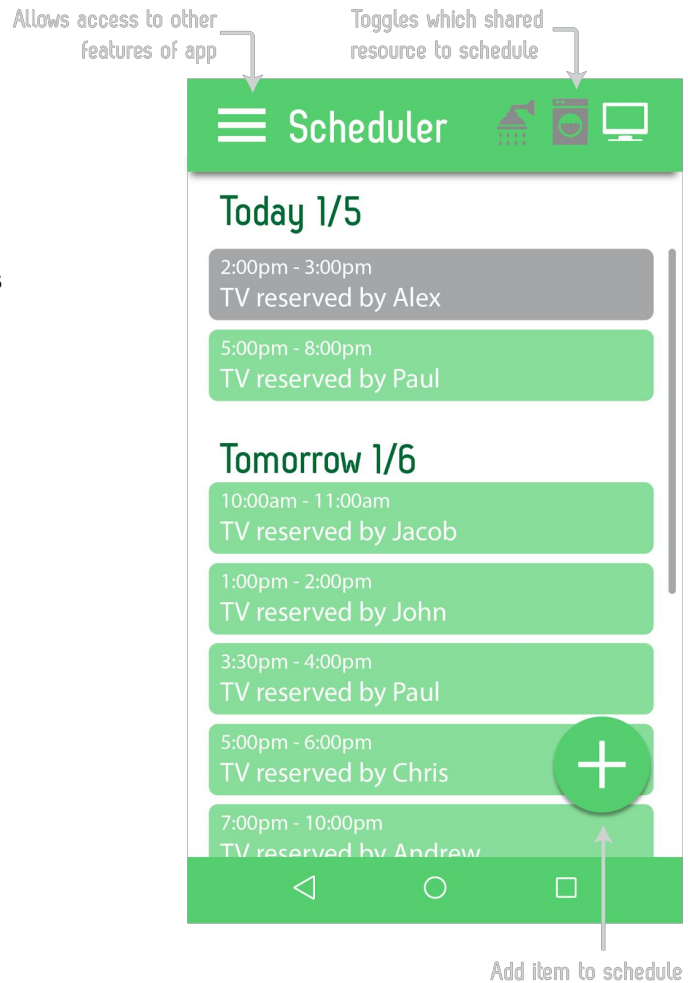# Project Proposal: RoomEase

Alex Vrhel (avrhel) and Jakob Sunde (jsunde)

CSE 403 16wi

RoomEase will be the first all-in-one organization app for roommates. It is intended for groups that live in a shared space, to streamline chores, sharing food, shopping, paying rent, and even reserving time in the kitchen or bathrooms. No single app exists that allows roommates to communicate and coordinate all of the different aspects of life that are necessary when living together, so users generally rely on communication through a variety of apps, which is a problem. This product is unique and compelling because it will serve as a platform for all necessary roommate interactions and coordination, eliminating, for example, the need to coordinate payments in one app and to-do lists in another. Users will set up a group with their roommates where they can coordinate a variety of things, including:

- A reservation schedule to reserve time with shared resources, such as laundry machines, TVs, or showers (pictured)
- Recurring chore schedules, with statistics and records on who has been contributing
- Fridge management, setting expiration dates and "sharing settings" on food, with integrated payment for using each other's food and notifications for expiring food
- Paying rent and managing bills
- Messaging system to communicate about anything else, and shared notes/to-do lists/wishlists
- A way to check who is home at any moment

Allows access to other features of app

Toggles which shared resource to schedule

Add item to schedule

RoomEase will be a mobile app, either for iOS or Android. The application will use a database to store data for each group of roommates, and all necessary user information, schedules, chores and chore leaderboards, etc. for that group. The database will be hosted on a server so that information can be shared easily between members of a group. This product will integrate various APIs such as Google Maps for real-time location verification to see who is home, a calendar service for various schedules, and Venmo for in-app payments between roommates (for rent, borrowing food, or other uses).

The biggest risk for this product is the competition that exists, from roommate-coordinating apps such as homeslice, payment apps like venmo, or communication apps as simple as facebook messenger. The application will likely not see much use unless it has a wide list of features that truly make it all-in-one, and a seamless UI that makes staying updated through this application a positive experience for users. To ensure that the product is compelling, special care will be given to make the UI as streamlined as possible, and the main landing page will make it easy to do frequently used actions, such as adding something to the fridge, as conveniently as possible. Learning how to use the various toolkits, APIs, and languages required for this project could also be a significant challenge, but this will be mitigated by having close communication within the team, especially early on in the process, to ensure everyone ramps up quickly.