Algo-trading market Client HLD

The program simulate Algo-Trading market.

It bridges between the client side and the server side using the following requests.

### Sell request

A sell request is a request that when posted to the server shows the will of a user to sell some amount of a commodity for a certain price. Posting sell requests automatically reduces the amount of available commodity the user has.

A sell request contains a commodity id, amount and ask price. If the user has enough resources to make the sell, the market replies with a sell ID.

### Buy request

A buy request is a request that when posted to the server shows the will of a user to buy some amount of a commodity for a certain price. Posting buy requests automatically reduces the amount of available funds the user has.

A buy request contains a commodity id, amount and bid price. If the user has enough resources to make the sell, the market replies with a buy ID.

### Cancel request

A cancel request contains an ID of the sell/buy request to cancel and refunds any commodities or funds invested in that request.

### Query sell/buy request

This request returns information about the buy/sell request with the given id.

The query request contains an ID of the sell/buy and returns the current information about the sell/buy (request information, units remaining).

### Query user request

The query request is empty (besides authentication) and returns sell/buy IDs, and for each commodity, how many the user owns (zero if the user doesn’t own it)

### Query market request

This request returns information about the market state of a certain commodity.

The query contains a commodity ID and returns the best ask price and best bid price for that commodity in the market.

Details about:

Terminology, Trading framework and Actors can be found here:

<https://goo.gl/xUwXR2>