

SW Engineering CSC648/848
Fall 2019 Section 01
SFSU Buy & Sell

Team 06 (Local Team)

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Milestone Two

Submitted to -

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1. Functional Requirements - prioritized

Priority 1 (must have):

Non-registered users

- User shall be able to browse on the website
- User shall be able to search for the products
- User shall be able to select the products from the product categories
- User shall be able to access all the information about the product
- User shall be able to sort search results by price
- User shall be prompted to register before checkout

Registered users

- User shall be able to proceed to checkout and purchase the product
- User shall be able to message to seller
- User shall be able to post a listing on the website
- User shall be able to decide the pickup spot and pickup time
- System shall be able to prompt a prefilled message, which includes the product details while contacting the seller about the product
- User shall be able to add product for selling on the website

Admin

- Admin shall be required to have the right of approving the products for posting live
- Admin shall not be able to change the content of the post, but can request the seller before approving the post.
- Admin shall be able to delete products on the website
- Admin shall be able to delete the users on the system

Priority 2 (desired):

Non-registered users

- User shall be able to compare the prices between the same product from different sellers

Registered users

- User shall be able to rate the user after the buying/selling process is completed
- User shall be able to add products to cart

Admin

Priority 3 (opportunistic as defined in the class):

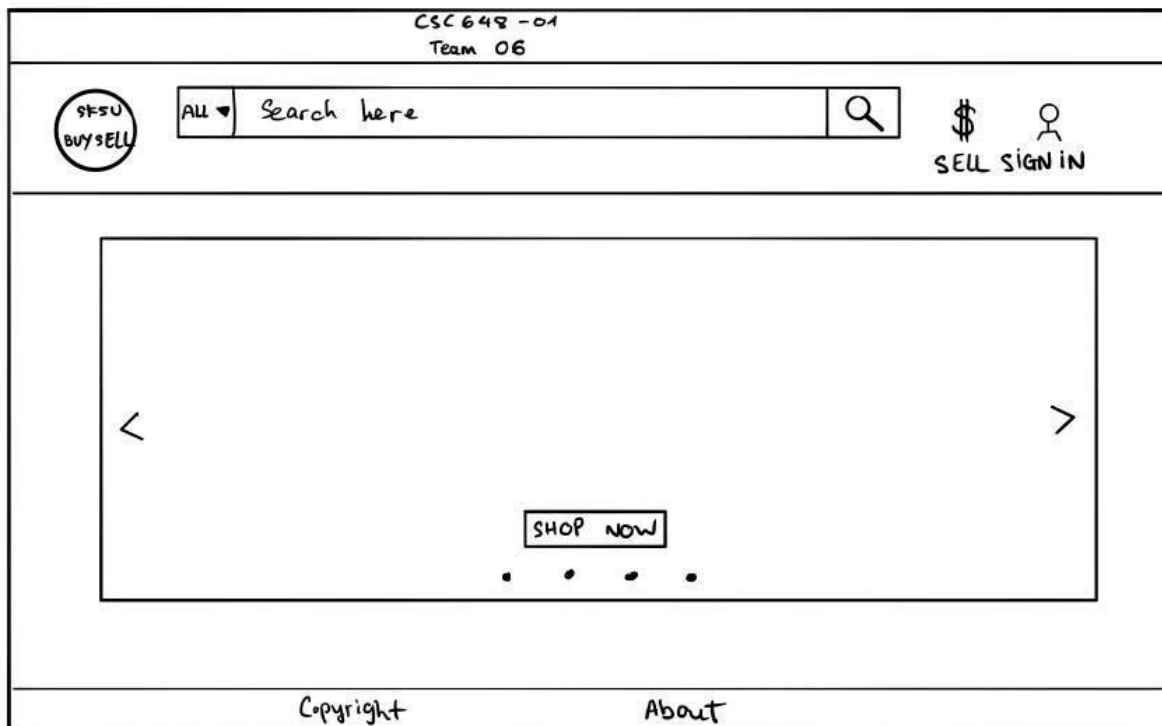
Non-registered users

Registered users

Admin

2. UI Mockups and Storyboards (high level only):

Home Page:



Result Page:

CSC648-01	
Team 06	
<div>sf-sv buy&sell</div>	<div>ALL ▼ laptop</div> <div>Q</div> <div>\$ \$ SELL SIGN IN</div>
<div><div></div><div> </div></div> <div><div></div><div> </div></div> <div><div></div><div> </div></div>	
Copyright	About

Sign In/ Sign Up Page:

A hand-drawn wireframe of a web page featuring a central modal window titled "SIGN IN / REGISTER" with a close button (x). The modal is divided into two sections. The top section, titled "SIGN IN", contains three input fields labeled "Email", "Password", and "Login", followed by a link "Forgot Password?". The bottom section contains the text "Don't have an account? SIGN UP Today!" and a button labeled "CREATE ACCOUNT" with a right-pointing arrow. The background page has a header with a circular logo containing "SFSD" and "BUYSELL", a search bar with a magnifying glass icon, and a "SELL SIGN IN" link with a dollar sign and person icon. The main content area has large left and right navigation arrows (< and >).

Sign Up Page:

A hand-drawn wireframe of a "CREATE ACCOUNT" page. At the top, it says "CSC 648 - 01" and "Team 06". The main heading is "CREATE ACCOUNT". Below it are six input fields, each with a red asterisk indicating a required field: "First Name", "Last Name", "Email", "Confirm Email", "Password", and "Confirm Password". Below the fields is a checkbox labeled "Agree to terms". At the bottom left is a button labeled "CREATE ACCOUNT" with a right-pointing arrow. To its right is the text "Already have an account? SIGN IN".

Create Post Page:

CSC 648 - 01
Team 06

sfSU
buySELL

All ▾ laptop

Q

\$
SELL

👤
SIGN IN

Sell

Choose a Category for your listing: *

Furniture

Books

Accessories

Laptops

Description: *

Price: *

\$

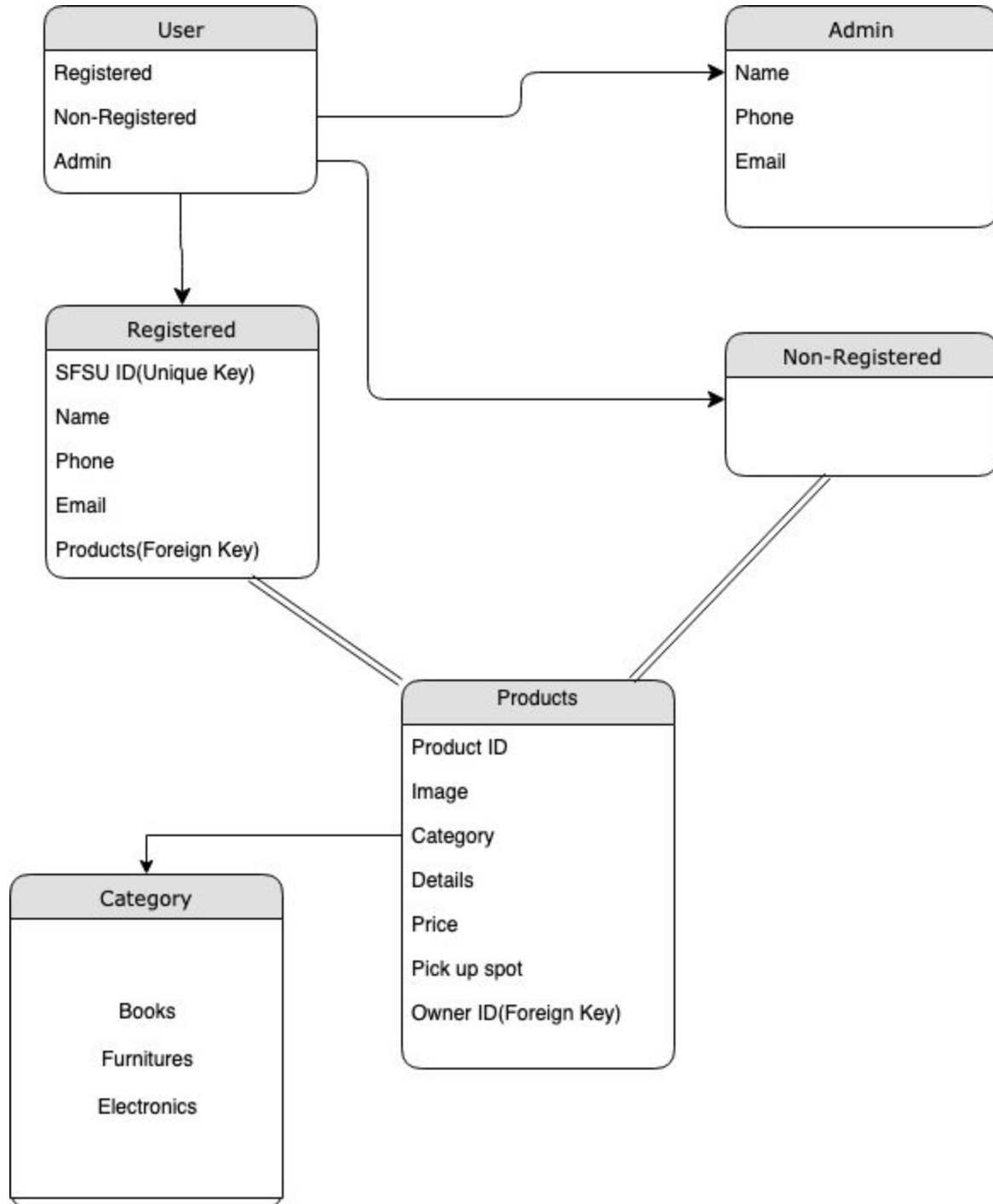
Location: *

Listing Title:

Image

Create Post

3. High level Architecture, Database Organization

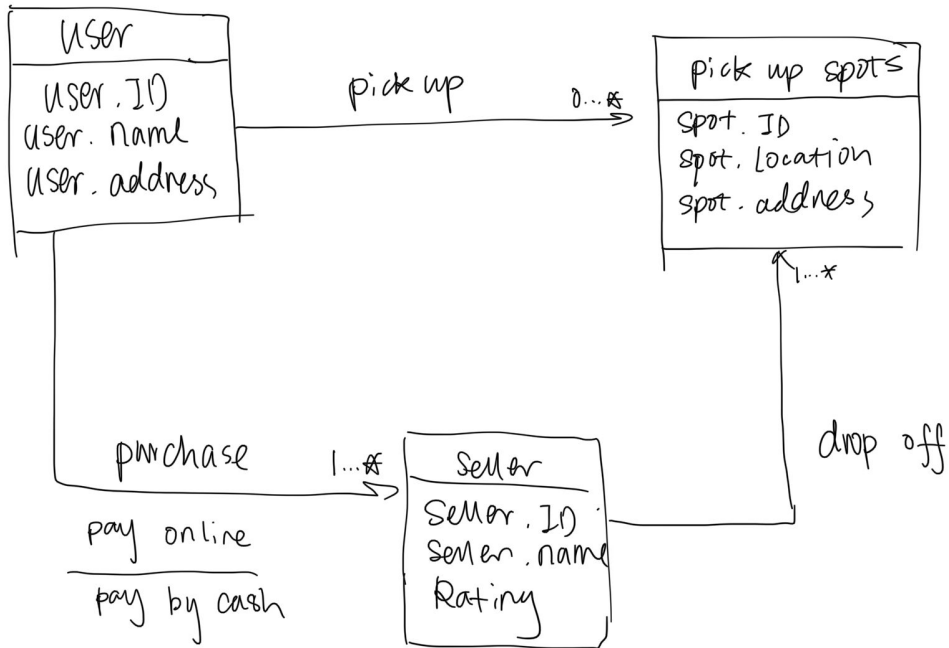


There are three main types of Users-- Registered, Non-Registered, and Admin. These three entities with separate attributes within them. Registered users are stored within the database with their SFSU IDs, their name, their email, their phone number, and an array of products that they will sell. Non-registered users are not stored in the database yet since anyone is able to access our website without needing to give any additional information to us. Lastly, Admins are stored in the database by just their phone, name and email. Registered users and Non-registered users are able to have access to the information of the Product but only Registered users are actually able to buy and sell Products. Within our database, the attributes that Products have Product ID, the image of the product, the details of what the product is, the price, category (furniture, clothing, sporting goods, etc.), pick up spots (Hensil Hall, Thornton Hall, Burke Hall, etc.), and the Owner ID.

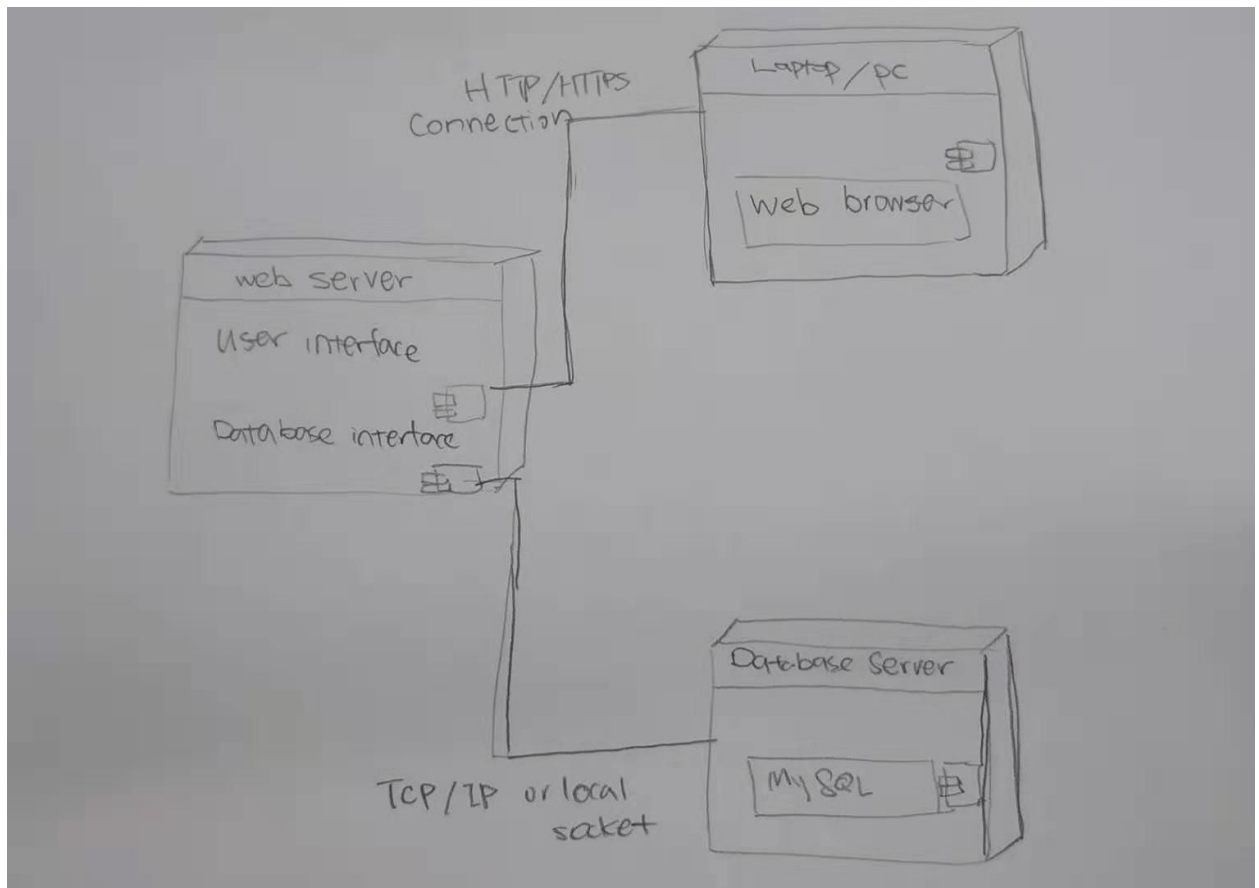
For media storage, we will be using Google Cloud storage. We will have the images directly uploaded to Google Cloud Storage and then we will use the generated reference link as a foreign key to call our local database. For search/filter architecture and implementation, we will be using the %like operator for the search. For example, if the user types "table" in the search box, the clicks on search. It will return all the products having "table" as a text from the description/title. Since we aren't using our own APIs, we will be using REST APIs-- such as ADD, DELETE, PULL, POST, and CREATE. Also, we will be using filtering systems such as "Price-- High to Low" and other array sorting algorithms. Last, for SW tools and frameworks currently, there are no changes in the SW tools.

4. High Level UML Diagrams:

a) *High-level UML class diagrams* for implementation classes of core functionality, i.e. functionality with provided interfaces. Focus on a main high-level classes only (one or at most two levels deep). This must reflect an approach to implementing your site.



b) UML Component and deployment diagram



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

- **Skills risks:** Lack of familiarity with the stack from our team (nodejs/expressjs, mysql, aws unfamiliar)
- **Schedule risks:** None at the moment,
- **Technical risks:** Security, difficulties with backend, can resolve with meeting and creating strategies to the issues.
- **Teamwork risks:** None at the moment, could potentially be more difficult to coordinate backend/frontend once they split
- **Legal/Content risks:** Potential copyright issues with images, potential copyright issues with future code borrowing

Skills risks: Our team's primary skill risk is our lack of experience with our software stack. We chose it due to our familiarity with javascript, but are still unfamiliar with MySQL, node/express, and aws as a whole. We plan to overcome this via online resources provided as there is plenty of open-source documentation available. We have not run into any issues with scheduling as we have been cooperative with meeting times as well as making deadlines.

6. Project management:

One of the most important keys to a successful software engineer team is the human factor. Thus, to make all the team members get up to date with the development of the project, every week, all team members will meet up on Monday before class to report all the current work. The front-end and back-end leads will check with the front-end and back-end developers about a particular task they are working at and make sure everything is on track. Then, the front-end and back-end leads will report their current development work to the team lead. The team lead has to make sure all milestone deadlines are met and submit the documents to the instructors through formatted emails. The team lead also has to inform back to team members about the milestone's feedback from the instructors.

Slack and Trello are the two software that is used to ensure effective communication between team members. Slack is used for informal communication about meetup time and general non-technical tasks. Trello is used for technical-related tasks such as a list of tasks the front-end and back-end have to do, the current task each developer is working on, or tasks that have been done.