

Team Assignment 2: Architecture and Project Planning

Trello Link: <https://trello.com/exceptionhandlers>

GitHub Link: <https://github.com/gabriellet/thepriceisright>

Note: We've also stored the CRC cards/class diagram in the "Issues" Section of our github repo and on our Trello Taskboard.

CRC Card: Class Parent Order	
<u>Responsibilities:</u> <ul style="list-style-type: none">• Accept trade from user (i.e. when a user places an order on our app, it creates a Parent Order)• UI: Show prompt confirming the details of the parent order (e.g. sell 100k shares of ACME ETF)• Execute the Time Weighted Average Price algorithm given by JP Morgan (essentially, split the order into even chunks and sell those periodically. We call these chunks "Child Orders". So a 100k Parent Order might split itself into 10x10k Child Orders.)• Keeps track of order progress (e.g. how many Child Orders have sold successfully)	<u>Collaborators:</u> <ul style="list-style-type: none">• User• Child Order

CRC Card: Class Child Order	
<u>Responsibilities:</u> <ul style="list-style-type: none">• Attempt to sell each chunk through calling the market simulator API• Note down the results of the API call e.g. if succeeded, note the price each chunk successfully sold for. (Each child order needs to notify its Parent Order when it succeeds/fails)• When selling a chunk fails, try to sell it again after waiting a few minutes.• If we encounter repeated failures, the Child Order will split itself into even smaller chunks (e.g. 10k Child Order might now become 2x5k Child Orders).	<u>Collaborators:</u> <ul style="list-style-type: none">• Parent Order

CRC Card: Class User

Responsibilities:

- Keep track of all the Parent Orders associated with the user
- Initiate new Parent Orders when a user wants to
- Cancel current Parent Orders if a user decides to stop selling
- Handle authentication i.e. Our app will have User objects with username/password fields to authenticate with

Collaborators:

- Parent Order

UML Diagram

