

# Boilerbazaar

## Sprint 3 Planning Document

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### **Sprint Overview**

For this sprint, we will be completing all our sprint backlogs. Since we finished all our user stories last sprint, we won't have any incomplete user stories to complete this sprint. We will be adding a rating system as well as web scraping capabilities. Extra quality of life features such as desktop notifications, viewing related textbooks, and following another user will also be added during this sprint.

**Scrum Master:** Jeffrey

**Meeting Plan:** Tuesdays/Thursdays @ 5:00 pm

### **Risk and Challenges:**

A challenge that might pop up during this sprint is giving the reviews between the buyer and the seller. There could be a case where the buyer has two unreviewed purchases and that may cause a problem with prompting when they first log on. Another challenge could be retrieving the price information from different websites. Since none of us have worked with html parsing before, it might take a while for us to learn how to retrieve and use the data from external websites.

## Current Sprint Detail

### User Story #1

As a user, I would like to search for textbooks not on webpage and see my previously viewed books on the home page.

#	Description	Estimated Time	Owner
1	Create UI summarizing a listing and link it to its listing page	4 Hrs	Ryan
2	Create Ajax function to get previously view textbook	1 Hr	Ryan
3	Create JS function to dynamically populate the UI	3 Hrs	Ryan
4	Create submit button	1 Hr	Ryan
5	Create search input	1 Hr	Ryan
6	Create unit tests to test functionality of seeing previously viewed textbooks on homepage.	2 Hrs	Ryan

#### Acceptance Criteria:

- Given that the ajax function is implemented correctly, it should return a list of listingIDs that this user previously viewed.
- Given that the JS function is implemented correctly, it should display the list of previously viewed textbooks with some information summarizing the listing.
- Given that the UI is designed correctly, users should be able to easily identify each book, and navigate to that listing's page.

### User Story #2

As a seller, I would like to see which textbook a buyer messaged about.

#	Description	Estimated Time	Owner
1	Create algorithm to send textbook information along with message to seller.	2 Hrs	Michio
2	Create UI for textbook information.	4 Hrs	Michio

3	Create unit tests to test functionality of textbook messaging.	2 Hrs	Michio
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Acceptance Criteria:

- Given that the UI is implemented, the seller should see a display of all the correct information for the buyer's chosen textbook.
- Given that the user messages the seller from the buy page the chosen textbook's information should be sent.
- Given that the user sends a message with a listing, the seller should receive the message along with the intended listing.

### User Story #3

As a student, I would like to be able to see a list of websites that are selling the textbook that I searched for with the cheapest price highlighted.

#	Description	Estimated Time	Owner
1	Create algorithm to parse html and pull data and/or use APIs.	6 Hrs	Shicheng
2	Create algorithm to highlight cheapest price.	1 Hr	Shicheng
3	Create unit tests to test functionality of finding websites with the cheapest price.	2 Hrs	Shicheng

Acceptance Criteria:

- Given that API is called properly, users should see prices of books in various websites such as Amazon, eBay, etc.
- Given that data is pulled correctly, users should see the lowest prices of the book.
- Given that the highlighting algorithm is generated correctly, the website with cheapest price should be highlighted.

### User Story #4

As a student, I would like to be able to easily access the websites selling the textbooks.

#	Description	Estimated Time	Owner
1	Create algorithm to generate links to the website listings for user to click on.	2 Hrs	Shicheng

2	Create UI for links.	4 Hrs	Shicheng
3	Create unit tests to test functionality of generating links.	1 Hrs	Shicheng

#### Acceptance Criteria:

- Given that the link is generated correctly, users can access links of selling books in external websites.
- Given that the navigation of links is generated correctly, clicking the link should open a new tab.
- Given that the UI is generated correctly, users should see a list of links that they can click.

#### User Story #5

As a student, I would like to be able to receive desktop notifications for price drops.

#	Description	Estimated Time	Owner
1	Add UI to opt in and opt out for desktop notifications	3 Hrs	Xavier
2	Adjust function for checking for price drops	2 Hrs	Xavier
3	Implement function for displaying desktop notifications	4 Hrs	Xavier
4	Create unit tests to test functionality of desktop notifications	2 Hrs	Xavier

#### Acceptance Criteria:

- Given that the UI is implemented correctly, a user should be able to opt in and out of desktop notifications for watchlist listings.
- Given that the algorithm is implemented correctly, price drops should be checked for and updated each time a user logs in.
- Given that the algorithm is implemented correctly, users should receive desktop notifications of price drops when they login.

#### User Story #6

As a student, I would like to be able to follow a seller to see if they list any other textbooks.

#	Description	Estimated Time	Owner
1	Add UI to follow and unfollow a seller	2 Hrs	Xavier
2	Add UI for seeing a list of followed sellers with links to their profiles	4 Hrs	Xavier
3	Implement function to add a followed seller to the database	1 Hr	Xavier
4	Implement function to remove a followed seller from the database	1 Hr	Xavier
5	Create unit tests to test functionality of following a seller	2 Hrs	Xavier

Acceptance Criteria:

- Given that the UI is implemented correctly, users should be able to follow and unfollow sellers from the seller's profile.
- Given that the UI is implemented correctly, a user should be able to see a list of their followed sellers on a page for the feature.
- Given that the algorithm is implemented correctly, a user's list of followed sellers should accurately change when they follow or unfollow a seller.

### User Story #7

As a buyer, I would like to be able to see other textbooks that are related to the current listed textbook.

#	Description	Estimated Time	Owner
1	Add UI for displaying textbooks related to a listing	4 Hrs	Xavier
2	Implement function to find related textbooks	3 Hrs	Xavier
3	Create unit tests to test functionality of displaying related textbooks	2 Hrs	Xavier

Acceptance Criteria:

- Given that the UI is implemented correctly, a user should be able to see related textbooks from a single listing page if there are any.

- Given that the algorithm is implemented correctly, related textbooks should have something in common with the current listing whether it be the author, course, etc.
- Given that the algorithm is implemented correctly, the information of past sold textbooks that are related should be displayed.

### User Story #8

As a student, I would like to be able to add a profile picture.

#	Description	Estimated Time	Owner
1	Create button for user to add image.	1 Hr	Michio
2	Create algorithm to add image to database.	2 Hrs	Michio
3	Create algorithm to retrieve image from database.	2 Hrs	Michio
4	Create button for user to remove image.	1 Hr	Michio
5	Create algorithm to remove image from database.	2 Hrs	Michio
6	Create unit tests to test functionality of adding and removing a profile picture.	2 Hrs	Michio

Acceptance Criteria:

- Given that the user chooses to add an image, the user should be prompted to upload an image.
- Given that the user uploads an image, their profile should be updated in the database to add the image.
- Given that the user chooses to delete an image, the image should be removed from their profile in the database.

### User Story #9

As a student, I would like to be able to block another user from messaging me and viewing my listing.

#	Description	Estimated Time	Owner
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1	Add block option on contact list, listing, and user profile	2 Hrs	Ryan
2	Generate algorithm to block a user from seeing listing/messaging.	2 Hrs	Ryan
3	Create UI for a blocked user trying to message a user that blocked them,	2 Hrs	Ryan
4	Create algorithm to update a user's block list.	2 Hrs	Ryan
5	Create button and algorithm to unblock user.	2 Hrs	Ryan
6	Create UI for a user to see their blocked users.	4 Hrs	Ryan
5	Create unit tests to test functionality of preventing block listings from appearing and blocking/unblocking a user.	4 Hrs	Ryan

#### Acceptance Criteria:

- Given that the UI is generated correctly, a user can choose to block another user from the message page, a listing of that user, or that user's profile page.
- Given that algorithm works correctly, a user cannot send messages/view listings to a blocked user or a user that blocked them.
- Given that algorithm works correctly, the option to block will change to unblock to allow the user to unblock blocked users.

#### User Story #10

As a student, I would like to be able to submit and view GroupMe links related to courses.

#	Description	Estimated Time	Owner
1	Create new navbar for GroupMe.	1 Hr	Michio
2	Create UI for GroupMe page.	4 Hrs	Michio
3	Create algorithm for submitting and verifying links.	2 Hrs	Michio
4	Create algorithm for retrieving links from database.	1 Hr	Michio

5	Create unit tests to test functionality of GroupMe functions.	2 Hrs	Michio
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Acceptance Criteria:

- Given that the user chooses to submit GroupMe links, the user should be prompted to enter a link for a specified course.
- Given that the client sends or requests links for a course, the database should update or send the courses links.
- Given that the UI for the GroupMe page is implemented, the user should see the GroupMe links related to courses.

### User Story #11

As a buyer, I would like to be able to give seller ratings based on interaction and ease of purchase.

#	Description	Estimated Time	Owner
1	Create UI prompt when seller sells item.	2 Hrs	Jeffrey
2	Create algorithm to add rating to sellers' profile	1 Hr	Jeffrey
3	Create UI for creating seller reviews.	4 Hrs	Jeffrey
4	Create unit tests to test functionality of seller ratings.	2 Hrs	Jeffrey

Acceptance Criteria:

- Given that the UI is generated correctly, when the user logs in and they just bought something, they should be prompted with a review.
- Given that the algorithm is written optimally, when the buyer sends in a review, the seller rating should be updated.
- Given that the seller rating UI is generated correctly, the buyer should be able to give a rating from 1 to 5.

### User Story #12

As a seller, I would like to be able to view reviews from my buyers.



#	Description	Estimated Time	Owner
1	Create a review page on settings page.	2 Hrs	Jeffrey
2	Create UI for review page.	4 Hrs	Jeffrey
3	Create algorithm to retrieve reviews about a seller from the database.	2 Hrs	Jeffrey
4	Create unit tests to test functionality of retrieving reviews.	2 Hrs	Jeffrey

#### Acceptance Criteria:

- Given that the UI is generated correctly, users should see all the ratings that they have received.
- Given that route is correct, users should see the reviews page on the settings page.
- Given that the algorithm is written optimally, when the user opens their review page, they should see the reviews that they have received.

#### User Story #13

As a seller, I would like to give reviews about my buyers.

#	Description	Estimated Time	Owner
1	Create algorithm to add review for buyer to database.	1 Hrs	Jeffrey
2	Create prompt for seller to choose who the buyer is.	3 Hrs	Jeffrey
3	Create UI for creating buyer reviews.	4 Hrs	Jeffrey
4	Create algorithm to update buyer ratings.	1 Hr	Jeffrey
5	Create unit tests to test functionality of buyer reviews.	2 Hrs	Jeffrey

#### Acceptance Criteria:

- Given that the user marks the textbook as sold, they should be prompted with who they sold it to.

- Given that the review prompt is generated correctly, the seller should be able to give a rating with a review to the buyer.
- Given that the algorithm is written optimally, when the seller submits the rating to the buyer, the buyer rating should be updated.

### User Story #14

As a student, I would like to be able to search for other users.

#	Description	Estimated Time	Owner
1	Create navbar item for search.	1 Hr	Shicheng
2	Create UI for search page.	4 Hrs	Shicheng
3	Create algorithm to retrieve users from database.	1 Hrs	Shicheng
4	Create profile page UI when user clicks on another user.	4 Hrs	Shicheng
5	Create unit tests to test functionality of searching for users.	2 Hrs	Shicheng

### Acceptance Criteria:

- Given that the UI is implemented correctly, the dropdown should contain an option to search for user.
- Given that the algorithm is implemented correctly, search results should return users with name or puid related to the query.
- Given that the profile page UI is generated correctly, the UI should be updated to look consistent with the rest of the web client.

## Remaining Backlog

### Functional

- ~~1. As a user, I would like to be able to login through Purdue authentication.~~
- ~~2. As a user, I would like to be able to easily navigate to any page using a navigation bar.~~
- ~~3. As a user, I would like to be able to change between light and dark mode.~~
- ~~4. As a student, I would like to be able to have a list of previously searched textbooks displayed when I open the home page.~~
- ~~5. As a student, I would like to be able to search for a textbook based on ISBN, author, or title.~~
- ~~6. As a student, I would like to be able to search for used textbooks from other students.~~
- ~~7. As a student, I would like to be able to view a dropdown of my previous searches on the search bar.~~
- ~~8. As a student, I would like to be able to filter through the student sold textbooks by course, edition, etc.~~
- ~~9. As a student, I would like to be able to search with multiple filters in the home page search.~~
- ~~10. As a student, I would like to be able to sort textbooks by price, popularity, ratings, etc.~~
- ~~11. As a student, I would like to be able to see a list of websites that are selling the textbook that I searched for with the cheapest price highlighted.~~
- ~~12. As a student, I would like to be able to easily access the websites selling the textbooks.~~
- ~~13. As a student, I would like to be able to track a textbook (watchlist) to see any changes in price, etc.~~
- ~~14. As a student, I would like to be able to receive desktop notifications for price drops.~~
- ~~15. As a student, I would like to be able to follow a seller to see if they list any other textbooks.~~
- ~~16. As a student, I would like to be able to see how many other users have viewed a textbook.~~
- ~~17. As a buyer, I would like to be able to easily message the seller.~~
- ~~18. As a buyer, I would like to scroll through images that a seller is trying to sell.~~
- ~~19. As a buyer, I would like to share a seller's listing.~~
- ~~20. As a buyer, I would like to see details on the listed textbook (condition, description, etc.).~~
- ~~21. As a buyer, I would like to be able to see other textbooks that are related to the current listed textbook.~~
- ~~22. As a student, I would like to be able to see past messages.~~
- ~~23. As a student, I would like to be able to view my profile.~~
- ~~24. As a student, I would like to be able to add a profile picture.~~
- ~~25. As a student, I would like to be able to edit my profile.~~
- ~~26. As a student, I would like to be able to view the profile of sellers.~~
- ~~27. As a buyer, I would like to be able to give seller ratings based on interaction and ease of purchase.~~
- ~~28. As a seller, I would like to be able to list textbooks for sale.~~
- ~~29. As a seller, I would like to be able to add/remove pictures of what I am selling.~~
- ~~30. As a seller, I would like to be able to list the title and price of the textbook.~~

- ~~31. As a seller, I would like to be able to edit or delete my textbook listings after submitting them.~~
- ~~32. As a seller, I would like to be able to add the condition of the textbook.~~
- ~~33. As a seller, I would like to be able to add a description of the textbook.~~
- ~~34. As a seller, I would like to be able to set a meetup preference (public, in front of house, etc.).~~
- ~~35. As a seller, I would like to be able to edit the status of a transaction for a book I am selling (available, sold).~~
- ~~36. As a seller, I would like to be able to view reviews from my buyers.~~
- ~~37. As a seller, I would like to give reviews about my buyers.~~
- ~~38. As a student, I would like to be able to block another user from messaging me.~~
- ~~39. As a student, I would like to be able to block another user from viewing my listings.~~
- ~~40. As a student, I would like to be able to search for other users.~~
- ~~41. As a student, I would like to be able to view information about the Purdue University Book Store such as locations and hours.~~
- ~~42. As a student, I would like to be able to view an "About" page with information about the developers and the project.~~
- ~~43. As a student, I would like to be able to view a watchlist of listings from my profile.~~
- ~~44. As a student, I would like to be able to see how many sales a seller has made.~~
- ~~45. As a student, I would like to be able to see which classes are associated with a textbook.~~
- ~~46. As a student, I would like to be able to see my viewing history.~~
- ~~47. As a student, I would like to be able to submit and view GroupMe links related to courses.~~
- ~~48. As a student, I would like to be able to change my notification preferences (if time allows).~~
- ~~49. As a student, I would like to be able to upload all my syllabi to get a list of textbooks from the syllabi (if time allows).~~

## **Non-Functional**

### **1. Performance**

As a developer,

- a. I would like to send and receive messages within 5 seconds.
- b. I would like to search and list textbooks within 10 seconds.
- c. I would like to be able to host 1 percent of Purdue's student population at any time (~4160 students).
- d. I would like the application to run smoothly without crashing.

### **2. Server**

As a developer,

- a. I would like the server to communicate with the front and two databases quickly and efficiently.
  - b. I would like the server to be able to store users' data in a database.
- 3. Appearance
  - As a developer,
    - a. I would like the application to be aesthetically pleasing.
- 4. Security
  - As a developer,
    - a. I would like user account to be secure and available only to the specific user.
    - b. I would like to notify users of basic etiquette and security precautions when interacting with other users through the messaging system (no harassment, discrimination; passwords should not be given to anyone).
    - c. I would like to ensure that the use of users' data is non-malicious and transparent.
- 5. Usability
  - As a developer,
    - a. I would like the interface to be clean and easy to navigate.
    - b. I would like the application to be able to run on web browsers.