

## Virtual Stock Market

### Description

A stock market trading game that allows users to invest an amount of virtual money in listed securities and then track the performance of the stocks over a period of time

### Project details

- Category: General
- Difficulty:
- Suggested stack: Not specified
- Approval status: Approved

### Target users

Player

### Organizer

### Tags

MVP, Notes, Optional

### User Stories

#### Special Note

A current (as of 11/4/17) source of stock market price data for free is <https://www.alphavantage.co>

You are required to register for a free key.

#### Register

As a Player, I can register with the system so that I can log in and play.

#### Login

As a Player, I can login so that I can play.

#### View Games

As a Player, I can see a list of all my current games.

#### Create Game

As a Player, I can create a new game and I will assigned as the Organizer for that game. A game will have an end date when the game will finish and a name.

#### Invite Players to Game

As an Organizer, I can invite existing Players into my game. They will be given an initial \$100,000 to invest.

#### Buy a Stock

As a Player, I can buy a stock. I can specify the trade in dollars or in shares.

#### Sell a Stock

As a Player, I can sell a stock. The value of the trade will be added to my available cash immediately.

#### See Stocks

As a Player, I can see my available cash and the status of all of my current stocks.

#### See Leaderboard

As a Player, I can see the running total of the portfolio value of all the other players in this game.

#### Game End

When the game end date is reached, the system will sell all outstanding stock balances for all the Players in the game and prevent anymore trades from happening. The winner is the Player with the most cash.

#### See Trades

As a Player, I can see all of the trades that I've done in the game.

#### Search for Stocks

As a Player, I can search for and research stocks on the site so that I can pick a good one to buy.

#### Pay Commission

As a Player, I have to pay a \$19.95 commission on every trade.

#### Chat

As a Player, I can chat with others that are in the game.

#### Visualizations

As a Player, I can see on a graph how my investments are doing and how my cash has changed over time.

#### API Data for Stock Prices

As a player, my purchases and sales are made using actual stock price information obtained from an API using "real-time" or current day values.

#### API Data for Company Information