Team WINY: Second Iteration Plan

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Responsibilities
Irwin and Wanlin: Class Diagrams
Nancy and Yiming: User Stories and Wireframes

Git repository
https://github.com/wanlinxie/ASE-marketgame

User Stories and WireFrames

User Story 1: Create New Account

Description: As a new user, I want to be able to register for a personal account.
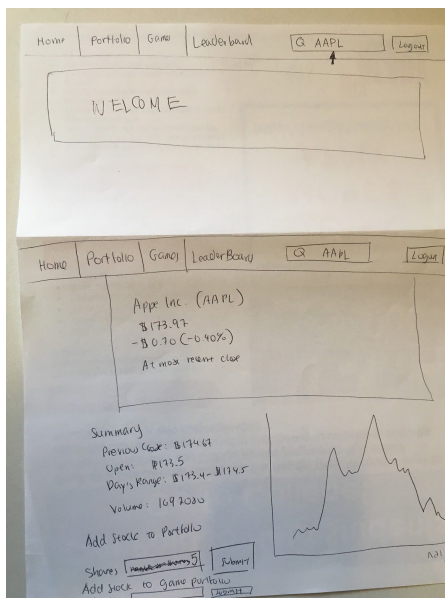
User Story 2: Login

Description: As a user, I want to be able to login into my personal account.
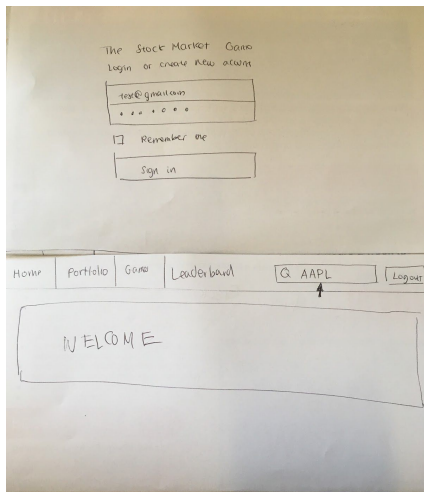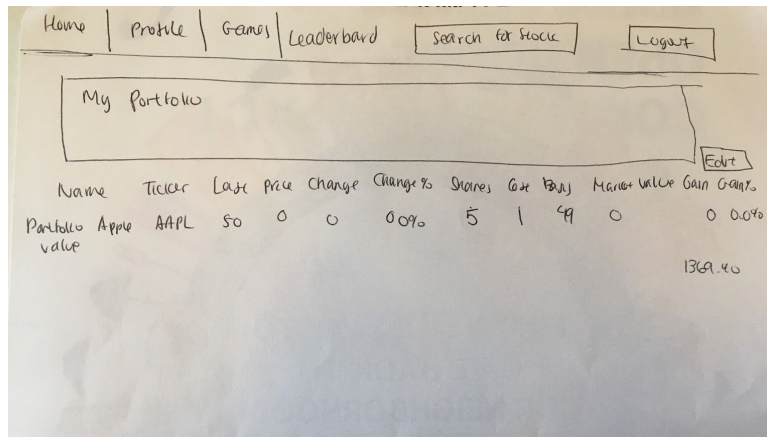

User Story 3: View Stock

Description: As a user, I want to be able to search up a stock and view details about it.
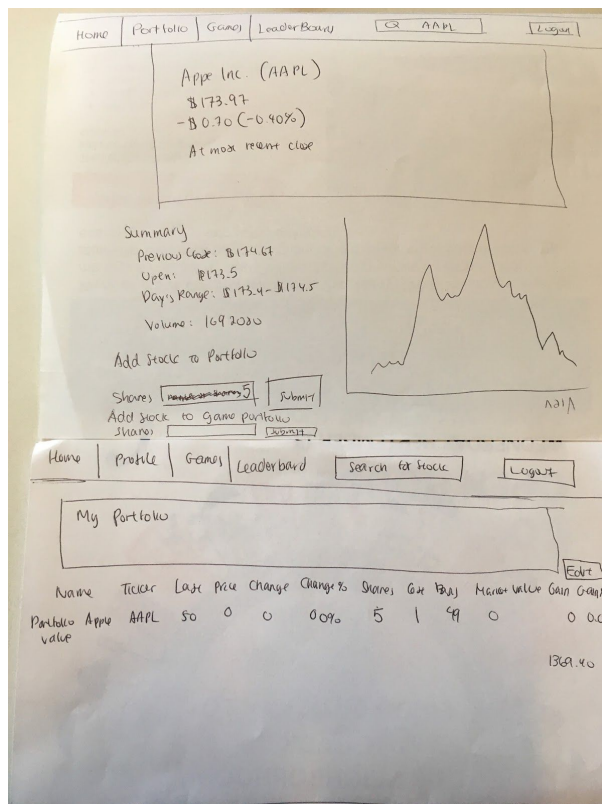

User Story 4: View Portfolio

Description: As a user, I want to be able to view my portfolio.
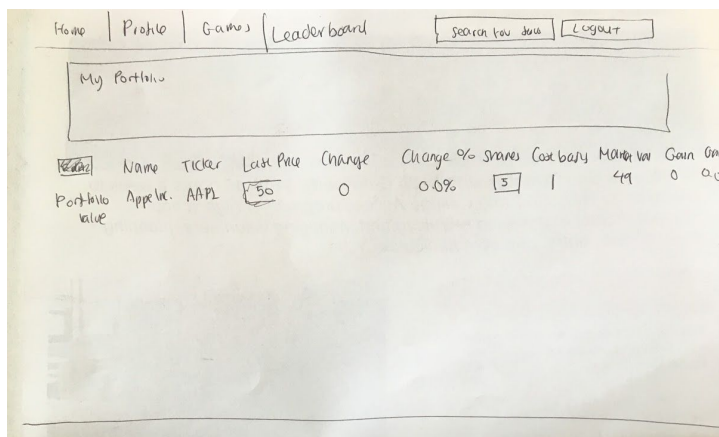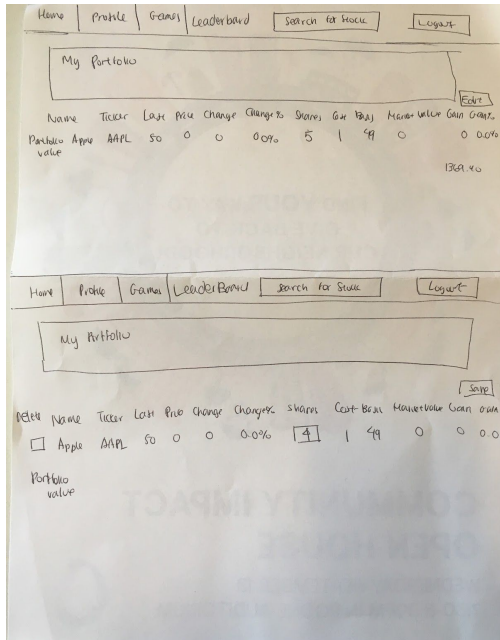
User Story 5: Add to Portfolio

Description: As a user, I want to be able to add stocks to my portfolio.

User Story 6: Edit Portfolio

Description: As a user, I want to be able to edit my portfolio by adding, deleting, or changing stocks in my portfolio

User Story 7: View Market Statistics News and Information

Description: As a user, I want to be able to view top performing stocks in the market, as well as general stock market performance, trends, as news.

User Story 8: Create a game

Description: As an admin user, I want to be able to create a game, set its duration, and make it available on the games tab for other users.

User Story 9: Participate in a game

Description: As a general user, I want to be able to join a game as an individual, or create a group to join the game.

User Story 10: Invite users to game group

Description: As a general user, I want to be able to invite other users to join my group for a game.

User Story 11: View game portfolio

Description: As a general user, I want to be able to view the stocks in my, or my group's game portfolio.

If not registered for game:	If registered for game:

User Story 12: Edit Game Portfolio

Description: As a user, I want to be able to edit my game portfolio by adding, deleting, or changing stocks in my portfolio

User Story 13: View game statistics

Description: As a user, I want to be able to view game statistics, such as the top performer groups, most improved groups, leadership boards, etc.

If game has not yet been started by administrator:	If game has been started by administrator:

User Story 14: Logout

Description: As a general user, I want to be able to logout of my account.

My Portfolio

Edit	Name	Ticker	Last Price	Change	Change %	Shares	Cost basis	Market val	Gain	Gain%
Portfolio value	Apple Inc.	AAPL	50	0	0.0%	3	1	49	0	0.0%

The Stock Market Game

Login or create new account

Remember me

Sign in

Class Diagrams

Class: Game

Attributes:
- Game ID: string
- Groups: list of groups
- Duration: int
- Initial Capital: int
- Admin: user

Operations:
- addAdmin(username)
- addGroup(group)

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create

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Class: Group

Attributes:
- Group ID: string
- Portfolio: portfolio
- Users: list of users
- Owner: user

Operations:
- addUser(username)
- joinGame(gameID)
- leaveGame(gameID)

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create, join

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Class: User

Attributes:
- User ID: string
- Username: string
- Password: string
- Portfolio ID: string
- In Game: boolean

Operations:
- login(username, password)
- logout(username, password)
- joinGroup(groupID)
- createGroup(groupID)

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Class: Portfolio

Attributes:
- Portfolio ID: string
- User ID: string
- Stock list: list of stocks in portfolio
- Current capital: double

Operations:
- addStock(ticker, units, cost)
- editStock(ticker, units, cost)
- computeTotalCost(stock list)
- computeTotalMarketValue(stock list)
- computeTotalGain(stock list)
- computeTotalGainPercentage(stock list)

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Class: Stocks

Attributes:
- Ticker: string
- Stock name: string
- Price: double
- Change: double
- Change percentage: double
- Shares: int
- Cost: double
- Market value: double
- Gain: double
- Gain percentage: double

Operations:
- update(ticker)