

SW-Engineering CSC 648 Spring 2019

Gator Room

Milestone 1

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Team 103

*Nico Graves - Jakhongir Khusanov - Michael McDonald Tran - Michael Nelson
Feona Garcia - David Hernandez - Carlos Velasco*

Executive Summary

I'm an SFSU student and I know how hard it is to find a place to live in San Francisco, one of if not the most expensive housing markets in the entire country. With the price of renting a dorm room for a semester up in the thousands, it can often be very challenging for students not living with their parents to find a place they can live, where landlords will not pressure them with huge rent costs and inconvenient leases. Students are very often taken advantage of by landlords who treat them as if they can afford to have full time jobs AND attend SFSU. GatorRoom is a platform for SFSU students, by SFSU students, that exists to make the strenuous process of finding a place to live easier. Our platform is a portal where landlords offering affordable housing options post listings they want SFSU students to fill. Many landlords are reluctant to offer housing to SFSU students and it's often a huge waste of time when you apply for a spot and are immediately rejected. On our platform GatorRoom all listed housing options are by landlords who are 100% willing to offer housing to students. By directly marketing our platform to SFSU students, we ensure that all the housing options offered are welcoming to students who very often live on tight budgets and schedules. With a slew of features including filters for certain house rules, the option for roommates to list and sublet available rooms in already rented houses, and robust information on each house listed, GatorRoom more than stands up to the rest of the competition in the online housing marketplaces. Developed entirely by a SFSU student team, GatorRoom is without a doubt the place to find a house for SFSU students.

Personas and User Stories

Category 1: Students Looking For Housing

- Assume all students are tech savvy and know how to use web apps
- Ask students to post/do more online to ease landlord burdens
- First year students - care more about cost / meeting new people / new experiences / easy purchasing experience and move in
- Returning Students - care more about roommates / living situation
- Comparison Shoppers - people comparing living off campus to on campus

Priority 1

Story 1 - A 1st year student Harry has never rented an apartment. He would like to live close to campus and meet new people. His hometown is far from SFSU and he probably will have to rent a place without actually seeing it. Photos media and ease of transaction will be the primary concerns of Harry. He either has no preference for roommates or doesn't know anyone else at the school yet. He might share a room with another student to save money. Harry uses our app to see a map view of the campus and housing locations to help him plan his move. Transit locations are highlighted so housing in the outer neighborhoods are still options to Harry. Looking at apartment layouts, photos and street views Harry gets a better idea of the living accommodations. Harry contacts several landlords easily from a big obvious button. He receives notifications when a landlord responds.

Priority 1

Story 2 - A returning student Ron has lived with some crazy people. His main concern this year is finding roommates who have to study as much as he does. Finding roommates with similar majors is one of his priorities. He already knows the campus and most of the living accommodations. He doesn't want to share a room. Ron opens our app and is able to search for housing filtered by roommate major. He chooses History, Physics, Computer Science and Engineering categories. He is show a list of houses that have these tags. He contacts several houses with a form letter introducing himself.

Priority 2

Story 3 - A returning student Hermione is starting her last year at SFSU. She has lived in the dorms, apartments and now wants to rent a house. Her concerns are price, roommates, availability of public transportation, and the condition of the house. Hermione uses our app to find a house that is available for rent, but also compares the price of renting an apartment. She is able to sort the listings by price, number of roommates and other accommodations like on-site laundry.

Category 2: Property or lease holders looking for tenants or roommates

Landlords - want reliable tenants, might not be tech savvy, wants to avoid craigslist scams/renters

Master tenants - want to find roommates to share rent, might use mobile exclusively,

Priority 1

Story 4 - Landlord Carl Fredrickson wants to rent out his property to Students.

Whatever the reason he's looking for reliable tenants who pay on time and don't make much fuss. Carl is older, and prefers to do things in person. Carl doesn't know he wants to use our website. We need to convince him. After a painless registration, it's easy to post the photos and info about Carl's house, and his listing is online later that day. Carl receives several inquiries about his property. Carl is able to see the public profiles of all the students who contacted him. These students are verified (* somehow) so Carl does not have to worry about Craigslist scams. This process has been so easy and stress free Carl wishes he could use our service for his lake house.

Priority 2

Story 5 - Master Tenant Veruca Salt's old roommate is just graduated and she needs to find someone to split the rent with. She prefers to live with another woman, and might want to see potential roommates social media or linkedin profiles to get a better sense of who she will be living with. She would also like a credit check, references from old landlords or some way to verify her new roommate. She will want to interview personally each potential roommate.

Veruca registers for our site from her phone. She takes photos and writes a short summary. Once she gets some inquiries she is able to see the students social media profiles from their public profiles.

Data Definitions

Landlord - A user who is allowed to list home openings through the landlord portal.

Master Tenant - A student user who is able to list open rooms when approved by a Landlord

Student - A SFSU student user who views available houses, and customize their profile with filters for various things.

Landlord Portal - A front end site that interfaces with the database of available houses and allows landlords to submit houses for review to be added to the database.

Student Portal - A front end site that displays available houses from the house database to students, based on their chosen filters.

House Database - The database of all available houses, approved by the webmaster.

User Database - The database of all users, landlord or student.

Landing Site - The index of the entire site, this site will prompt you to login to your account or register a new account as a landlord or student.

Registration Sites - These two platforms are for the creation of new user profiles,. and for the student portal there is the added verification step of needing an SFSU email

Master Tenant Portal - A portal where master tenant users may upload available rooms in their apartments.

Initial List of Functional Requirements

1. Users Database
 - Database of all the users, students and landlords. Separate entities that inherit from one user abstract.
 - Priority - High
2. House Database
 - Database of all available houses. Uploaded by landlords and approved by webmaster.
 - Priority - Medium
3. Student Portal
 - Portal where student users can view listed houses from the house database. The listed houses are based on filters the student customizes.
 - Priority - Medium
4. Landlord Portal
 - Portal where landlords can submit new housing options for review by the webmaster.
 - Priority - Low
5. Registration Sites
 - Site for registering a new student or landlord account. Students must provide a SFSU email account.
 - Priority - Low
6. Landing Site
 - Index page, first site new users will see when they visit Gator Room. Will offer a login feature and a register new account feature.
 - Priority - Low
7. Master Tenant Portal
 - Portal that only student accounts with master tenant status can view. Students here can post houses onto the housing database that need vacancies filled.
 - Priority - Low

List of Non-Functional Requirements

- 1) The Gator Room website will help college students attending San Francisco State University (which are our users for this website), to find their ideal apartment and roommates while they are attending San Francisco State University.
- 2) The student will be given a list of filters for specific housing situations (pets, smoker friendly, garage, parking, prices, pool access, amenities, etc...), in order for the student to feel some comfort when moving into their new apartment.
- 3) The student will be able to sign up for the website by having a San Francisco State University email, and only students with this email will be allowed to sign up for the website. This way the student's and the student's privacy is kept secured and only other students can see each other's profile on the website.
- 4) This website can help students who are looking for an apartment and do not have anywhere else to go. There will always be an available space for and student attending San Francisco State University.
- 5) The students will be accountable for any damages done in the apartment, and there will be a maintenance number for the student to call when there is some utilities not functioning correctly in the apartment.

Competitive Analysis

	Gator Room	Zillow.com	Zumper.com	Rent.com
Post Rental	+	+	+	+
Search / Filter	+	+	+	+
Map	+	+	+	+
Student Oriented	++	-	-	+
Favorites	+	+	+	+

Legend:

- + Feature available
- ++ Feature excels
- Feature unavailable

Our competitors offer a lot of features and mostly repeat each other. Our product will have similar features, however, we will only **focus on affordable housing for students**. We plan to add specific filters so students could find the most suitable apartments. Compared to rent.com, which also has a special section for students, listings on our website will be checked so every apartment meets student-oriented requirements. Students will receive the best experience in terms of service and website usability.

High-level system requirements

- Server Host: Google Compute Engine CPU - 1 vCPU, 0.6 GB memory
- Operating System: Ubuntu 18.10 x86_64
- Database: mysql-server-5.7
- Web Server: nodejs
- Server-Side Language: Javascript (Node.js v11.9.0)
- Additional Technologies: Bootstrap 4, npm v6.5.0, Express (back-end node module), React.js (front-end framework), Python ranger, p5js
- IDE: vscode/atom

Team

Nico Graves - Team Leader

Jakhongir Khusanov - Full Stack Dev

Michael McDonald Tran - Github Master

Michael Nelson - Full Stack Dev

Feona Garcia - Scrum Master

David Hernandez - Front End Lead

Carlos Velasco - Back End Lead

Checklist

Team found a time slot to meet outside of the class

DONE

Github master chosen

DONE

Team decided and agreed together on using the listed SW tools and deployment server

DONE

Team ready and able to use the chosen back and front end frameworks and those who
need to learn and working on it

DONE

Team lead ensured that all team members read the final M1 and agree/understand it
before submission

DONE