2017

User Manuals

STOCK MARKET SIMULATOR SYSTEM

THE UNIVERSITY OF LIVERPOOL

Group GWMF

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SOFTWARE DESCRIPTION

This stock market simulator software is designed for collecting, storing, analysing, and managing real-time stock information with a database implementation, and provides a simulating stock market to help customers who are interested in learning stock knowledge, or students who wish to practice stock trading skills in real life. And aimed at the customers who are interested in learning stock knowledge, or students who wish to practice stock trading skills in real life.

HARDWARE REQUIREMENTS

To run this software on your personal computer, there are minimum hardware requirements for your computer.

- Storage: 7200 RPM with 50MB available HDD space

Recommended (targeting on running s software smoothly over 1 years)

- Storage: 7200 RPM with 100MB available HDD space

SOFTWARE REQUIREMENTS

To run this stock simulator system on your computer, several software should be installed on your computer first to running it.

Required software:

- MySQL Workbench 6.3 CE
- JAVA 8
- JAR package: jfoenix.jar, resfb-1.39.0.jar, commons-codec-1.10.jar, commons-dpcp-1.4.jar, commons-logging-1.2.jar, commons-pool-1.5.4.jar, je-5.0.73.jar, json-20140107.jar, jsoup-1.9.2.jar, junit-4.11.jar, junuversalchardet-1.0.3.jar
- Anaconda 2 for Python 2.7 version

Preparation for using stock simulator system

1. Install Anaconda

1. Download the Anaconda installer.
2. Click Run to launch the installer. (NOTE: If you encounter any issues during installation, temporarily disable your anti-virus software during install, then re-enable it after the installation concludes. If you have installed for all users, uninstall Anaconda and re-install it for your user only and try again)
3. Read the licensing terms and click I Agree.

4. Select an install for "Just Me" unless you're installing for all users (which requires Windows Administrator privileges).
5. Select a destination folder to install Anaconda and click Next. (NOTE: Install Anaconda to a directory path that does not contain spaces or unicode characters. Do not install as Administrator unless admin privileges are required)
6. Choose whether to add Anaconda to your PATH environment variable. Unless you plan on installing and running multiple versions of Anaconda, or if you want to limit the length of your PATH variable, you should accept the default and leave this box checked.
7. Choose whether to register Anaconda as your default Python 3.6. Unless you plan on installing and running multiple versions of Anaconda, or multiple versions of Python, you should accept the default and leave this box checked.
8. Click Install. You can click Show Details if you want to see all the packages Anaconda is installing.
9. After a successful installation you will see the "Thanks for installing Anaconda" image:
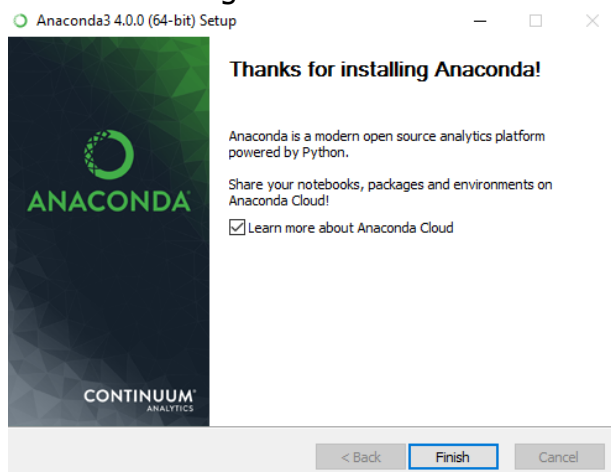
10. You can leave the "Learn more about Anaconda Cloud" box checked if you wish to read more about this cloud package management service. Click Finish.

2. Install MySQL WORKBENCH 6.3 CE

The general MySQL Installer download is available at http://dev.mysql.com/downloads/windows/installer/. The MySQL Installer application can install, upgrade, and manage most MySQL products, including MySQL Workbench.

MySQL Workbench can be installed using the Windows Installer (.msi) installation package. The MSI package bears the name mysql-workbench-community-version-winarch.msi, where version indicates the MySQL Workbench version number, and arch the build architecture (winx64).

1. To install MySQL Workbench, right-click the MSI file and select the Install item from the pop-up menu, or double-click the file.
2. In the Setup Type window you may choose a Complete or Custom installation. To use all features of MySQL Workbench choose the Complete option.
3. Unless you choose otherwise, MySQL Workbench is installed in C:\%PROGRAMFILES%\MySQL\MySQL Workbench 6.3 edition_type\, where %PROGRAMFILES% is the default directory for programs for your locale. The %PROGRAMFILES% directory is defined as C:\Program Files\ on most systems.

Set up Database

- Once installed MySQL in your computer, you have to set up database for server to store the core information.
- First at the top left where it says "MySQL Connections", click the "+" symbol to add a new connection (by default you won't have any defined connections when you start MySQL Workbench for the first time).
- Later the "setup new connection" box appears, give the connection a meaningful name (meaningful to you). Moreover, make sure the Connection method says "Standard (TCP/IP)" and the Parameters tab is chosen. In Hostname you have to put the name of the mysql server. Input "localhost" in the Hostname field. Leave the port (3306) as it is. Click OK.
- The main window for MySQL Workbench should now open. The Navigator panel on the upper of the left hand side has a schema section at the bottom. This is where you can select the appropriate aspect of your database that you want to explore. Choose the Server menu "Data Import" option. In the new tab that gets created, select "Import from self-contained file". Click the "…" to open a file browser and navigate to the location of the file where you put the "stockinformation.sql" file which we provide for you.
- Select that file and click open. In the section "Default Schema to be imported to" choose your database. Click "Start Import". Wait a little while and the database is all set.

3. Install JAVA JDK 8

The installation process starts. Click the Install button to accept the license terms and to continue with the installation.

Oracle has partnered with companies that offer various products. The installer may present you with option to install these programs when you install Java. After ensuring that the desired programs are selected, click the Next button to continue the installation.

A few brief dialogs confirm the last steps of the installation process; click Close on the last dialog. This will complete Java installation process.
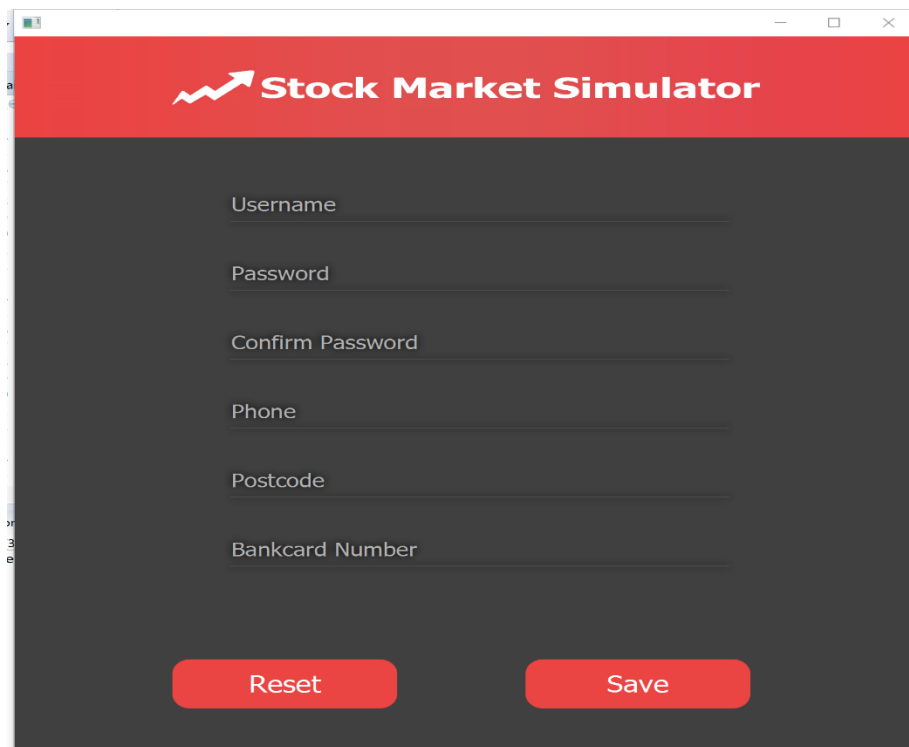

Note: Detect older versions (8u20 and later versions). Starting with Java 8 Update 20 (8u20), on Windows systems, the Java Uninstall Tool is integrated with the installer to provide an option to remove older versions of Java from the system. The change is applicable to 32 bit and 64 bit Windows platforms.
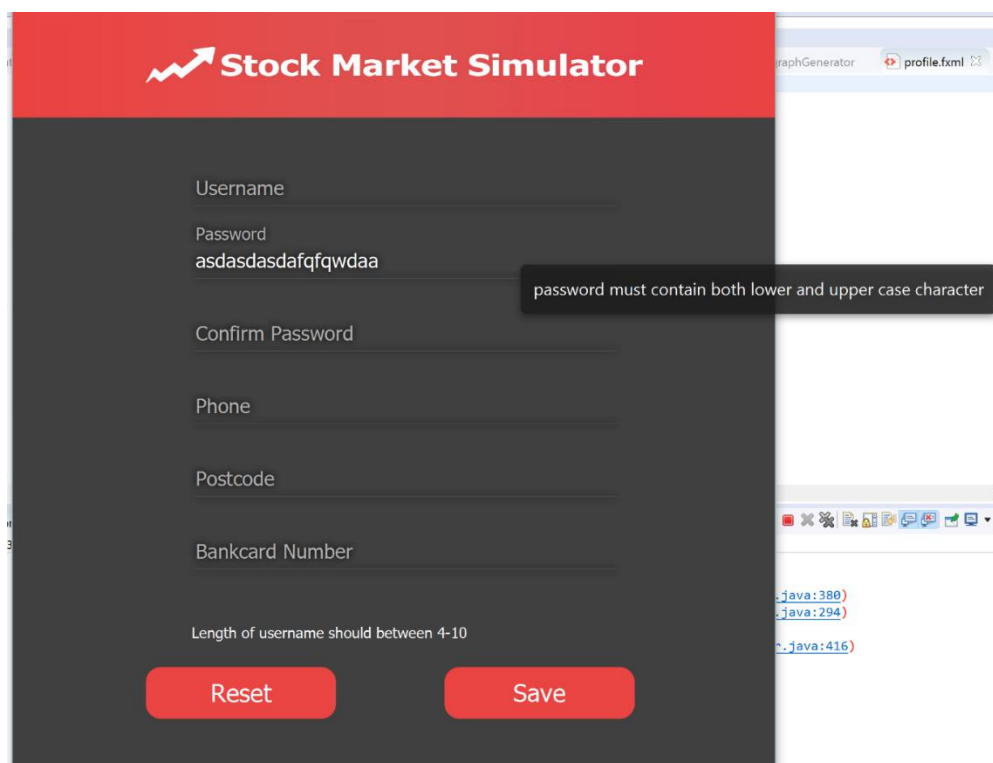
Now you finished all preparation for using our stock simulator system.

How to use our stock simulator

Login:

Please input userId first then password. Click on log in button and if both input correct match with the data stored in database, you will enter the main menu of our stock simulator system. Click on the sign up will head to the sign up window.

User Information stored in database (username and password are encrypted):

	user_id	username	password	surplus_fund	phone	postcode	bankcard
▶	1	emhhbmc=	◆)	28675	7510983293	l73rg	1231241231213
	2	emhhbmc=	◆)	0	123	2132123	123123
⁕	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Register menu:

User are required to fill all information in the sign up window, and part of them should follow some rules. Like password must contain both upper and lower case letter. Once finished, click save button then all information will store in database and turn userId for you to log in our system. Click on the reset button, all input will be set to blank.
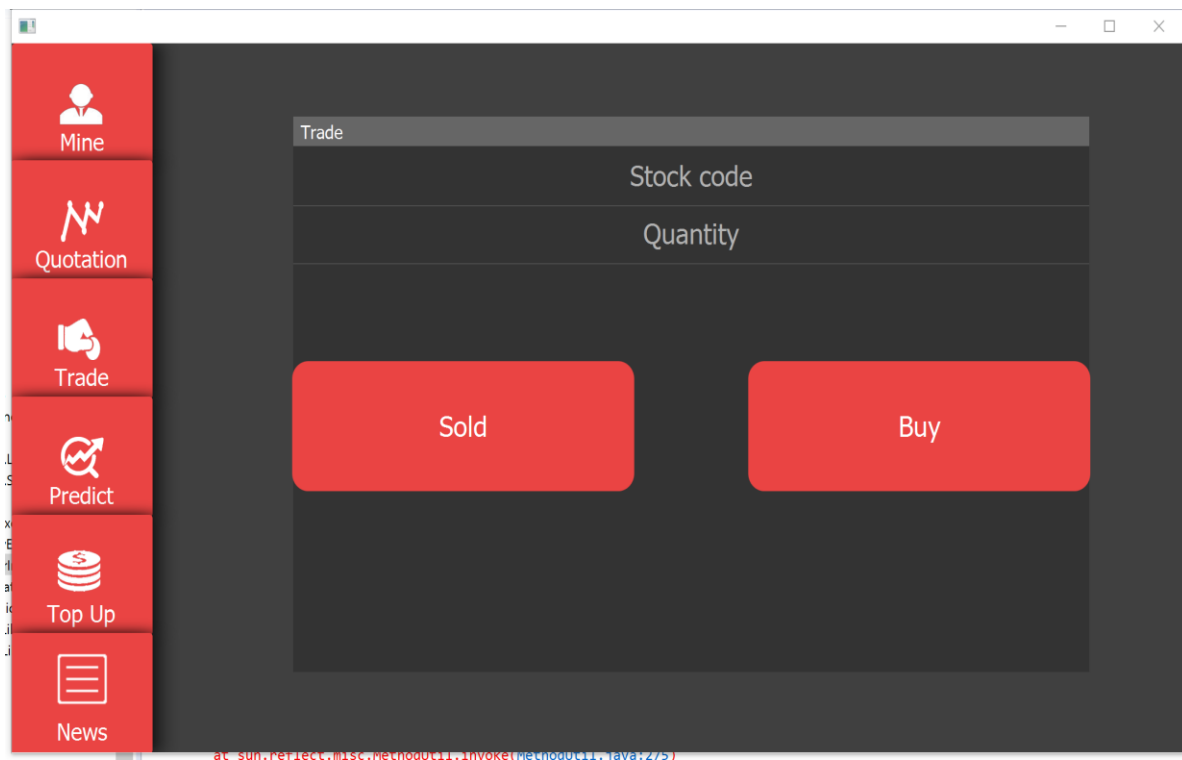
Main menu:
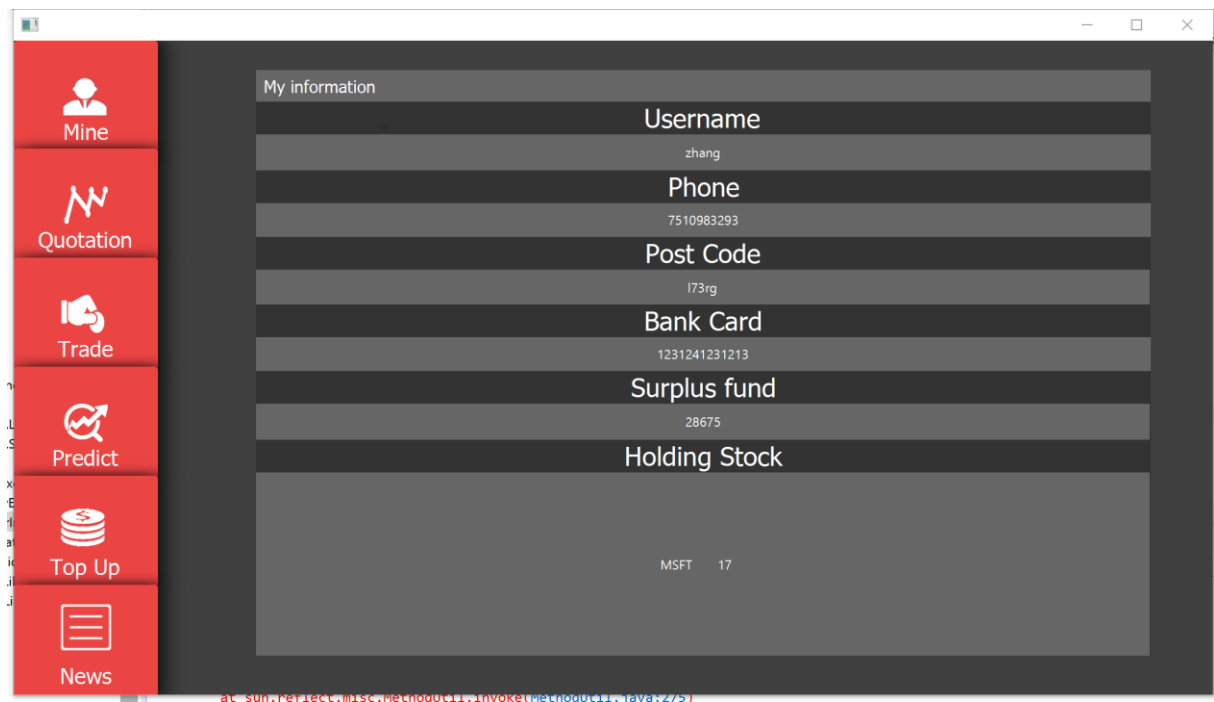
Once you click on the Mine button, our system will provide all your account information for you to check.
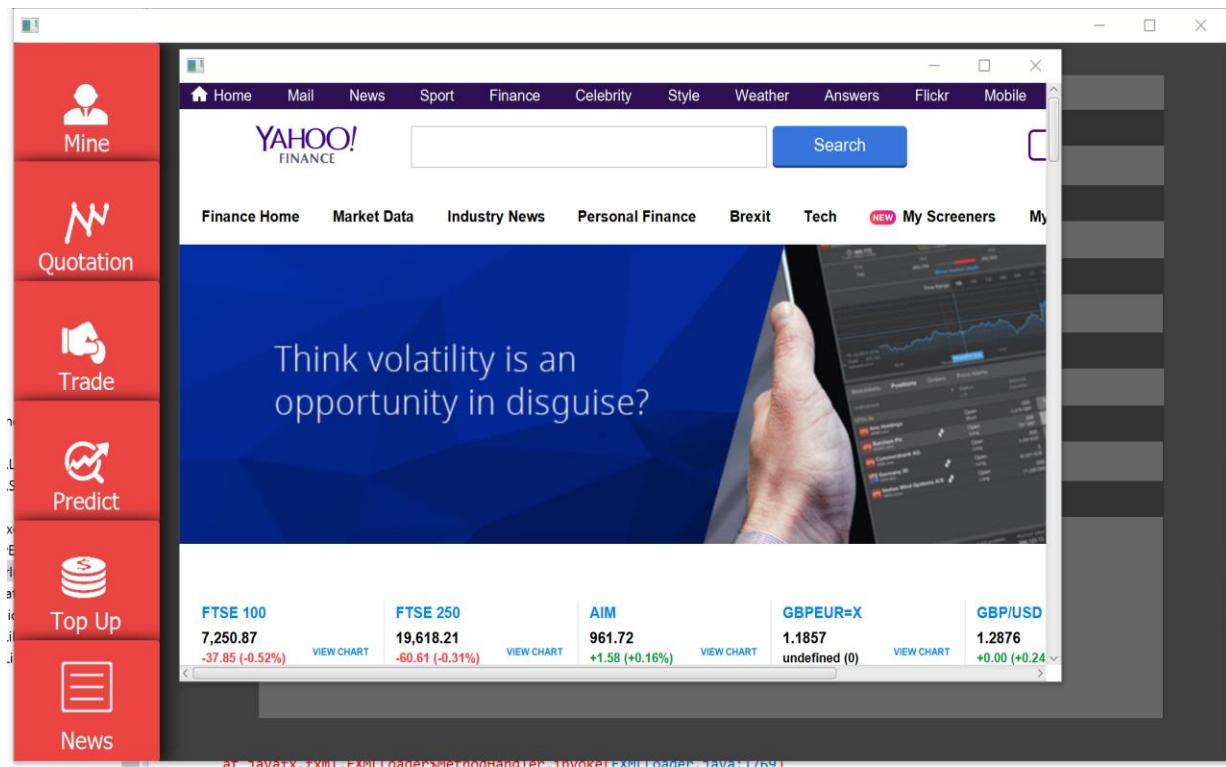

Once you click on the news button, a new window will be opened and hand to YAHOO financial website for you to explore the news of each company.

Once click on the trade button, window will switch to trade part for you. You can type in the stock code and quantity you want to trade. Once finished, click buy or sold, system will first check the correctness of this transaction. If valid, then change the data information stored in database and pop out success message. Else, pop out fail message to you.
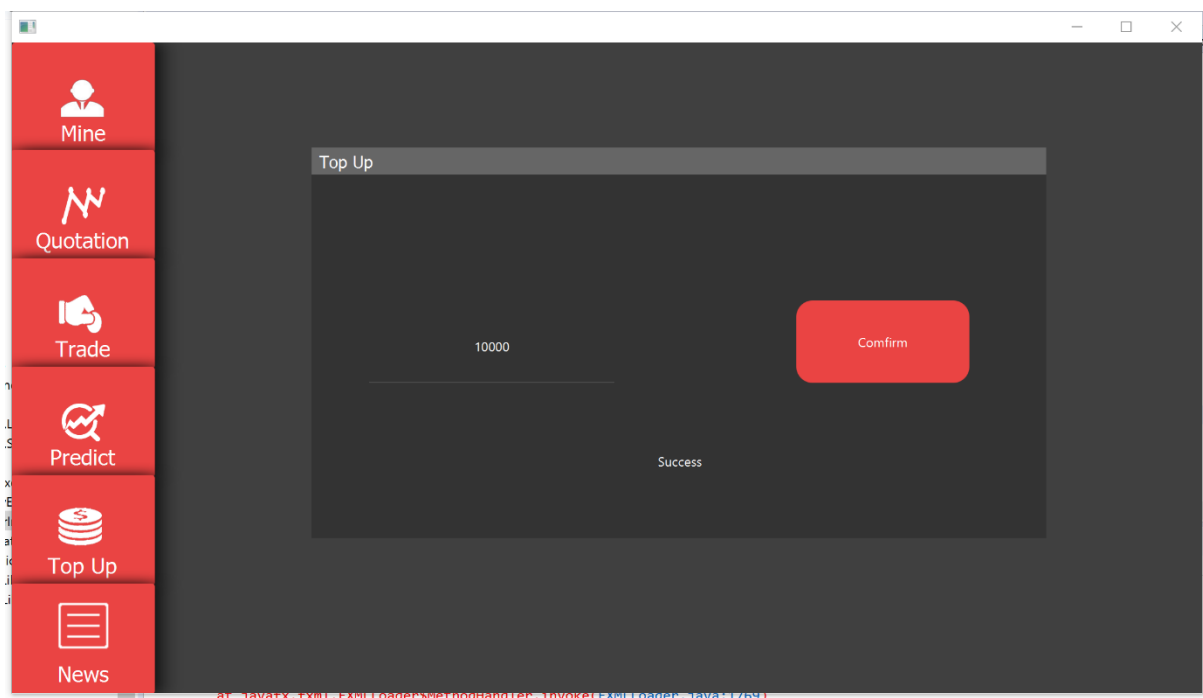
Once click on the top up button, you are free to input the amount money and top up for yourself. By click on confirm button, system first check the validation of the input. If valid, pop out success message or inform you the wrong input.
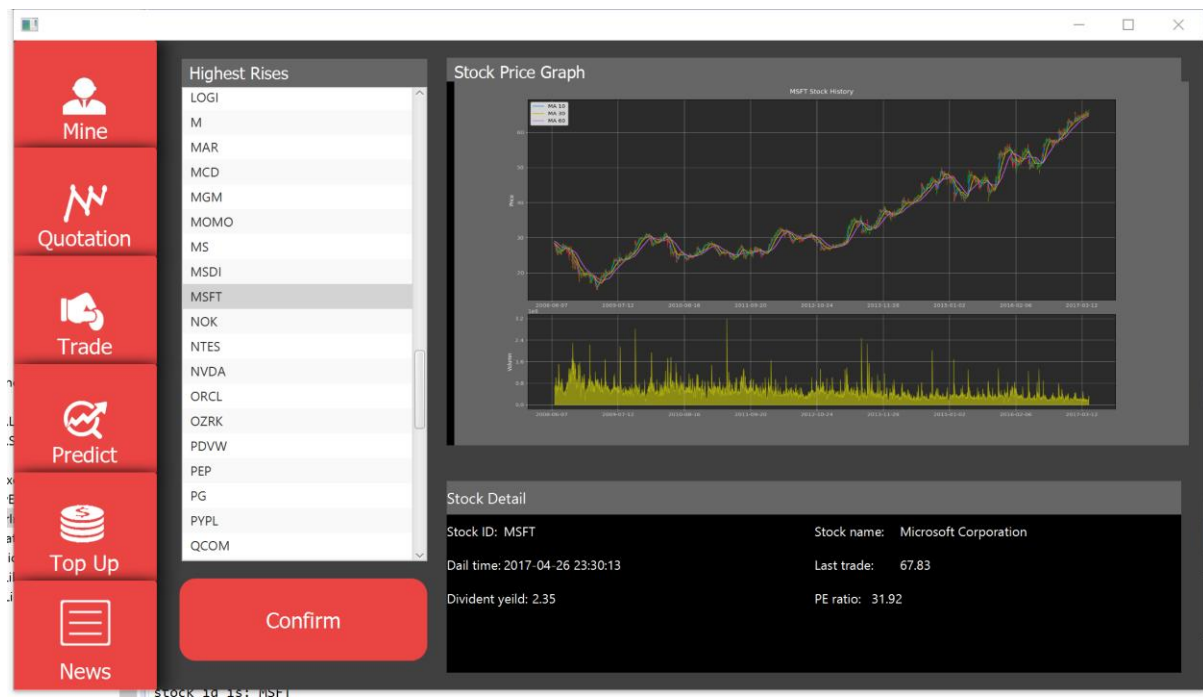
By click on the quotation button, you can check each stock price graph. First choose the stock code in the list then click confirm. A price graph and some price information will appear on the right side of the window for you to check.
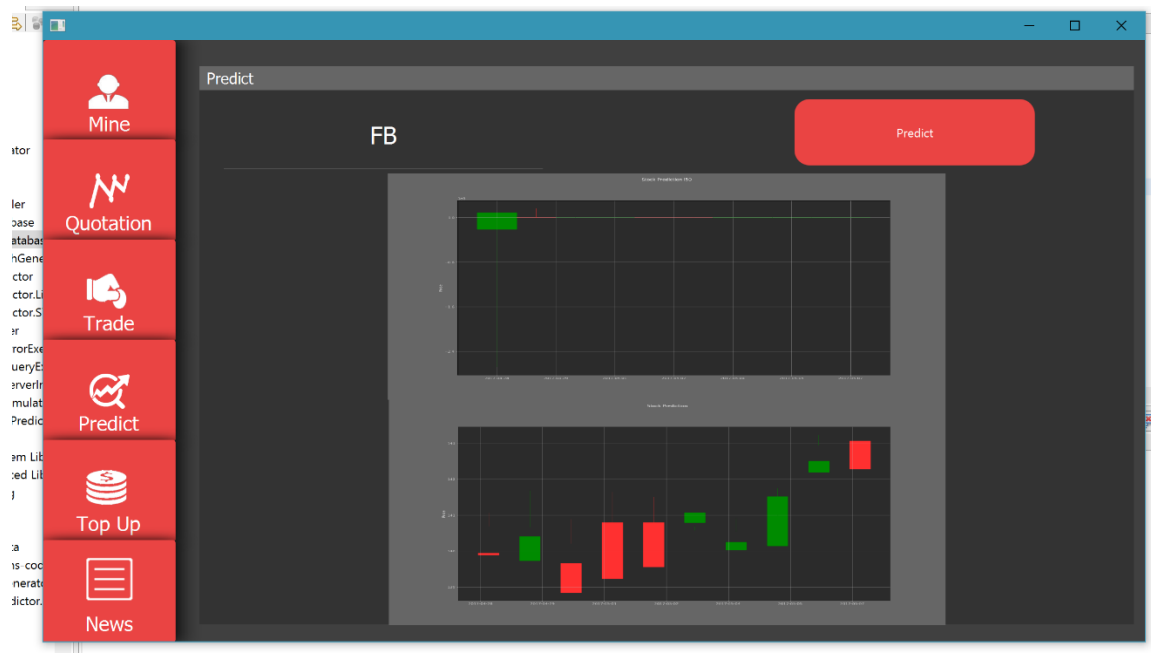
By click predict button, you can use this function to choose one stock to predict future price trend. First, input stock code and click predict on the right hand side. Wait seconds for system to running the algorithm and generate the graph. You can get two graphs from two different algorithm which may helpful for you in choosing stock to buy or sell.