# DESIGN OF ALGORITHM TRADING PROJECT

Jian Chen

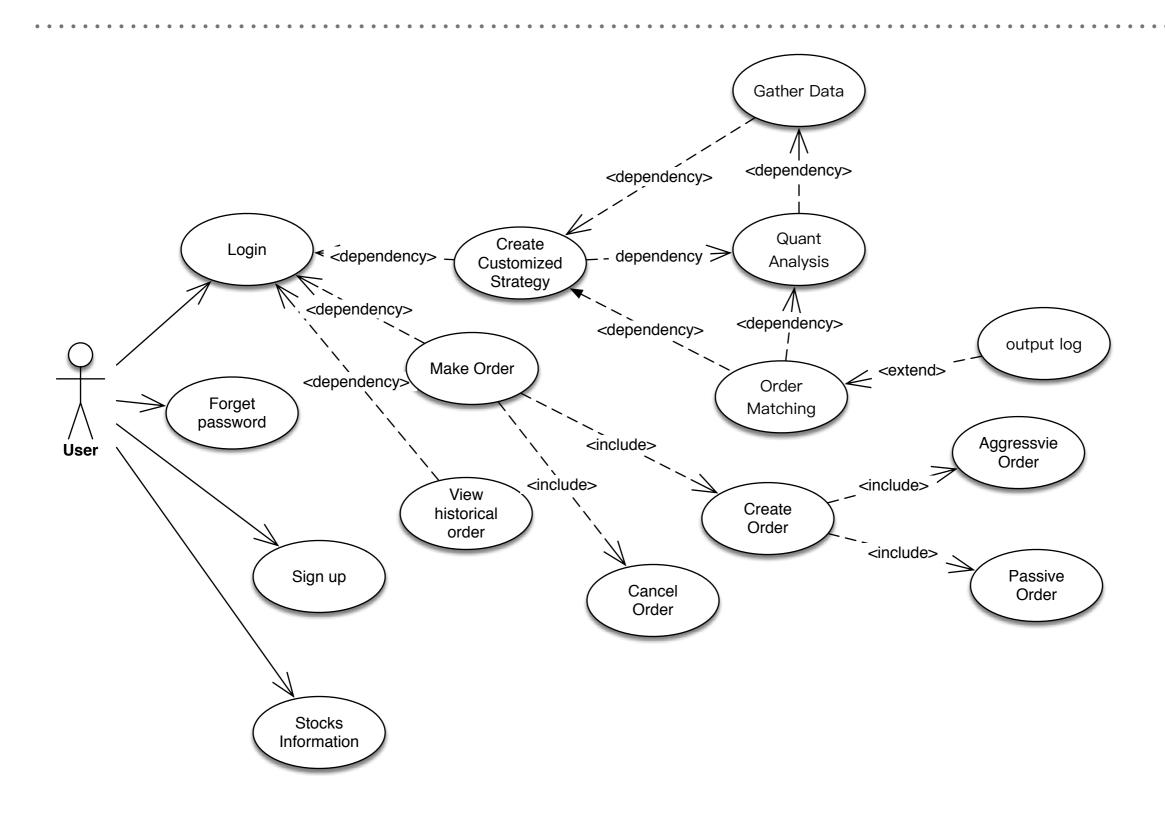
# **TEAM MEMBER**

- ➤ Benchi Shao
- ➤ Guodong Shen
- ➤ Jian Chen
- ➤ Ruihong Yan
- ➤ Yiqun Xiao
- ➤ Yu Qiu

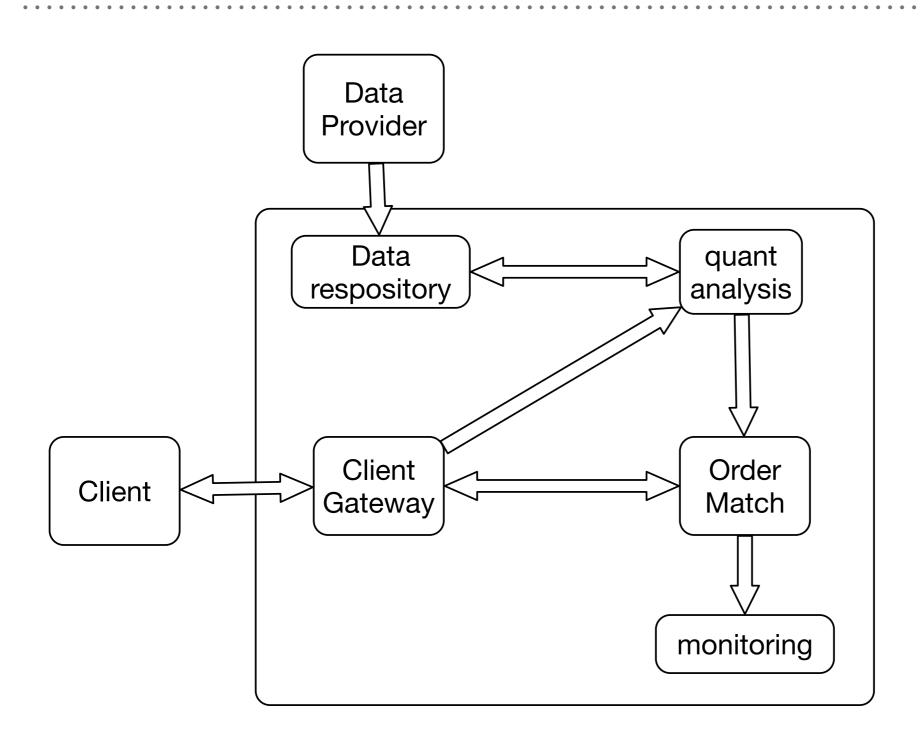
# **CONTENTS**

- ➤ Understanding to the requirement
- > System architecture & Message interaction
- ➤ Technology concern and solution
- ➤ Development Plan

# UNDERSTANDING TO THE REQUIREMENT



### SYSTEM ARCHITECTURE & MESSAGE INTERACTION



#### TECHNOLOGY CONCERN AND SOLUTION

- ➤ Programming Language: Python3
- ➤ Relational database: MySQL
- ➤ Graphical user interface: Qt5

- Some popular backtesting library using python
  - > zipline
  - pyalgotrade
  - ➤ vn.py







#### **LIBRARYS**

- ➤ Tushare: get real-time quotes
- ➤ Easyquotation: download sina finance data
- Numpy: process data
- ➤ Pandas: process data
- ➤ Matplotlib: plot library
- > PyQt5: build graphical user interface
- PyMySQL: connect to mysql database
- > SQLAchemy: connect to database using orm
- ➤ Logging: log

# **SOME CONCERN**

- ➤ Performance of Matplotlib
- ➤ Consistency between our system and real market

### **DEVELOPMENT PLAN**

- ➤ Now: finish data acquiring
- > Future:
  - functions of quant analysis
  - order making system(user)
  - order matching system
  - graphical user interface

