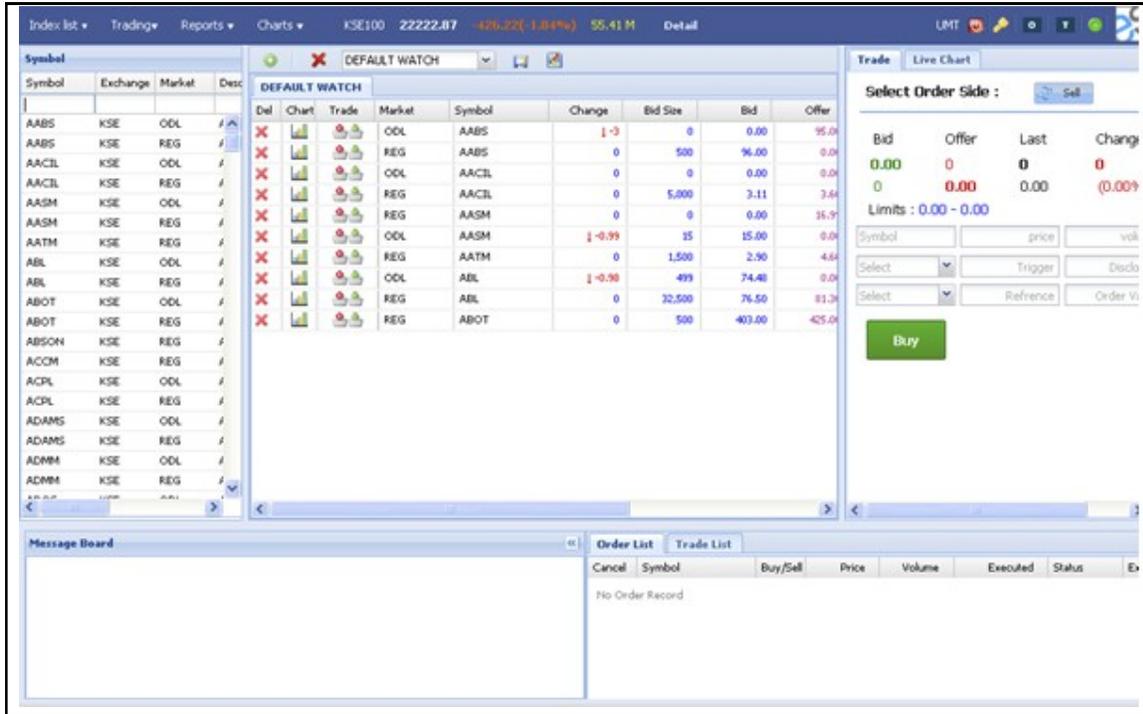


Figure 1: Application Startup

Field	Function
	If user properly connected, the button will turned Green on successful connectivity.
	If connections are not established properly with the servers, than button will turned red, that indicates the non-connectivity of the application
Display Name	On successful Logged in, user name will display on the menu bar
	This button will provide the Log Out Facility to the User.
	This button is used for change password if required by the user.
Order Notification	This button is used to refresh the Order
Trade Notification	This button is used to refresh the order.

Screen Name: Symbols

All active listed symbols are available in symbol portion. User has provided with the option of search by symbol wise, exchange wise, market wise, sector wise and currency wise. Similarly users can sort symbols either in ascending or Descending order and can able to adjust the Columns properties as required.

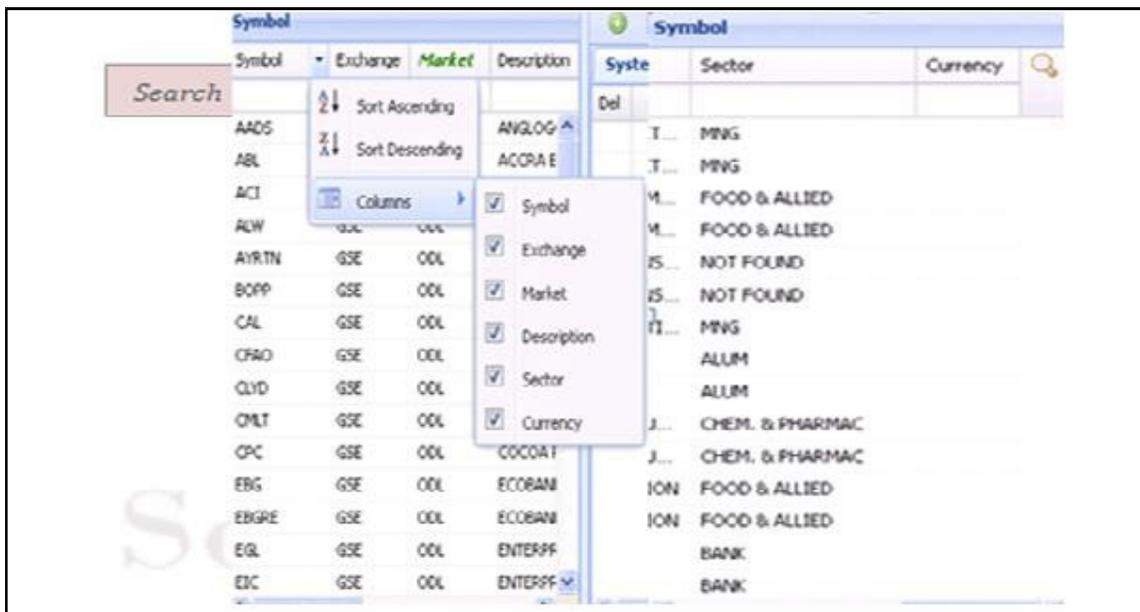


Figure 2: Symbols

Field	Function
Symbol	Enter the Symbol for search in search option
Exchange	Enter Exchange for search through exchange basis
Sort Ascending	Sort the symbols in ascending order
Sort Descending	Sort the symbols in descending order
Columns	Adjust the columns as required by the user
Market	Enter Market Type for search either Regular or ODL , The symbols related to ODL or Regular will listed
Sector	Enter the sector in the search option for searching symbols through sector wise

Screen Name: System Watch Default.

This is default market watch. On load of page top 30 listed symbols will displays in default market watch. These symbols appear in default market cannot be added or removed by the user. The list will increase or decrease on the basis of feeds received from the market. If only twenty symbols

feed are received than those 20 symbols will populate automatically. User can perform trade through default market watch as well.

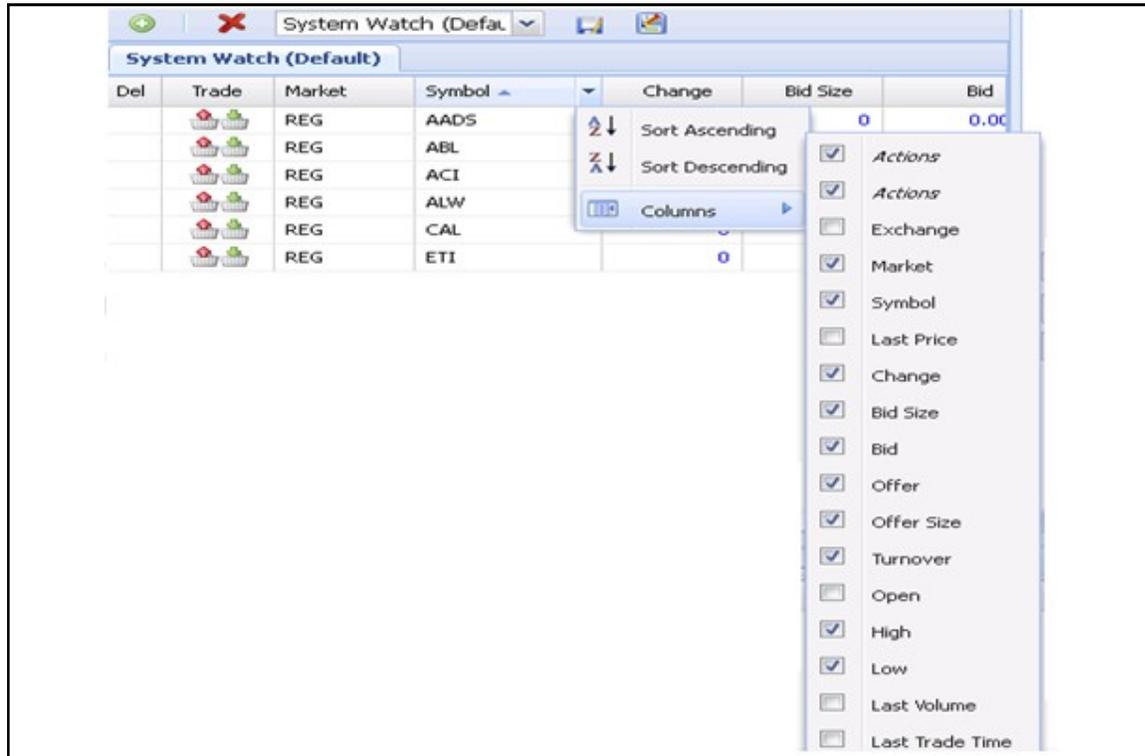


Figure 3: System Watch Default

Field	Function
	On clicking this will allow the user place any sell order.
	On clicking this will allow the user to place any buy order
Sort Ascending	User can sort the enlisted symbols in Ascending Order.
Sort Descending	User can sort the enlisted symbols in Descending Order.
Columns	Select the column(s) from the available column. User can reorder the shown column by check/uncheck the boxes.

Screen Name: User Created Market Watch

Most of the watch list are feed based and have similar customization option. User can choose symbols to be shown in the watch list. User can select different column to be shown on the watch list from a list of columns and can also arrange these columns in some desired order. User can easily save their own created market watches and the settings are restored next time application is started. User has provided with the facility to delete any watch list except system watch (default) as desired.

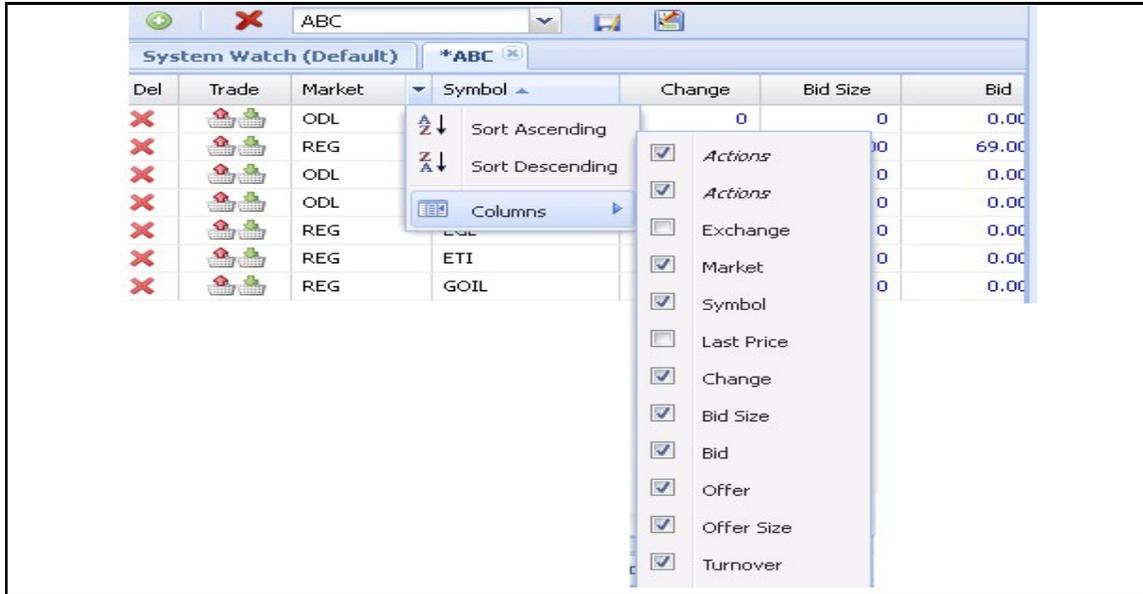
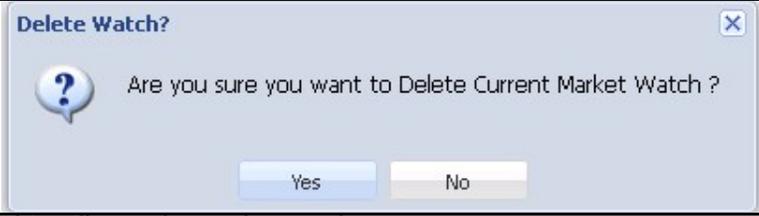
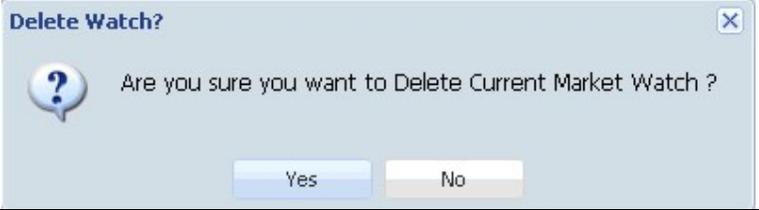


Figure 4: User Created Market Watch

For inserting symbols in market watch, user requires to drag the desired symbols from symbol grid and drop it in the market watch grid and as shown in below screen shot. To remove any symbol from market watch, delete option is available.



Field	Function
Create Market Watch	This option is user to create user define Market Watch. On click create watch option will appear
Remove Market Watch	This option is used to delete user define market watch. On click confirmation message will appear

	 <p>A dialog box titled "Delete Watch?" with a question mark icon. The text reads: "Are you sure you want to Delete Current Market Watch ?". There are "Yes" and "No" buttons at the bottom.</p>
 Save	This will save the Market watch
 Save As	<p>If user wanted to save the market watch with some name as well than this option will serve the purpose.</p>  <p>A dialog box titled "Save as" with a close button. It contains a "Name:" label and a text input field containing "ABC1". There are "OK" and "Cancel" buttons at the bottom.</p>
 DEL	<p>This option is used to remove any symbol from user define market watch.</p>  <p>A dialog box titled "Delete Watch?" with a question mark icon. The text reads: "Are you sure you want to Delete Current Market Watch ?". There are "Yes" and "No" buttons at the bottom.</p>
 Trade	This option is used for Buy/Sell any security as desired by the user.

Screen Name: Index List Menu

Select the index option from index list menu. Index Detail is design to represent the quick performance of the exchange for the user. By selecting exchange, **High, Low and Change%** will start appearing on the menu bar and if user selects **“Detail”**, this will show the complete detail of the exchange for the current period.

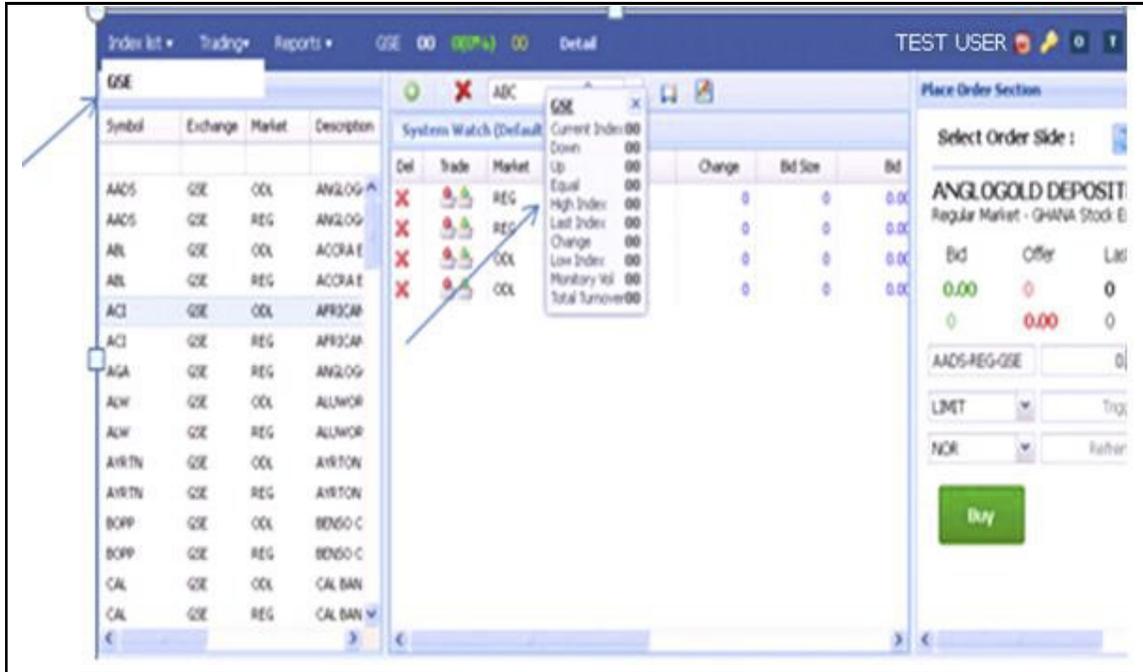


Figure 5: Index List Menu

Field	Function
Index List	Select Index from Index list for display in menu bar
Detail	Click detail option or place cursor on Detail will show complete index detail of selected exchange.

TRANSACTION:

Screen Name: Place Order Selection

This section of the screen is transactional portion. User can place order either Buy or Sell by selecting “Select Order Side” and select desired symbol in which user wanted to execute trade. The section is self-define and easy to use.

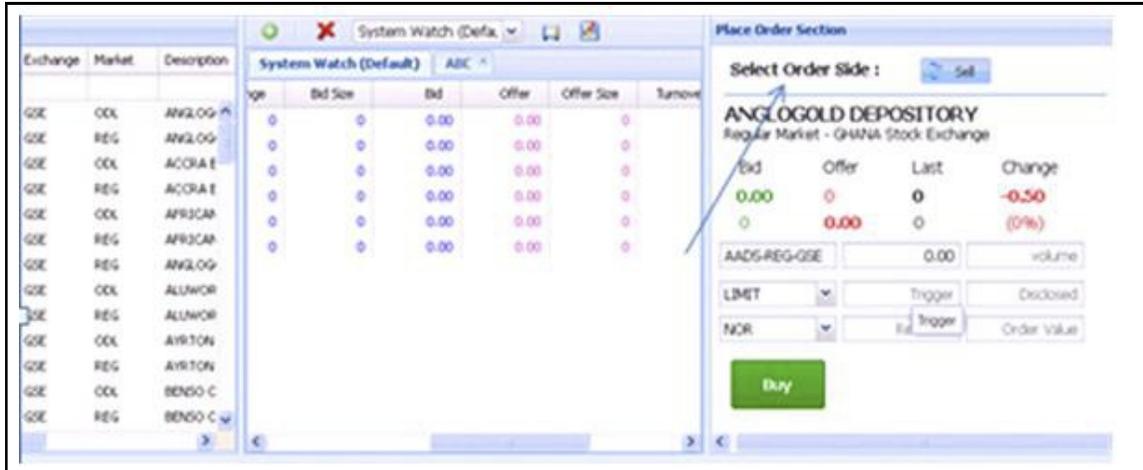


Figure 6: Place Order Selection

Field	Function
 Buy	Select Order side. If select BUY , Buy option will be available on the screen as 
 Sell	Select Order Side: If select sell ,sell option will be available on the screen as 
BID	It displays the BID price of selected symbol
Offer	It shows the Offer price of selected Symbol
Last	It shows the last price of selected symbol
Change	It shoes change in % of selected symbol
<input type="text" value="AADS-REG-GSE"/>	Enter the symbol manually. User can if select either BUY or SELL from market watch than symbol automatically populate.
<input type="text" value="0.00"/>	On selecting symbol, market price will appear in the field. User has provided with the facility to change the price of the order. This is mandatory field.
<input type="text" value="volume"/>	Enter volume, for placement of order. This is Mandatory field.

LIMIT <input type="button" value="v"/> 	Select type of order Market only. Drop down option is available for the users to select the type of order as LIMIT <input type="button" value="v"/> LIMIT STOP LOSS MARKET
<input type="button" value="Buy"/>	Press BUY button for placement of buy order
<input type="button" value="Sell"/>	Press SELL button for placement of sell order.

Screen Name: Buy Order:

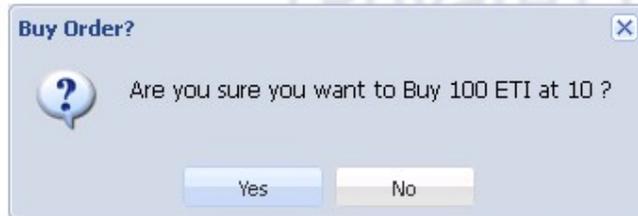
For placement of Buy Order user need to fill all require fields as given below. Symbol, Price and volume are mandatory fields. On competition of required filed press BUY button



Figure 7: Buy Order

Order Confirmation:

This is confirmation message appears for the users. Before executing order user can confirm the price and volume



Field	Function
YES	Yes will execute the order
NO	NO will cancel the order at initial stage. User can brought changes as desired.

Screen Name: SELL ORDER

For placement of Sell Order user need to fill all require fields as given below. Symbol, Price and volume are mandatory fields. On competition of required filed press SELL button

Place Order Section

Select Order Side :

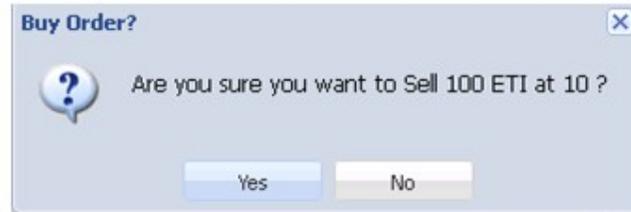
Bid	Offer	Last	Change
0.00	0	0	-0.50
0	0.00	0	(0.0%)

ETI-REG-GSE	10	100
LIMIT	0	0
NOR	Refrence	1000

Figure 8: Sell Order

Order Confirmation:

This is confirmation message appears for the users. Before executing order user can confirm the price and volume



Field	Function
YES	Yes will execute the order
NO	NO will cancel the order at initial stage. User can brought changes as desired.

Screen Name: Message Board

Message board section display events details as they occur. These events are part of transactional portion. Events related to Order Placement, invalid order placement, order cancellation, Order received and confirmation message, trade execution notification etc.

Buy Order Message:

Once Buy order executed following message will appear and st the same time Order List also updated



Figure 9: Buy Order Message

Sell Order Message:

Once Sell order executed following message will appear in the message board and order list automatically updated.



Figure 10: Sell Order Message

Invalid Order Message:

If order is invalid due to any reason, than user will be intimate with invalid order message

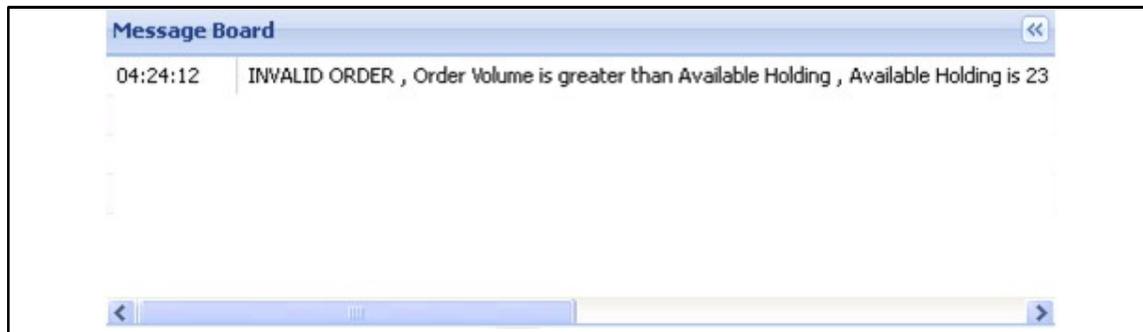


Figure 11: Invalid Order

Screen Name: Order Cancellation:

User has provided with the option to cancel order if it is remain in the pending state. Order showing in the Order List has cancellation option to cancel either Buy or Sell order as shown in the below given figure.

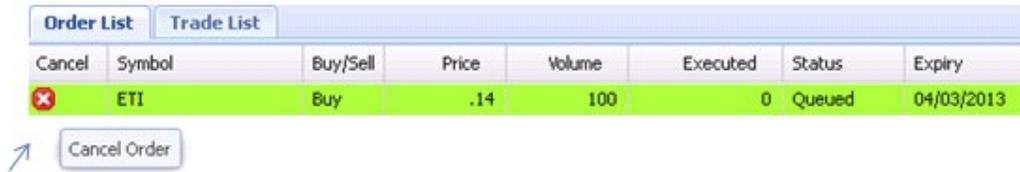
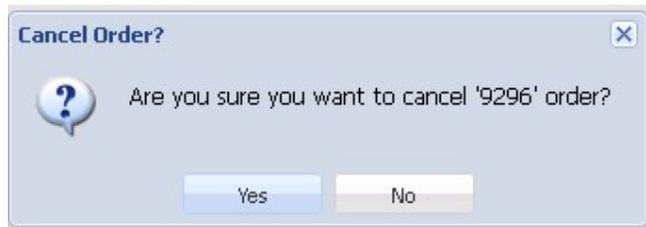


Figure 12: Order Cancellation

On clicking Cancellation button Confirmation message box will appear to the client



“YES” will execute the process of order cancellation and “NO” terminate the cancellation request.

Once Order successfully cancelled, Confirmation message will be displayed on message board as given below



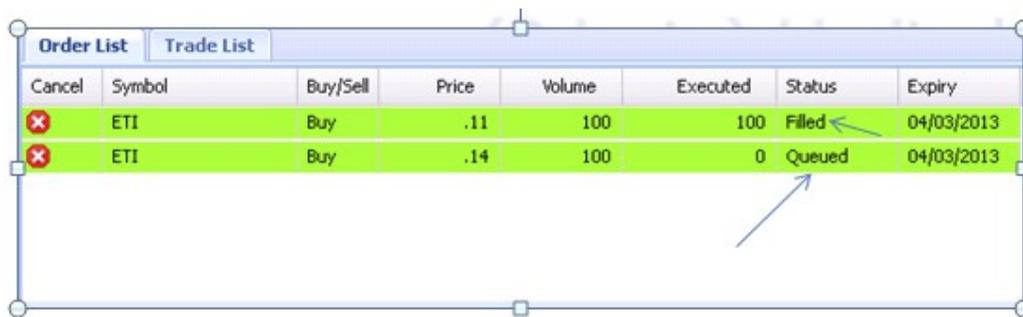
Trade List:

Once Order fulfilled and trade executed against requested order, than message board shows confirms trade execution message and at the same time trade list also updated automatically.



Figure 13: trade message

After trade confirmation notification order showed queued in order list will be marked filled and on refreshing the order list, list will be empty and only remains with the pending orders.



Reports

Screen Name: Periodic Trade Detail Report

Periodic trade summary shows symbol wise detail of client’s trades in a particular period of time. User can view the complete information of his trades.

Periodic Trade Detail Report

Client Code: RMS01 From Date: 12/10/2013 To Date: 12/11/2013
 Exchange: All Clearing Type: All Symbol:
 Type: HTML

[View Report](#)

Periodic Trade Detail

From Trade Date: 12/10/2013 To Trade Date: 12/11/2013 Printed On: 12/11/2013
 Security: All Client: RMS01 - RMS Client
 Clearing Type: All Exchange: All

Exchange	Market	Trade Type	Trade No.	Trade Date	Settlement Date	Quantity		Rate	Amount						
						Buy	Sell		Buy	Sell	Brokerage	CVT	UNIT	FED	Net
PAKISTAN STATE OIL COMPANY LIMITED															
KSE	Regular Market	Regular Trade	11200	01/11/2013	05/11/2013		100	274.0000		27,400.00	23.00	0.00	5.40	0.00	127,371.5
KSE	Regular Market	Regular Trade	11201	01/11/2013	05/11/2013		100	274.0000	27,400.00		23.00	0.00	0.00	0.00	27,423.0
Security Total:						100	100		27,400.00	27,400.00	46.00	0.00	5.40	0.00	51.4

End Of Report

Figure 14: Periodic Trade Detail

Field	Function
Client Code	BY default client is populated
From Date	The starting date of the date range from where the data is required
To Date	The Ending date of the date range till the data is required
Exchange	Select the exchange, or continue will default value ALL will fetch the required information from all exchanges
Clearing Type	Select type of clearing from drop down box
Symbols	Enter particular symbol or remain blank for all symbols
Type	Enter Type for format in which print is required. Available types are PDF,HTML,EXCEL
	Press to view report on user screen
	Print option is available for hard copy of the report

Screen Name: Periodic Trade Summary Report

Periodic trade summary shows symbol wise summary o client’s trade in a particular period of time. Report can be requested for a particular period of time and for particular clearing type. It shows the summary of the client’s trades in all symbols.

Periodic Trade Summary Report												
From Trade Date: 12/11/2013			To Trade Date: 12/11/2013			Client: RMS01 - RMS Client						
Clearing Type: All			Exchange: All									
Printed On: 12/11/2013												
Security Name	Exchange	Symbol	Quantity			Amount						
			Buy	Sell	Net	Buy	Sell	Brokerage	CVT	WHT	FED	Net
ICI PAKISTAN LIMITED	KSE	ICI	0	1,000	(1,000)	0.00	168,000.00	168.00	0.00	33.60	0.00	(167,866.40)
OIL & GAS DEVELOPMENT CORPORATION	KSE	OGDC	350	2,620	(1,670)	39,005.00	340,400.00	375.00	1.69	68.04	0.00	(300,850.27)
PAKISTAN PETROLEUM LIMITED	KSE	PPL	100	1,110	(1,010)	12,000.00	213,100.00	235.00	0.00	42.61	0.00	(200,822.39)
PAKISTAN STATE OIL COMPANY LIMITED	KSE	PSO -JPR	500	0	500	140,250.00	0.00	45.00	0.00	0.00	0.00	140,295.00
PAKISTAN STATE OIL COMPANY LIMITED	KSE	PSO -DEC	10	0	10	3,000.00	0.00	0.90	0.30	0.00	0.00	3,001.20
PAKISTAN STATE OIL COMPANY LIMITED	KSE	PSO	14,033	19,204	(5,171)	2,695,824.50	3,532,948.00	6,735.55	73.93	633.62	0.00	(839,660.50)
PAKISTAN TELECOMMUNICATION COMPANY LTD.	KSE	PTC -MNR	200	1,000	(800)	3,000.00	14,440.00	36.00	0.00	2.89	0.00	(11,401.11)
PAKISTAN TELECOMMUNICATION COMPANY LTD.	KSE	PTC	231	2,131	(1,900)	4,054.00	30,554.00	236.20	0.00	6.11	0.00	(26,257.69)
Grand Total:						2,897,130.50	4,200,442.00	7,823.65	75.62	796.97	0.00	(1,333,622.10)

End Of Report

Figure 15: Periodic Trade Summary Report

Field	Function
Client Code	BY default client is populated
From Date	The starting date of the date range from where the data is required
To Date	The Ending date of the date range till the data is required
Exchange	Select the exchange, or continue will default value ALL will fetch the required information from all exchanges.
Clearing Type	Select type of clearing from drop down box
Type	Enter Type for format in which print is required. Available types are PDF,HTML,EXCEL
	Press to view report on user screen
	Print option is available for hard copy of the report

Screen Name: Custody Net Share

This report will give the complete information of the net custody share for any specified symbols of the client. The report will generate the total net holding of the customer securities.

Custody Net Shares												
Client Code:	RMS01	As On Date:	12/11/2013									
Type:	HTML											
View Report												
DEWAN FAROOQ SPINNING MILLS	0	0	0	0	0	0	400	0	0	400	2.51	1,004.00
ICI PAKISTAN LIMITED	0	0	0	0	0	0	(990)	0	0	(990)	174.50	(172,755.00)
KOT ADDU POWER COMPANY	0	0	0	0	0	0	150	0	0	150	60.45	9,067.50
LOTTE PAKISTAN PTA LTD.	0	0	0	0	0	0	(800)	0	2,100	(800)	8.16	(2,448.00)
MCB BANK LIMITED	0	0	0	0	0	0	280	0	0	280	263.76	73,852.80
NATIONAL BANK OF PAKISTAN	0	0	0	0	0	0	220	0	0	220	52.25	11,495.00
NISHAT FABRICS	0	0	0	0	0	0	5,000	0	0	5,000	0.00	0.00
OIL & GAS DEVELOPMENT CORPORATION	0	0	0	0	50	50	(66)	(1,000)	(5,800)	(1,016)	254.21	(258,277.36)
PAKISTAN PETROLEUM LIMITED	0	0	0	0	1,300	1,300	(600)	0	2,050	700	199.25	139,475.00
PAKISTAN STATE OIL COMPANY LIMITED	0	0	0	0	6,700	6,700	584	(100)	10	7,184	268.00	1,925,312.00
PAKISTAN TELECOMMUNICATION COMPANY	0	0	0	0	0	0	(2,209)	0	(800)	(2,209)	26.96	(59,554.64)
SAUDI PAK COMMERCIAL BANK	0	0	0	0	0	0	375	0	0	375	4.00	1,500.00
SECURITY LEASING CORP	0	0	0	0	0	0	350	0	0	350	3.00	1,050.00
THE BANK OF PUNJAB	0	0	0	0	0	0	1,740	0	0	1,740	10.42	18,130.80
WAPDA BOND 10TH ISSUE	0	0	0	0	0	0	0	100	0	100	0.00	0.00
Page 1 of 2											Total:	1,737,252.10

Figure 16: Custody Net Share

Field	Function
Client Code	BY default client is populated
As on Date	By default current system date will populated
Type	Enter Type for format in which print is required. Available types are PDF,HTML,EXCEL
View Report	Press to view report on user screen
	Print option is available for hard copy of the report

Screen Name: Outstanding Order Report

This report will show the outstanding orders of the client in current date. Outstanding report will provide the view about the pending security either Buy or sell along with amount and total volume. Exchange, order type is also showing in the report. Once order executed outstanding order list will automatically updated.

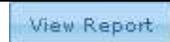
OutStanding Orders Report

Client: RMS01 - RMS Client
Printed On: 12/11/2013
Exchange: All

Number	Reference	TimeStamp	Exchange	Market	Symbol	Side	Nature	Rate	Volume	Executed	Status
20189	null	04/11/2013 11:22:23	KSE	REG	PSO	Buy	140	12.3000	20		0Queued
20192	null	04/11/2013 11:55:13	KSE	REG	PSO	Buy	140	12.3000	10		0Queued
20196	null	04/11/2013 12:11:03	KSE	REG	PSO	Buy	140	12.3000	50		0Queued
20197	null	04/11/2013 12:13:12	KSE	REG	PSO	Buy	140	12.3000	10		0Queued

End Of Report

Figure 17: Outstanding Order Report

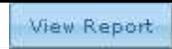
Field	Function
Client Code	BY default client is populated
Exchange	Select Exchange from drop down box
Type	Enter Type for format in which print is required. Available types are PDF,HTML,EXCEL
	Press to view report on user screen
	Print option is available for hard copy of the report

Screen Name: Cash Book Report W.R.T Trades

Cash book report shows the position of cash of a client with respect to trades. Total Debit and Credit balance can be viewed against each transaction. Description of his trades is also displayed on the report.

CashBook Report W.R.T Trades								
Client:	RMS01 - RMS Client	Client Lot Code:	TRDZT90002					
From Date:	12-Nov-13	Printed On:	12-Nov-13					
To Date:	12-Nov-13	Time :	11:22:05 AM					
Trade/Vouch #	Trade/Vouch Date	Chq/Bill #	Sett Date	Exchange	Description	Debit	Credit	Balance
	12/11/2013		12/11/2013		OPENING BALANCE	0.00	2,017,996,020.84	2017996020.84 CR
Total:						0.00	2,017,996,020.84	2017996020.84 CR
Outstanding Cash Withdrawal Amount:							42,000.00	
Net Cashbook Balance:				2017956020.84 CR				
Clearing Type		UnBilled Amount						
NCEL FL100OZ-DE10		6000.00						
NCEL G010Z-AP11		0.00						
CRUDE10-DE12		182.87						
T+2 NCSS		(104721.19)						
G010Z-FE12		(1654.20)						
NCEL SA100OZ-		6000.00						
NCEL SA100Z-DE10		(9000.00)						
PMEX TOLA GOLD		(192719.16)						
NCEL CLEARING		36907.56						
NCEL FL100Z-DE10		(9000.00)						
NCEL G010Z-OC11		0.16						

Figure 18: Cashbook Report W.R.T Trades

Field	Function
Client Code	BY default client is populated
From Date	Enter from date either manually or user can select from calendar
To Date	Enter To date either manually or user can select from calendar
Type	Enter Type for format in which print is required. Available types are PDF,HTML,EXCEL
	Press to view report on user screen
	Print option is available for hard copy of the report

Screen Name: Client Portfolio

Cash book report shows the position of cash of a client with respect to trades. Total Debit and Credit balance can be viewed against each transaction. Description of his trades is also displayed on the report.



Figure19: Client Portfolio

Field	Function
Client Code	BY default client is populated
From Date	Enter from date either manually or user can select from calendar
To Date	Enter To date either manually or user can select from calendar
Type	Enter Type for format in which print is required. Available types are PDF,HTML,EXCEL
View Report	Press to view report on user screen
	Print option is available for hard copy of the report

CHARTS:**SCREEN NAME: INTRA DAY CHART**

Live chart option is available in market watch. On simple click live chart window will load and display the result. Live chart option is available against each symbol. User can enable or disable the chart by clicking on **TURN OVER**. X-axis represents the time range and Y-axis represents volume range. Refresh button will update the chart on real time basis.

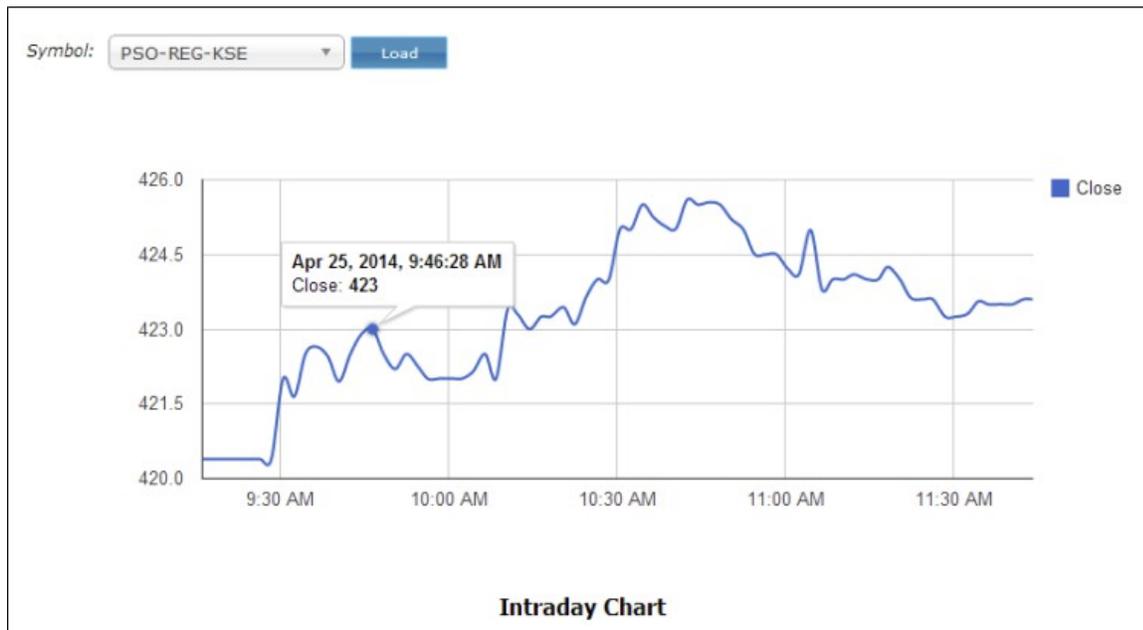


Figure 20: Intra Day Chart

SCREEN NAME: TIME LINE CHART

Time line is a chart that depicts how a set of resources are used over a period of time. In this chart user can view organized sequence of events in the order in which they occur. Selection based criteria is available for the user to view the chart. First select the option of Time Line Chart than enter symbol and hit load to view the chart.

Chart can be analyzed for different period of time like 1 month, 3 month, 1day, 5 day, 1 year and max(depend on the data stored for number of years in database. If we are having data for ten years than the graph for the chart created for ten years).

User can use the chart inspector to set the period. Period is defined in terms of years.

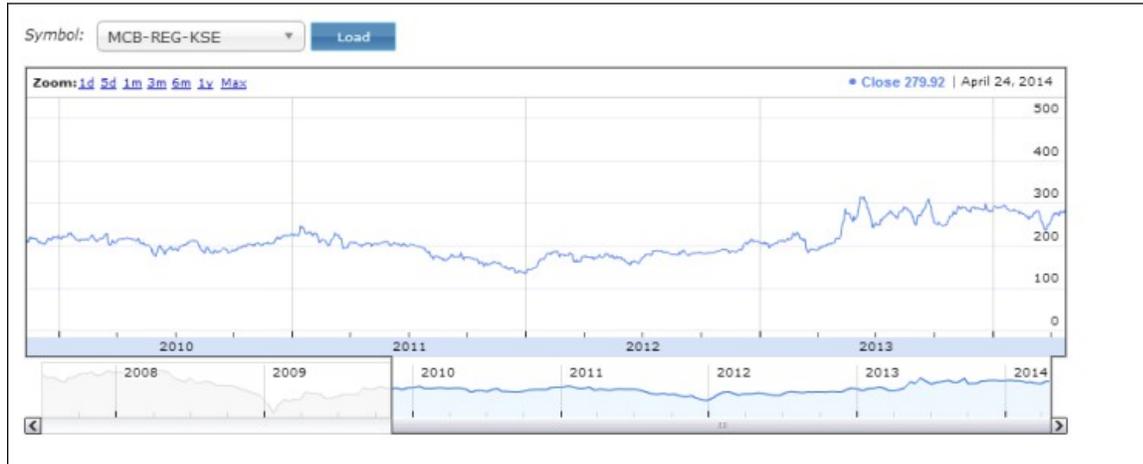


Figure 21: Time Line Chart

SCREEN NAME: CANDLE STICK CHART

A candle stick chart used primarily to describe price movement of a security, derivatives, or currency over time. Each bar represents the range of price movement over a given time interval. User require to select the type of graph as Candle stick chart and then select symbol and press load button to load the chart. Period translator machine is given below to select the period range for a graph.

1. **Fill Bar** 

A filled bar, usually blue, is created when a security's closing price is greater than price at which it opened.
2. **Fill bar with upper stick** 

Upper stick on filled bar show the max level of high price. It means highest price for the day.
3. **Fill bar with Lower Stick**

Lower stick show the min level of low price. It means lowest price for the day.
4. **Empty Bar** 

An empty bar, is created when a security's closing price is below the price at which it opened.
5. **Doji lines:**

Illustrate periods in which the opening and closing prices for the period are very close or exactly the same.



Figure 22: Candle stick

Y-axis: Represents the Volume

X-axis: Represents the Date and year

Screen Name: Comparison chart:

Comparison Chart is used to compare different shares for specific period of time. This combination chart is a best possible graphical representation for analysis of different symbols. Symbols are distinguished with red and blue colors. Symbol input field allow to select two symbols. Max two symbols can be selected. Y-axis represents the volume and x-axis represents the date and year over a define period of time. Time period can be defined from below given scroll option. Normally one year comparison will be allowed.



Figure 23: Comparison Chart