Global Distributed Software Development

Master Team Project SoSe 2022

Milestone 2 – Project Team 1 (Local Team)

ProClick – Online Media Point

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Revision History

Name	Date Submitted	Date Revised	Revision Summary	Version
Ahmed Hassan	09.05.2022	-	-	1.0

Table of Contents

Content and Structure for Milestone 2 document for review

1. Functional Requirements (Prioritized)

Priority

- *1 – must have*
- *2 – desired*
- *3 – opportunistic*

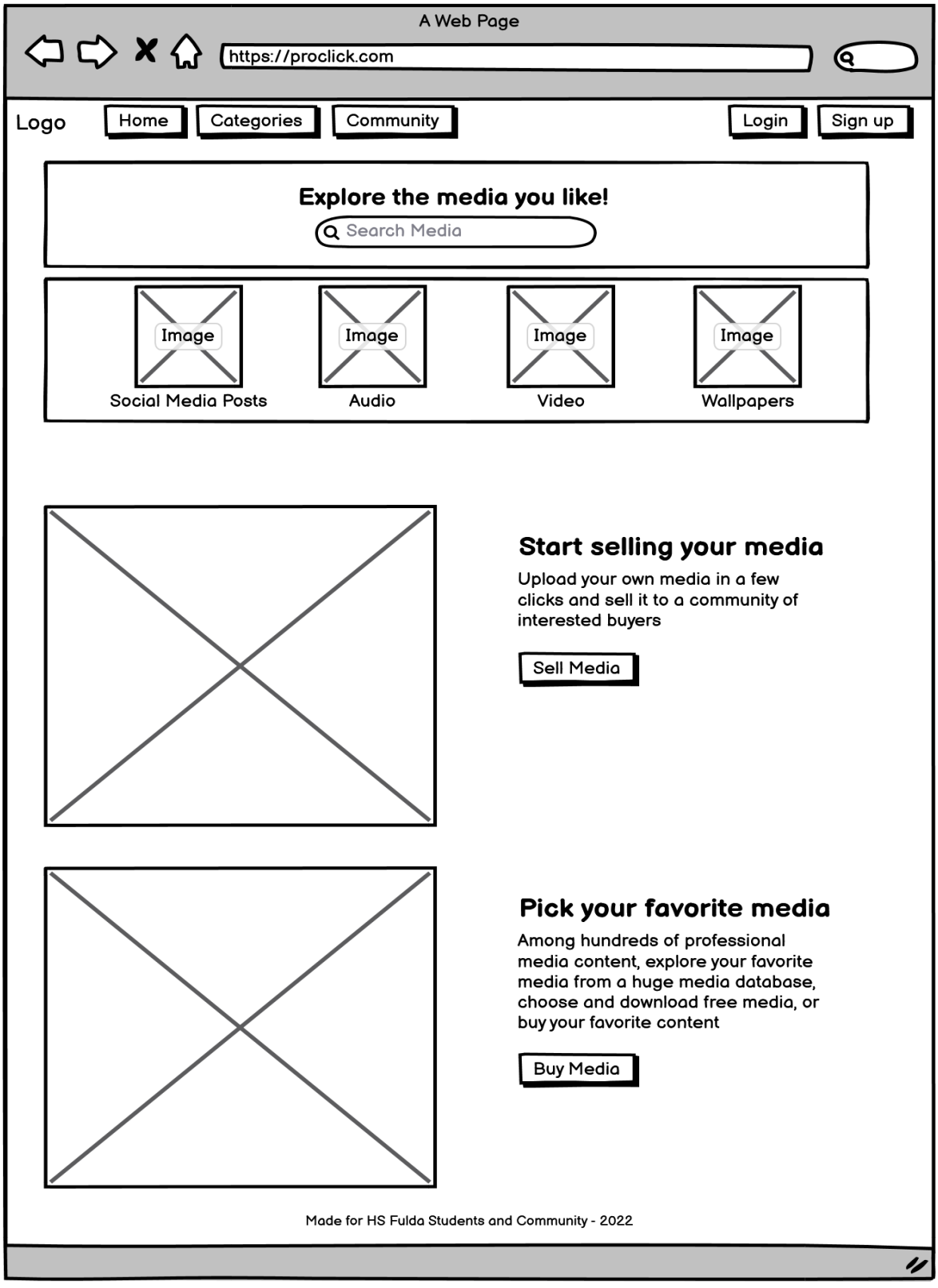
Sr. no.	Functional Requirements	Priority
1.	Buyer can sign up and log in to the system using the university email	1
2.	Buyer can search for the media by using Text and through Voice.	1
3.	Seller can upload media in the form of image, audio, or video.	1
4.	Buyer can download the media from the application	1
5.	Seller can delete the media from the application which is uploaded by himself	1
6	Buyer can access media owned by him anytime e.g if it gets deleted from computer	1
7.	Buyer can send messages to the seller to buy media.	1
8.	Admin can view the media in the system	1
9.	Admin can create new media in the system	
10.	Admin can delete media uploaded by the sellers	1
11	Admin can block certain users.	1
12.	Admin can approve the media uploaded or updated by seller	1
13.	Admin can view the list of buyers and sellers registered in the system	1
14.	Sellers should be able to update the product's details such as media, description, etc.	1
15.	Buyer will get a bonus deposit on sign up.	2
16.	Buyer can get recommended results based on his previous search or tags	2

2. List of Main Data Items and Entities

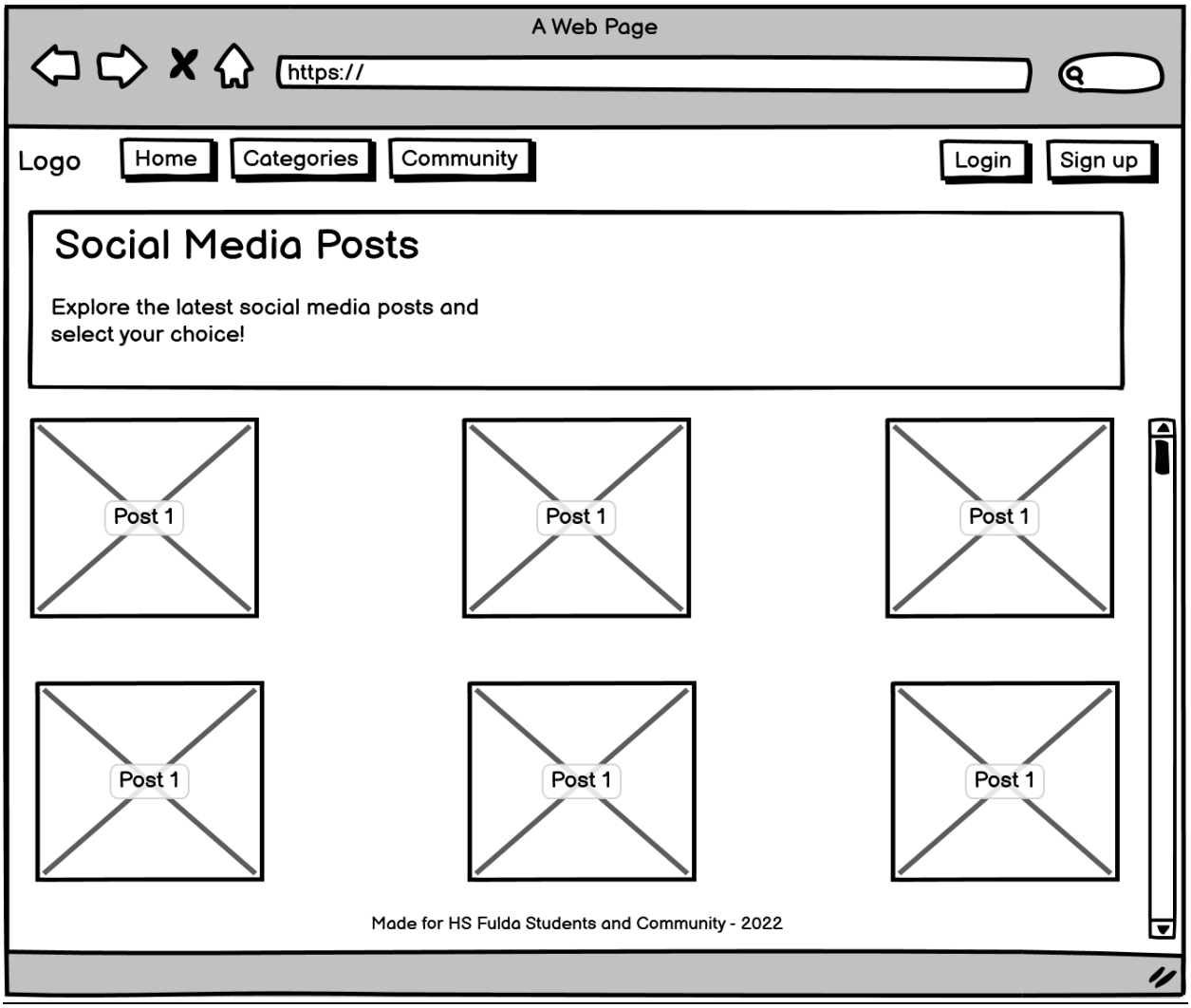
Sr. No.	Entities	Data Items	Detail
1	Admin	String	A system administrator is responsible for managing seller's profiles, as well as to approval of media.
2	Seller	String	This entity contains the seller's information.
3	Reviews	String	When a buyer makes a purchase, there is a rating option to rate the seller's content.
4	Chat	String	This feature connects the seller and the customer, allowing them to communicate with no trouble.
5	Buyer	String	It contains the buyer's profile information
6	Media	String	This application's most important feature is its media. So, in this entity, we'll store media URLs of each product that will be linked with a specific buyer.

3. UI Mockups and Storyboards

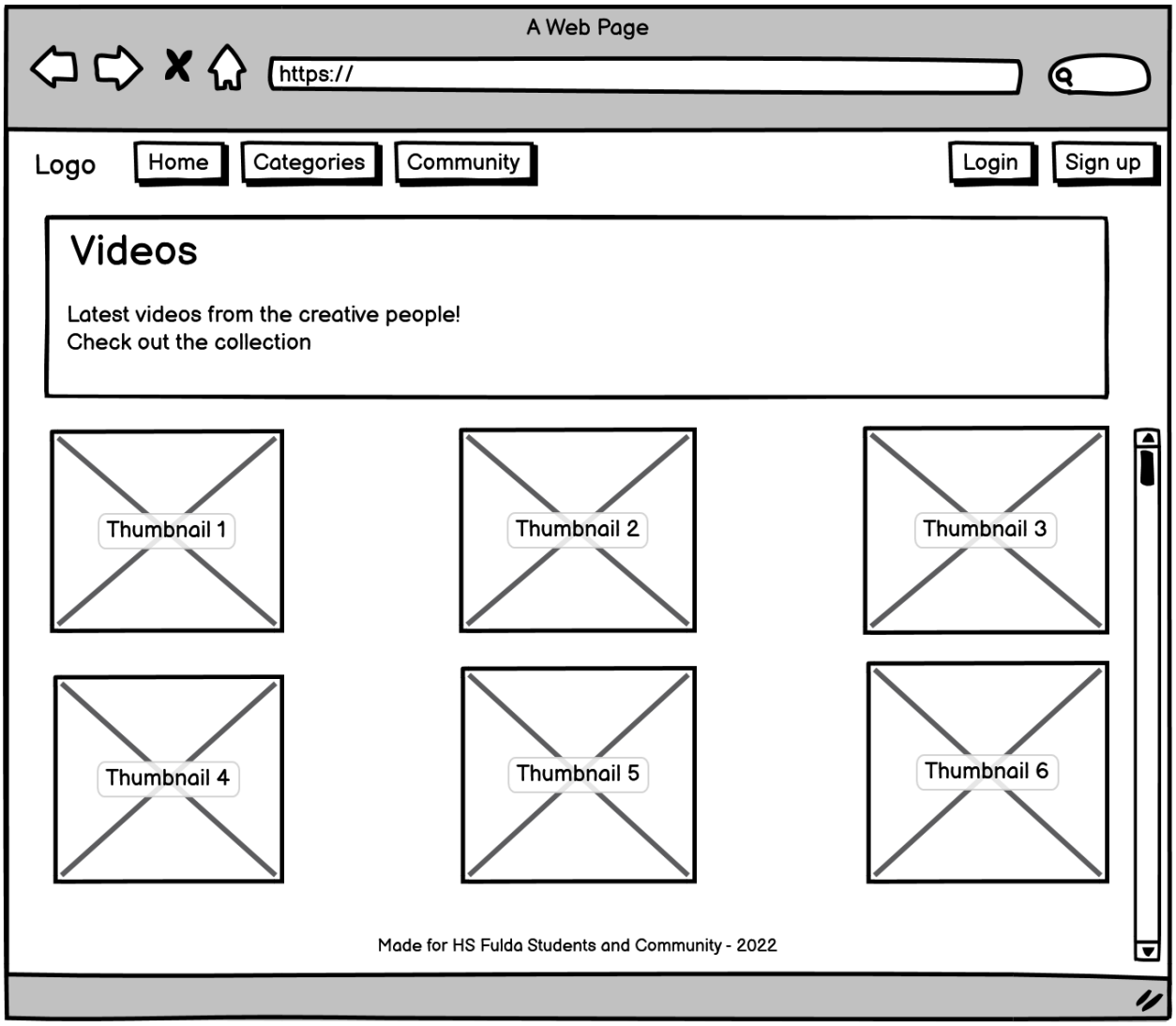
Landing Page



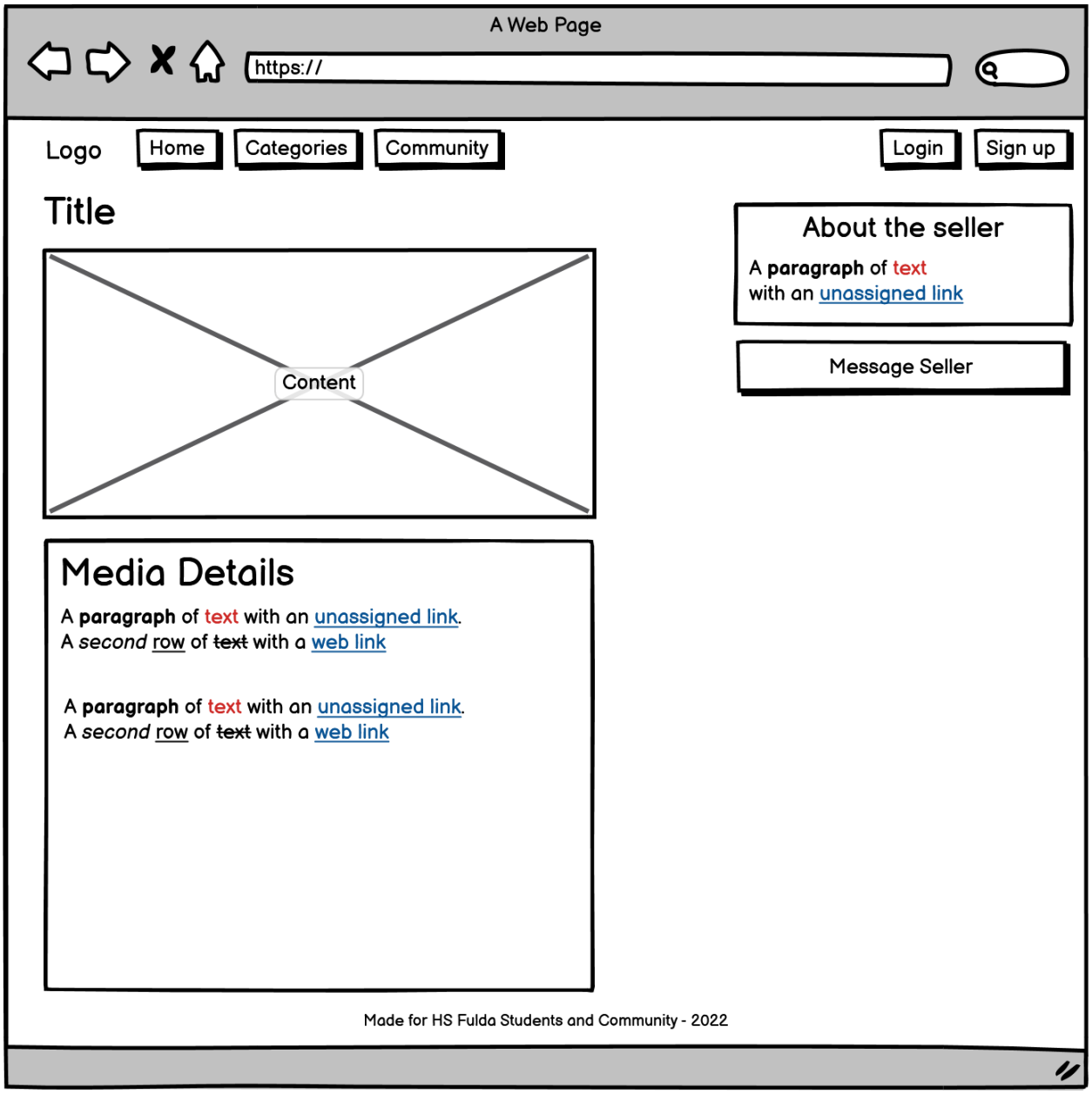
UI for Search results 1



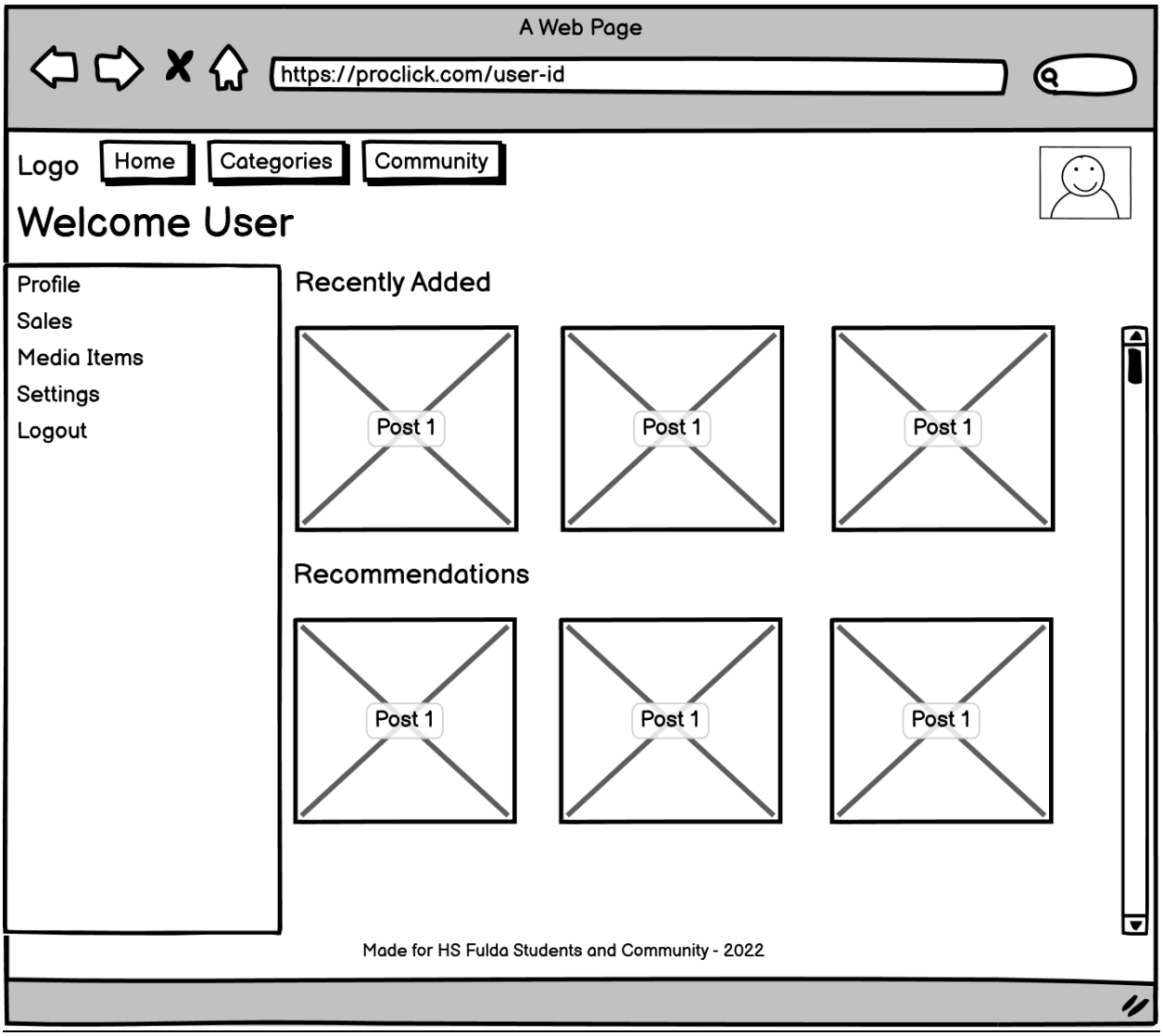
UI for Search results 2



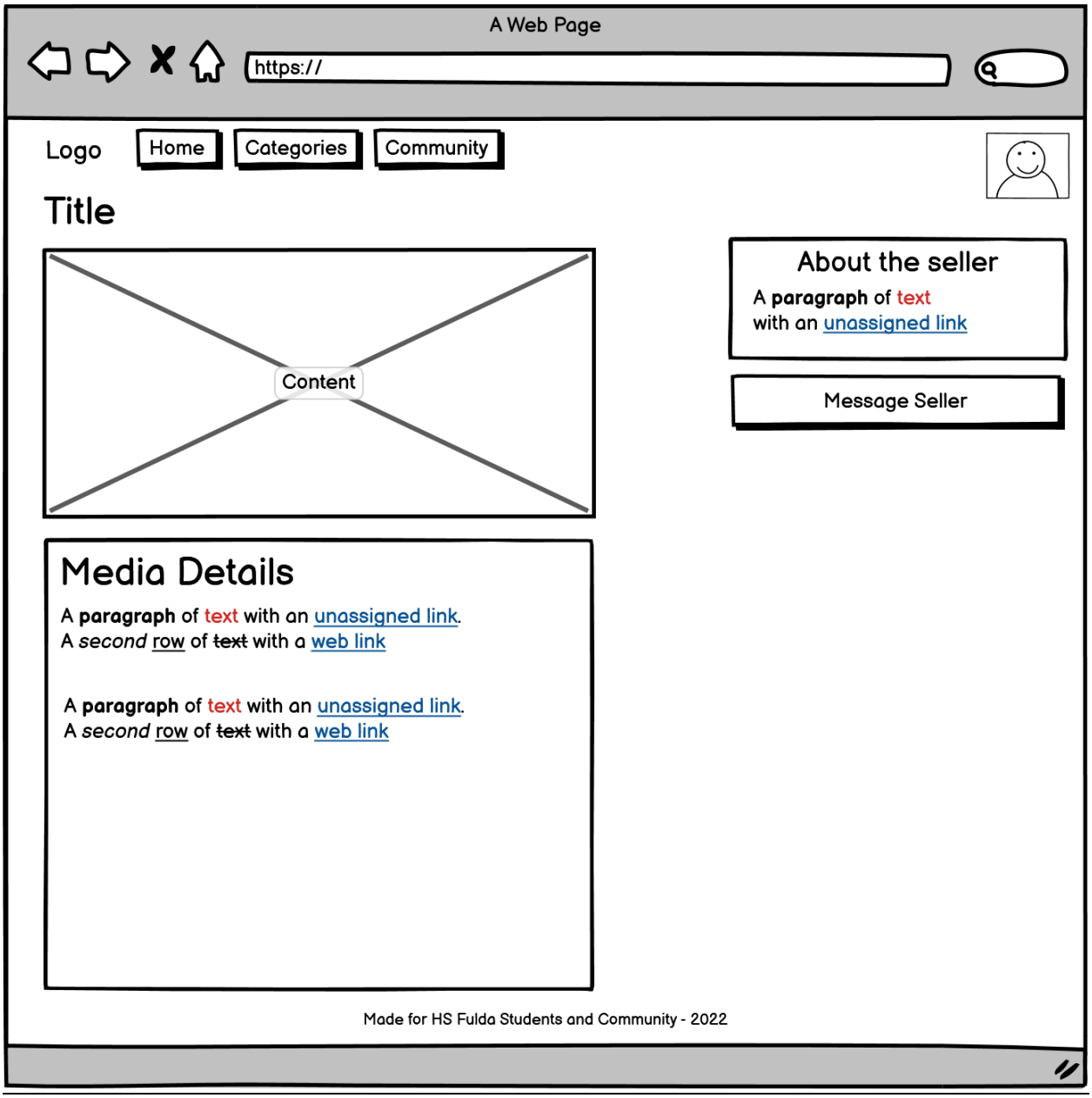
UI for Item Details Page after clicking on a specific media item



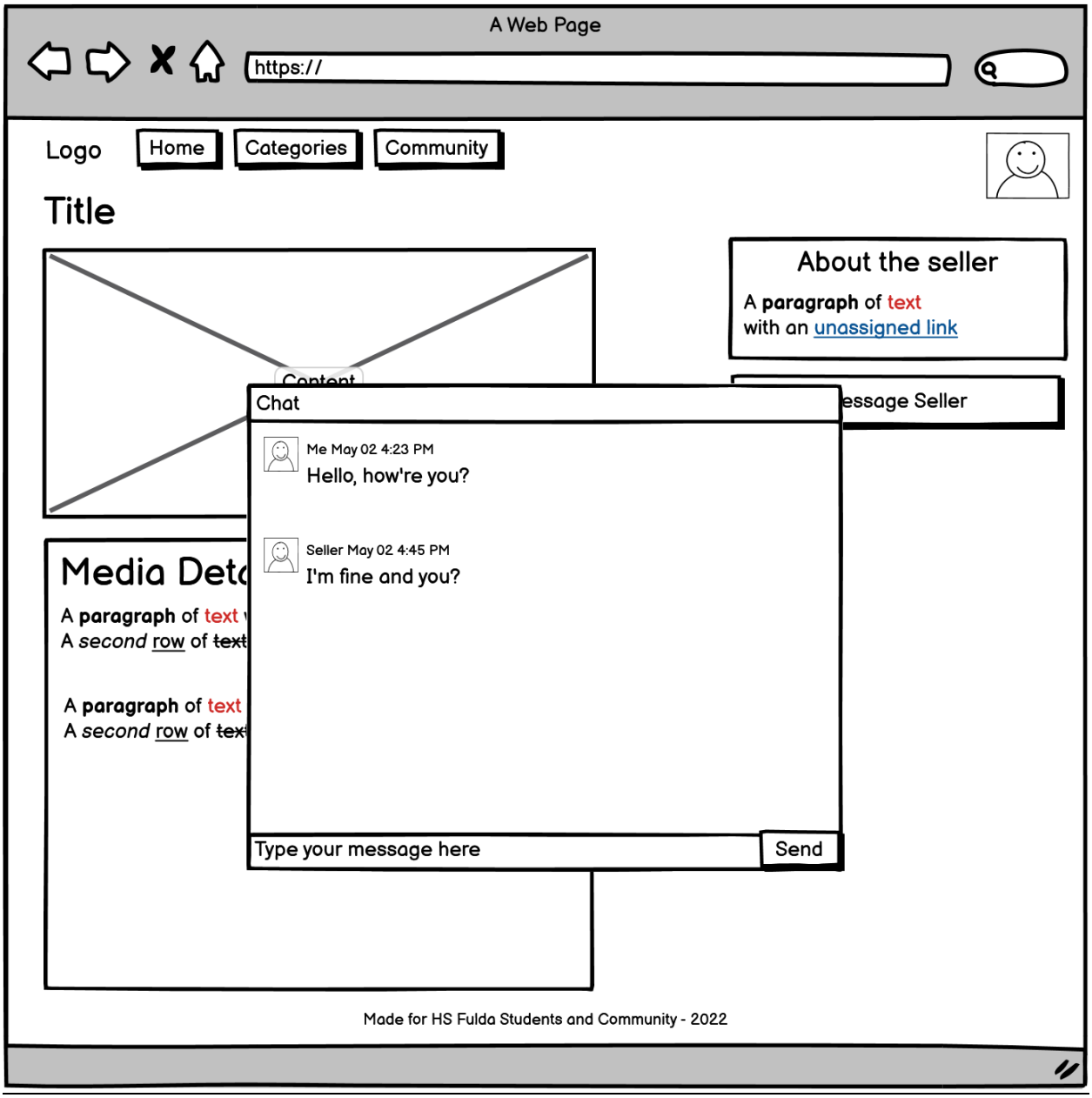
UI for User Dashboard



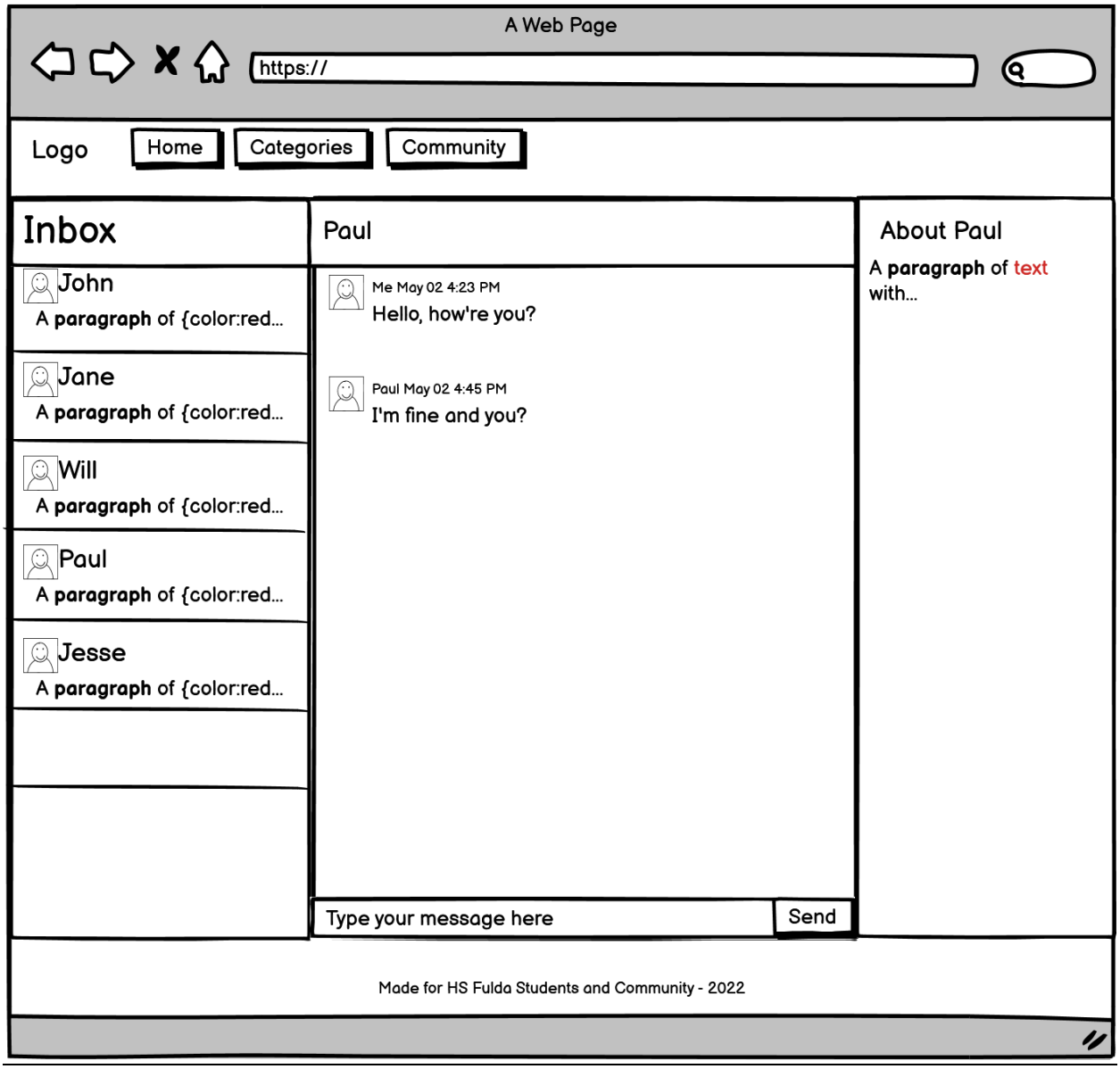
UI for Item Details Page after login



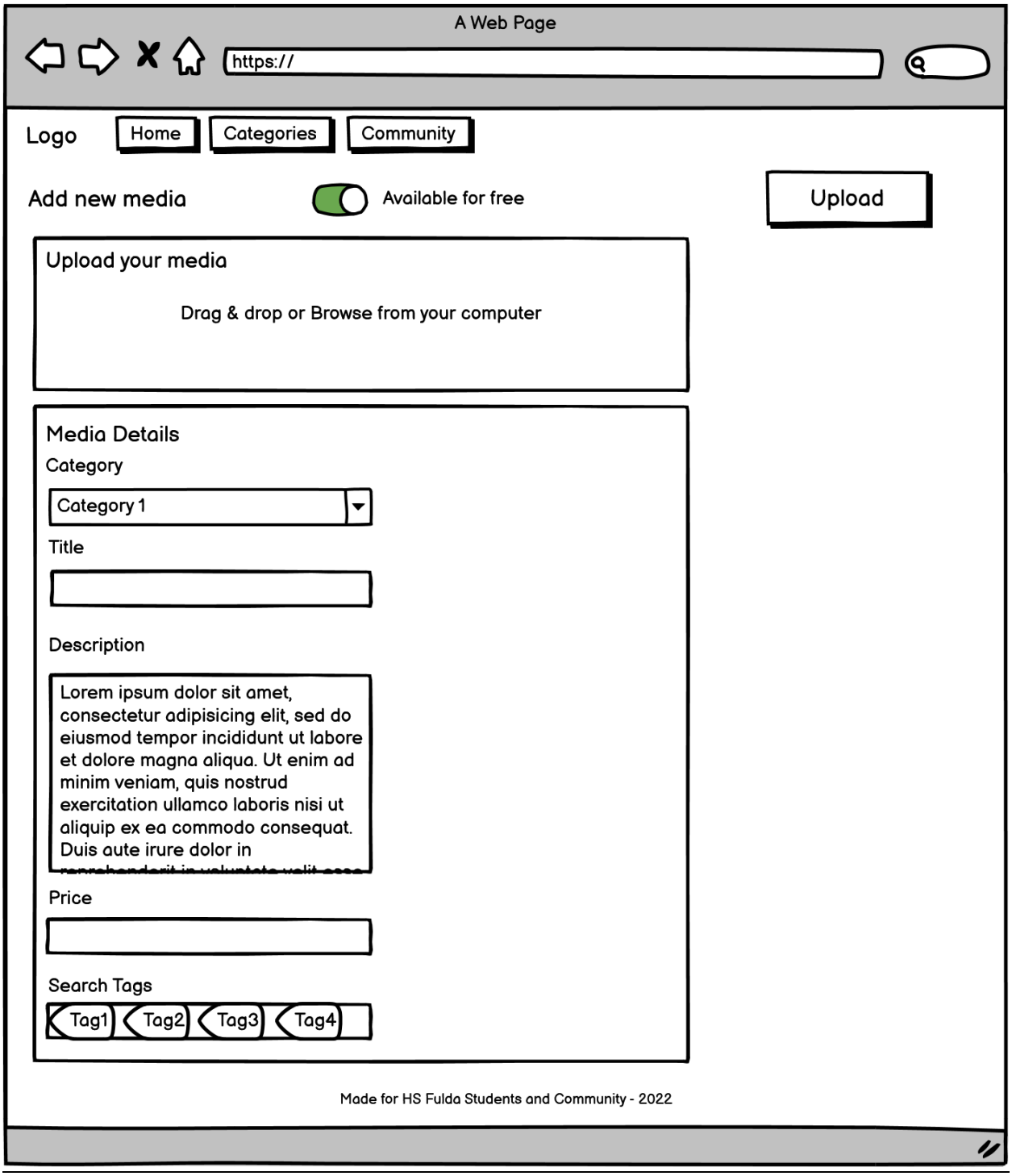
UI for Message Seller Popup



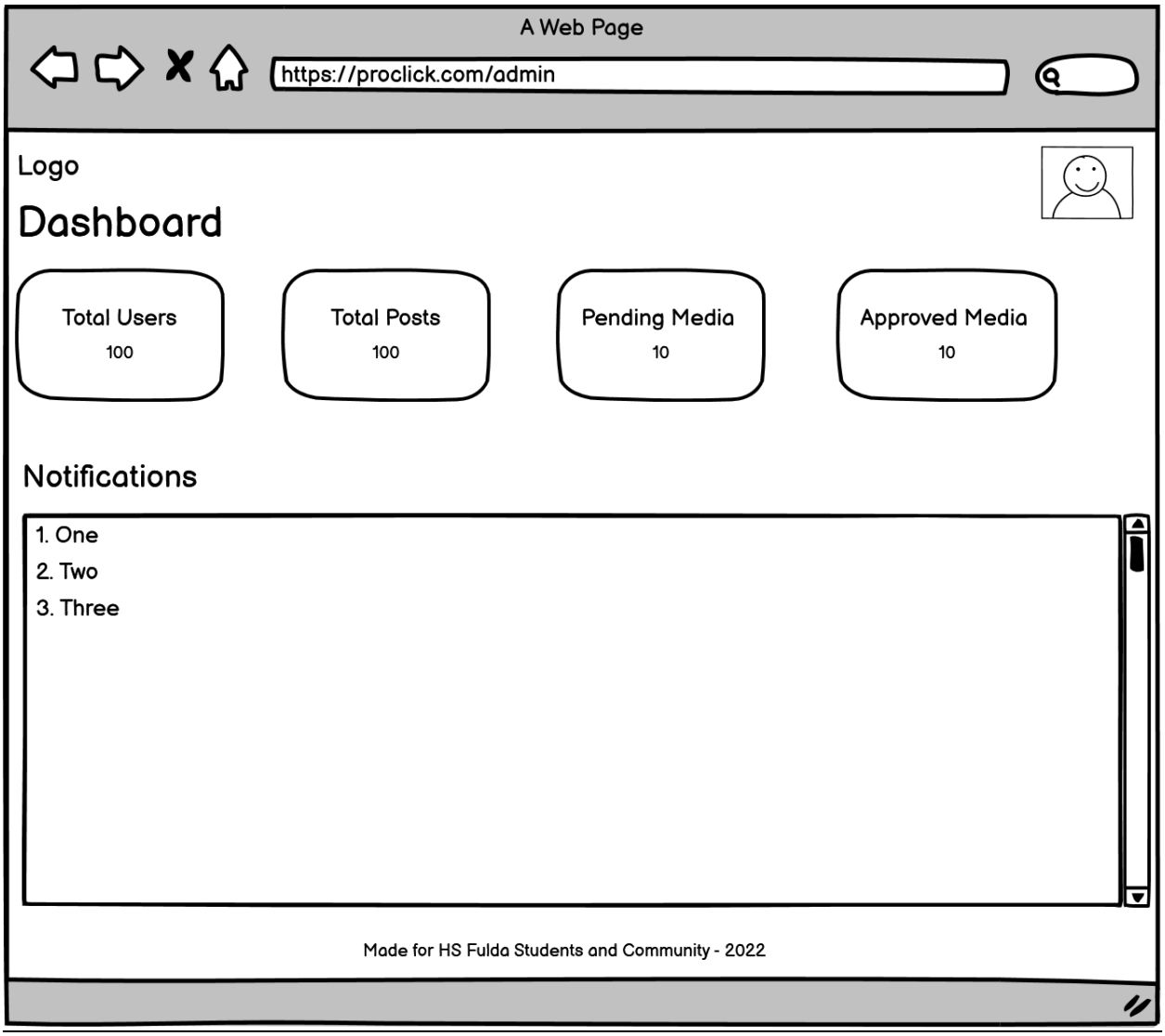
UI for user inbox



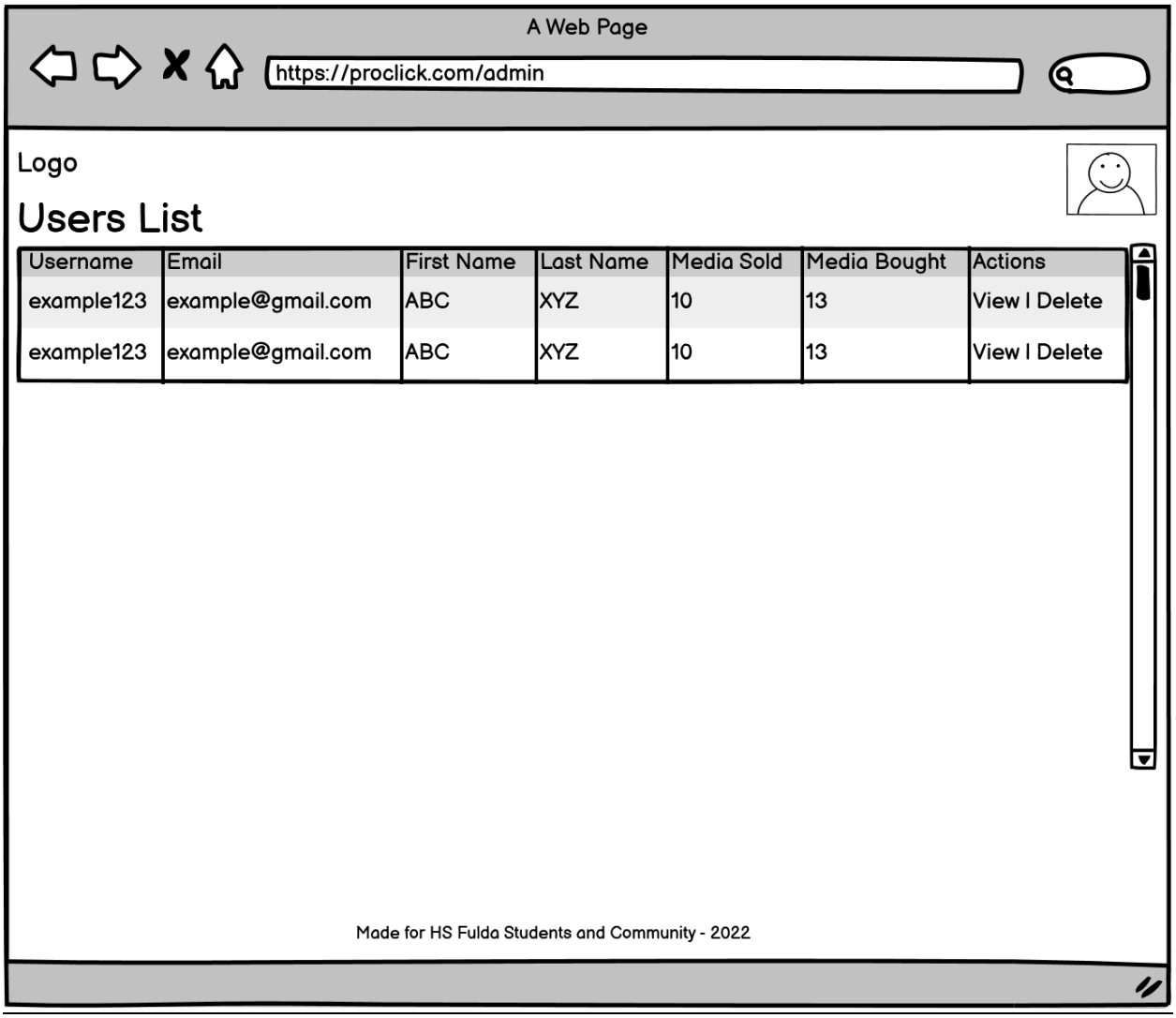
UI for Add new Media



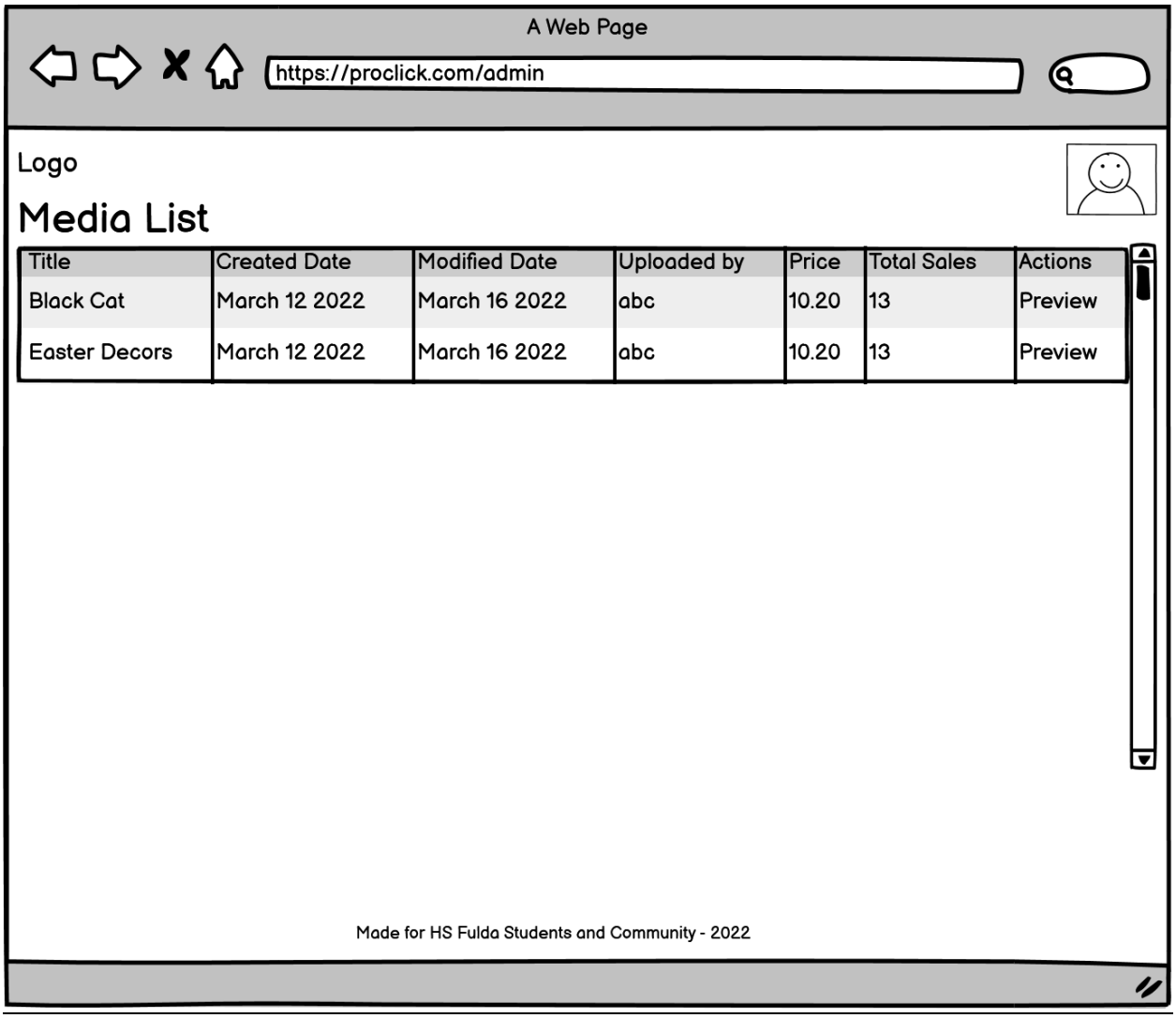
UI for Admin Dashboard



UI for Users List



UI for Media List



4. High Level Architecture, Database Organization

Database Organization

Database Table name	Attributes
Tbl_user	User_id, username, email, password, first_name, last_name, profile_picture, about, is_seller, is_buyer, date_created
tbl_admin	Login_id, password, Name, profile_picture
Tbl_media	Media_id, title, media_category, sub_category, description, media_url, price, is_free
Tbl_messages	Msg_id, message, created_date, sender_id, sender_image, chat_id
Tbl_reviews	Review_id, media_id, level, comment, posted_by, posted_date
Tbl_user_search_history	Id, keywords, searched_by, date_searched
Tbl_sales	sale_id, media_id
Tbl_chats	Chat_id, created_date, thumbnail,
Tbl_ search_tags	Tag_id, name

Media Storage

In order to store the data related to media items such as images, audio/video, we planned to use the **file system** on the server where the backend code of our application will be deployed. The sql database will store the media path (url) of the uploaded media. The image files will be stored as .png, video files as .mp4, and audio files as .mp3.

Search/filter architecture and implementation

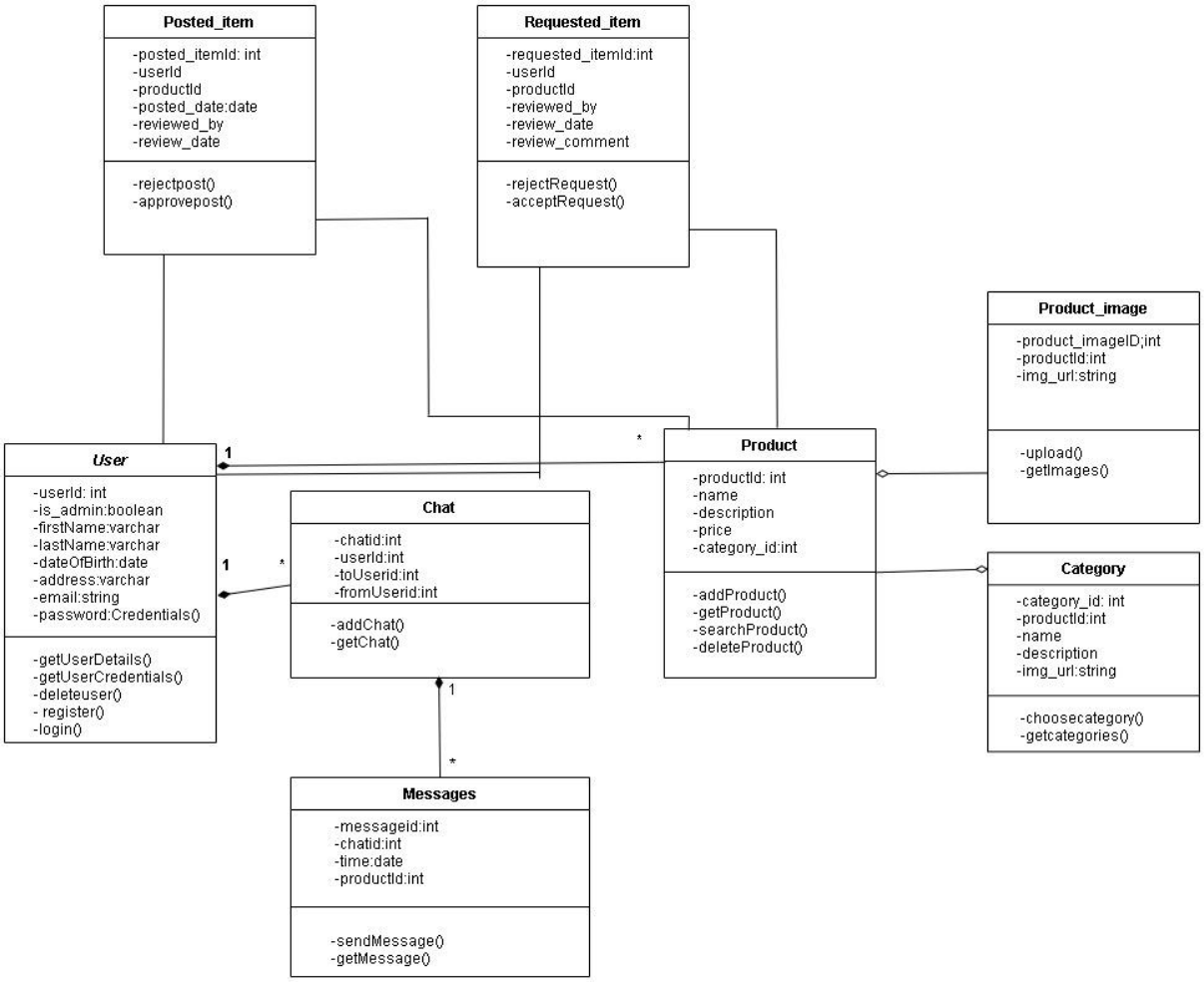
Media search will be based on keywords the user will enter in the search bar. Each media item has a category associated with it that is used in retrieving the media on submitting a search query. For example, a picture of a cat is associated with the category “animal”, therefore when a user searches for animal, the picture(s) of all the animals including cats will be retrieved and shown to the user. The media table in the database contains a column named ‘category’ that stores the main category of the item.

For the prioritization of media items and show them to the users as suggested items, the user’s search history will be stored in the database and analyzed in order to get the appropriate results for a specific user. The ranking of the items will be based on the most viewed and most sold media and prioritized accordingly.

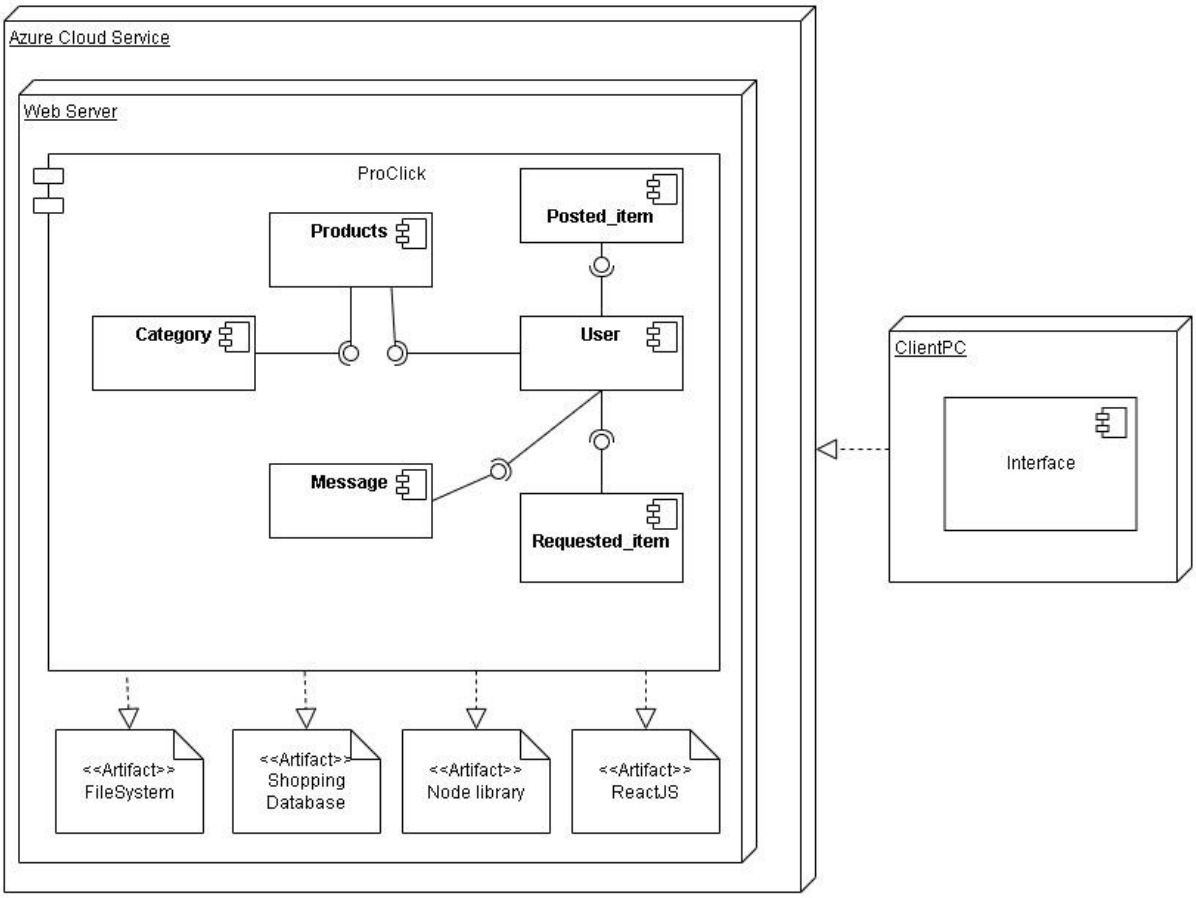
5. High-level UML Diagrams

Following are the high-level UML diagrams of our system. It gives the abstract overview of the main data items, classes, and their attributes. Also, it depicts the main components of the application and their connection to each other.

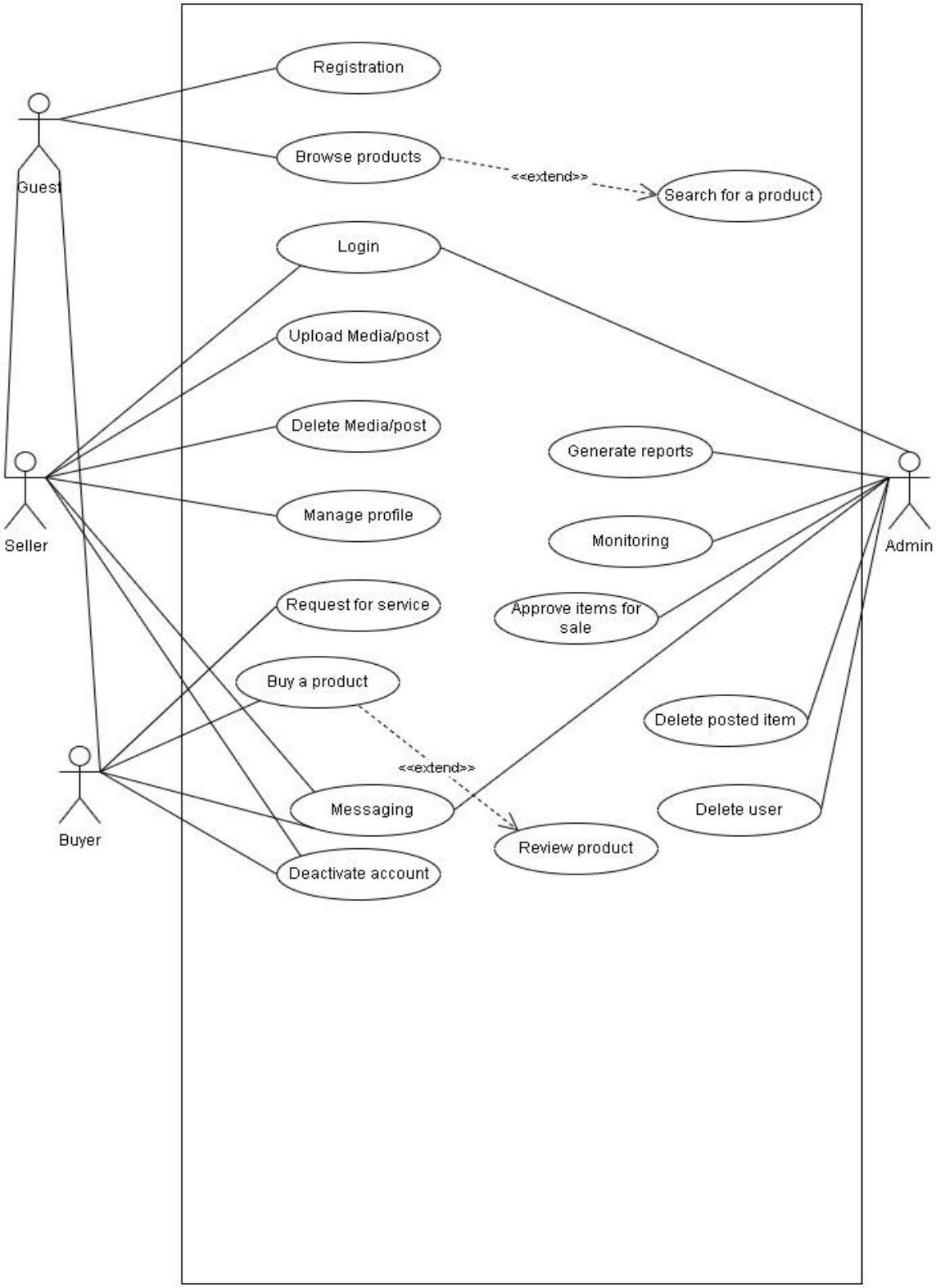
5.1. UML Class Diagram



5.2. Component Diagram



5.3. Use Case Diagram



6. Identify actual key risks for your project at this time

- Schedule

We had problem in arranging team meeting outside class. Everyone had different schedule going on before start of course e.g job, courses and other issues. We resolve it now after getting familiar with each other schedule and by having fixed team meeting schedule.

- Skills

We had problem in start for someone to help in backend side with main backend developer. We had front end side skills but for backend it was problem. We managed to overcome it initially by splitting backend in little chunks, so we can do it easily, but now we have another team member so issue is resolved in more good way.

- Technical

We don't have any team member to do cloud deployment or deal with it. We struggle so much with it in start. We wasted our time also more in deployment on cloud and getting familiar with most if it, but we are managed to do it but collaborative efforts. Everyone searched on different cloud providers and share opinions and then we go with azure. No one was familiar with cloud deployment, so it was big issue in start.

7. Project Management

Since our team is comprised of 6 members and there are four main roles that are defined among the team members; backend team, frontend team, github master, and cloud engineer. To complete the milestone 2 and plan its future tasks, the sections of the milestone 2 document are divided among all the team members based on their roles and experience levels.

The team uses a communication channel to remain synced with the updates done by each of the members of the group. For the milestone 2 documentation, we are using google docs to add each member part in the cloud document so that every member can get an updated version of the document at any time. In case of any issue, the updates are shared in the communication channel and be resolved accordingly.

For the future tasks (development, testing and deployment etc.), we will be using Trello board in which the tickets will be generated and assigned to each member based on their roles. The board will be divided into 4 main sections; *To-Do, In-Progress, Review, Done*. Each member will move their assigned tickets to each section and show their progress.