**The Roommate App**

**an Android App by Albert Rynkiewicz, Alex Greco, and Matt Cieslak**

**Project Summary**

The Roommate app will be an Android app focused around the everyday life of people who have roommates. It will be a place for roommates to square-up their bills, delegate and track chores, keep track of damages and accountability, and track everyday shared items, like milk and toilet paper. Users will be able to join a group with all of their house mates. Once in the group, each user will receive live-time notifications about all roommate activities.

This app will be developed for Android smartphones using Android Studio as the IDE.

**Project Goals**

The goal of the project is to become a one stop shop for everyone living with roommates to use to help manage, record, and distribute all the different shared responsibilities that come with living with other people.

Over our years at Rowan, we’ve learned many things. But something that sticks out is our experiences with our roommates. We’ve had some great times, but the most annoying thing living with a bunch of people, time and time again, is managing/organizing all the shared items and responsibilities. We hope to create an app to take the worry and stress out of the worst things about having roommates. Our app will make managing bills, chores, groceries, and house maintenance easier than ever. Instead of having to text all your roommates, “you owe me xxx for rent” or “I just bought milk,” users will be able to log everything into this app, and the app will notify everyone. We hope to make an application that is not only easy to use, but we want our users to love using it.

We would like our app to simplify having roommates and make it as easy and worry-free as possible.

**Product Features**

This will be an Android App that will contain the following features inside of it. We plan to have a main dashboard, where the user can then navigate to each section/category.

1. **Bill Manager**
   1. Bill manager - feature to post and delegate bills among users in a group.
      1. PHP web-server as backend user information.
   2. Bill payment - feature to pay each other bills (Venmo api, Strip api).
2. **Chores Board**
   1. Chores Board - have a panel to post and delegate chores.
      1. An itemized list that has common chores for quick delegation.
3. **Grocery List**
   1. Grocery List - feature to post, view and track groceries.
      1. PHP web-server as backend to store item information.
      2. An itemized list that has common items for making a quick list.
4. **Group messaging**
   1. Message board - group chat feature among groups.
      1. PHP web-server as backend to store messages
5. **Maintenance**
   1. maintenance board - feature to post damages, fixes and weekly maintenance.
      1. PHP web-server as backend.
      2. have an itemized list of what supplies are needed to fix the damages.
6. **Point system**
   1. Points board - feature to track roomie’s points. Can be used for either or both rewards and punishments.

**Limitations**

**This app will not act as a roommate finder**

Students will go on and create their own groups, this is not a way to find potential roommates since we won’t have access to university data and that’s not the desired functionality.

**Payments**

We are not sure if available API’s would be provide us with the functionality to facilitate peer-to-peer credit card transaction. Even if they did it could lead to unnecessary security vulnerabilities. All payments will be decided by the user in question, never forced by another user or automated by the system.

**Real time data functionality**

Real time client/server transactions are often limited by the libraries available and if implemented incorrectly can lead to suboptimal resource usage as well as additional security vulnerabilities.

**Keeping the automation of the system neutral**

This is in reference to how the users actually interact on the system. All conflicts and issue are resolved by the household. This app just provides a platform for users to organize/manage themselves and their shared living space