

Sprint 4 Plan

LEEPS Financial Markets Platform

Sprint completed on March 14, 2019.

Goal

To create a shippable version of the economics experiments software by integrating and finalizing all of the different parts of the software, particularly the robots, broker, and the exchange.

Tasks

- **[11]** As a developer, I want to implement a client that executes the *Maker's* algorithm in real time
 - be able to communicate with the broker and receive a live feed of BB and BO [11h]
 - Send a new order based on the BB and BO [1h]
 - Be able to send replace orders [1h]
- **[5]** As a developer, I want to implement a client that does the *Taker's* algorithm in real time
 - create a client that makes buy/sell decisions based the Takers algorithm in the texts [5h]
- **[21]** As a developer, I want all of my servers to communicate via ouch protocol
 - send message from client to broker via OUCH [1hr]
 - forward client message to the exchange via broker [11h]
 - keep track of clients in broker [2h]
 - parse exchange response [7h]
 - return exchange to originating client
 - broadcast BB, BO [1h]
- **[13]** As a developer, I want to set up all my broker calculations
 - Replicate the exchange server book [3hr]
 - Calculate BB, BO from the book [5hr]
 - Calculate the order imbalance [5hr]
 - Introduce the concept of time [3hr]
 - Calculate the weight of the stocks [2hr]
- **[5]** As a developer, I want to automate the random robot
 - read in a CSV file of information about orders as input.
 - parse the CSV file and input into the random robot [5h]

Team Roles

- Francisco Braga: Developer
- Jan Rybojad: Developer (Scrum Master)
- Mary Chern: Developer (Product Owner)
- Minh Anh Nguyen: Developer
- Megan Wu: Developer
- Wen Bin Yu: Developer

Initial Task Assignment

- Francisco Braga
 - Complete implementation for makers & takers
- Jan Rybojad
 - Complete random robot implementation
- Mary Chern
 - Complete random robot implementation
- Minh Anh Nguyen
 - Complete broker implementation
- Megan Wu
 - Complete broker implementation
- Wen Bin Yu
 - Complete implementation for makers & takers

Initial Burnup Chart

https://docs.google.com/spreadsheets/d/10kGLBTZBR_dqE5ovgwLAaJS9YZsavxA6fxUE6W_xLIU/edit#gid=0

Initial Scrum Board

<https://trello.com/b/d6q9mn4t/sprint-4>

Scrum Times

BE 316, Tues 5:30pm

BE 316, Wed 5:30pm

E2 419, Thurs 5:50pm