CSC 648-848 01 Fall 2019

Gator Trader

Team 05

Milestone 02:

More Detailed Requirements, Specs, Architecture, UI Mock-Ups & Vertical SW Prototype

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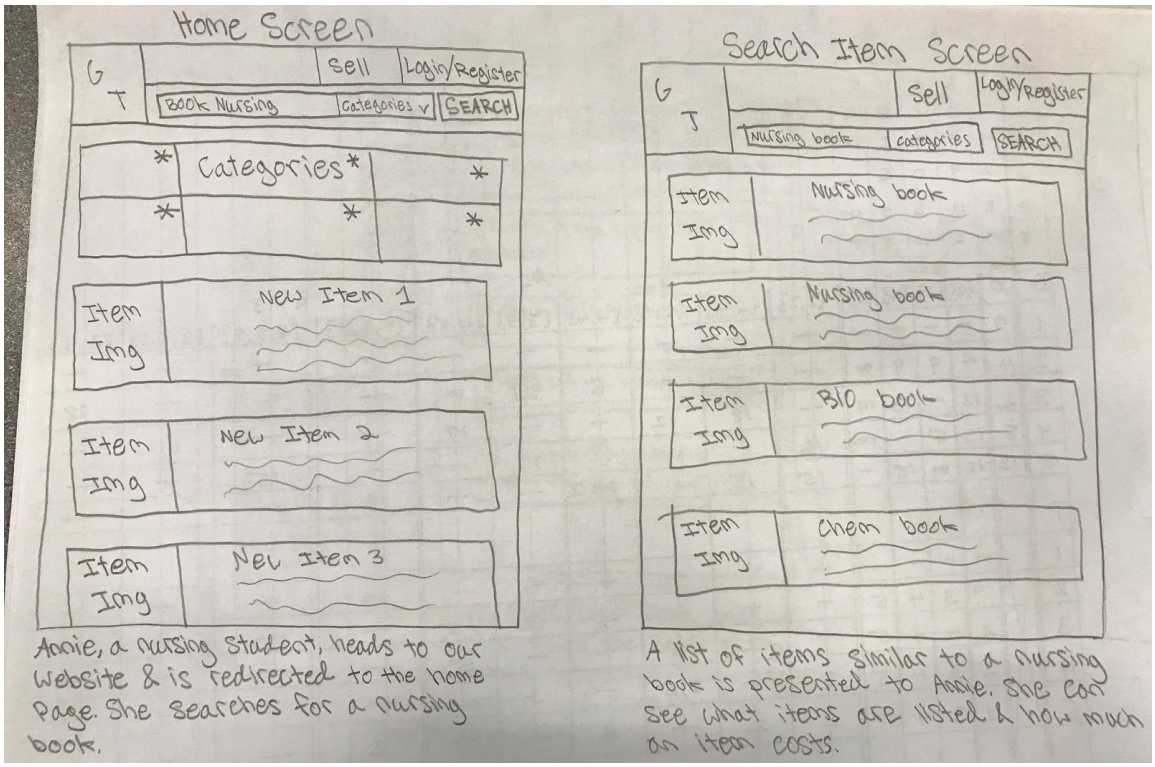
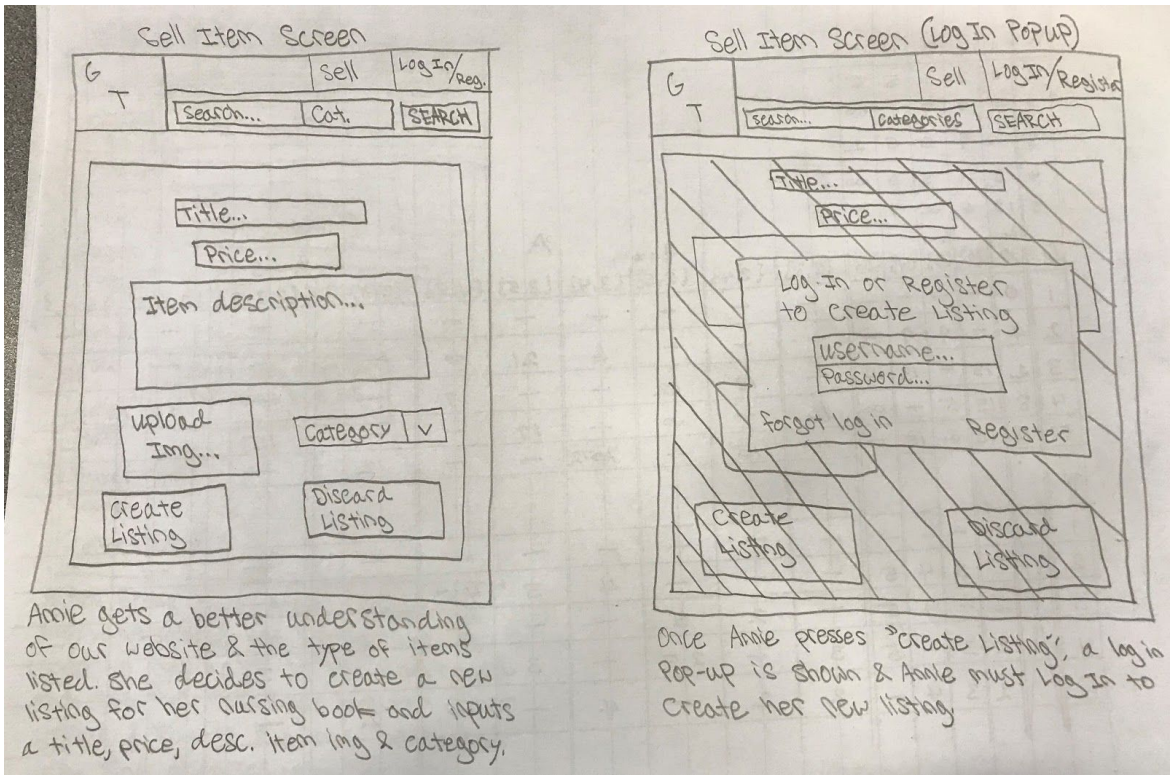
Date	Description
10 / 9 / 2019	First Draft
10 / 17 / 2019	First Draft Submission

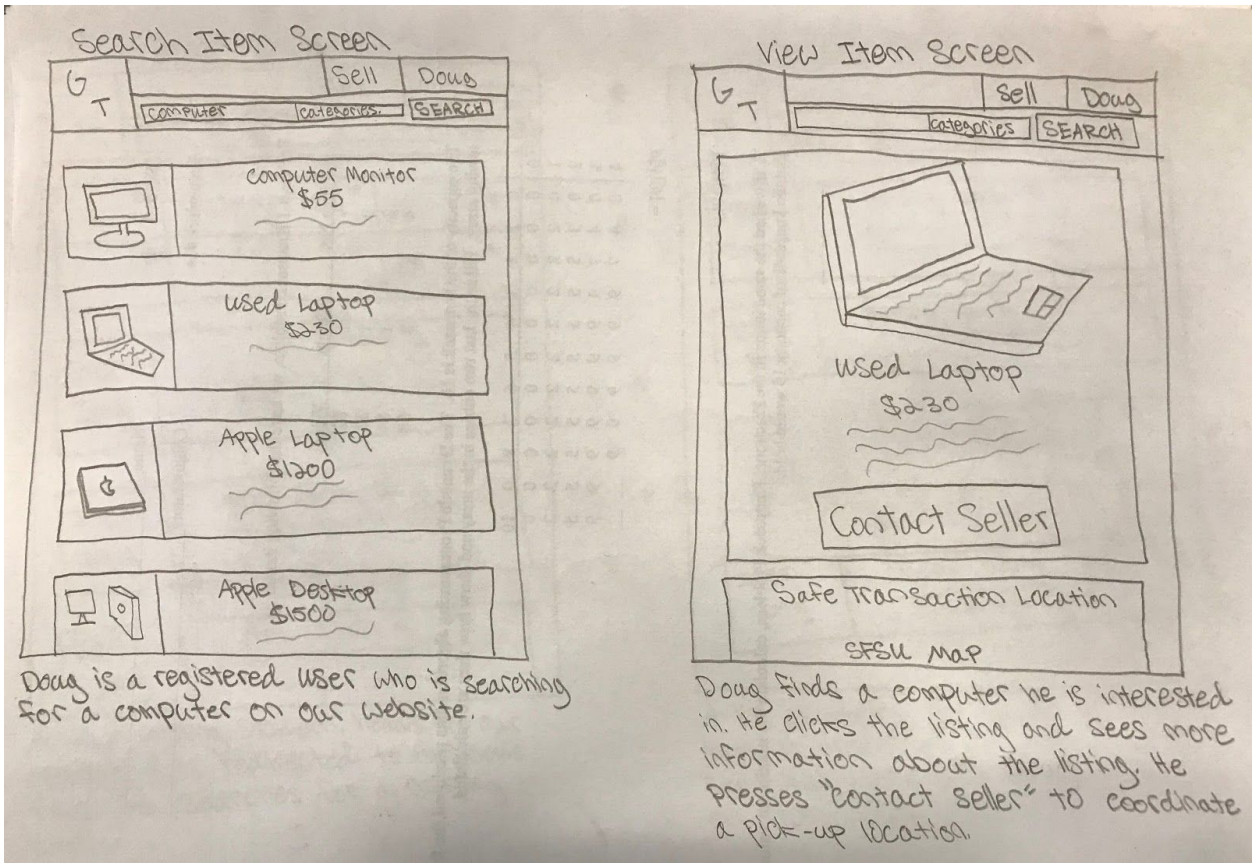
1. Functional Requirements - prioritized
    a. Unregistered User
        i. Shall be able to browse through listed items for sale (1)
        ii. Shall be able to view the details of each post (1)
        iii. Shall be able to sort the posts by price, newest post (2)
        iv. Shall be able to become a registered user (1)
    b. Registered User
        i. Shall be able to do all of unregistered user + (1)
        ii. Shall be able to log in to their account (1)
        iii. Shall be able to log out of their account (1)
        iv. Shall be able to contact a seller (1)
        v. Shall be able to post items for sale (1)
        vi. Shall have access to the registered user dashboard for messaging (1)
        vii. Shall have access to registered user dashboard for personal post management (2)
    c. Administrator
        i. Shall be able to access the database of Gator Trader (1)
        ii. Shall be able to approve / deny potential posts to Gator Trader (1)
        iii. Shall be able to Suspend / Ban accounts for terms violations (3)
        iv. Shall have access to Google Analytics for Gator Trader (2)

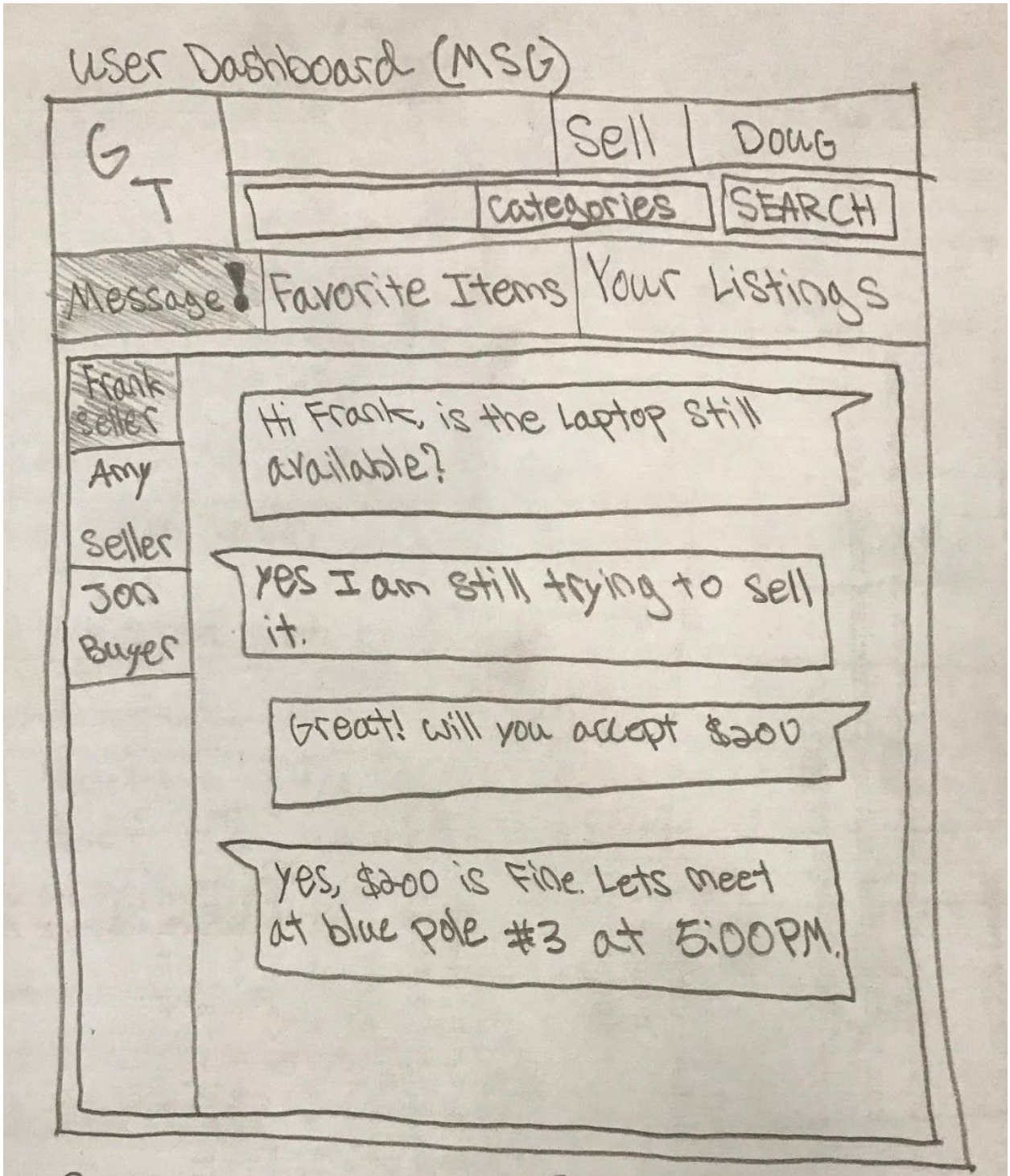
2. UI Mockups and Storyboards



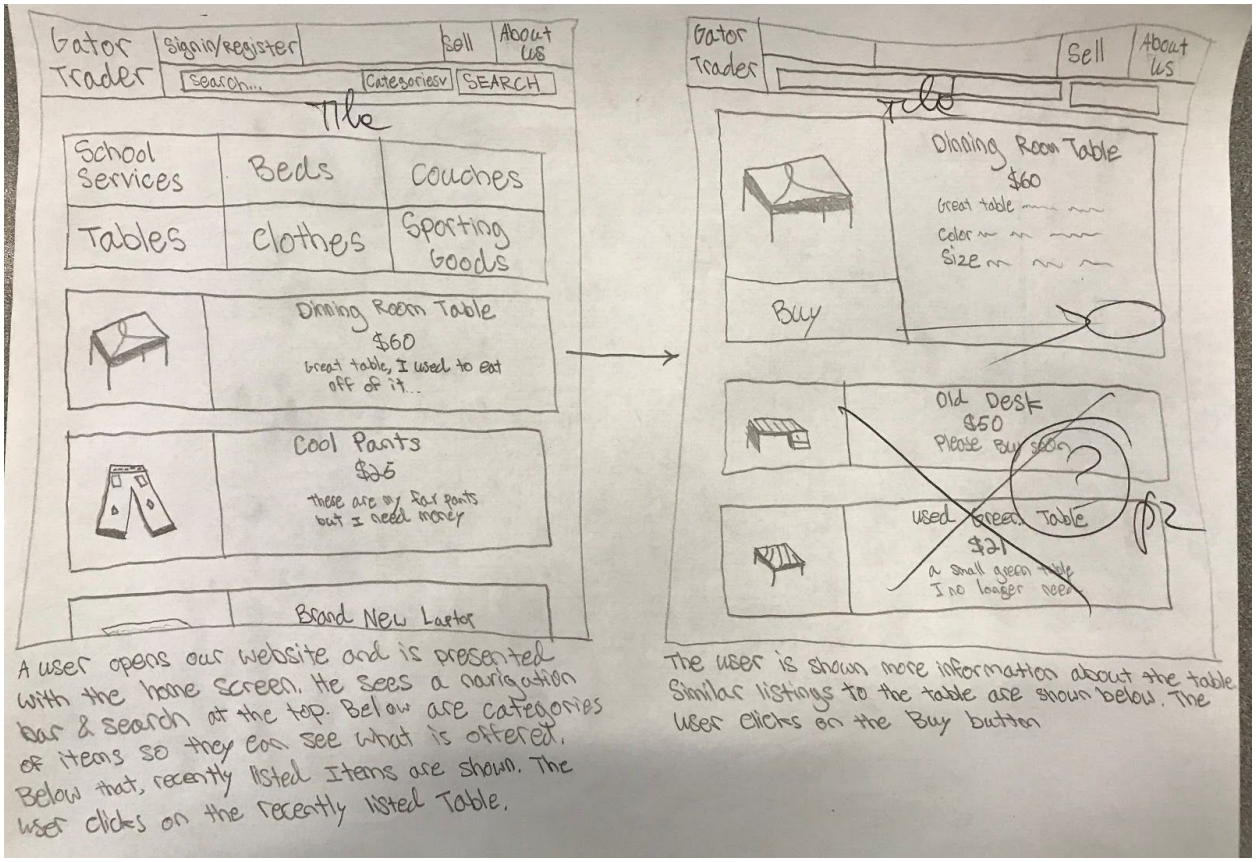


add


Search Item Screen
Sell
Doug
computer
categories
SEARCH
Computer Monitor
$55
used Laptop
$230
Apple Laptop
$1200
Apple Desktop
$1500
Doug is a registered user who is searching for a computer on our website.
View Item Screen
Sell
Doug
categories
SEARCH
used Laptop
$230
Contact Seller
Safe Transaction Location
SFSU Map
Doug finds a computer he is interested in. He clicks the listing and sees more information about the listing. He presses "Contact Seller" to coordinate a pick-up location.

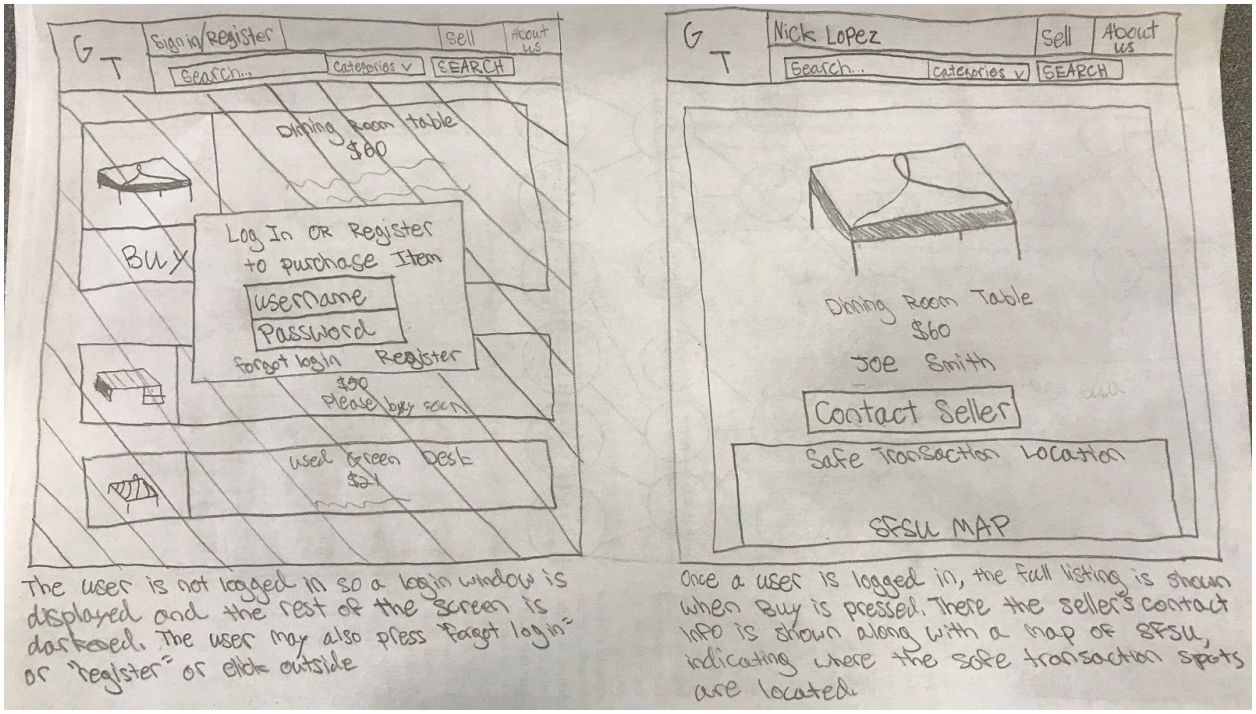


Some time goes by & Doug sees a notification that the seller of the computer has responded. They agree on the price and location for the transaction.



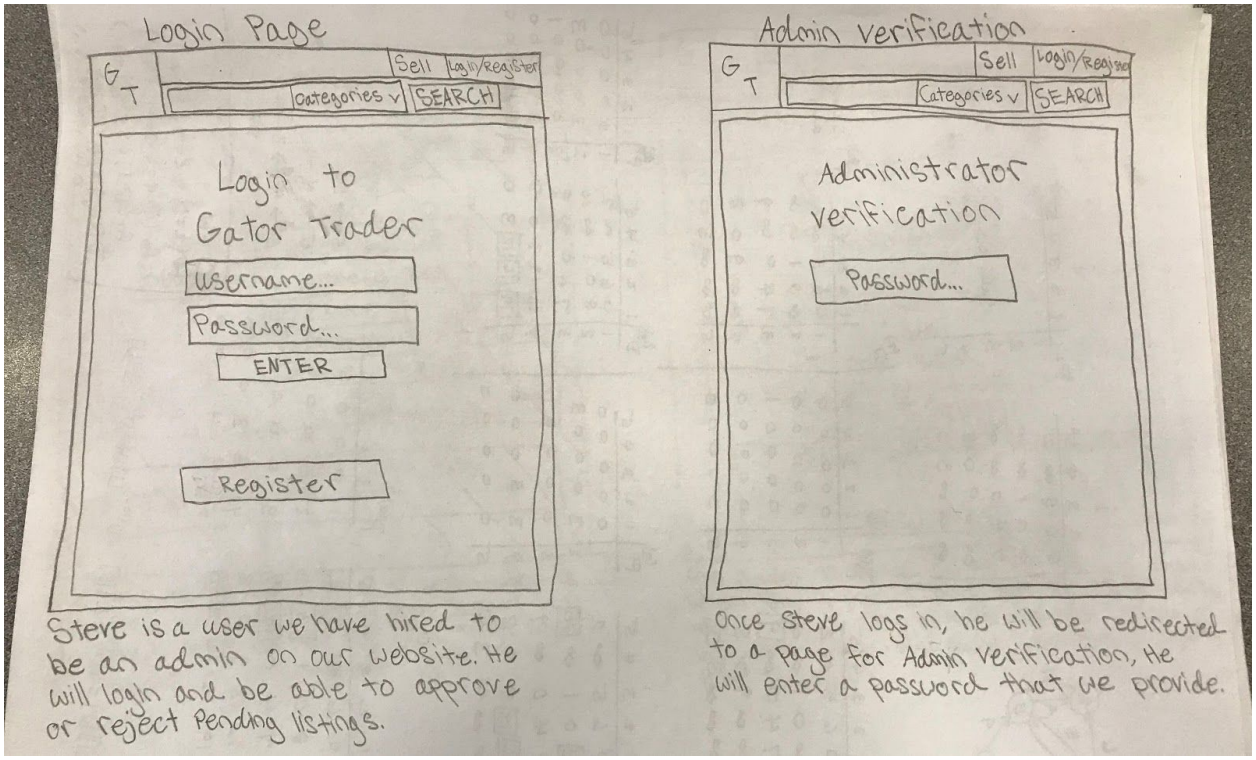
A user opens our website and is presented with the home screen. He sees a navigation bar & search at the top. Below are categories of items so they can see what is offered. Below that, recently listed items are shown. The user clicks on the recently listed Table.

The user is shown more information about the table. Similar listings to the table are shown below. The user clicks on the Buy button



The user is not logged in so a login window is displayed and the rest of the screen is darkened. The user may also press "forgot login" or "register" or click outside

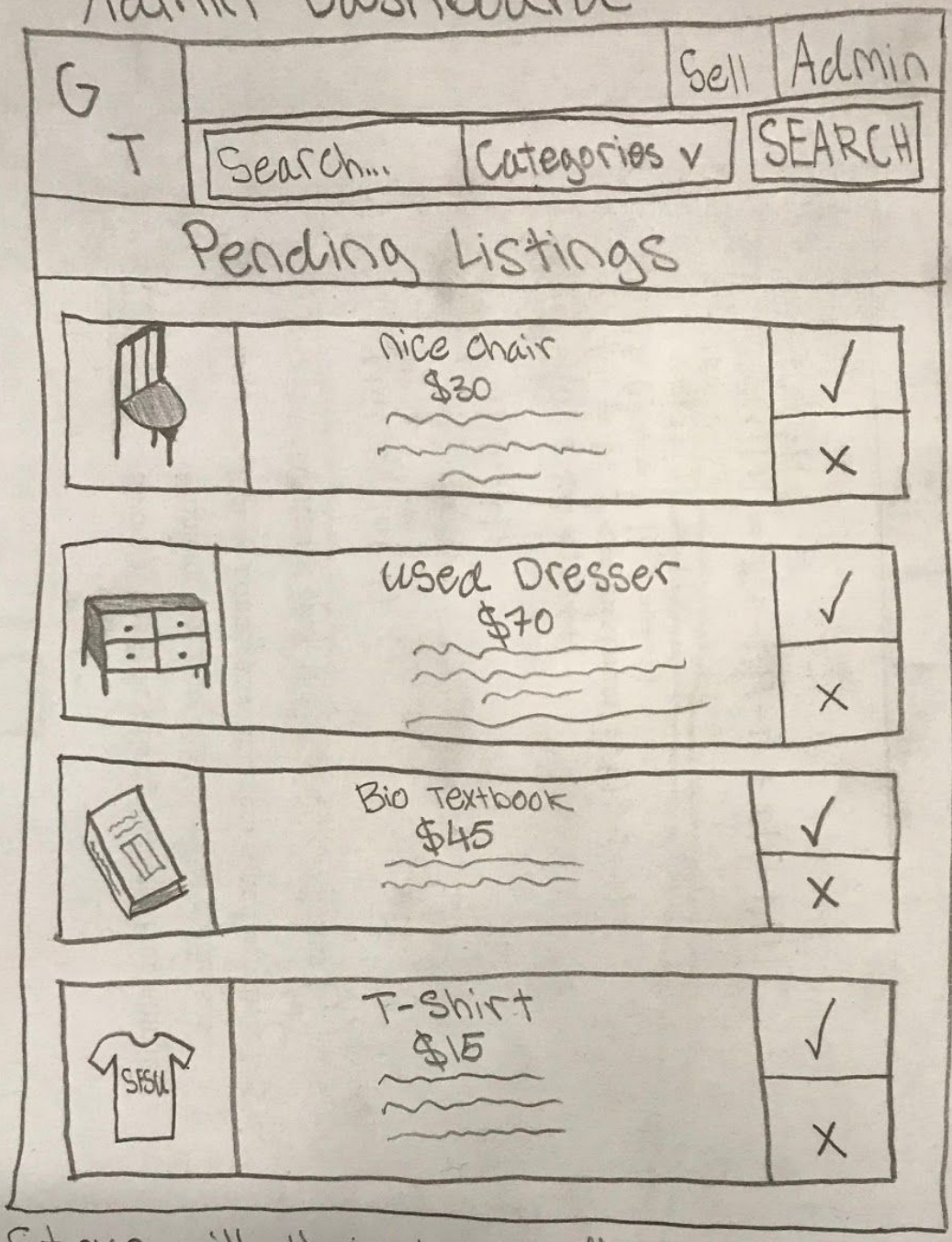
Once a user is logged in, the full listing is shown when Buy is pressed. There the seller's contact info is shown along with a map of SFSU, indicating where the safe transaction spots are located.



Steve is a user we have hired to be an admin on our website. He will login and be able to approve or reject pending listings.

Once Steve logs in, he will be redirected to a page for Admin verification, He will enter a password that we provide.

Admin Dashboard



Steve will then be redirected to the admin dashboard where pending listings will be displayed for the Admin to inspect for inappropriate listings. once a listing is approved, it will be visable to every user.

3. High level Architecture, Database Organization

   Database organization:

Table	**Purpose**	**Items**
User	All registered users (excluding Admins)	Username, password, user ID
Admin	All registered admins	Username, password, admin password
Listing	All posted items for sale	Title, price, owner, approval, desc, category, date
Catalog	All category classifications	Category
Message	All peer-to-peer messages used onsite	Sender, num of msg, newmsg

   Media storage:

   - Image and video/audio files will be kept in BLOBs (Binary Large OBjects)

   Search/filter architecture and implementation:

   Algorithm/SW for search

   - expression LIKE pattern ESCAPE escape_character
     - pattern % wildcard for zero or more characters
     - pattern _ wildcard for single characters

   Organizing search items from user, by order of priority

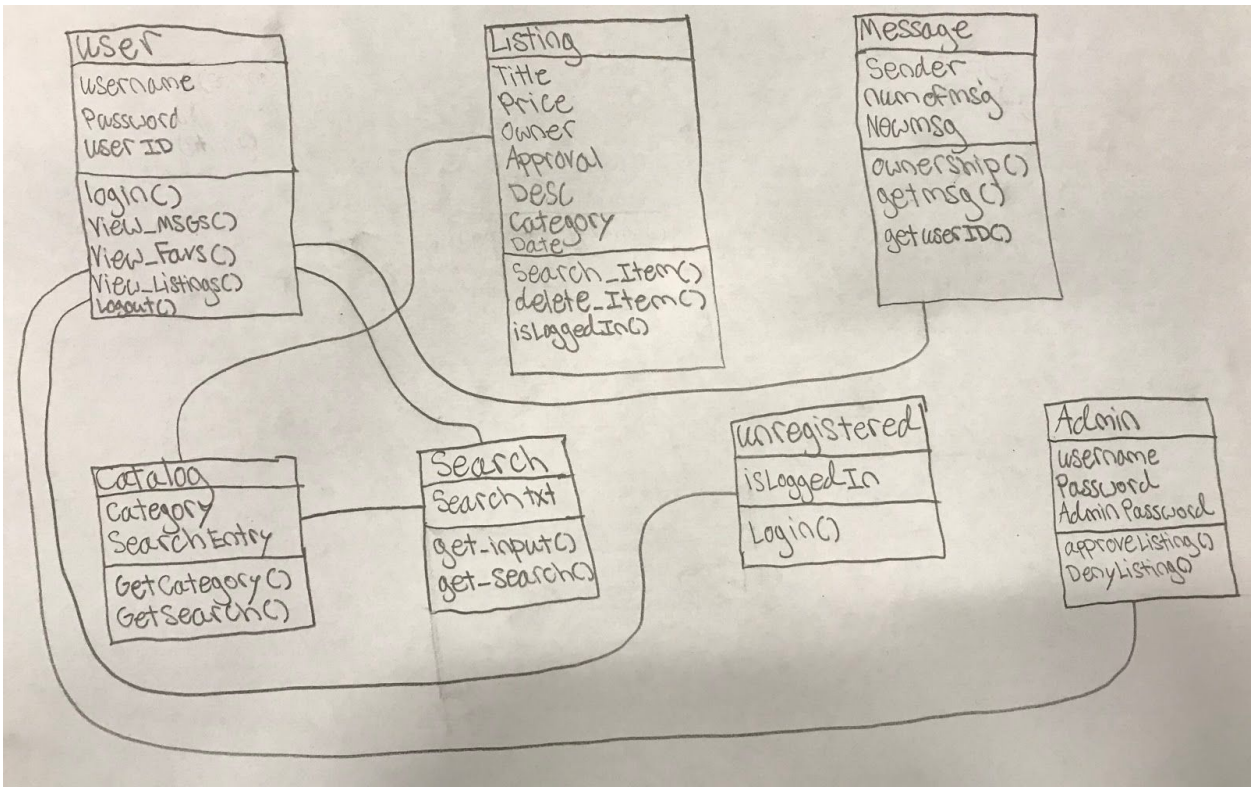
   1. Match search string closely

    i. Use category if selected
    ii. Default to title if not selected
2. Match search string loosely
    i. Use category if selected
    ii. Default to title if not selected
3. Autosort matches from (1) and (2) by date
    i. Provide alternate sort options (price)
4. If search string is empty and
    i. Category is selected, list category listings by date
    ii. Category is empty, list all listings by date

Modified SW tools/frameworks:

- Server Database (directly into AWS EC2 server): mysql Ver 14.14 Distrib 5.7.27, for Linux (x86_64) using EditLine wrapper

4. High Level UML Diagrams



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

    a. Skills risks

        Our team at *Gator Trader* is entirely composed of front-end developers. During the role assigning process, all team members declared themselves as front-end developers and expressed that they do not have previous back-end experience. As we needed a back-end lead, Daniel Gutierrez volunteered and conveyed that he would read and watch tutorials to familiarize himself with the skills, frameworks, and technologies needed for us to succeed. Hayato Waki is also assisting Dann with the back-end. Although we have had some roadblocks with the back-end (problems with Express in Milestone 0) we have worked hard to correct all issues. We anticipate that we will be able to hurdle past any problems through our team's hard work and diligence.

    b. Schedule risks

        Based on our committed features and available resources, we do expect to finish our application in time. Although we are limited on the back-end side or our team, we believe that we can power through any adversity that comes our way. Our team is well organized and has excellent communication which allows us to complete tasks punctually.

    c. Technical risks

        Our team does not have any technical unknowns to solve at this time.

    d. Teamwork risks

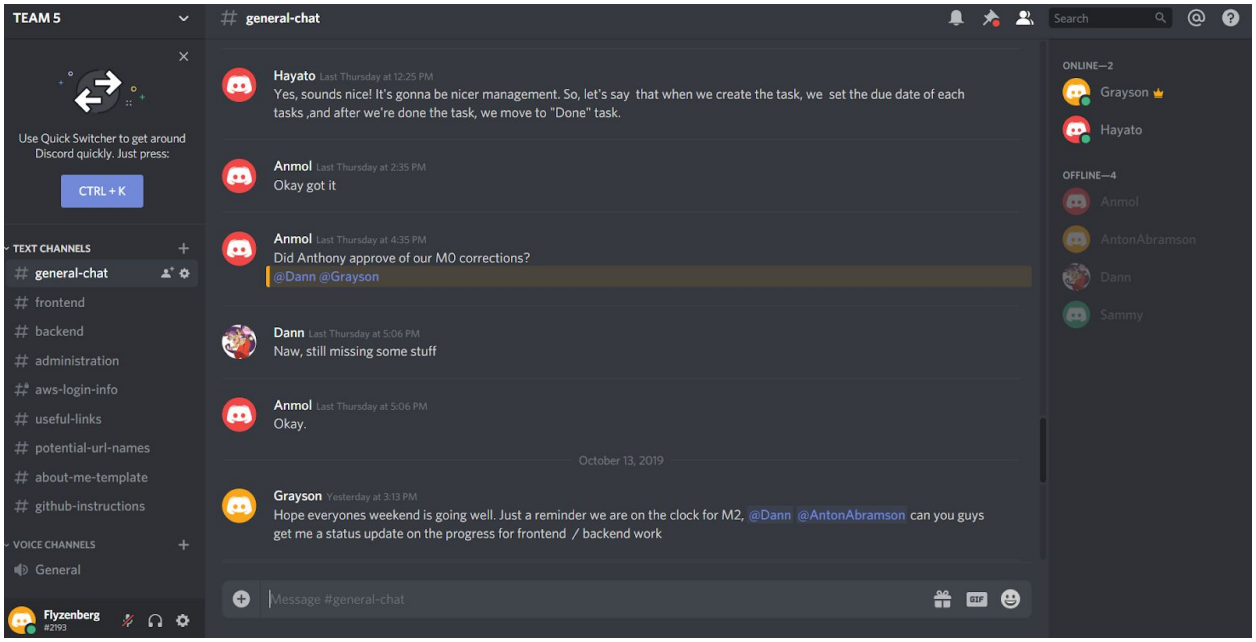
        Our team does not have any teamwork risks. All group members have mutual respect for one another and communicate in a timely manner.

    e. Legal/Content risks

        Our team does not currently have any legal/content risks. As our application progresses, we will do our due diligence to obtain any required licenses to avoid copyright infringement.

6. Project management

Our team has done a large amount of our group project organization on discord.gg, and we will continue to use the platform for day-to-day communications.



Our team has also began to use trello.com for the start of M2 and upcoming milestones.