I have done the part of understanding of the problems and we did some exploration on the data.

As we want to be an app that is more trader-focused, what are different groups among current customer base (e.g., based on their trading activities, KYC profile, etc)?

- The amount of the trading money

- The frequencey of each trade and withdraw

- Segment time length

- The investment areas (symbol)

Are there any differences/similarities amongst identified customer segments on a cohort/temporal level? Are there any insights on users moving from high value to low value segments?

- Yes, based on the segments and the frequency + amount of withdraw, we can tell whether they want to do investment on GoTrade.

What are the implications for the marketing strategy?

- Different marketing strategies may have different implications on each user, for example if we push some information that the users may be interested to, they may pay more effort on this app to do more investment. So as the profit for the company may increases. On the other hands, if we just push the same information to all the user, this may lead to negative implication.

What is the goal or purpose of my model?

- Clustering the user based on the user's segments, trading history, as well the user behaviors in an appropriate way. For example, their investment interests and risk.

Who are the business users of my model and how can they use it?

- Besides the clustering mentioned above, we can recommend the product and information to each users based on the interests that we defined in the model.

What data do I have and do I understand the various fields?

```python

class user {

deposit\_id [] #deposit

segment\_event ['screen\_name','event\_tracked\_at'][]

segement\_tap\_event ['event\_name','event\_tracked\_at'][]

trade []

withdrawal\_id []

churn\_date []

segment\_v1 #trade level (Given by the Gotrade data)

segment\_v2 #will be generated on case study 1

}

class deposit {

deposit\_id

deposit\_value\_usd

deposit\_method

deposit\_paid\_at

deposit\_ranking

}

class trade {

id #

symbol # investment company name, AAPL....

trade\_order\_level\_filled\_at #trading date and time

order\_type #USD? SHARES?

side #buy? sell?

qty #the number of trade

trade\_value\_usd #trading value

avg\_price\_usd #trading value unit

}

class withdrawal {

withdrawal\_id

withdrawal\_value\_usd

withdrawal\_executed\_at

}

```