

SW Engineering CSC648/848 Fall 2018

Team 9

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Milestone 2

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1. Data Definitions v2

1. Non-Registered Users: The users who access our website without getting registered or an administrator. They shall be able to access posts from sellers, view pictures, browse and search categories, and register for the website. He or she shall not be able to contact the seller for items.
2. Registered Users: The users who have created an account on our website. They shall be able to access the seller dashboard, post listings, respond to buyer messages, buy from other sellers, browse categories, message other sellers, along with the privileges of a non-registered user.
3. Administrator: The user who has access to other registered user's data. He or she shall be able to accept requested listings for approval before they go online. Administrators shall be able to ban a user, delete listings, and edit the terms of service, along with having the privileges of registered and non-registered users.
4. Selling: Registered Users can post an item with or without a picture uploaded and containing the price, condition, contact information, description, subject, and any SFSU classes that use this item. Registered Users shall need a registered account to keep track of selling posts.
5. Buying: Registered Users are able to buy an item as long as contact information is exchanged. Non-Registered Users shall be able to view posts and description without an account, but must register to message the seller and buy from them.
6. Browsing: Non-Registered Users and Registered Users shall be able to browse and search for items they are looking for. They shall be able to use a filter to filter by price from lowest to highest or vice versa. By default, the prices should already line up from lowest to highest.
7. Categories: In addition to Browsing, Non-Registered Users shall be able to click on categories that turns into sub categories. For example, after clicking "furniture", different sub-categories shall appear, such as couches, tables, or chairs.
8. Registering: Non-Registered Users shall have to sign in to post an item for sale. Registering shall require an email and a password. They shall agree to the terms of service, and do the captcha.
9. Terms of Service (TOS): Registered Users shall have to accept the terms of service once for their account before they can begin posting items. Inappropriate items or illegal items shall not go live after being reviewed from the admin.
10. Administering: After a Registered User submits a post for sale, it shall not go live until an Administrator reviews and approves of the post. If the post is rejected, the post shall be saved as a draft for that Registered User to change and resubmit.
11. Messaging: Each item/post shall have a button to send a message to the Registered User (Seller) and start a chain of messages in order by date. Each user shall have a different colored text bubble.
12. Seller Dashboard: The Registered User (Seller) shall have access to the seller dashboard which they can sort, manage, and edit their listings. They can choose to create new listings, delete existing listings, or edit a listing's properties; price, picture, title, condition, etc.
13. Sales item: descriptive characteristics of the item like a picture.

14. User record: is the data of user that defines the basic information about a user. For example if the user was ever blocked from web site, or the reliability of user.

2. Functional Requirements v2

1. Priority - Must have

For Non-Registered users:

1. Selling

- 1.1. Non-Registered users shall be able to click on the sell button and start listing an item.
- 1.2. Before submitting the listing for sale, they shall be required to log in or register.

2. Buying

- 2.1. Non-Registered users shall be able to buy an item by contacting the owner.
- 2.2. When Non-Registered users click to send a message, they shall be required to login or register.
- 2.3. Non-Registered users shall ask the owner for payment option in person.

3. Browsing

- 3.1. Non-Registered users shall be able to view listings for sale.
- 3.2. Non-Registered users shall be able to sort listings by price or date uploaded.

4. Categories

- 4.1. Non-Registered users shall be able to browse listings by category
- 4.2. Example categories include Math, Science, Business, etc.

5. Registering

- 5.1. Non-Registered users shall have to sign in to post an item for sale.
- 5.2. Registering shall require an email and a password.

8. Messaging

- 8.1. Each listing shall have a button to send a message to the registered user.
- 8.2. The message window shall be ordered messages from earliest date.
- 8.3. The buyer and seller shall both have different chat color boxes.

10. Searching

- 10.1. Searching shall be available to search for any input for any category.
- 10.2. Searching shall also be filtered to search within a category.
- 10.3. Searching shall also be filtered to search by course number.

For Registered users:

1. Selling

- 1.1. Registered users shall be able to list an item with/without a picture uploaded.
- 1.2. Registered users shall be able to list an item's price, condition contact information, description, subject, SFSU class category.

2. Buying

- 2.1. Registered users shall be able to buy an item by contacting the owner
- 2.2. Registered users shall ask the owner for payment option in person.

3. Browsing

- 3.1. Registered users shall be able to view listings for sale.
- 3.2. Registered users shall inherit from Non-Registered users to sort listings by price or date uploaded.

4. Categories

- 4.1. Registered users shall inherit from Non-Registered users to be able to browse listings by category.
- 4.2. Example categories include Math, Science, Business, etc.
- 4.3. Each category will have sub-categories.

6. Terms of Service (TOS)

- 6.1. Upon registering, users shall have to accept the TOS before the account is successfully created.
- 6.2. If the TOS isn't accepted, then the user shall be brought back to the home page.
- 6.3. The TOS shall include; not posting inappropriate pictures, spamming messages to a Registered User (seller).

8. Messaging

- 8.1. Registered users shall be able to send a message to the owner of a listing.
- 8.2. The message window shall be ordered messages from earliest date.

9. Seller Dashboard

- 9.1. Registered users shall be able to create, sort and view their listings.

10. Searching

- 10.1. Searching shall be available to search for any input for any category.
- 10.2. Searching shall also be filtered to search within a category.
- 10.3. Searching shall also be filtered to search by course number.

For admins:

7. Administering

- 7.1. When a Registered User submits a listing for sale, it shall not go live until an admin approves the listing
- 7.2. On the Admin's Dashboard, the admin shall approve or disapprove a listing.
- 7.3 Admin can leave reasons for rejection.

2. Priority - Desired

For Non-Registered users:

For Registered users:

9. Seller Dashboard

9.1. Registered users shall be able to delete or change listings.

For admins:

3. Browsing

3.1. Admin shall have the choice to browse listings to find anything inappropriate that was unfiltered.

3.2. Admin shall be able to edit any posts

11. Admin Dashboard

11.1. Admin shall be able to view listing requests

11.2. Admin shall be able to reject or accept requests

11.2a. Admin can leave a message to seller before rejecting.

3. Priority - Opportunistic

For Non-Registered users:

For Registered users:

For admins:

8. Messaging

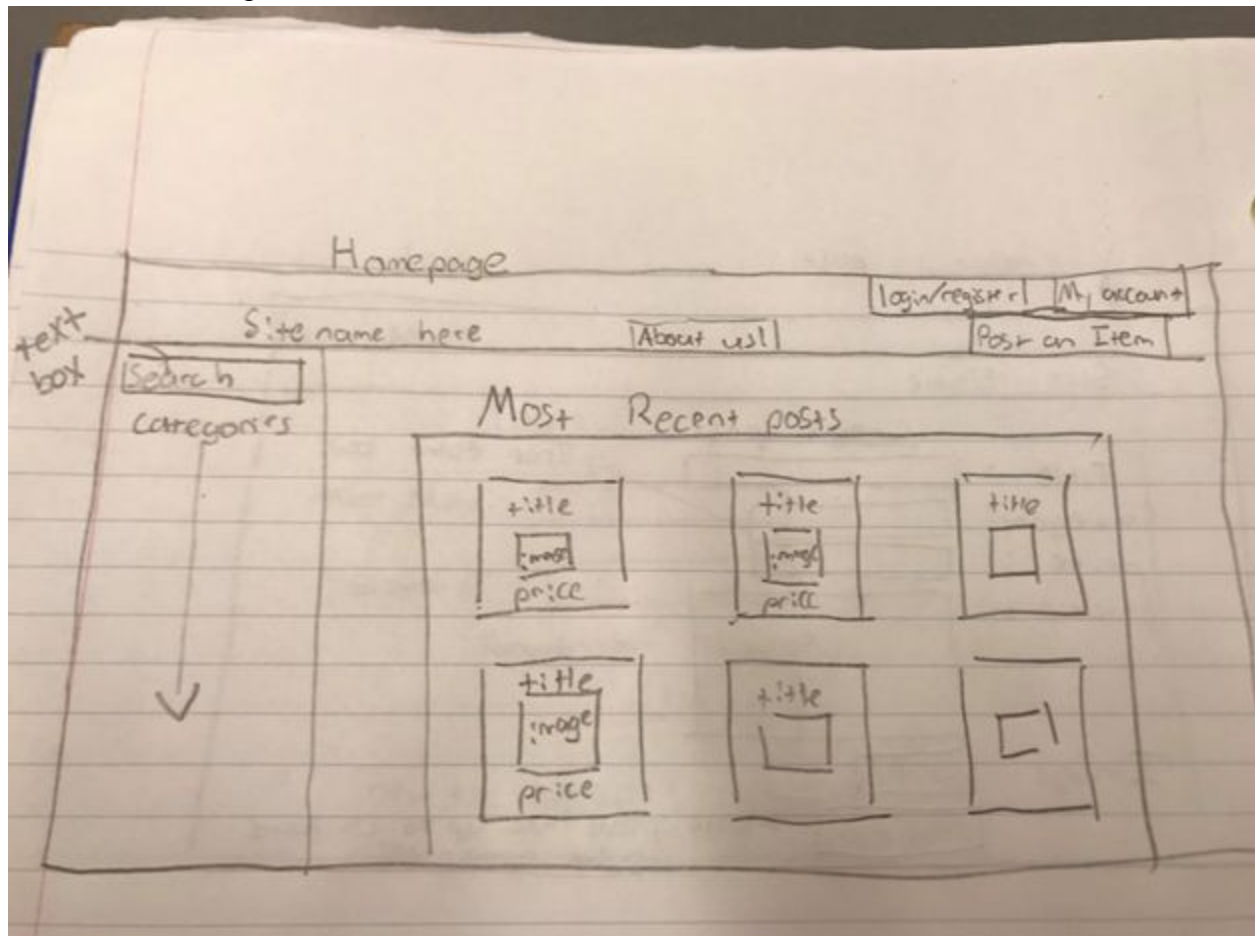
8.1. Admins shall be able to message Non-Registered and Registered users.

3. UI Mockups and Story Board

Case 1: Unregistered User Browsing

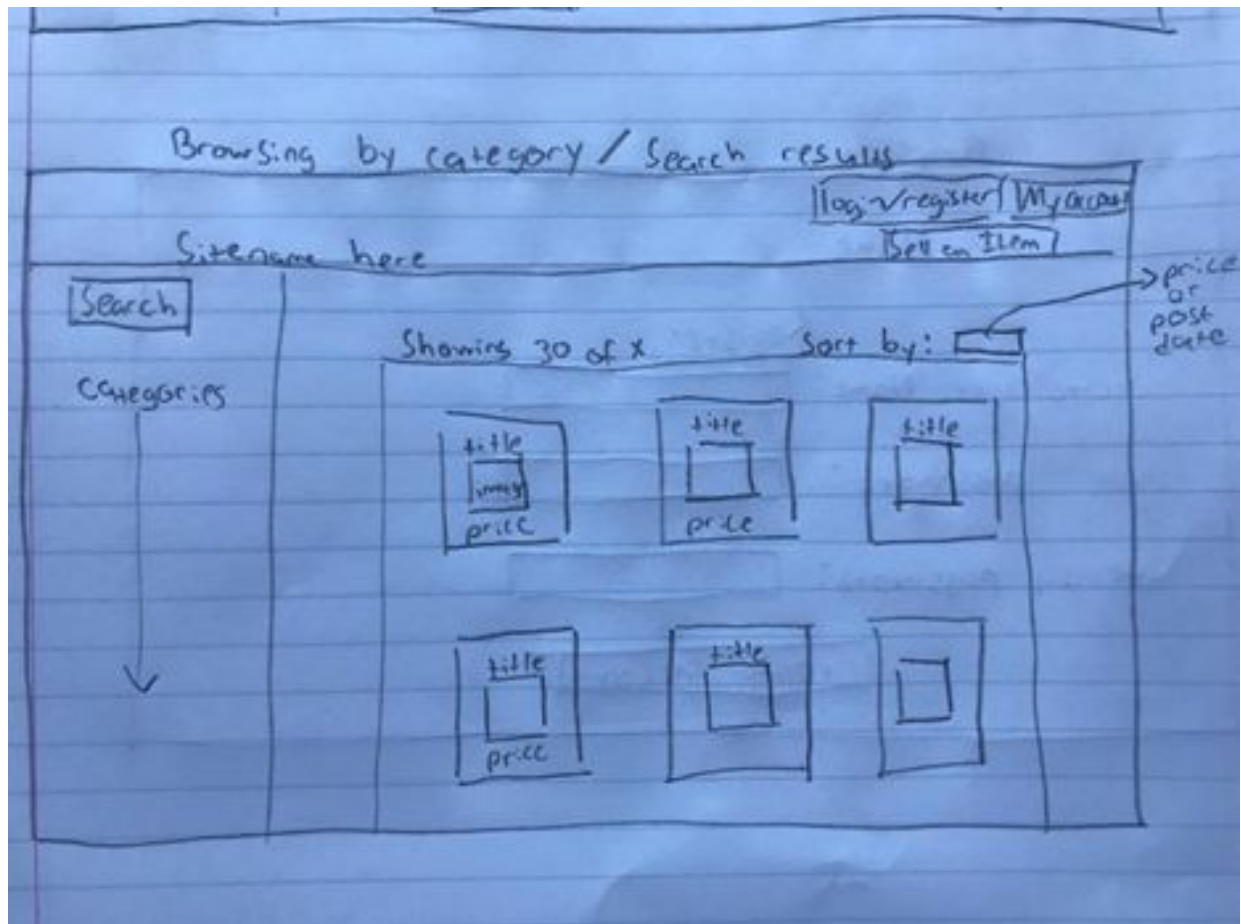
An unregistered user has heard of our website and decides to use it to purchase a text book. Upon visiting our website, they are first brought to the home page.

The Home page will display the most recent posts on the center of the page and categories to browse posts on the left side of the page. Each displayed post will display the title of the post, an image of the post, and the price of the post. On the top right of the page will be links to login, to the dashboard, and to create a post. Above the categories will be a text field for users to search for posts.



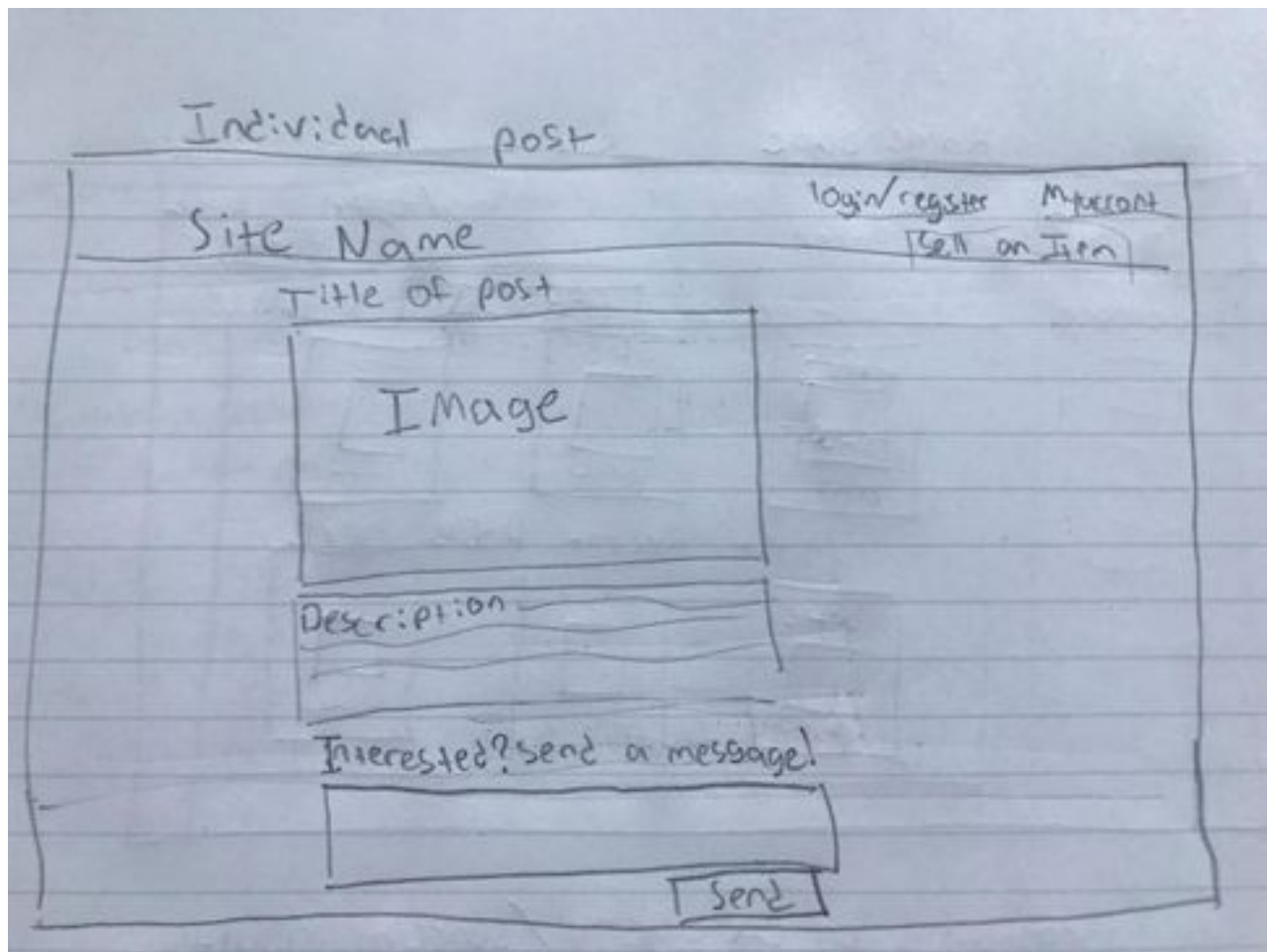
The unregistered user then clicks on the textbook category on the left side of the page to filter for textbooks.

When Filtering by search or category, the display will be similar to the homepage, with the addition to sort by price or post date. Additionally, if browsing by category, if a specific category has subcategories, the subcategories will be indented and displayed below the main category.



The unregistered user then sees a post about a textbook they need and clicks on it, and they are brought to the individual post's page.

Individual posts will display The title of the post, then images of the post, followed by the price and description. Then there will be a textbox for interested users to send a message to the post's seller.



The unregistered user then writes out a message to the post's owner, and when they hit send, they are brought to the login/register page. They create a new account and their message is sent.

The login page will contain two text fields for username and password information, with a forgot password link and a login button. It will also have a link for unregistered users to create an account, which will have a field for unregistered users to create their username and password.

A hand-drawn sketch of a login page on blue-lined paper. The page is titled "Login" at the top center. Below the title is a horizontal line labeled "Site Name" on the left. Underneath this line, the word "Login" is written and underlined. Below the underlined "Login" are two text input fields: the first is labeled "User Name:" and the second is labeled "Password:". To the right of the "Password:" field is a link that says "forgot your password?". Below these fields is a button labeled "log in". At the bottom of the form area, there is a link that says "new to our site?" followed by a button labeled "register".

A hand-drawn sketch of a register page on lined paper. The page is titled "Register" at the top center. Below the title is a horizontal line labeled "Site Name" on the left. Underneath this line, the word "Register" is written and underlined. Below the underlined "Register" are three text input fields: the first is labeled "desired user Name:", the second is labeled "password:", and the third is labeled "verify password:". Below the "password:" field is a button labeled "Captch box". To the right of the "Captch box" button is a checkbox labeled "checkbox". Below the checkbox is the text "I have read and agree to the terms of service.". At the bottom of the form area is a button labeled "Create account".

Case 2: Unregistered User Making a Post

An unregistered user wants to make a post on the site. Upon visiting the homepage, and click on the create post link in the upper right corner. The unregistered user is brought to the post creation page and begins to fill out the information about their post.

The create post page will have a text field for the title of the post, and a drop down bar to select a category. The create post will also have another text field for the price of the post, a text box for the description of the post, and a link to upload images for the post.

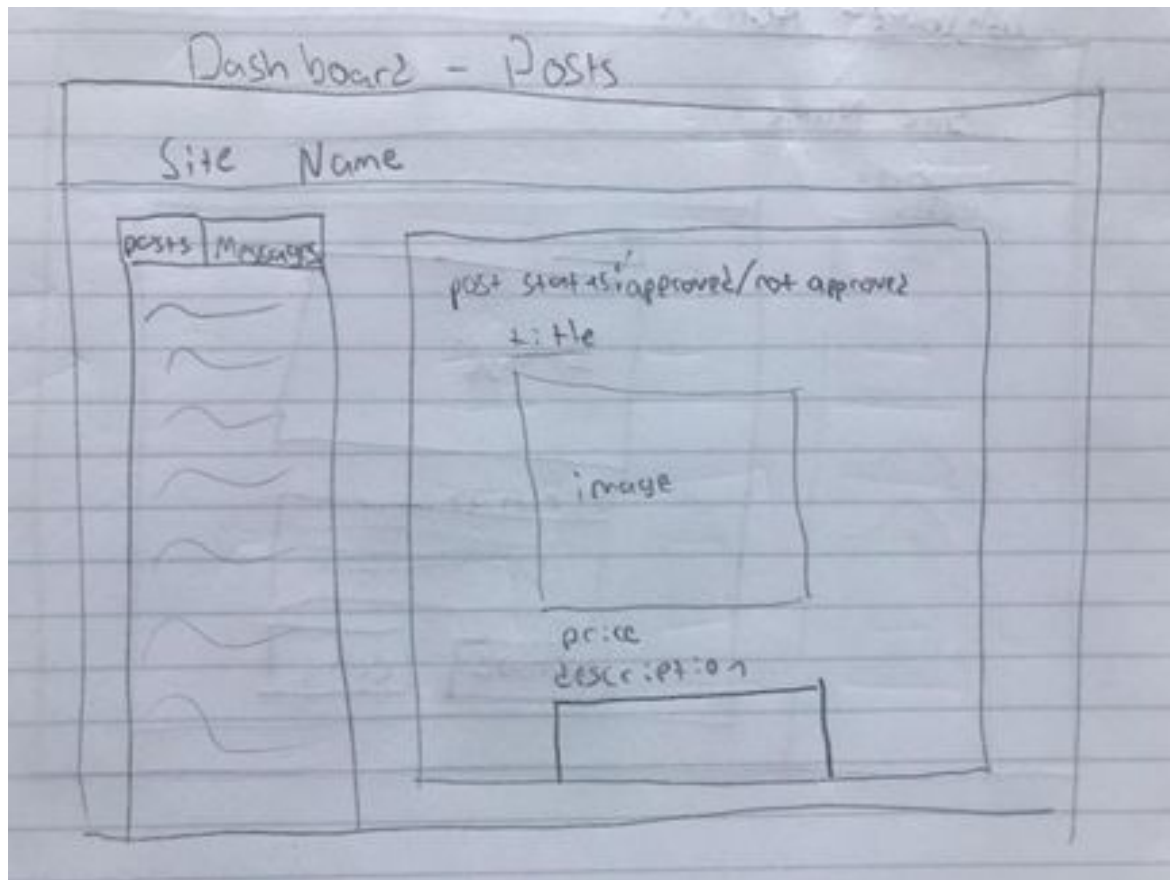
After the unregistered user hits the create post button, they are brought into the login/register page, where they must create a new account. Once they create an account, their post is created and pending approval from an administrator.

The image shows a hand-drawn wireframe of a 'Create post' page on lined paper. At the top, the title 'Create post' is written. Below it is a horizontal line labeled 'Site Name'. The main form area contains several fields: a text field for 'Title' with an asterisk, a 'drop down bar' for 'Category' with an asterisk, a text field for 'price' with an asterisk, and a larger text area for 'description'. Below these is an 'Image' field with an asterisk and an 'upload' button. At the bottom left are 'Cancel' and 'create post' buttons. At the bottom right is a note: '*Note: posts take up to 24 hours to be approved'. A legend indicates that '*' denotes 'Mandatory Fields'.

Case 3: Registered User Using the Dashboard

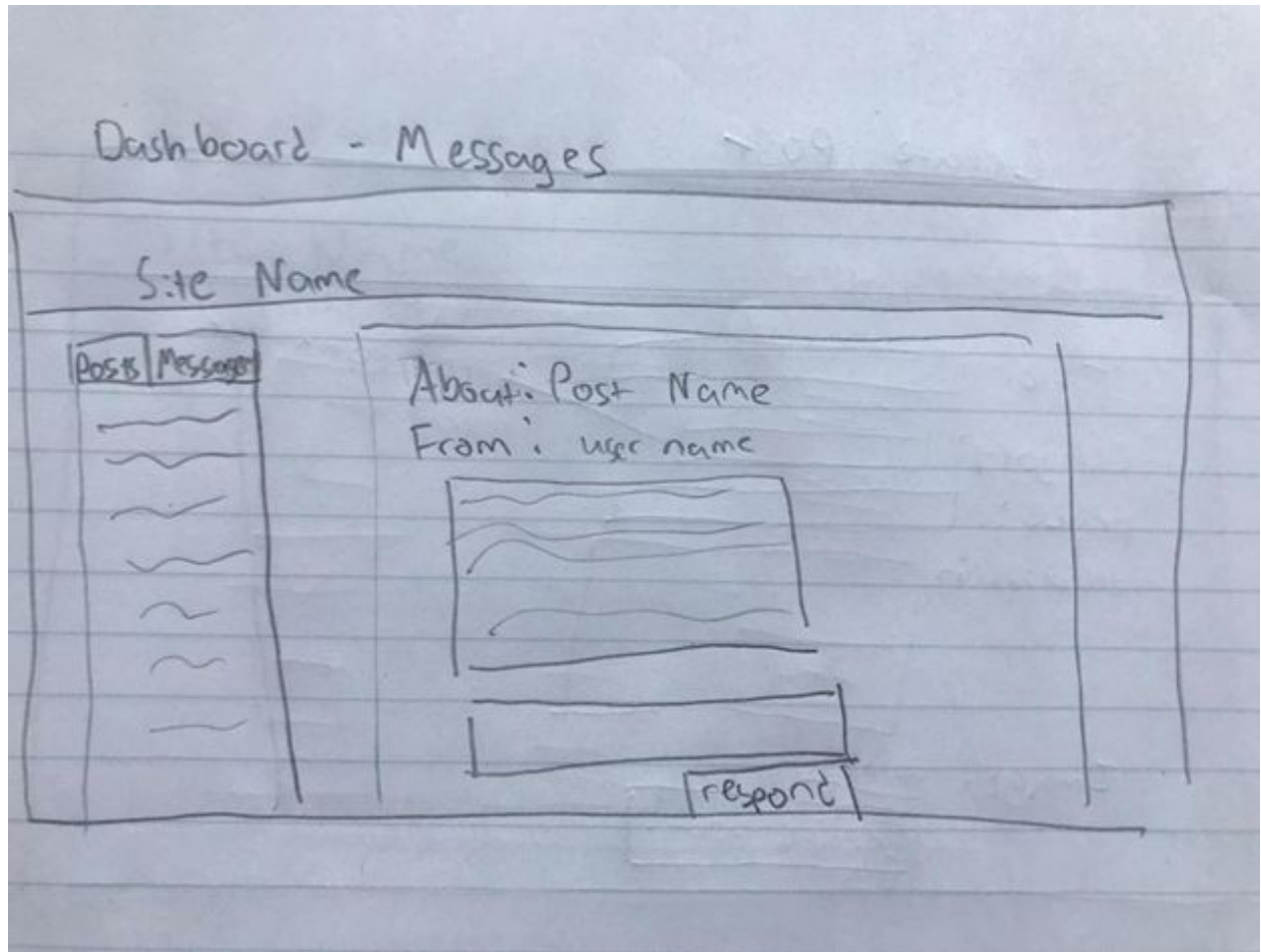
A registered visitor wants to view the approval status of a recent post they have made. They visit the website's homepage and click on the My Account link in the upper right corner. After logging in, they are brought to their dashboard where they can see the status of their posts.

The dashboard will display the post in the center of the screen similar to how a post is seen when browsing, but with the addition of the approval status of the post at the top. On the left, the registered user's posts are listed, so they can click on them to view the individual status of each post.



After viewing the status of their posts, the registered user wants to see if he or she has any messages about their posts. They click on the messages tab and read any new messages they have.

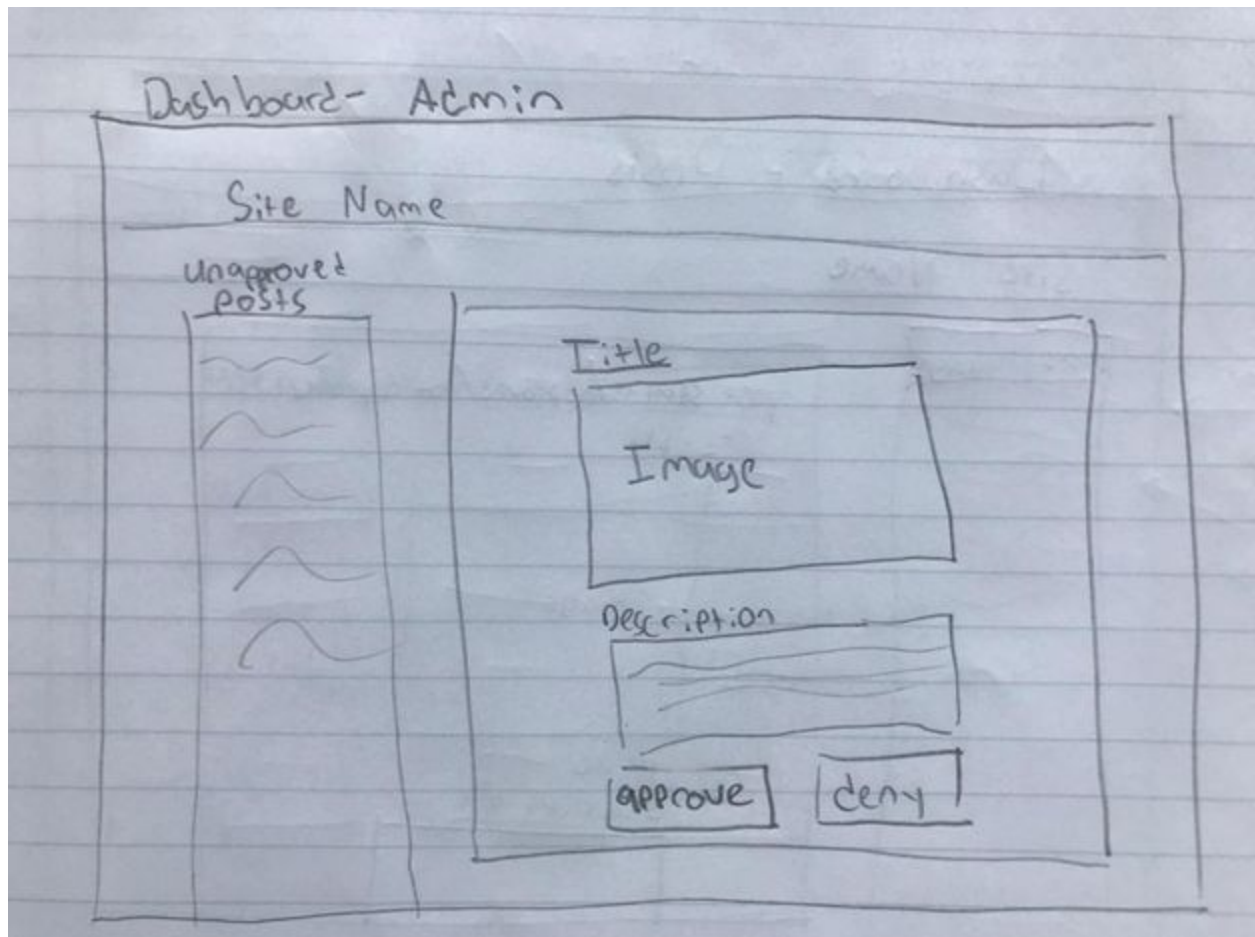
The messages dashboard will display messages on the left similar to the posts dashboard. On the center of the screen, the message will display the name of the specific post the message is about, and the text body of the message. Below that will be an empty text field for the registered user to write a response to the message sender.



Case 4: Administrator Approving/Denying Posts

An administrator logs onto the website to approve or deny posts. They log onto the administrator dashboard to sift through new posts, and approve appropriate posts and deny inappropriate posts.

The administrator dashboard will look similar to the registered user's dashboards. It will have new approval pending posts on the left of the screen and the post's content on the middle of the screen in the normal post format. Below the post will be an approve or deny button for the administrator to approve or deny posts.



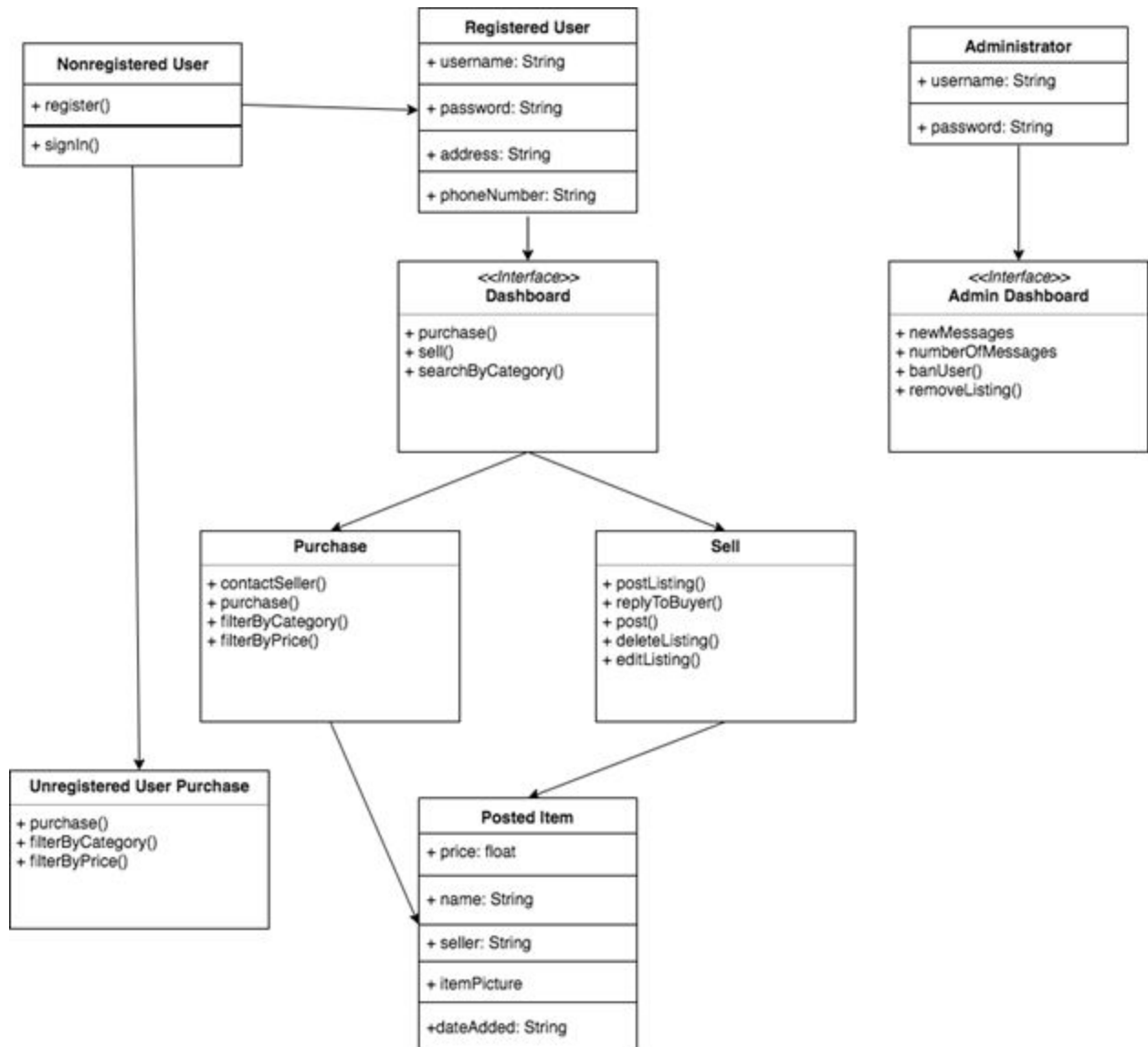
4. High Level Architecture, Database Organization

Database Organization: We will have an Accounts table, which will hold the information of the registered users, such as username and password. We will have a schema called Categories, which would hold the tables of different categories, such as Books, Electronics, Furniture, etc. In those tables, we will hold the information of the items that users are going to post, such as the pictures, price, item name, etc. There will also be a Messages table, which will hold all of the messages.

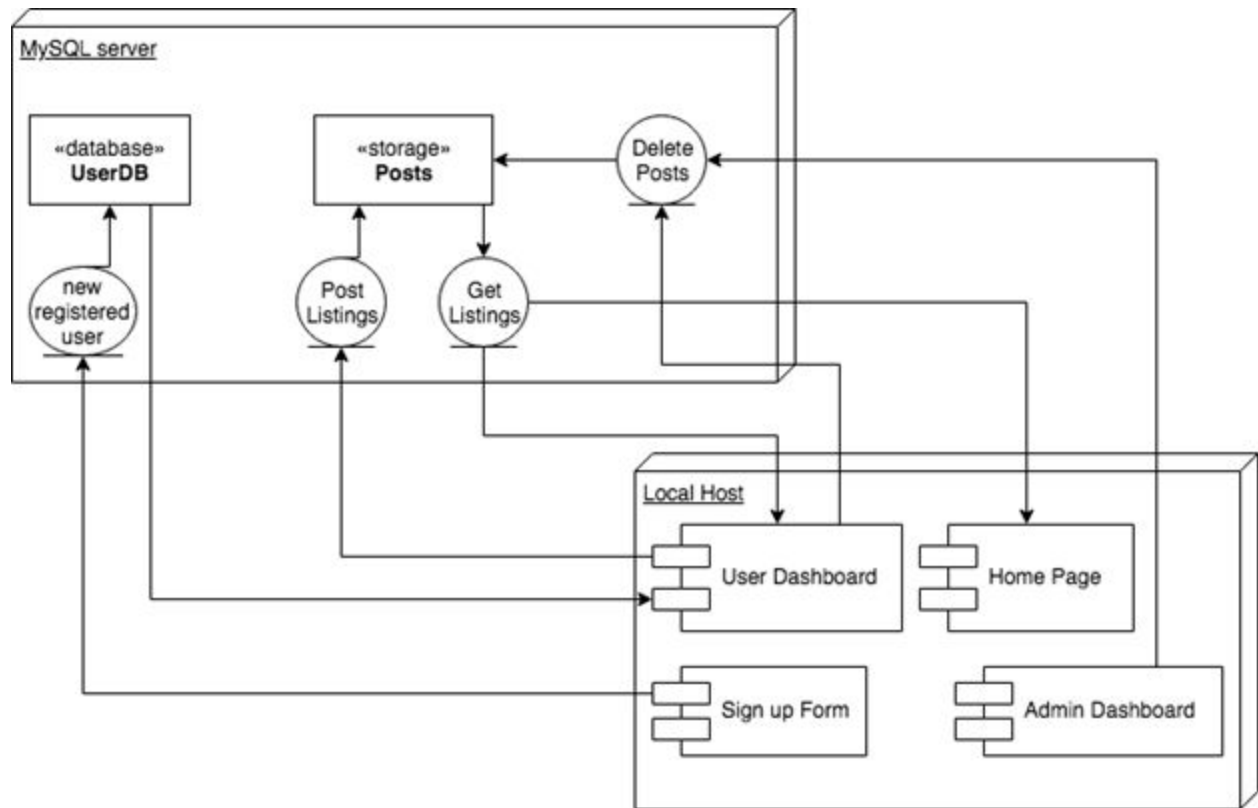
Images will mainly be kept of file systems because we will only need to store static items such as photos and user input.

We will organize search items by the different categories, then we will user %like to find the result that is closest to the user's input. We will also implement a sorting feature, which will sort items by price or alphabetically.

5. High Level UML Class Diagrams



Deployment Diagram



6. Key Risks

Our Project Faces Two Key Risks:

1 - Our group has little experience with using python, and the bulk of our project needs to be written in python. Our group has been using tutorials to learn and practice using python so that we will be prepared for our project.

2 - Our team has a small time window where we can all meet at once. As such, it is unlikely that we will be able to work as an entire team to work on our project, and we will instead need to work on individual pieces and divide our meeting times so that the front end and back end teams will be able to work with their respective team members.