

Project.O

Project.Alphabet.O

What we will do

A strategy pack containing 6 / 7 different options strategies to earn money all the time.

What we need to do

Finish all 4 different milestones: <https://github.com/ProV1denCEX/Project.O/milestones>

Work division:

Milestone 0:

We need to select a certain ETF that fulfil our strategy requirements below:

- It should have great trading volume and be well known to investors (without too much explanation in our final presentation).
- It should have derived options trading in exchanges (CBOE or others). Its options should also have enough trading volume.
- The historical data for both ETF and options should be long enough, at least 5 years for daily data. Longer is better.

For Data Collection and Update, there are some unnecessary requirements:

- The module should be designed to be replaced with other options and ETF easily.
- The module should be designed to be replaced with other data source easily.
- target selection: Chenxi -> SPX
- Data Collection: Wenhan, Saurabh
- Data Update: Saurabh

Due: Feb 25

Milestone 1:

We need a BT platform at least supports: multi options trading ETF Data loading alternative data loading professional trading details This platform should base on python or MATLAB.

Platform preparation: Frontal. Prototype finished, need to be adjusted.

- Different scenarios simu and analysis in BT. Need to explain the performance under different scenarios.
 - scenarios design: Wenhan, Saurabh
 - scenarios test & pressure test: Chenxi

Due: Mar 2

Milestone 2:

Build our strategies. Strategies' file format should fulfil the requirement of #milestone 1

- Strategy build:
 - Chenxi. Ideas and codes finished, need to be adjusted.
 - Wenhan, Saurabh: 1 or 2 more strategies each

Strategies Designed:

- Tracer (Main) -> (sell) to earn theta and delta recession
- Tanker -> (sell) near-month contracts to increase the usage of money (when iv goes up)
- Hyper gamma -> (buy) to bet a great vol when near expire date
- Lancer -> buy call when the market boom
- Archer -> buy call when the market rise
- Doom's Lottery -> buy lotteries when comes to expire date
- Joker -> undecided

Due: Mar 16

Milestone 3:

- Allocation plan: Chenxi. Platform finished, waiting for the result of Backtest.

Strategies constrains and priorities:

Tracer -> 50% ~ 70%
Tanker -> 70% - Tracer
Hyper gamma -> 0% ~ 10%
Lancer -> 1% ~ 3%
Archer -> 3% ~ 5%

Doom's lottery -> 0.05% ~ 0.5%

Joker -> undecided

Due: Mar 23

Milestone 4:

- Slides: unknown, need to be compared for each one's works before.
- Rule book:
 - Prototype: Wenhan, Saurabh -> find a good rule book sample suitable for our project.
 - Content fill-in: All members -> Chenxi needs to explain the whole project in plain words and make teammates fully understand what we've done. Then all the members finish the rule book.

Due: 2 weeks from final pre