Algo-trading market emulator LLD

For terminology and other relevant information please refer to the server LLD document.

<https://goo.gl/h5MyZu>

The project id delegated to three sub-projects(layers) containing the following:

**Presentation layer:**

The presentation layer contains only the Main Class which describes the user-console communication interface.

**Classes:**

Main Class –

In this class (currently the only class in this layer) a Request Manager class instance is created in order to enable a convenient way to operate the functions from the Data Access Layer. Through this instance the layer uses the functions in the DAL(Data Access Layer) according to the user requests and inputs.

**Functions**

IsDigitsOnly(string str) – an input check function to check if a given string is made only from numbers

**Business layer:**

*Will be filled in the next Milestones.*

**Data Access layer:**

In this layer, the requests of the user and his inputs are being processed and sent to the server, using the classes and functions of the layer.

**Classes**

**RequestManager Class** – this class operates as the main class of the DAL. This class contains all the functions communicating with the server with the adequate inputs as given from the Presentation Layer. This class implements the IMarketClient interface as given in the MarketClient solution.

**Functions**

Each of these functions creates an instance of SimpleHTTPClient, and use that instance in order to use the SendPostRequest function, which is used in order to translate the requests and send them to the server.

SendCancelBuySellRequest(int id) –

SendBuyRequest(int price, int commodity, int amount) -

SendSellRequest(int price, int commodity, int amount)

SendQueryBuySellRequest(int id)

SendQueryUserRequest()

SendQueryMarketRequest(int commodity)

**Requests Classes**

These classes include no functions, only appropriate fields (according to the input needed of the function) for creating requests instances.

BuyRequest Class

SellRequest Class

CancelRequest Class

QueryMarketRequest Class

QuerySellBuyRequest Class

**Query outputs Classes**

These classes include one function – ToString(), and appropriate fields (according to the output received from the server) . these Classes implement the interfaces as given in DataEntries folder in the MarketClient solution.

MarketCommodityOffer Class

MarketItemQuery

MarketUserData