**Stock exchange**

**Description**

You have to implement stock exchange system. System itself is a client-server application based on ASP.NET MVC and WebAPI.

On the server there is a stock registry of all companies, which participate in the exchange. Authorized broker can buy and sell stocks with restect to his capital. Server simulates exchange by continuous modelling of stocks' price change. Broker's aim is to gain as much money as possible by buying and selling stocks. Broker company executive can increase or decrease broker's capital.

**Requirements**

**Grade up to B.**

1. Client-server system based on HTML, CSS, ASP.NET MVC and WebAPI, Entity Framework, JavaScript (Jquery), database of a choice.
2. Authorization must be implemented.
3. Broker interface must implement view, search and filter of stocks according to different fields, e.g. company title, number, price dynamics.
4. Broker interface must have interactive information about stock quotes and ability to buy or sell stocks.
5. Broker capital is a money account, which can be increased by company executive through executive interface.
6. Executive must be able to view all his brokers with their capitals and recent operations.
7. Administrator interface must implement system restart.
8. System must randomly emulate stock price changes with an interval of 1 second.
9. Administrator must be able to manage companies.

**For grade A. In addition:**

1. Broker interface should be able to watch stock price history with statictics.
2. Executive interface should implement ability to view detailed information about broker activity.
3. History and current stock prices should be displayed as dynamic plots.