README of Exchange simulator

This project contains three parts: server, client and monitor. The server is used to receive order and give back response; the client can send order and receive response; the monitor is used to record every response and write it into a doc.

Although there is three parts, the two main parts are server and client. Then, I will introduce the usages of them.

In the part of server, you should first initialize the whole book I construct with two names of shares and insert them into the set named “share\_book” (the names of shares can increase if needed and I set the whole book with two share names).

Just like

shares\_book.insert("share1");

shares\_book.insert("share2");

whole\_book book("share1", "share2");

focus on the tag 55, which means the share names.

there is three kinds of orders:

1. Deal with a new-borned order

The order must contain tags in { "8","9","35","11","21","38","40","54","55","60","44","10" };

Eg:

string d1 = "8=FIX.4.2;9=0;35=D;11=456;21=1;38=1000;40=2;54=2;55=share1;60=2017051614:46:00;44=12.34;10=000;";

string d2 = "8=FIX.4.2;9=0;35=D;11=asd;21=1;38=1300;40=2;54=2;55=share1;60=2017051614:53:00;44=12.57;10=000;";

string d3 = "8=FIX.4.2;9=0;35=D;11=1q1;21=1;38=10456;40=2;54=2;55=share1;60=2017051614:54:00;44=32.76;10=000;";

string d4 = "8=FIX.4.2;9=0;35=D;11=a45;21=1;38=1010;40=2;54=2;55=share1;60=2017051614:55:00;44=12.07;10=000;";

1. Cancel an order
2. Return all existing orders

In the part of client, you should first choose what kind of order you want to send and then build your order. It is rather easier than server.

The operation is introduced above, and now I will talk about the frame of my work.

in both server and client, I build the class order and order\_book which is a list of orders, building some functions and subfunctions. I have remarked each of them in my work and you can clearly understand what I want to mean.

My work has been fully tested before it contains “boost” which is used to connect them. And one of the problem is that my work is lack of the test of “boost”.

Thank you for your reading and your brilliant and leading class.