

# Psychic Waffle Project Proposal

A.J. Feather  
af2849@columbia.edu

Andrew Grant  
amg2215@columbia.edu

Jacob Graff  
jag2302@columbia.edu

Jake Weissman  
jdw2159@columbia.edu

October 12, 2016

## 1 High Priority User Stories

- User Case 1: As a user, I want to log-in to the system with unique credentials so that my identity is verified before granting access to the trading platform
- User Case 2: As a user, I want to enter a trade amount through a web interface so that I don't have to execute trades manually
- User Case 3: As a user, I want to see the results of my transaction when it's over so that I can verify everything went well

## 2 Use Cases

### 2.1 Use Case 1

- Actor: All Users
- Use Case Overview: User securely signs in to system
- Trigger: User enters home webpage
- Pre-condition 1: None

#### 2.1.1 Basic Flow

Description: User signs in to his/her account

1. Access home webpage
2. Enter password. If incorrect, access to account is denied. Otherwise, user is redirected to his/her homepage

Termination Outcome: User logs in

#### 2.1.2 Alternative Flow 2A

Description: User signs up for an account

1. User enters username and password. If username already exists, reject the User.
2. User signs in.

Termination Outcome: User signs up for an account and user info is stored in database

## 2.2 Use Case 2

- Actor: All Users
- Use Case Overview: User enters trade into system and system executes it
- Trigger: User enters quantity into trade execution window
- Pre-condition 1: User has securely signed in

### 2.2.1 Basic Flow

Description: User executes a trade through the system

1. User enters quantity/required parameters into system
2. System determines how to space out trade over time
3. System executes trade according to algorithm
4. System informs user the trade was successfully executed

Termination Outcome: System executes trade for user

### 2.2.2 Alternative Flow 1A

Description: User enters invalid quantity into system

1. User supplies the system with invalid input
2. System rejects user input, and asks the User to re-input the required parameters

Termination Outcome: User re-inputs required trading parameters

### 2.2.3 Alternative Flow 4A

Description: System cannot execute trade for client

1. If the system is not able to execute the clients trade successfully, the User is informed

Termination Outcome: User is informed the desired trade was not successfully executed

## 2.3 Use Case 3

- Actor: All Users
- Use Case Overview: User views transaction history
- Trigger: User clicks on History link
- Pre-condition 1: User has securely signed in and has successfully executed trades in the past

### 2.3.1 Basic Flow

Description: User views transaction history

1. User clicks History link
2. System accesses database storing the given User's transaction history
3. System prints out transaction history on the page

Termination Outcome: User can view all his/her transaction history

## 3 Trello Board

<https://trello.com/b/1LbSuZ5C>

Psychic Waffle

Login

Transactions

Sell Shares

Login:

Username

Password

☐

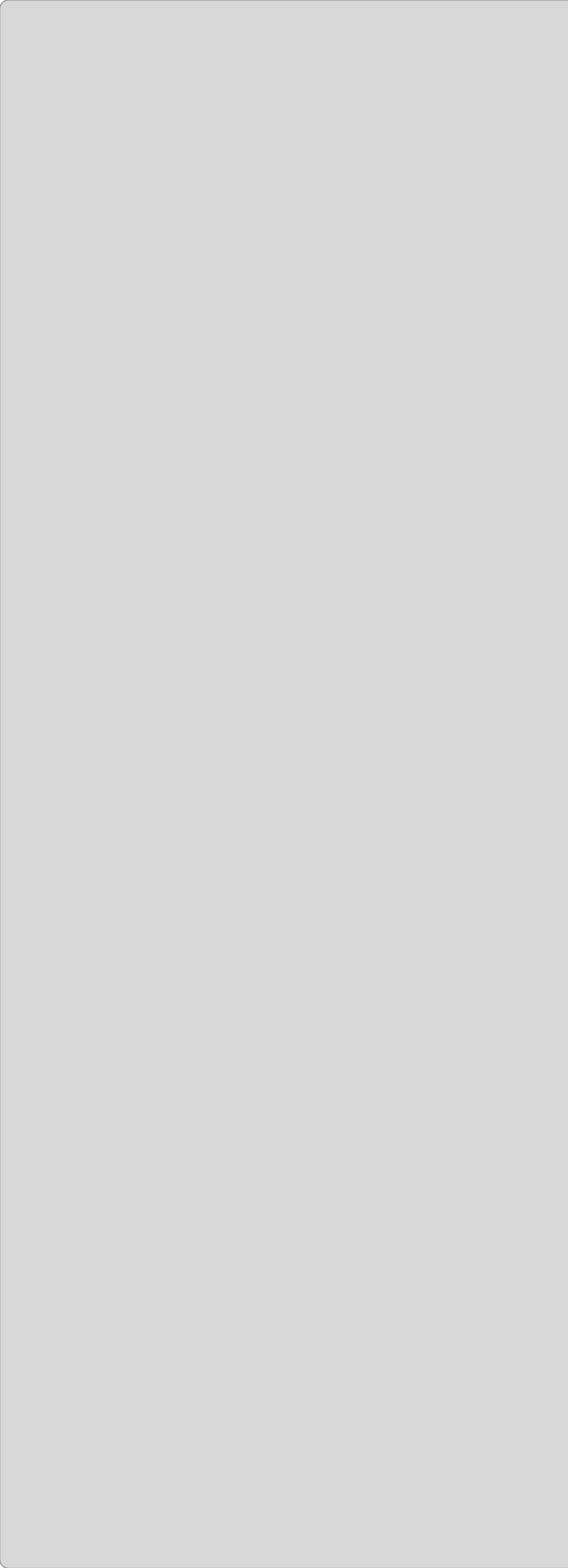
Save Username

[Register New User](#)

Login

Transactions:

Date/Time:	Shares Sold:	Sale Value:	Time To Complete:	Balance After Sale:
07/05/16 4:00pm	12	\$1200	10 mins.	5,400,720,000.36
06/25/16 4:20pm	12	\$1200	2 mins.	5,400,720,000.36
06/02/16 2:50pm	12	\$1200	5 mins.	5,400,720,000.36
05/07/16 1:32pm	2	\$150	75 mins.	5,400,720,000.36
05/03/16 3:40pm	1	\$500	.5 mins.	5,400,720,000.36



Execute a Transaction:

Current Balance: 5,400,720,000.36

Number of Shares Available to Sale: 7,455

Sale Order Instructions:

Number of Shares:

Price to Sell At:

Execute

Currently Executing 2 Transactions:

