

## **Sprint 1 Planning Document**

#### Team 24

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# **Sprint Overview**

During this sprint, we hope to successfully build the foundational structure of our web application by implementing basic functionalities such as user registration, login, post creation, editing of account details, password recovery, account deletion, and logging out. We will build easy-to-use web pages in order to facilitate these functionalities.

Scrum Master: Sakshi Choudhary

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

### **Risks and Challenges:**

This majority of this sprint will involve us building the foundation of our web application. We need to ensure a smooth interlinking of the different technologies we are using, and follow a modular approach to build a separate front-end and back-end. Moreover, working with session variables to ensure secure login and logout functionality will be a challenge. The implementation of an email API to send required emails to purdue.edu will be challenging, but it is a necessary security feature.

# **Current Sprint Detail**

## **User Story #1**

As a user, I would like to be able to register for a MyUniMarket account with a purdue.edu email

#	Description	Estimated Time	Owner
1	Create UI panel to display the fields for registration	2 Hrs	Conley
2	Retrieve field values using GET/POST via PHP	1 Hrs	Mihir
3	Validate submitted fields	2 Hrs	Nick
4	Store the validated fields in User table in MySQL database	2 Hrs	Mihir
5	Send confirmation to the given purdue.edu email	4 Hrs (each)	Mihir Nick
6	Test that validation code is successfully delivered to the user's email address.	2 Hrs	Mihir

- Given that the user has a valid Purdue email account, if they attempt to create an account with their purdue.edu email, then they can successfully make a new account.
- Given that the user does not have a valid Purdue email account, if they attempt to create an account with a non-purdue email, then they are unable to make a new account.
- Give that all information is valid, the new user should receive a confirmation email to their purdue.edu email.

As a user, I would like to be able to login to my MyUniMarket account

#	Description	Estimated Time	Owner
1	Create UI panel to display the fields for login	2 Hrs	Conley
2	Notify user if they have not completed a required field	2 Hrs	Giorgi
3	Validate login information	1 Hr	Giorgi
4	If correct, redirect to market page. Else, notify user that information is incorrect.	3 Hrs	Giorgi
5	Testing of session variables and redirection	2 Hrs	Mihir

- Given that the input fields are implemented and the login information is correct, when a user presses the login button they should be notified that the information is correct.
- Given that the input fields are implemented and the login information is incorrect,
   when the user presses the login button they should be notified that the
   information is incorrect.
- Given that the login was successful, the user should logged in and displayed a logout button instead of a login button.

As a user, I would like to be able to sign out of my MyUniMarket account

#	Description	Estimated Time	Owner
1	Create UI interface for sign out on each page	2 Hrs	Conley
2	Change Session variables of PHP	4 Hrs	Mihir
3	Display Logout SUCCESS message	2 Hrs	Sakshi
4	Test correct modification of session variables	4 Hrs	Mihir

- Given that the user is logged in, they should be able to view and click the sign out button from every page.
- Given that the user is logged in, when the user presses the logout button, they should be successfully logged out with a SUCCESS message.
- Given that the user has been successfully logged out, they should not be able to enter MyUniMarket until they have logged back in.

As a user, I would like to be able to edit my account information

#	Description	Estimated Time	Owner
1	Create UI panel to display the fields for account editing	2 Hrs	Nick
2	Create UI panel which asks user to confirm all their edits	1 Hrs	Nick
3	Edit user details from completed fields then update the database	2 Hrs	Nick
4	Functional and Usability Testing	3 Hrs	Nick

- Given that the user already has an account that is logged in, when they press the Edit Account Information button, the website displays fields where they can edit their account details.
- Given that they do not press the save changes button, their account information stays the same as before.
- Given that the user presses the save changes button, their account information is displayed with updated information.

As a user, I would like to be able to delete my account

#	Description	Estimated Time	Owner
1	Create UI panel to display delete button	1 Hr	Conley
2	Create UI panel which asks user to confirm whether they wish to delete their account	2 Hrs	Sakshi
3	Create UI panel for user to enter their password to confirm account deletion	3 Hrs	Sakshi
4	User is automatically signed out of their account	2 Hrs	Nick
5	Remove user's account from database	2 Hrs	Giorgi
6	Testing of database tables and validation	2 Hrs	Nick

- If the user presses the Delete Account button, then they prompted to confirm whether they wish to delete their account.
- Given that they have pressed the delete account button and are prompted to confirm account deletion by entering their password, if they enter their password incorrectly an error message appears.
- Given that they have pressed the delete account button and are prompted to confirm account deletion by entering their password, if they enter their password correctly and they do not confirm account deletion, then the prompt disappears and nothing happens.
- Given that they have pressed the delete account button and are prompted to confirm account deletion by entering their password, if they enter their password correctly and they confirm account deletion, they are automatically signed out of their account and the account and its posts are removed from the database.
- Given that the user has deleted their account, if they attempt to log in using their deleted credentials, then they are unable to log in.
- Given that the user has deleted their account, if they attempt to make a new account they are able to do so.

As a seller, I would like to list items for sale

#	Description	Estimated Time	Owner
1	Create button to redirect to new listing page.	1 Hr	Conley
2	Create UI panel to display the fields for creation of a listing.	3 Hrs (each)	Conley Nick
3	Retrieve field values using GET/POST via PHP	2 Hrs	Mihir
4	Validate submitted fields	2 Hrs	Nick
5	Store the validated fields inside new entries in Item table in MySQL database	2 Hrs	Nick
6	Usability Testing of Listing page	2 Hrs	Nick

- Given that the user has correctly filled out all required fields in the listing, if they attempt to post their listing, then the listing is added to the database
- Given that the user have not filled out all required fields in the listing, if they
  attempt to post their listing, then the listing is not added to the database and they
  are prompted to fill the remaining required fields
- Given that the seller has not uploaded an image for the listing, a default thumbnail should be displayed for the listing.

As a seller, I would like to provide the quality of my item for sale

#	Description	Estimated Time	Owner
1	Create UI panel	1 Hr	Conley
2	Add radio buttons with qualities 1 to 5 (Used - Poor, Used - Good, Used - Great, Used - Like New, New)	2 Hrs	Conley
3	Create "quality" class and create string array with the indices linking to 2	3 Hrs	Sakshi
4	Link quality with listing on submission of post by adding to the database	4 Hrs	Mihir

- Given that the user is creating a post, the listing should function for each available quality ranking.
- Given that the user has selected a quality from one of the radio buttons, when the listing is submitted the correct quality is added to the post's details.
- Given that a listing has been posted, if a listing is clicked on, the item quality should be viewable on the listing.

As a seller, I would like to set an asking price for my item for sale

#	Description	Estimated Time	Owner
1	Create UI panel to display asking price field	2 Hrs	Conley
2	Validate that asking price is in correct format	2 Hrs	Giorgi
3	Store asking price in database	1 Hrs	Giorgi

- Given that the seller is displayed with the asking price field, if the seller enters an invalid value, an error message is displayed.
- Given that the seller enters a valid value in the asking price field, the asking price is correctly stores in the database.
- Given that the seller enters a valid value in the asking price field, the asking price of the listing is displayed correctly.

As a seller, I would like to write a description of my item for sale

#	Description	Estimated Time	Owner
1	Create UI panel to display description field	2 Hrs	Conley
2	Store description in database	2 Hrs	Sakshi
3	Create user from completed fields then store in database	3 Hrs	Sakshi

- Given that the user already has an account and is signed in, while making a post they should be able to write description of their item.
- Give that the user has written the description, it should be viewable across all pages where the post is included.
- Given that a listing has been posted, if a user clicks on the listing, then they should see the item's description.

As a seller, I would like to categorize my item for sale

#	Description	Estimated Time	Owner
1	Create category class with string array for each category	3 Hrs	Sakshi
2	Create UI panel with dropdown to display various categories that can be selected from 1	2 Hrs	Giorgi
3	Store selected categories in database on submission	2 Hrs	Giorgi
4	Validate that the category has been stored correctly.	1 Hr	Giorgi

- Given that the UI is implemented correctly and the category class is implemented correctly, the user should see a full list of available categories when clicking the dropdown menu.
- Given that there are many different types of items, the category class should have a vector for necessary additions.
- Given that the database has been implemented correctly, if the user submits their post, then the database should correctly store the category.
- Given that the database has been implemented correctly, if the user submits their post, then they should get an email that the category has been stored correctly.

As a seller, I would like to display my location on my posts.

#	Description	Estimated Time	Owner
1	Create UI panel to display the field for location	2 Hrs	Conley
2	Store the location as a string in database	2 Hrs	Giorgi
3	Validate that the location has been stored correctly.	1 Hr	Giorgi

- Given that the database has been implemented correctly, if the user clicks create post, then the database should correctly store the location given.
- Given that the database has been implemented correctly, if the user clicks create post, then they should get a message that the location has been stored correctly.
- Given that the text filter has been implemented correctly, if the user types a word that is flagged as inappropriate, then they should get a message that the location contains an inappropriate word.

### As a user, I would like to easily navigate the website

#	Description	Estimated Time	Owner
1	Find a marketplace design that fits our needs	2 Hrs	Conley
2	Customize the design the ensure a simple, yet thorough experience	4 Hrs (each)	Conley Sakshi
3	Ensure bootstrap functionality is attained	2 Hrs	Conley
4	Create routing functionality for pages	2 Hrs	Conley
5	Interface Testing	2 Hrs	Sakshi

- Given that our design includes all necessary details, the website should be minimalistic.
- Given that all UI function is implemented properly, the user should be able to visit each page on the website through a variety of buttons.
- Given that our UI works with bootstrap correctly, the website should be easily viewable and functioning on any device.

As a user, I would like to avoid seeing inappropriate words/phrases on the marketplace

#	Description	Estimated Time	Owner
1	Create list of words and phrases considered 'inappropriate'	2 Hrs	Giorgi
2	Add list of inappropriate words and phrases to a database	2 Hrs	Giorgi
3	Reject any post which contains any inappropriate word/phrase	2 Hrs	Giorgi

- Given that there is a list of inappropriate words and phrases, if the user attempts to include an inappropriate word or phrase in a listing, then that listing will not be posted and they will be prompted to edit their listing
- Given that there is a list of inappropriate words and phrases, if the user attempts to create a username with an inappropriate word or phrase, the username is rejected and they must create a new one.
- Given that there is a list of inappropriate words and phrases, if the user attempts
  to create a password with an inappropriate word or phrase, the password is
  accepted.

As a developer, I would like to store passwords as hashes in the MySQL Database

#	Description	Estimated Time	Owner
1	Utilize Hashing library of MySQL	3 Hrs (each)	Mihir Sakshi
2	Store Hashed Password in Database	2 Hrs	Mihir

- Given that the user enters their password while registering, the password is hashed using an irreversible secure hashing algorithm.
- Given that the user enters their password while registering, the password is hashed and stored in the User table of Database.
- Given that the user enters validated fields for logging in, the password field is hashed and compared with the hashed password for the given email stored in the database.

# **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
- I. 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.