SW Engineering CSC648/848 Spring 2019 Dormy Home Rental Services

Team 01(Local)

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Milestone 2 March 21st, 2019

<u>History</u>

March 21st, 2019 (First Submission)

1. Data Definitions V2

- 1. **Unregistered User:** The users who access our website without getting registered. They shall be able to access listing from sellers, view pictures, edit filters, and register for the website.
- 2. **Registered User:** The users who have created an account on our website. They shall be able to post listings and respond to messages, along with having 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. Registering:** Non-Registered Users shall have to sign in to post for sale. Registering shall require an email and a password. They shall agree to the terms of service, and do the captcha.
- 5. **Listing**: Registered Users can post with or without a picture uploaded and containing the house type, price, description, distance from SFSU and address. Registered Users shall need a registered account to keep track of the posts.
- 6. **Browsing**: Non-Registered Users and Registered Users shall be able to browse and search for the house they are looking for. They shall be able to use a filter to filter by distance from SFSU.
- 7. **Administering**: After a Registered User submits a post for renting, 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.
- 8. **Messaging**: Each post shall have a button to send a message to the Registered User (Landlord) and start a chain of messages in order by date. Each user shall have a different colored text bubble.

2. Functional Requirements V2

Unregistered Users

1. Priority (Must haves):

- Shall be able to explore (view) the website's listings prior to becoming a registered user.
- Shall be able to browse listings based on housing type (room, apartment, home) via search bar.
- Shall be able to use filters (price, location, etc.) to sort listings.
- Shall be able to create a mock up listing prior to registering (lazy registration).
- Shall be prompted to register to the website prior to publishing a listing/messaging a landlord.
- Shall be able to register to the website (accept terms and conditions).

2. Priority (Desired):

• Shall be able to browse through listings within a certain radius of SFSU.

3. Priority (Opportunistic):

• TBD.

Registered Users

1. Priority (Must haves):

- Shall have all the functionality of unregistered users other than the ones which would create registration redundancies.
- Shall be able to log in to the website.
- Shall be able to access their dashboard upon login.
- Shall be able to message landlords or tenants.
- Dashboard shall display information about housing options they have messaged or been messaged about.
- Shall be able to post a listing to the website.

- Shall be able to edit the property details of listings they've posted.
- Shall be able to remove listings they've posted.

2. Priority (Desired):

- Shall be able to compare listings.
- Shall have and be able to manage notifications.

3. Priority (Opportunistic):

- Shall be able to review sellers.
- Shall be able to "Star" / "Favorite" particular listings, storing them within the user's dashboard.

Admins

1. Priority (Must haves):

- Shall be able to approve listings prior to them being posted to the site.
- Shall be able to remove or edit listings deemed inappropriate.
- Shall be able to block/remove undesired user accounts.

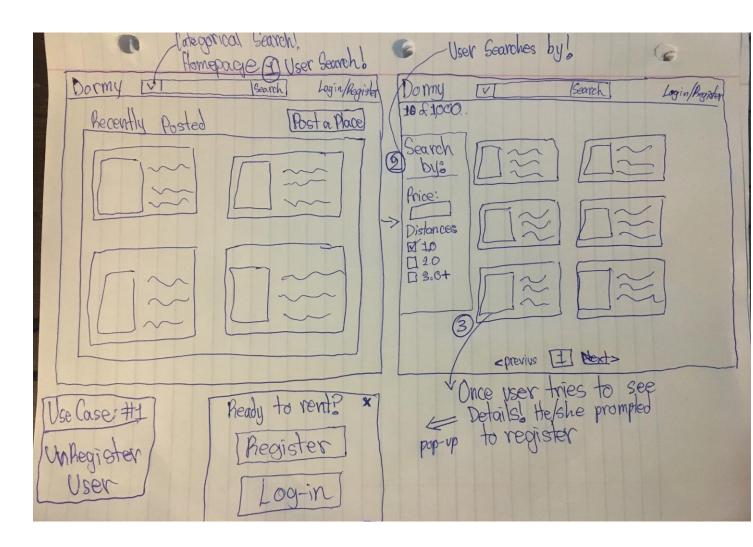
2. Priority (Desired):

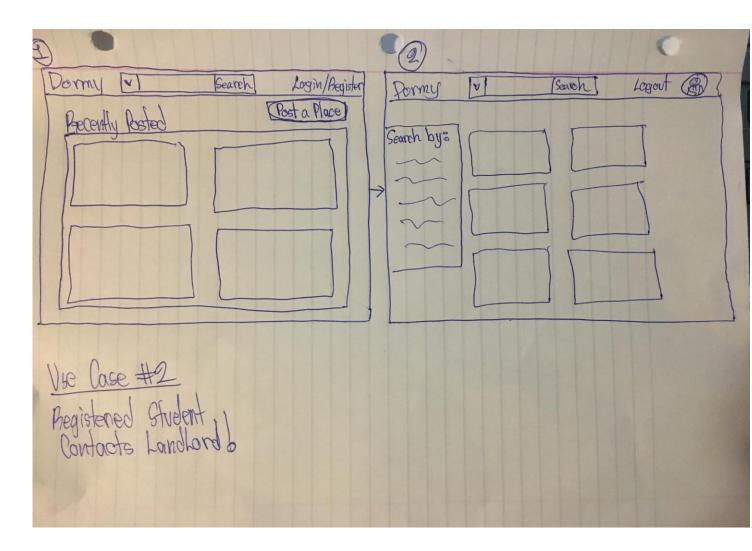
• Shall be able to remove outdated listings.

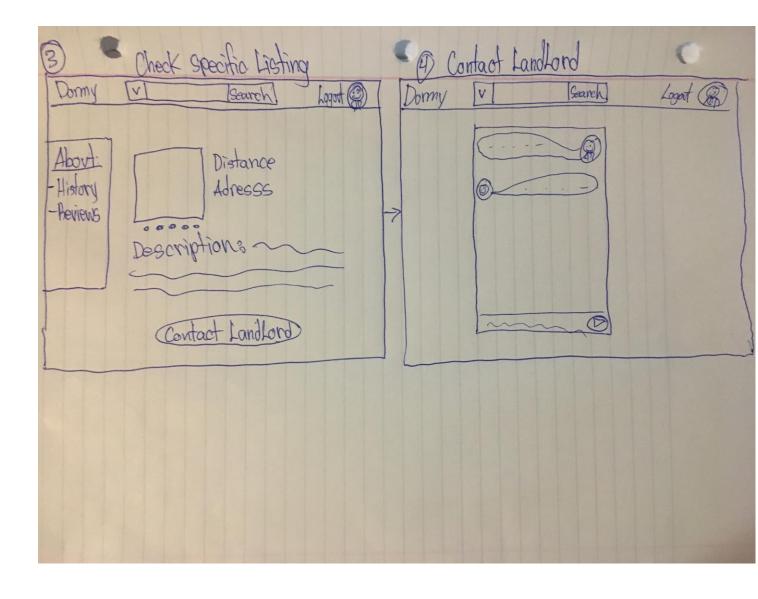
3. Priority (Opportunistic):

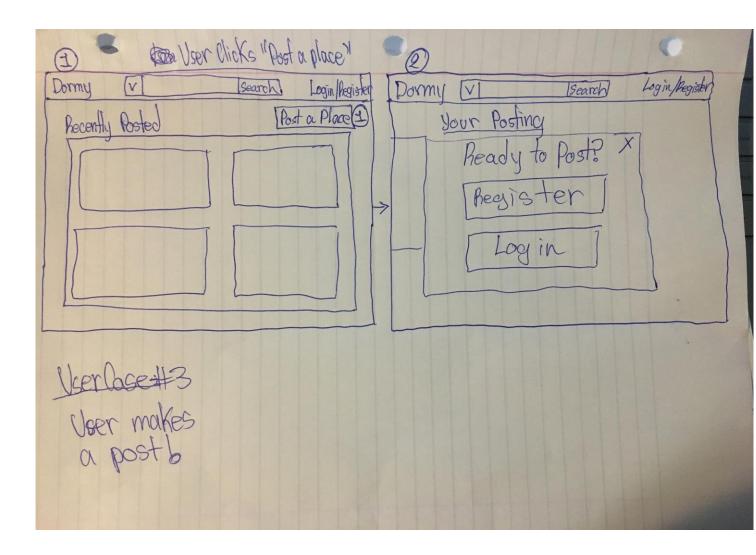
• Shall be able to send mass messages to all registered users at once (platform notifications).

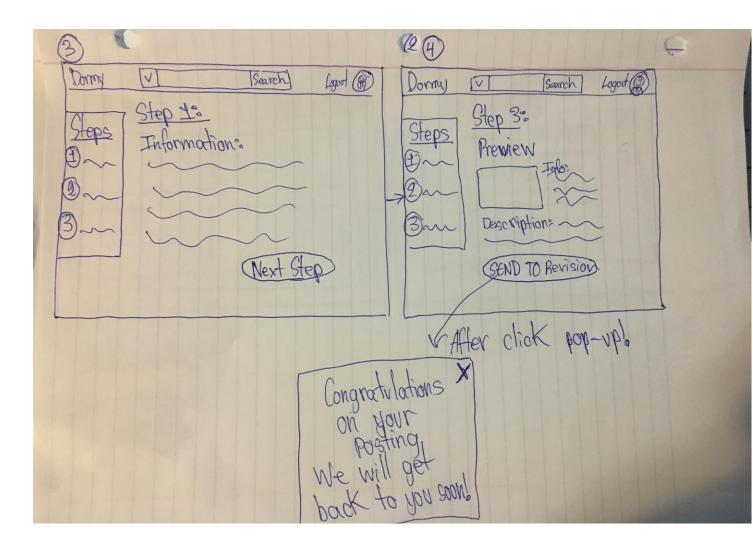
4. UI Mockups and Storyboards (high level only)

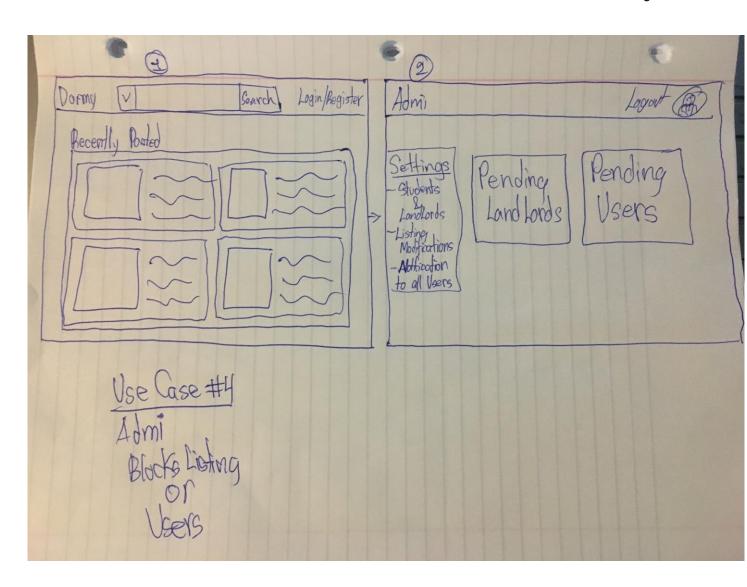


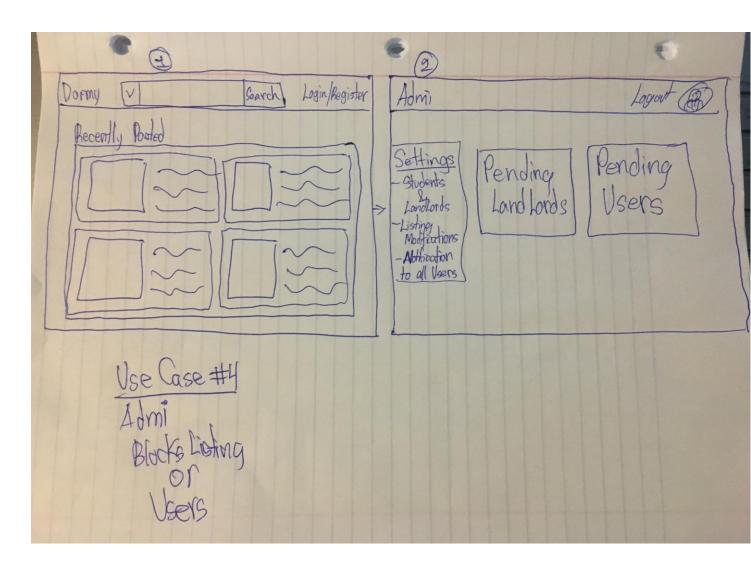




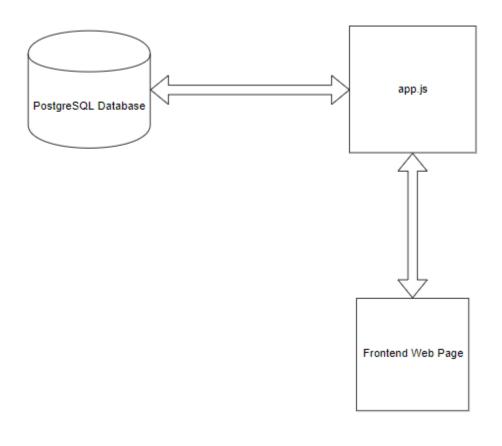








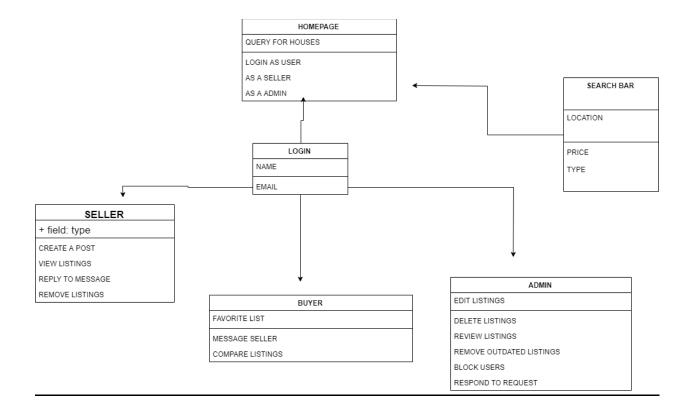
4. High level Architecture, Database Organization



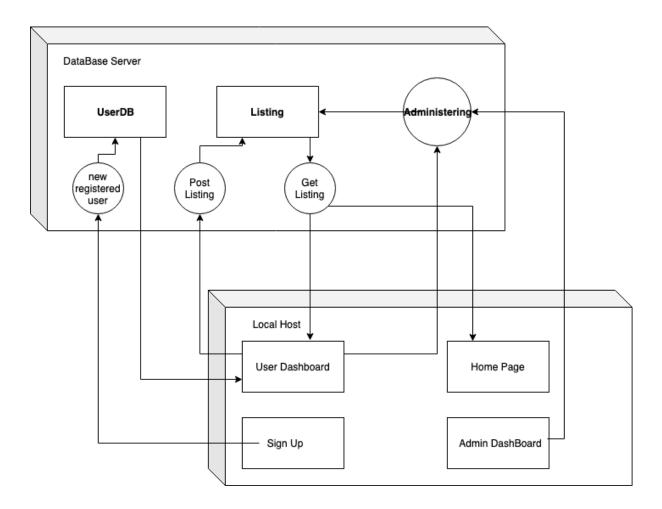
	Users
uid	int
name	varchar
contact	varchar
password	varchar

☐ Listing	s
uid	int
lid	int
Title	varchar
uid	int
Price	int
Address	varchar
Distance	int
NumRooms	int

5. High Level UML Diagrams



Deployment diagram:



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

Risks throughout the course of Dormy can scope from micro to macro ranges. Specifically, the skills risk, such that our team must have the ability to program an end-to-end software application from the backend to frontend to data storage. This is a fast-paced project in which we must deliver the product by mid-May and require all team members to adapt to the quick movements and technologies that arise. A solution to this risk is to hold sessions in which all team members are up to speed before moving forward.

Another risk factor is scheduling. Scheduling risks are correlated to are we able to complete the project on time and have it ready for production. We have chosen our technological stack and have collected the resources needed to code this project, it all comes down to actually implementing each function and task. A solution to this risk is to make sure we allocate our time and resources accordingly to ensure no tasks are overlapping and time is wasted. We need to make sure all code is modular and no other team member is working on the same code.

7. Project management

Although the notion of tackling a daunting obstacle bit by bit seems obvious, in order to be successful with this method, a common line of communication between those involved in the process needs to be implemented and enforced. Our software engineering team has chosen to adopt this approach, and intend on fulfilling the task of creating our SFSU home rental website through collaboration and teamwork. From day one it was unanimously agreed upon that our first order of business was to decide on a platform in order to base our communications out of. Our GitHub master Kevin Reyes suggested using the messaging application "Discord", which allows all team members to communicate on a private channel. We organized our dashboard to host 4 separate channels: one for general communications, one for the front-end team, one for the back-end team, and finally, one "bot" channel that automatically notifies everyone when changes are being made on our group's GitHub branches. Through the use of Discord, any team member can quickly communicate with all other members at once, allowing streamlined transfer of information between the entire team. On top of group messaging, Discord also allows us to voice chat with each other which supplements our varying schedules from allowing everyone within the group to meet up outside of class. Besides Discord, we have also found Trello to be a useful tool in the decomposition of larger tasks such as Milestone 2. For this milestone we created an individual card for each section of the document along with the due date. From there, team

members decide which sections they'd like to tackle and associate their name with said section. This responsibility is enforced by the team lead as it allows for even dispersal of all tasks. Finally, within our dashboard we created 5 columns titled: Backlog, To-Do, In Progress, Review, and Done, so that we can move each individual card between these columns to inform the rest of the team where we stand with that task. As of now, these project management tools have been immensely helpful in the collaboration of our milestones. We look to continue the enforcement of using these tools in order to satisfy the future tasks we'll be presented with, and have confidence that ultimately through team communication, our site will prove to be a useful tool for incoming SFSU students to find local housing alternatives with.