Annex Project Planning Document

Project Name:	Day trading system
Due Date:	April 5th 2020

This is the pre-project planning document for our group to introduce ourselves a little and to list some important dates and plans for us to present to our client.

Participants

Name	Role	Contact information
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Milestones

Milestone name	Target date	Due Date
1. 1 user workload file	Jan 30th	Jan 31st
2. 10 user workload file	Feb 4th	Feb 7th
3. 45 user workload file	Feb 12th	Feb 14th
4. 100 user workload file	Feb 25th	Feb 28th
5. 1000 user workload file	Mar 10th	Mar 14th
6. Final 2019 workload file	Mar 25th	Mar 27th
7. Demo of web interface	April 1st	April 2nd
8. Presentation	April 1st	April 3rd
9. Deadline for submission	April 3rd	April 5th

The Objectives

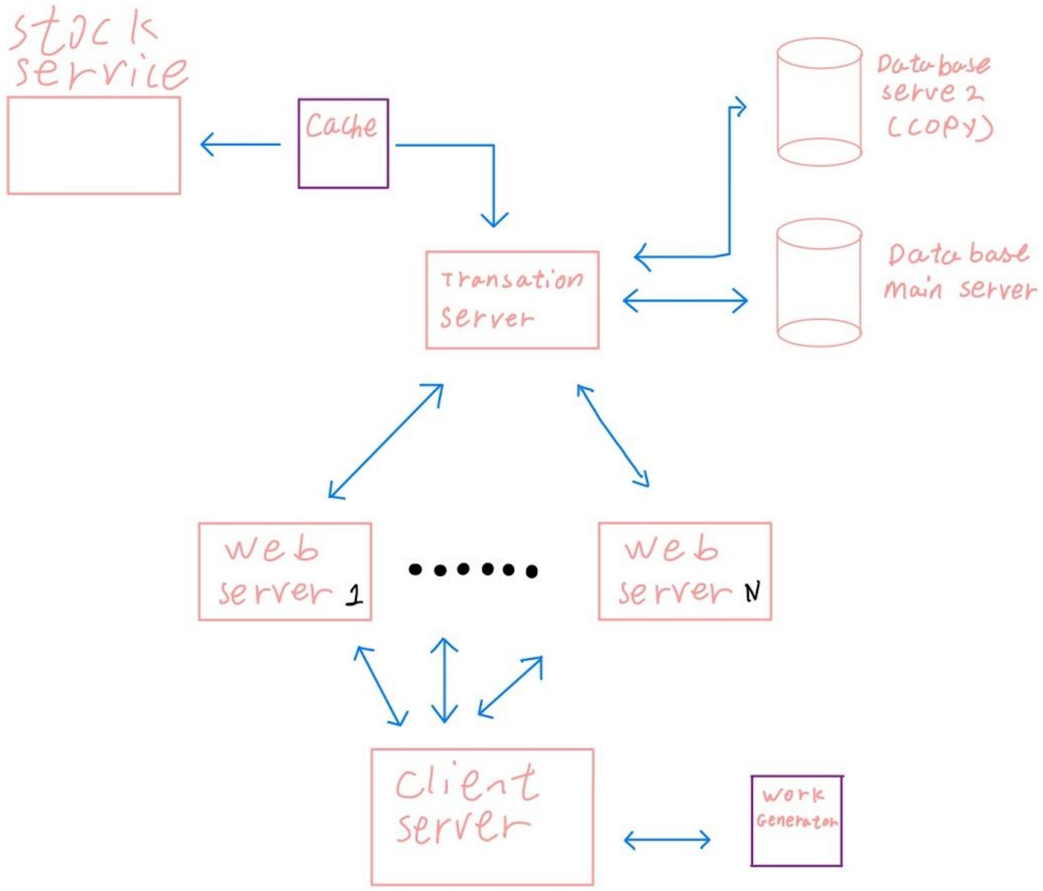
The project offer by DayTrading Inc. Require our team to build a end-to-end stocks trade system. The system must be good quality and high performance. Our final goal is to be able to handle 1000 users can use at the same time with no bugs and no errors. Our team able to use any framework or any technologies and any programming languages. One thing we must follow if we must use docker to build up this system, and that makes everyone able to pull our project docker images and run as same building environment.

Project Scoop:

The new system must contain the following functions:

- View their account
- Add money to their account
- Get a stock Quote
- Buy a number of shares in a stock
- Sell a number of shares in a stock they own
- Set an automated sell point for a stock
- Set an automated but point for a stock
- Review their complete list of transactions
- Cancel a specified transaction prior to its being committed
- Commit a transaction

Base Architecture:



Architecture Description:

Stock Quote Server: The quote server already provide for us and we only can use it, and not able to edit the quote. We can use the quote command to get the current stock price. This server is touch to the transtraction server and it can communicate with transtraction server and give the response to transtraction server.

Transtraction Server: This server is the main part of this system, and it like the cpu in a computer. it's job is to take the user commands and handle it and give a repose back to users. Transtraction server connect to quote server, database, and transfer data between quote server, database, and clients.

Database (Main): The database connect to the translation server, so only translation server can get the data and pass to the client. Other server if want to get data from database must need to send a request to transtraction server first.

Database 2 (Sub): The database 2 is sub database, once the main database down the transtraction server still able to get the data from the database 2, so it provides a minimal protection of the system running.

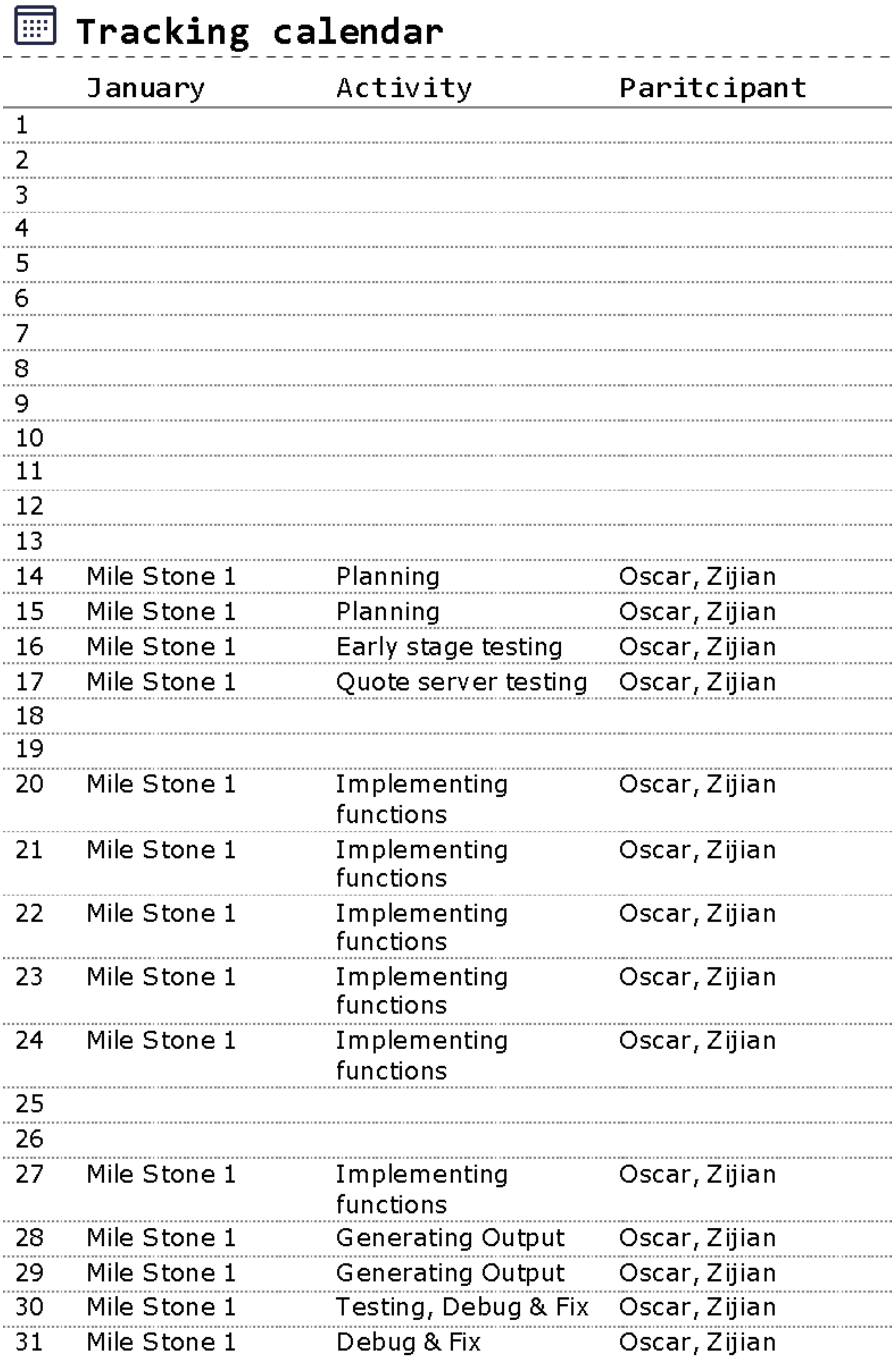
Web Server: This Web server takes client's request and forwarding to the transtraction server, it may generate out several web server, if there large amount users are using the system at the same time. It is try to reduce the web client working pressure and protect the system not to crash.

Workload Generator: Because this is a prototype, so we don't really have that much users to test out our system. So the user commands is already logged into a text file, so the workload is a simulation of user inputs.

Clients: Clients input the commands to do something with the system. For example, Buy, Sell Add funds commands.

Cache: It help us increase the speed of transtraction to get something from quote server because our quote server is old server it has its own limitations, so if we use cache to store some data between the quote server and transtraction server and it will improve the working speed.

Below is a Tracking calendar, to access, double click anywhere on the calendar.



Tracking calendar

	January	Activity	Paritcipant
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14	Mile Stone 1	Planning	Oscar, Zijian
15	Mile Stone 1	Planning	Oscar, Zijian
16	Mile Stone 1	Early stage testing	Oscar, Zijian
17	Mile Stone 1	Quote server testing	Oscar, Zijian
18			
19			
20	Mile Stone 1	Implementing functions	Oscar, Zijian
21	Mile Stone 1	Implementing functions	Oscar, Zijian
22	Mile Stone 1	Implementing functions	Oscar, Zijian
23	Mile Stone 1	Implementing functions	Oscar, Zijian
24	Mile Stone 1	Implementing functions	Oscar, Zijian
25			
26			
27	Mile Stone 1	Implementing functions	Oscar, Zijian
28	Mile Stone 1	Generating Output	Oscar, Zijian
29	Mile Stone 1	Generating Output	Oscar, Zijian
30	Mile Stone 1	Testing, Debug & Fix	Oscar, Zijian
31	Mile Stone 1	Debug & Fix	Oscar, Zijian

Current status updates

Milestone 1	
Primary responsibility:	Execute 1 user file
Percentage complete:	100%
Current status:	Submitted

Milestone 2	
Primary responsibility:	Execute 10 user file
Percentage complete:	0
Current status:	Writing in progress

Milestone 3	
Primary responsibility:	Execute 45 user file
Percentage complete:	0
Current status:	Not started

Milestone 4	
Primary responsibility:	Execute 100 user file
Percentage complete:	0
Current status:	Not started

Milestone 5	
Primary responsibility:	Execute 1000 user file
Percentage complete:	0
Current status:	Not started

Milestone 6	
Primary responsibility:	Execute final 2019 workload file
Percentage complete:	0
Current status:	Not started

Milestone 7	
Primary responsibility:	Prepare for demo
Percentage complete:	0
Current status:	Not started

Milestone 8	
Primary responsibility:	Prepare for presentation
Percentage complete:	0
Current status:	Not started

Milestone 9	
Primary responsibility:	Complete final report and submit code
Percentage complete:	0
Current status:	Not started

We will update the status and calendar as time goes on.

Some primary work

- Output Generate
  - XML
  - XSD
  - Logbook
  - Audit servers

- Internal work
  - Transaction Server
  - Web Server
  - Workload generator
  - Databases
  - Data Transfer
  - TCP/IP Connections

- External work
  - Quote Server
  - Users Commands
  - Docker Environments
  - Unix Terminal
  - Python 2.7 support

Project resources

GitHub repository is our main source of storage. The link to our GitHub repo is https://github.com/zijian-chen96/seng468

To request for access or view, please send an Email to Zijian Chen.