

Virtual Stock Market Game

Requirements

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Major functional requirements:

1. Personal user accounts
2. Fantasy money system
3. Show a graph of historical stock prices
4. Show trend lines for stocks future forecast
5. Show a graph of users' account value over time
6. Users start with a fixed amount of seed money
7. Tracks actual stock prices
8. Users can buy and sell as many virtual stocks as they can afford
9. Advertisers pay fees to display ads
10. Ads when players go to new page
11. 10% of advertisement revenue goes to best player of month
12. Stock buying recommendation (social-based, e.g.: 4 of your friends bought this stock)
13. Teams (create a team for your company, class, or group of friends)
14. Leaderboards: Global, friends, teams
15. Money markets: if you take your money out of stocks, it gains a small amount of interest
16. Ability to change your name's display color on your profile & leaderboards

Major non-functional requirements:

1. Stock prices are within 30 minutes of real-time.
2. If there is an issue getting stock information (stock market or stock price feed down), the site should continue to function
3. Modular design which permits easily implementing new modules
4. Clean, readable, easy-to-use interface

Supplementary non-functional requirements:

1. User passwords are stored in a secure manner
2. Website maintains adequate uptime (>90% of the time)