ASE Team Assignment 2

Trade Wizard-JP Morgan Project
ASE Avengers

Akanksha Gupta (ag3749)
Ishan Guru (ig2333)
Stanislav Peceny (skp2140)
Brennan Wallace (bgw2119)

Link to Trello Boards:

CRC Cards: *https://trello.com/b/YF8QIHcb/crc-cards*

Class Diagrams: *https://trello.com/b/meDTsvWe/class-diagram*

Task Board: *https://trello.com/b/RyfTSza6/ase-project*
Class tags viewable upon inspection of board cards.

GitHub Wiki Link for CRCs: *https://github.com/brennangw/tradeWizard/wiki/_new*

GitHub Wiki Link for Classes: *https://github.com/brennangw/tradeWizard/wiki/Classes*

CRCs

We have three CRC cards, Child Trade, Parent Trade and the Trader Account.

Child Trade: This represents the action of connecting to the exchange to query data and records the returned messages from the exchange. This collaborates with the parent trade as for each parent trade, we have child trades to process the complete parent trade.

Child Trade	
Responsibilities	Collaborators
Connect/Send to exchange	Parent Trade
Records message to and from exchange	

Parent Trade: This represents the action of creating the child trades for the parent trade. The created child trades are then sent to exchange to make an actual trade. Further, if a time is preset, it should stop sending the child trades to the exchange. Further the trader also has the option to stop sending child trades to the exchange. He can then perform the whole order in one bulk transaction or decide not to perform anything. This further collaborates with Child Trades as every parent trade has respective child trades for it. Further it also collaborates with Trader account to maintain a history of what is performed and by which trader.

Parent Trade	
Responsibilities	Collaborators
Creates child trades and send them to the exchange	Child Trades
Stop sending child trades after a preset time	Trader Account
Stop sending trades if specially requested by the trader	

Trader Account: This represents the trader account. The responsibilities include creating the parent trade, view the dashboard based on the trades being performed, edit user account details such as name, email. Also the trader has the control to start and stop the trade.This collaborates with Child Trades and Parent trade.

Trader Account	
Responsibilities	Collaborators
Creates parent trade	Child Trades
Access a nice data set based on the account's trading	Parent Trade
Change user account information (Name, Email, User Name)	
Start a parent trade	
Stop a parent trade from running	

Class Diagrams

Following are the classes we have made use of.

Child Trade: This class contains the following details. It contains all details related to a trade and sends that date to exchange. Details such as ETF traded, price, timestamp are all tracked here.

Child Trade

Message Sent
Message Received
ETF
Price
Time
Side
Quantity

Send to Exchange

Parent Trade: This class contains details like ETF, Price, ec. This maintains a record of all corresponding child trades linked to a parent trade.

Parent Trade

ETF
Price
Start Time
Side
Quantity
Interval Length
Number of Intervals
Child Trades

Start Sending Child Trades
Stop Sending Child Trades

Trader Account: This class contains details for the trader like name, email, username and the parent trades performed by the trader.
Also the trader has control over starting trades, stopping trades, and fetching data.

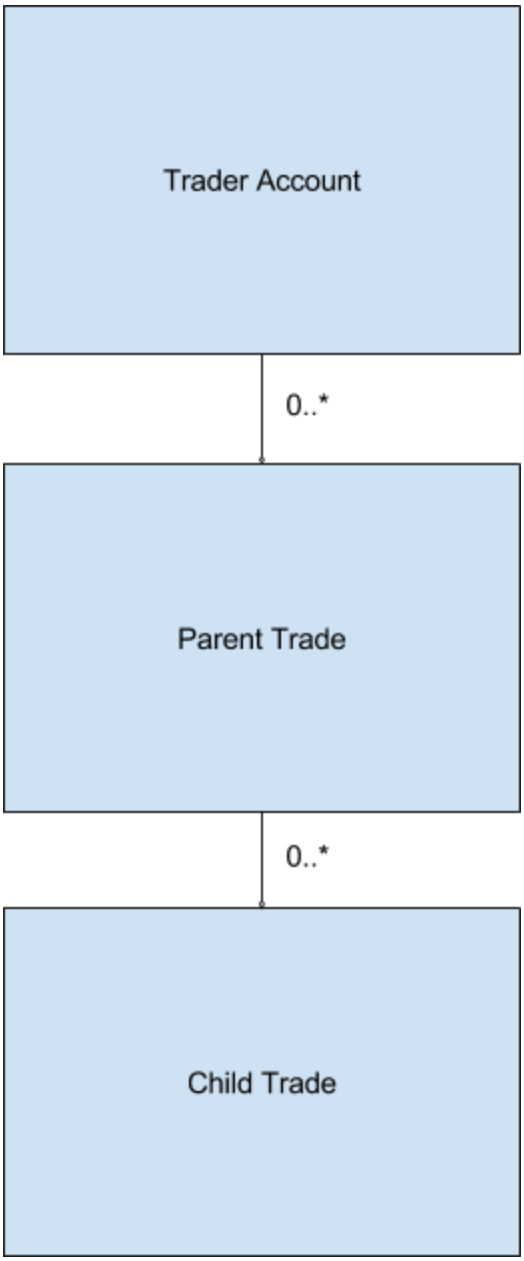
Trader Account

Name
Email
Username
Parent Trades

isActive

Change Name
Change Email
Change User Name
Cancel Parent Trade
Create Parent Trade
Start a Parent Trade
Get data

Class Diagram



Discussion: The class diagram represents the interaction between the three classes in our system. The trader account class has one to many relation with the Parent Trade class. This is because of the fact that a single trader can perform multiple parent trades. Further the parent trade class has one to many relation relation with the child trade class. Every parent trade can have one (if trade is done as bulk in one go) and many relation if a parent trade is broken down into multiple child trades.

Are some tasks too big or too small?

Yes, all tasks are not equally heavy. Some tasks like creating a login, logout or registering a new trader are small and fast to do with Meteor. Major tasks like connecting to exchange and sending the parent/child trades to the exchange and further retrieving back data to dashboard for the trader are big and challenging.

Are there some CRC cards and/or class diagrams that do not belong to any task?

No, all are CRC cards and class diagrams correspond to one or the other task on our taskboard. There are instances where a single CRC card and a class diagram spans over multiple tasks.

Re organizing your tasks, adding, removing and reassigning?

We did reorganize some of the tasks and divided the high level tasks into more granular buckets. As an example, we had a major task as ; display data back from exchange to the user. This was vague and had many tasks involved. So we further sub-divided this bigger task into smaller modular tasks as:

1. Parse the data returned from the exchange API Query
2. Render live data to HTML Pages
3. Render dynamic tables to display data
4. Add filters to data displayed, like filter on basis of time stamp

CRC cards and class diagrams using github "issues" (or "wiki")

Our CRC cards and classes have been recorded on GitHub wiki at following links:

GitHub Wiki Link for CRCs**:** *https://github.com/brennangw/tradeWizard/wiki/_new*

GitHub Wiki Link for Classes**:** *https://github.com/brennangw/tradeWizard/wiki/Classes*