Roomey

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Problem Statement

Roommates, even the good ones, find it difficult to communicate with one another. Until now, there has been no singular solution that can help roommates gently remind each other of their tasks as well as keep track of everything in their house. Sometimes, splitting the bills among the roommates can be tricky and time consuming. We plan to provide a one-stop solution for roommates to distribute work to each other and to keep track of everything from their debts to the groceries in the house. Other solutions to roommate management exist, however ours is different in that it allows you to take all actions, such as splitting up the bills and paying your share of the bill, organizing chores and other tasks in a convenient and effective manner. User can perform tasks without leaving the app through integration with services most people already use. Other solutions simply provide reminders, we provide you resources to act.

Background Information

There are many aspects of living with roommates that can be found difficult to manage. As a result, responsibilities can be mismanaged due to poor communication or unmatched expectations causing household chores to be divided unequally. Our app Roomey, seeks to provide a one-stop solution to help alleviate these issues and makes life simpler for roommates. We seek to deliver a modular application that can be modeled and updated to address the future needs of roommates across the world.

We acknowledge that there are existing services that provide similar services as we provide for roommates. However, while services like Homeslice and Goodmate allows you to send and receive messages among the roommates, can keep track of the grocery list, but these services don't allow you to pay for the groceries your roommates bought within the application itself. There are other services like Splitwise that allows you to keep track of you and your roommates financial information, but they allow you to pay the bills and due within the application nor they allow you to keep track of what you have in your home, and what you need. Our application Roomey, will provide one location for you to do everything you need to manage your home and your roommates, using services many people already use.

With modularity as a focus, we will be able to constantly push out product updates based on consumer needs and feedback. Other apps are built with the initial features in mind, ours is built with the knowledge that consumer needs evolve and our application will need to grow with these needs.

<u>Requirements</u>

Our application will run on the web, with the possibility of developing a mobile application later.

Account Management

Story #	User Story	Functional/Non-Functional
A1	As a user, I would like to sign up for an personal account	Functional
A2	As a user, I would like to create an apartment group and then invite other users.	Functional
A3	As a user, I would like to manage my personal account (change, password, change profile picture, name and other details).	Functional
A4	As a user, I would like to be able to recover the account, if I forget my password.	Functional
A5	As a user, I would like to remove users if they leave the apartment.	Functional
A6	As a user, I would like to be able to leave an apartment group if I move	Functional
A7	As a developer, I would like only members of an apartment to view the apartment group	Functional
A8	As a user, I would like to add more roommates if I have more than one roommate	Functional
A9	As a user, I would like a help page	Functional
A10	As a user, I would like to be able to remove services (i.e. cable, water, electricity, and gas) after they have been disconnected	Functional

Financial Management

Story #	User Story	Functional/Non-Functional
F1	As a user, I would like to able to pay my bills using Venmo API service.	Functional
F2	As a user, I would like to be able to link my gas, water, cable and electricity bill to my account	Functional
F3	As a user, I would like to be able to report grocery bills and have them show up in the apartment group	Functional
F4	As a user, I would like to pay or request money among roommates	Functional
F5	As a user, I would like to be able to split bills as a percentage for each user. For example, 33.3% for one user, 66.7% for another.	Functional
F6	As a user, I would like to keep track of how much my roommates owe me	Functional
F7	As a user, I would like to be able to split up grocery and other bills equally between roommates	Functional
F8	As a user, I would like to keep track of what my roommates owe me	Functional
F9	As a user, we would like to be able to pay our bills by splitting the total cost	Functional
F10	As a user, we would like to pool money together for group expenses	Functional
F11	As a user, I would like to keep track of my monthly expenses, and see statistics about my financial information	Functional
F12	As a user, I would like to be able to store a payment method	Functional
F13	As a user, I would like an auto pay method	Functional
F14	As a developer, I would like financial transactions to be secure	Functional
F15	As a user, I would like multiple options of paying my bills, such as credit card, PayPal, Venmo, E-checks, Bitcoin, et cetera	Functional
F16	As a user, I would like to see how much bills change over time.	Functional
F17	As a user, I would like to be notified when the bills are due	Functional
F18	As a user, I would like to have the option of receiving email receipts	Functional

Inventory Management

Story #	User Story	Functional/Non-Functional
I1	As a user, I would like to view my group's common shopping list	Functional
I2	As a user, I would like to maintain a list of our current food and supplies for a group I belong to.	Functional
I3	As a user, I would like to be reminded of the items that I commonly purchase	Functional
I4	As a user, I want to know how much my group's inventory is worth, based off of average prices of our items or the price we enter.	Functional

Scheduling Management

Story #	User Story	Functional/Non-Functional
S1	As a user, I would like to add events to the calendar	Functional
S2	As a user, I would like to view bills due dates on the calendar	Functional
S3	As a user, I would like to be sent notifications when an event is coming up	Functional
S4	As a user, I would like to view a calendar of upcoming events for each apartment in my account.	Functional

User Communication

Story #	User Story	Functional/Non-Functional
U1	As a user, I would like to leave notes for my roommates	Functional
U2	As a user, I would like to view notes my roommates have left	Functional
U3	As a user, I would like to add a chore that needs to be done	Functional
U4	As a user, I would like to claim a chore for myself (vote for myself)	Functional
U5	As a user, I would like be able to vote on who does chores	Functional
U6	As a user, I would like to be able to see who has been doing the chores	Functional
U7	As a user, I would like to be able to automatically assign chores to a roommate	Functional
U8	As a user, I would like to be able to accept or decline a chore, task, or	Functional

	bill that my roommate assigned to me.	
U9	As a user, I would like to be able to schedule chores (daily, weekly, monthly)	Functional
U10	As a user, I would like to be able to get phone notifications at the beginning of the week listing my chores for that week	Functional
U11	As a user, I would like to be able to get email notifications at the beginning of the week listing my chores for that week	Functional

Non Functional Requirements

N1	As a developer, I would like the account to be secure	Non- Functional
N2	As a developer, I want the UI to be as easy to use as possible,	Non-Functional
N3	As a user, I want a design focused on effectiveness and ease of use.	Non-Functional
N4	As a user, I want my notifications to appear on time.	Non-Functional
N5	We will make sure that website communication is encrypted using https vs http.	Non-Functional
N6	Account Information will remain secure as possible. User passwords will be hashed. Stealing user data should be very difficult for a hacker.	Non-Functional
N7	Account information integrity should not be compromised. We will defend against SQL injection.	Non-Functional
N8	Must be compatible with all major web browsers	Non-Functional
N9	We will make the UI as responsive as possible. Our goal is to never have a wait time for a page to be over 5 seconds.	Non-Functional
N10	We will develop a backend using Ruby-On-Rails which will allow us to possibly have multiple different front-ends for different devices (Desktop, mobile).	Non-Functional
N11	As a developer, I would like the user database to be hidden from people who have not signed up for the website	Non-Functional
N12	As a developer, I would like a common place to store code	Non-Functional
N13	As a developer, I would like an automatic testing suite that runs with every commit to the master branch	Non-Functional
N14	As a developer, I would like a common coding style that everyone follows	Non-Functional

N15	As a developer, I want the servers to be able to defend against DDos attacks	Non-Functional
N16	As a developer, I would like the whole project to be in the cloud	Non-Functional
N17	As a developer, I would like my servers to be reliable (ie. not likely to crash or shutdown)	Non-Functional
N18	As a developer, I would like to have backup/recovery-mode servers in case one server goes down	Non-Functional
N19	As a developer, I would like the database to be separate from the rest of the project	Non-Functional
N20	As a user, I would like an app for my smartphone or tablet	Non-Functional