

Trendr

CS40700 Sprint 1 Planning

1.30.23

Our Team:

Jake Baker

Logan Sweeney

Alan Bare

Jack Lawrence

Shicheng Fang

Daniel Fruland

**Sprint Overview**

During this sprint we hope to create a working prototype of the Trendr website as well as develop the process of calculating a stock’s Trendr and attention score. The key aspects of this sprint will be setting up much of the structure of the website, specifically the database, authentication, profiles, and a basic view of stocks with their Trendr score.

**Scrum Master:** Logan Sweeney

**Meeting Plan:** Monday/Wednesday/Friday @ 4:00 PM

**Risks and Challenges:**

The largest challenge posed in this Sprint is setting up a strong foundation for the website. The database, backend, and frontend must all be implemented in a way such that they are able to communicate between each other. Additionally, a large challenge we will tackle in this sprint is scraping relevant information from social media sites to generate a stock’s Trendr score.

**Current Sprint Detail**

**User Story #3**

**As a user, I would like to be able to create an account on Trendr with email and password.**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Create UI element for account creation. | 4 Hours | Daniel/Logan |
| 2 | Establish client-server-database communication protocol for storing and verifying user information | 3 Hours | Daniel/Logan |
| 3 | Ensure salting and hashing works properly within Azure systems | 3 Hours | Daniel/Logan |
| 4 | Write tests for account creation and storage. | 4 hours | Daniel/Logan |

Acceptance Criteria:

* Users must be able to register their accounts with their email addresses.
* Invalid passwords (Under 6 characters) won’t allow account creation.
* Passwords will be hashed in the DB.
* Users should be able to log in with this account successfully

**User Story #4**

**As a user, I would like to be able to reset my password with Email**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Create UI element for password reset account creation | 4 Hours | Daniel |
| 2 | Establish client-server-database communication protocol for storing and verifying user information | 2 Hours | Daniel |
| 3 | Ensure salting and hashing of stored passwords in Azure system | 4 Hours | Daniel |
| 4 | Write tests for password reset | 4 Hours | Daniel |

Acceptance Criteria:

* Users must be able to reset their password with their email addresses.
* Invalid passwords (Under 6 characters) won’t allow a reset.
* Passwords will be hashed in the DB.
* User must only be able to log in with ONLY the new password.

**User Story #5**

**As a user, I would like to be able to reset my password with SMS**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Create UI element for SMS password resets | 3 Hours | Logan |
| 2 | Create protocol for changing password within DB through SMS | 3 Hours | Logan |
| 3 | Create Twilio account and establish functionality for sending users SMS codes | 6 Hours | Logan |

Acceptance Criteria:

* Users must be able to reset their passwords upon entering correct SMS code.
* Users must be notified if their account does not have a phone number associated with it.
* Invalid codes must alert the user and advise them to try again with a new code.

**User Story #6**

**As a user, I would like to be able to secure my account with two factor email authentication.**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Create UI element for email password resets | 3 Hours | Daniel |
| 2 | Create protocol for changing password within DB through email | 3 Hours | Daniel |
| 3 | Set up email sending and code generation process for users | 5 Hours | Daniel |

Acceptance Criteria:

* Users must be able to access their account upon 2FA success.
* Invalid codes must alert the user and advise them to try again with a new code.

**User Story #7**

**As a user, I would like to be able to secure my account with two factor sms authorization.**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Create UI element for SMS two-factor authentication setup | 3 Hours | Logan |
| 2 | Create protocol for verifying phone number user is trying to associate with the account. | 3 Hours | Logan |
| 3 | Create protocol for authenticating account with SMS authentication set up | 5 Hours | Logan |

Acceptance Criteria:

* Users must be able to (while logged in to their account) set up two-factor SMS authentication.
* Users must be authenticated on login if their account has two-factor SMS attached to it.
* Invalid codes must alert the user and advise them to try again with a new code.

**User Story #10**

**As a user, I would like to be able to switch between light and dark mode.**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Create button to toggle light/dark mode | 2 Hours | Ben |
| 2 | Ensure the website is displayed properly when the button is toggled. | 7 Hours | Ben |

Acceptance Criteria:

* Users should see a properly styled button.
* Users should use the button to toggle themes of websites.

**User Story # 11**

**As a user, I would like to be able to read a quick summary of how a stock’s Trendr score is determined.**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Create an Info page | 4 Hours | Alan |
| 2 | Display what Trendr score is | 4 Hours | Alan |

Acceptance Criteria:

* Users should be able to navigate to an info page.
* Users should see how the Trendr score is calculated.

**User Story # 13**

**As a user, I would like to view stocks based on industry (tech, food, etc)**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Create an explore stocks page | 4 Hours | Alan |
| 2 | Group stocks based on category | 4 Hours | Alan |
| 3 | Display popular stocks by category | 4 Hours | Alan |

Acceptance Criteria:

* Users should be able to navigate to the explore page.
* Users should see popular stocks grouped by category.

**User Story# 33**

**As a user, I would like to view a stock’s individual Facebook Trendr score.**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Register Facebook API Platform | 1 Hours | Ben |
| 2 | Setup Facebook API | 10 Hours | Ben |
| 3 | Analyze data and derive Trendr score | 4 Hours | Ben |

Acceptance Criteria:

* Users should see the stock's Facebook Trendr score.
* Users should see hot posts mentioning the stock.

**User Story #34**

**As a user, I would like to view a stock’s individual Twitter Trendr score.**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Register Twitter API | 1 Hour | Alan |
| 2 | Setup Twitter API | 10 Hours | Alan |
| 3 | Analyze data and derive Trendr score | 9 Hours | Alan |

Acceptance Criteria:

* Tweets mentioning the stock should be found.
* Tweets must be classified and impact the Trendr score.
* Users should see the stock’s Twitter Trendr score.

**User Story #35**

**As a user, I would like to view a stock’s individual Reddit Trendr score.**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Setup Reddit API | 10 Hours | Ben |
| 2 | Analyze data and derive Trendr score | 6 Hours | Ben |

Acceptance Criteria:

* Users should see the stock's Reddit Trendr score.
* Users should see hot posts mentioning the stock.

**User Story #41**

**As a user, I would like to see the current price of a given stock.**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Fetch Price Using Polygon.io | 3 Hours | Jack |
| 2 | Create page to view stock info | 13 Hours | Jack |
| 3 | Create display for stock price | 6 Hours | Jack |

Acceptance Criteria:

* Given there is a trender site, there is a page to look up stocks.
* Given that there is a page to look up stocks, users can search for a stock in a search bar.
* Given that I can look up a stock, there is a display where users can view the current price.

**User Story #42**

**As a user, I would like to see the day gain/loss of a given stock.**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Fetch needed data to get gain/loss of a given stock | 3 Hours | Jack |
| 2 | Create display for stock gain/loss info | 6 Hours | Jack |

Acceptance Criteria:

* Given there is a place to search stocks, there is a place where I can view the gain/loss for a given stock.
* Users can easily tell if the stock gained or lost that day with color coded numbers.

**User Story #43**

**As a user, I would like to see the day’s price chart for a given stock**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Get a stocks price chart for the day using Polygon.io | 3 Hours | Jack |
| 2 | Create display for stocks chart | 6 Hours | Jack |

Acceptance Criteria:

* Given there is a page to search stocks, users can view the stock’s day chart.
* Users have a well labeled chart to view a stock’s movement for the day.
* Users can easily tell if the stock had positive or negative movement for the day.

**User Story #50**

**As a user, I would like to be able to view my profile information**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Create a UI page for viewing a user’s profile information (name, email, phone, picture, bio, friends and watchlists) | 7 Hours | Jake |
| 2 | Create a UI button that changes the page to the user’s profile | 3 Hours | Jake |
| 3 | Manually test UI | 2 Hours | Jake |

Acceptance Criteria:

* Users will be able to click a “profile” button on the main page of the website and be routed to there personal profile
* On this profile page, users will be able to see their name, email, phone number, profile picture, bio, friends, and any watchlists
  + Note: Friends and watchlist functionality will be implemented in a later sprint

**User Story #51**

**As a user, I would like to be able to add/edit my profile picture**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Create user functionality to upload a profile picture | 6 Hours | Jake |
| 2 | Store profile picture in database along with other profile information | 3 Hours | Jake |
| 3 | Verify that an old profile picture is replaced with the new one upon new login | 1 Hour | Jake |

Acceptance Criteria:

* When viewing their profile, users will be able to upload a profile picture
* Upon uploading a picture, the photo persists as their profile picture (across new sessions etc)

**User Story #52**

**As a user, I would like to be able to add a bio to my profile so others can learn more about me**

| **#** | **Description** | **Estimated Time** | **Owner** |
| --- | --- | --- | --- |
| 1 | Create functionality so users can add/edit their profile | 3 Hours | Jake |
| 2 | Store bio in database along with other profile information | 3 Hours | Jake |
| 3 | Verify that the proper bio is stored in the database after being updated | 2 Hours | Jake |

Acceptance Criteria:

* When viewing their profile, users will be able to add/edit a brief biography with information about themselves
* Upon updating a bio, the updates persist across new sessions

**Total Hours for Each Team Member:**

**Logan: 30 Hours**

**Daniel: 31 Hours**

**Ben: 40 Hours**

**Alan: 40 Hours**

**Jack: 40 Hours**

**Jake: 30 Hours**

**Remaining Backlog:**

1. As a user, I would like to be able to register specific stocks for tracking.
2. As a user, I would like my chosen stocks to be displayed on the homepage of the site.
3. ~~As a user, I would like to be able to create an account on Trendr with email and password.~~
4. ~~As a user, I would like to be able to reset my password with Email~~
5. ~~As a user, I would like to be able to reset my password with SMS~~
6. ~~As a user, I would like to be able to secure my account with two factor email authorization.~~
7. ~~As a user, I would like to be able to secure my account with two factor sms authorization.~~
8. As a user, I would like to edit which stocks I currently am tracking.
9. As a user, I would like to reorganize my front-page by determining a priority order of tracked stocks.
10. ~~As a user, I would like to be able to switch between light and dark mode.~~
11. ~~As a user, I would like to be able to read a quick summary of how a stock’s Trendr score is determined.~~
12. As a user, I would like to view the Trendr scores of the stocks I’ve set to be tracked.
13. ~~As a user, I would like to view stocks based on industry (tech, food, etc)~~
14. As a user, I would like to view the change in a stock’s Trendr score over a specified amount of time.
15. As a user, I would like to view a stock’s individual attention score.
16. As a user, I would like to view the change in stock’s individual attention score over a specified amount of time.
17. As a user, I would like to view a stock’s individual positivity score.
18. As a user, I would like to view the change in stock’s positivity score over a specified amount of time.
19. As a user, I would like to be notified about big changes in Trendr score of my stocks through email.
20. As a user, I would like to be notified about big changes in Trendr score of my stocks through SMS.
21. As a user, I would like to view the highest increases in Trendr scores over all stocks tracked by Trendr.
22. As a user, I would like to view the highest decreases in Trendr scores over all stocks tracked by Trendr.
23. As a user, I would like to view the highest increases in attention score.
24. As a user, I would like to view the highest decreases in attention score.
25. As a user, I would like to track the top 10 crypto investments Trendr score
26. As a user, I would like to view a graph of the Trendr score for each of the top 10 cryptocurrencies
27. As a user, I would like to view graphs generated by Trendr of a specified stock’s change in Trendr score over time.
28. As a user, I would like to be able to zoom into a graph to see smaller timespans of a stock’s Trendr score
29. As a user, I would like to be able to zoom out of a graph to see larger timespans of a stocks Trendr score
30. As a user, I would like to enable and disable SMS and Email notifications for specified tracked stocks.
31. As a user, I would like to be able to export the information from my tracked stocks.
32. As a user, I would like to be able to share a URL to a specified stock’s Trendr page.
33. ~~As a user, I would like to view a stock’s individual Facebook Trendr score.~~
34. ~~As a user, I would like to view a stock’s individual Twitter Trendr score.~~
35. ~~As a user, I would like to view a stock’s individual Reddit Trendr score.~~
36. As a user, I would like to view a sample of a popular post for a given stock (and whether it was classified as negative or positive).
37. As a user, I would like to be able to click the popular post and be redirected to the source of the post (Twitter, Facebook, or Reddit).
38. As a user, I would like to view percentage change in a stock’s Trendr score.
39. As a user, I would like to upload a csv of my portfolio’s stock positions (sourced from a brokerage such as Schwab, Fidelity, etc) to automatically populate my watchlist.
40. As a user, I would like to be able to remove a stock from my watchlist.
41. ~~As a user, I would like to see the current price of a given stock.~~
42. ~~As a user, I would like to see the day gain/loss of a given stock.~~
43. ~~As a user, I would like to see the day’s price chart for a given stock.~~
44. As a user, I would like to see the current price of all of the stocks in my watchlist displayed on the dashboard.
45. As a user, I would like to see the day gain/loss of all of the stocks in my watchlist displayed on the dashboard.
46. As a user, I would like to be able to add friends
47. As a user, I would like to be able to remove friends
48. As a user, I would like to share my portfolio of tracked stocks with a generated URL
49. As a user, I would like to be able to see the stocks my friends are interested in
50. ~~As a user, I would like to view my profile information~~
51. ~~As a user, I would like to be able to add a profile picture~~
52. ~~As a user, I would like to add a bio to my profile so others can learn more about me~~