**MeanStock for Next Generation Networks**

Name: Qing Lan UNI:ql2282 Role: System Architect

Name: Jianpu Ma UNI:jm4437 Role: UI design and API fetching

**Overview**

Mean Stock is a web application specifically designed for investor to track their favourite stock anytime by using their Smartphone, Tablet and computer. User could store their favourite stocks and obtain real-time stock price map. They can also use virtual investment tool in the web application to simulate the actual bid sell/ask environment. The basic system will contain a cloud server, Database and Node.js environment.

**Goals**

User could...

1. Check Real-time Stock price 2. Display stock price histogram

3. Add/Modify Personal User account 4. Add/Modify personal stocks

5. Use Virtual Investment Simulation tool

**Implementation Specification**

* Step1: Create the project plan and learning the related knowledge on Cloud Server, Database and website implementation. Collect API information from Yahoo Finance and Google Finance.
* Step2: Build the system sketch for the website and E/R Diagram for the database structure and Implement the Database on MongoDB and start coding on website
* Step3: Establish the connection between DB and web application. Fetch the Stock information from API provider and display them on the web application
* Step4: Create the Investment tool and optimize the code/system structure. Test the system and push it to the Cloud Server

**Challenges and Highlights**

**Challenges Highlights**

Database structure and relationship between entities Fast/Convenient Access to stock information

Interactivity between database and website Customized Stock Tracker and Investment tool

stock fetched from API and UI Display Multiple Device Support

**Plan and Schedule**

|  |  |  |
| --- | --- | --- |
| **Steps** | **Target** | **Timeline** |
| **Step 1** | **Have:** Project plan, API tables  **Ongoing:** Learn Could application fundamentals | Oct.16—Oct.25 |
| **Step 2** | **Have:** ER Diagram, MongoDB basic Database, System sketch  **Ongoing:** Database test, JavaScript coding | Oct.26—Nov.1 |
| **Step 3** | **Have:** DB to web app Connection, Stock information display  **Ongoing:** Building UI and testing | Nov.2—Nov.16 |
| **Step 4** | **Have:** Investment tool, Stock Price Histogram, public website  **Ongoing:** Final report and further Improvement | Nov.17—Dec.1 |