

# Team WINY: Implementation and Demo

Irwin Li (izl2000)  
Wanlin Xie (wx2161)  
Yiming Sun (ys2832)  
Nancy Xu (nx2131)

## Responsibilities

Irwin and Wanlin: Account Login/Creation, View Portfolio

Nancy and Yiming: Unit Testing, Add Stock to Portfolio

## Git repository

<https://github.com/wanlinxie/ASE-marketgame>

## Challenges

Setting up our project with all the technologies that we were planning to use was one of our biggest challenges. Everyone's environment was slightly different so some commands that would work for one person would not for someone else. However, we eventually were all able to download all our required technologies and start learning the ones we were unfamiliar with such as MongoDB. One of the challenges we still have not been able to figure out is using Google Cloud to host our web service. While we were able to setup a locally hosted MongoDB instance in a Google Cloud Ubuntu VM instance, we were unable to access the web application externally. We tried enabling HTTP and HTTPS forwarding was enabled on the Google Cloud instance and creating the app.yaml and appengine\_config.py configuration files, but were still unable to access the web application externally. The server works fine when run and accessed locally.

## Demo

During the demo, we were able to present our login, account creation, as well as stock addition. We also discussed with her some of our future feature implementations. The first one is utilizing external APIs to retrieve stock information and displaying it in the 'search' page for our stock market game. The second one is implementing the stock market game, and creating multiple games for each user and one portfolio for each game. For the first feature, we discussed the problem that the Google Finance API was deprecated and we resolved to utilize Yahoo Finance instead as our external API. We also discussed our previous idea of refreshing the price information for the stock every fifteen minutes, and we concluded that it was best to refresh the price information every morning at 7:30 am once the user logs into the market game app, in order to prevent too much external API lookup, which may take a long time. For the second stock market game, we discussed creating a second mongodb collection, in order to enable lookup by user for each market game. This is not supported by our current mongodb collection. Our mentor also recommended the pycharm IDE, which will make debugging overall easier.