



## Sprint 3 Planning Document

### Team 24

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## Sprint Overview

During this sprint, we hope to successfully finish the implementation of the MyUniMarket web application. Part of this sprint will contain refining the functionalities we've previously made to make our Web Application look professional. The other parts of this sprint will be dedicated to implementing the last functional and nonfunctional user stories such as ratings, searching, and deployment.

**Scrum Master:** Conley Utz

**Meeting Plan:** Wednesdays 7:00 pm & Sundays 2:00 pm

### Risks and Challenges:

This majority of this sprint will involve us completing all corner case functionality for our website, and testing that will be difficult. Ensuring our application will deploy on heroku and continue to be a multi-user website will be difficult, but we've put hours of research into making sure it will function correctly. Moreover, refactoring code may take a very long time, but at the end of a development project it is absolutely necessary.

# Current Sprint Detail

## User Story #1

I would like to be able to search for items using keywords

#	Description	Estimated Time	Owner
1	Create UI search bar to allow keyword searching	2 Hrs	Nick
2	Validate the field through PHP and fetch it	2 Hrs	Giorgi
3	Integrate the PHP code with database to create custom query	3 Hrs	Giorgi
4	Dynamically list all appropriate listings back on the market page	3 Hrs	Mihir
5	Testing	1 Hr	Sakshi

## Acceptance Criteria

- Given that a user is logged in, they should be able to search all posts by the use of keywords.
- Given that a user has entered a keyword, the database should only fetch the posts that contain the keyword in the name.
- Given that a user has entered a keyword and there were no matches found, the market page should display nothing.

## User Story #2

I would like to be able to utilize the MyUniMarket website across all types of devices

#	Description	Estimated Time	Owner
1	Refine all responsive aspects	6 Hrs	Conley
2	Ensure launched website loads in smart phone browser	1 Hr	Conley
3	Test on mobile devices, tablets, and different PC browsers.	2 Hrs	Sakshi

### Acceptance Criteria

- Given that a registered user is on a smartphone, they should be able to use MyUniMarket in the browser of their choice
- Given that a registered user is on a tablet, they should be able to use MyUniMarket in the browser of their choice
- Given that a registered user is on a PC, they should be able to use MyUniMarket in the browser of their choice

## User Story #3

I would like to be able to view seller ratings

#	Description	Estimated Time	Owner
1	Create UI panel to add rating on listings	5 Hrs	Conley
2	Display rating within the profile page	2 Hrs	Giorgi/Nick
3	Update ratings whenever a new rating is submitted	2 Hrs	Mihir
4	Test that ratings are displayed correctly	0.5 Hrs	Sakshi

### Acceptance Criteria

- Given that the user is viewing a sellers profile, then they are able to see the seller's rating.
- Given that a new rating has been submitted, then the seller's rating on their profile page is updated to reflect the new rating
- Given that a user has no ratings, no rating will be displayed in their profile.

## User Story #4

I would like to be able to rate the seller by the quality of the item and transaction

#	Description	Estimated Time	Owner
1	Create UI button which pulls up rating radio button when clicked	3 Hrs	Conley
2	Create radio button which the user fills out to rate the seller	2 Hrs each	Conley/Nick
3	Calculate rating from fields in database	2 Hrs	Mihir
4	Testing of rating calculation and UI functionality	0.5 Hr	Sakshi

### Acceptance Criteria

- Given that a transaction has been completed between a buyer and a seller, when the buyer goes to the profile page of the seller, he has the option to “rate seller” through radio buttons
- Given that the user has not completed a transaction with a seller, if they view that seller’s profile page, they will not have the option to rate the seller
- Given that the user has rated a seller, once the user submits the rating, the seller’s rating is immediately updated based on the user’s rating
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## User Story #5

I would like to develop the backend API in object-oriented and open source PHP and MySQL using a modular approach to independently test each component.

#	Description	Estimated Time	Owner
1	Make Database related objects/classes	3 Hrs	Giorgi
2	Make functions for query calls inside classes	5 Hrs	Mihir
3	Testing	1 Hr	Giorgi

### Acceptance Criteria

- Given that the code is written in PHP and MySQL, all Database related computations must use OOP.
- Given that the code is written in PHP and MySQL, all MySQL queries should execute via function calls.
- Given that the code is written in PHP and MySQL, the software design should follow a modular approach.

## User Story #6

I would like to have a seamless frontend for a crisp and clean web application.

#	Description	Estimated Time	Owner
1	Refine UI on all pages to create minimalistic design	5 Hrs	Conley
2	Refine redirects to ensure full functional pages	1 Hrs	Conley
3	Test functionality on all pages	1 Hr	Nick

### Acceptance Criteria

- Given that the web application is implemented correctly, all redirects to pages should work as intended.
- Given that the web application is implemented correctly, application functionalities (such as posting, account editing), should have a minimalistic design, be easy to use, and work as intended.
- Given that the user is on the website, they should not be overwhelmed with information or be unable to figure out how to use the application.

## User Story #7

I would like to include security features to prevent against popular attacks such as MySQL Injection and Distributed Denial of Service.

#	Description	Estimated Time	Owner
1	Escape strings of PHP before Query	4 Hrs each	Mihir Sakshi
2	Setup Heroku Security to prevent DDoS	3 Hrs	Mihir
3	Test DDoS using online-based tools	1 Hr	Mihir

### Acceptance Criteria

- Given that the user inserts MySQL Injection type strings in HTML Forms, the input is cleansed before being run in a MySQL query.
- Given that the user inserts harmless strings in HTML Forms, the input is unchanged and ran in MySQL query unchanged.
- Given that a DDoS attack occurs, DDoS mitigation solutions are deployed preventing any harm to Web Server.



## User Story #8

I would like to have an effective and efficient user experience.

#	Description	Estimated Time	Owner
1	Organized and Interactive UI	4 Hrs each	Sakshi/Nick
2	Maintain consistency and use common UI elements	3 Hrs	Sakshi
3	Website warns users before they take permanent decisions (like delete account)	3 Hrs each	Sakshi/Nick
4	Website is easy to use and understand	2	Nick
5	Testing	1 Hr	Nick

### Acceptance Criteria

- Given that the user wants to use the website, the content is displayed in a systematic way using buttons, text fields, dropdowns and other Interface elements.
- Given that user visits different web pages, they should be consistent in terms of color, pattern, layout and design.
- Given that the user gets a pop up while using the website, the instructions should be easy to understand.

## User Story #9

I would like to use Heroku for the deployment of our web application as they have a simple cloud platform for development teams.

#	Description	Estimated Time	Owner
1	Install heroku environment	2 Hrs	Mihir
2	Migrate MySQL to Heroku's flavor of SQL	3 Hrs	Mihir
3	Deploy GitHub code to Heroku	2 Hrs	Mihir
4	Testing	0.5 Hr	Nick

### Acceptance Criteria

- Given that the app is deployed on Heroku, anyone with an internet connection should be able to access the Web Application.
- Given that the app is deployed on Heroku, all the functionality provided on local deploy should be available.
- Given that the app is deployed on Heroku, initial MySQL data must be converted to Heroku's flavor of SQL.

## User Story #10

I would like my frontend to involve HTML5, CSS3, and Javascript in unison to create the best user experience possible along with backend in PHP and MySQL to provide a high-uptime guarantee.

#	Description	Estimated Time	Owner
1	Create UI using HTML, CSS for structure and style of web pages	2 Hrs each	Conley Sakshi
2	Using JS for interactive web pages	2 Hrs each	Giorgi Sakshi
3	Use PHP and MySQL as back-end	2 Hr	Giorgi Nick:
4	Testing	0.5 Hr	Nick

### Acceptance Criteria

- Given that we use HTML, CSS for front-end we follow a common styling theme across our website for the best user experience.
- Given that we use PHP, all submitted fields in forms must be fetched by PHP and stored in MySQL through PHP.
- Given that we use MySQL, we can add, access and edit content in the database.

## User Story #11

I would like to be able to bookmark a listing.

#	Description	Estimated Time	Owner
1	Create UI button to bookmark a listing	2 Hrs	Conley
2	Create additional database fields to support the feature	2 Hrs	Giorgi
3	Implement dynamic listing on my bookmarks page using the newly created database fields	2 Hrs	Giorgi
4	Testing	1 Hr	Nick

### Acceptance Criteria

- Given that a customer is logged in they should be able to view all the posts they have bookmarked thus far under my bookmarks page.0
- Given that a user is logged in they should be able to bookmark any post that will be displayed under my bookmarks page as a result.
- Given that a previously bookmarked post has been deleted it should not be displayed.

# Remaining Backlog

## Functional

### 1. User accounts

As a user,

- ~~a. I would like to be able to register for a MyUniMarket account with a purdue.edu email~~
- ~~b. I would like to be able to verify my account registration through email~~
- ~~c. I would like to be able to login to my MyUniMarket account~~
- ~~d. I would like to be able to sign out of my MyUniMarket account~~
- ~~e. I would like to be able to edit my account information~~
- ~~f. I would like to be able to recover my password in the event it is lost~~
- ~~g. I would like to be able to delete my account~~
- ~~h. I would like to be able to view other users' profiles~~

### 2. Listings

As a buyer,

- ~~a. I would like to be able to view listings for items~~
- ~~b. I would like to be able to search for items using keywords~~
- ~~c. I would like to be able to sort items by category~~
- ~~d. I would like to filter items by parameters such as price~~
- ~~e. I would like to be able to bookmark a listing (if time allows)~~
- ~~f. I would like to be notified if one of my bookmarked posts has been sold (if time allows)~~
- ~~g. I would like to be able to see how many people have viewed a listing (if time allows)~~

As a seller,

- ~~h. I would like to be able to list items for sale~~
- ~~i. I would like to be able to provide the quality of my item for sale~~
- ~~j. I would like to be able to set an asking price of my item for sale~~

- ~~k. I would like to be able to write a description of my item for sale~~
- ~~l. I would like to be able to edit my listings after they are posted~~
- ~~m. I would like to be able to take down my listings~~
- ~~n. I would like to be able to categorize my item for sale~~
- ~~o. I would like to be able to display my location on my posts~~
- ~~p. I would like to be able to remove my items after completing a transaction~~
- q. I would like to see how many people have viewed my listings **(if time allows)**

### 3. Communication/Misc.

As a user,

- ~~a. I would like to be able to easily navigate the website~~
- ~~b. I would like to be able to utilize the MyUniMarket website across all types of devices~~
- ~~c. I would like to avoid seeing inappropriate words/phrases on the marketplace~~

As a seller,

- ~~d. I would like to be able to communicate with a potential buyer via private email~~

As a buyer,

- ~~e. I would like to be able to view seller ratings~~
- ~~f. I would like to be able to rate the seller by the quality of the item and transaction~~
- ~~g. I would like to be able to communicate with a seller via private email~~
- ~~h. I would like to know the location of the seller in order to find the most optimal listing~~

# Non-Functional

## 1. Architecture and Performance

As a developer,

- ~~a. I would like my server to handle 500 simultaneous requests~~
- ~~b. I would like to develop the backend API in object-oriented and open source PHP and MySQL using a modular approach to independently test each component.~~
- ~~c. I would like to have a seamless frontend for a crisp and clean web application.~~

## 2. Security

As a developer,

- ~~a. I would like to include security features to prevent against popular attacks such as MySQL Injection and Distributed Denial of Service.~~
- ~~b. I would like to store passwords as hashes in the MySQL Database.~~
- ~~c. I would like to allow only the authorized users to view or modify their listings.~~

## 3. Utility

As a user,

- ~~a. I would like to have an effective and efficient user experience.~~
- ~~b. I would like to solely focus on selling used school products in a local domain.~~

## 4. Hosting & Development

As a developer,

- ~~a. I would like to use Heroku for the deployment of our web application as they have a simple cloud platform for development teams.~~
- ~~b. I would like my frontend to involve HTML5, CSS3, and Javascript in unison to create the best user experience possible along with backend in PHP and MySQL to provide a high-uptime guarantee.~~