SLEEPMATE

Hi-Fi Prototype
Midway Milestone

Overview

- Introduction
- Heuristic Evaluation Results
- Revised Designs
- Prototype Implementation
- Demo Video

Introduction

The Team

Aaron H.

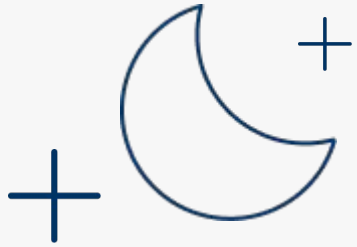
Michelle X.

Derek C.

Tristan W.

Value Proposition

Sleeping easy, made easy.



Mission

SleepMate's mission is to ease anxiety when it comes to sleeping with roommates by reminding roommates to keep noise levels low during sleeping hours.

Problem Overview

It can be difficult to tell your roommates over and over again to be quiet when you're trying to sleep. SleepMate helps you rest at ease by monitoring your roommates' noise levels and alerting them when they're being too loud so you don't have to!

Heuristic Evaluation Results >

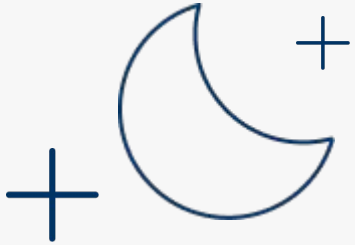
Summary of Heuristic Violations

	# Violations (Sev. 3)	# Violations (Sev. 4)
H1	1	1
H2	2	0
H3	5	0
H4	2	0
H5	3	0
H6	3	0
H7	2	0

Summary of Heuristic Violations

	# Violations (Sev. 3)	# Violations (Sev. 4)
H8	4	1
H9	1	0
H10	4	0
H11	0	0
H12	1	0
H13	0	0
Total	28	1

Most Common Violations



18.64%

H8: Aesthetic and Minimalist Design

15.25%

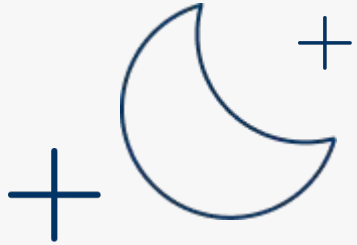
H3: User Control and Freedom

13.56%

H4: Consistency and Standards

Revised Designs

Violations: Roomies Page



H1

Average wake-up time isn't visible for roommates (3)
We've added that to the roommate's profile page.

H4

You either can delete one roommate or have to delete all roommates (3)
We've changed the deleting process more akin to the iOS Alarm app's deleting process.

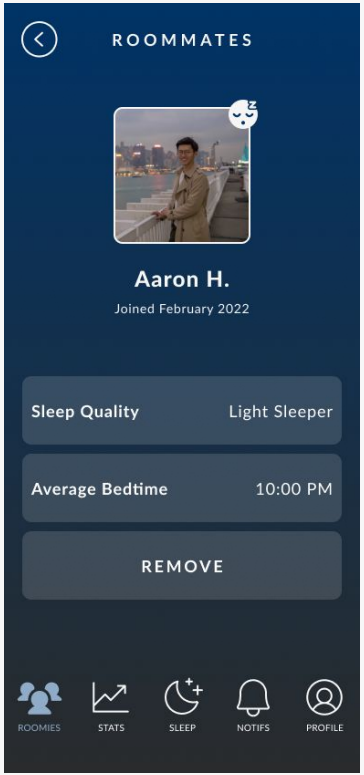
H5

Roommate adding screen only shows photos and names of people, which can make it difficult identifying the right person (3)
We've changed the search criteria to be username only.

H6

The sleeping icon next to roomie's profile can be confusing (3)
We've added clarifying text next to the icon to clearly indicate the roommate is sleeping

Revision: Roomies Page | Added Avg. Wake-Up Time



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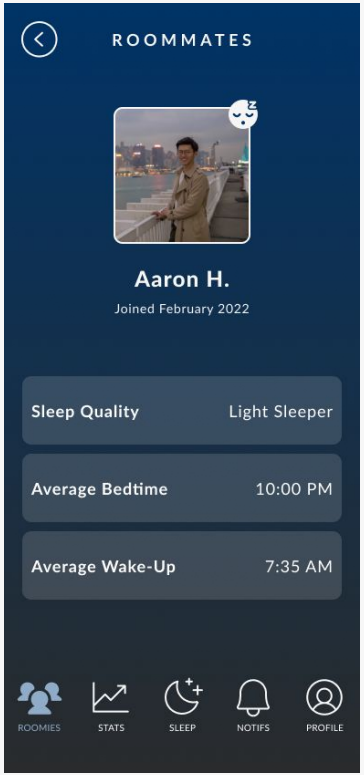
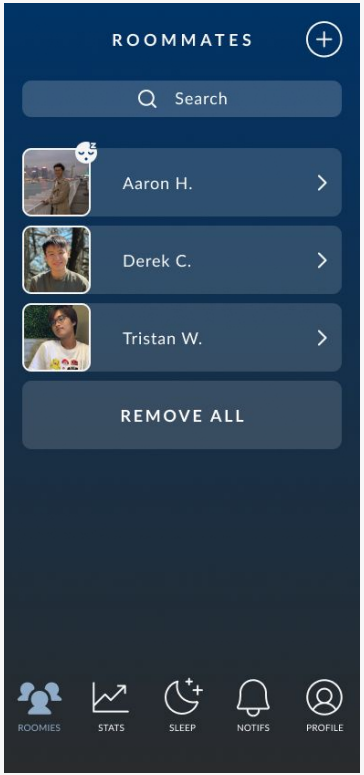
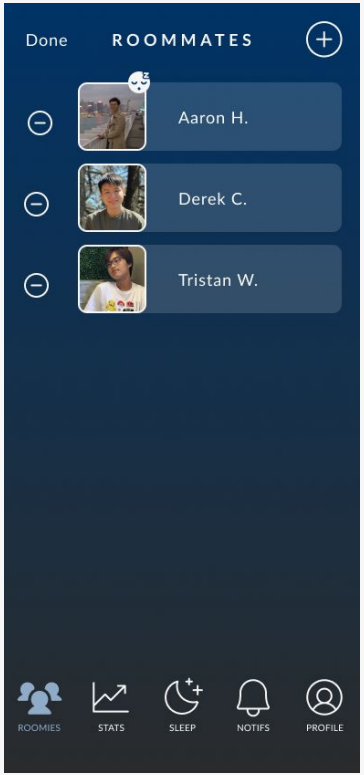


After

Revision: Roomies Page | Change Roomie Deleting Process

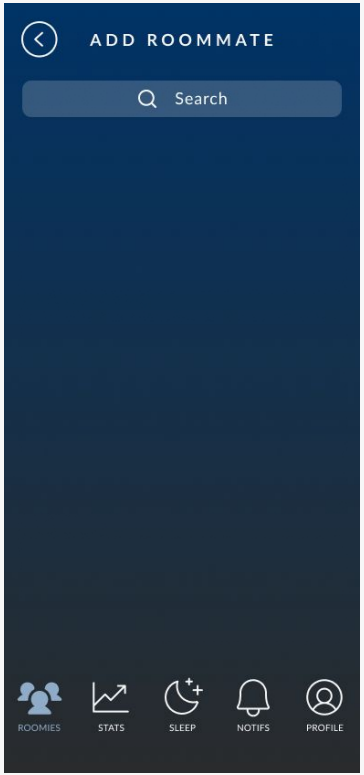


Before



After

Revision: Roomies Page | Search Criteria to Username Only



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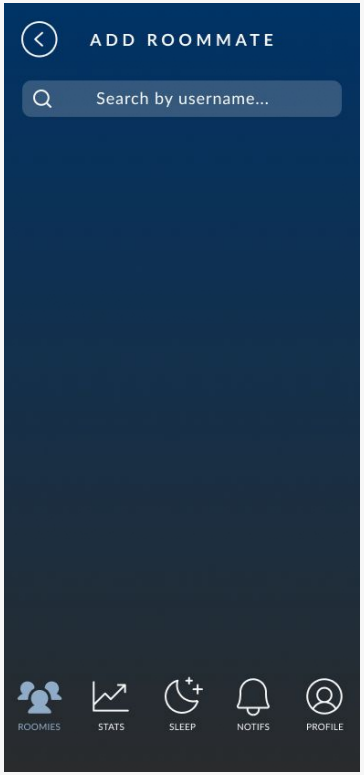
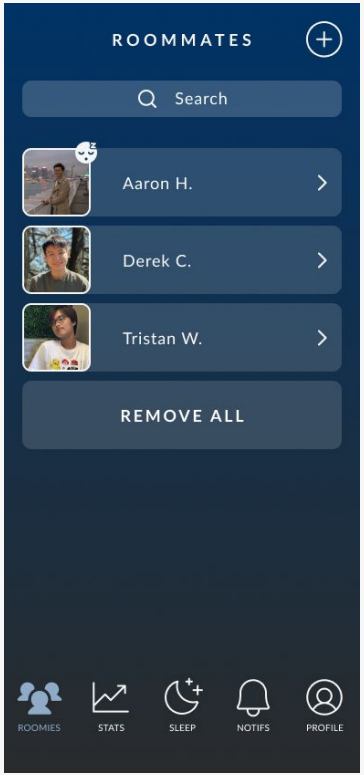
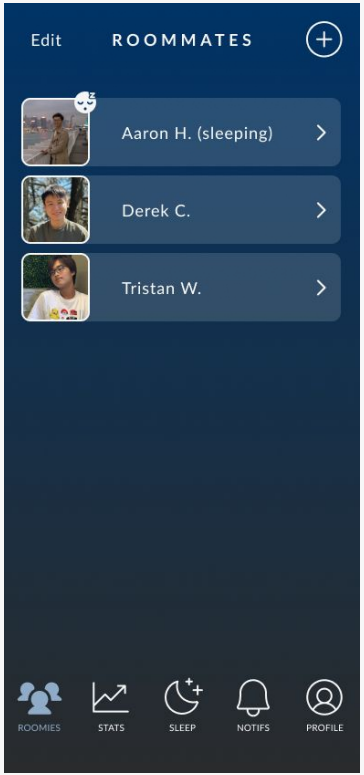


After

Revision: Roomies Page | Clarified Icon Meaning

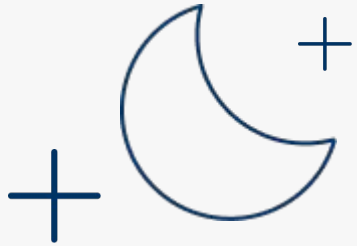


Before



After

Violations: Statistics Page



H2

Word choices for indicating noise levels and sleep quality are confusing (3)
We're changing the wording so that it's easier to understand.

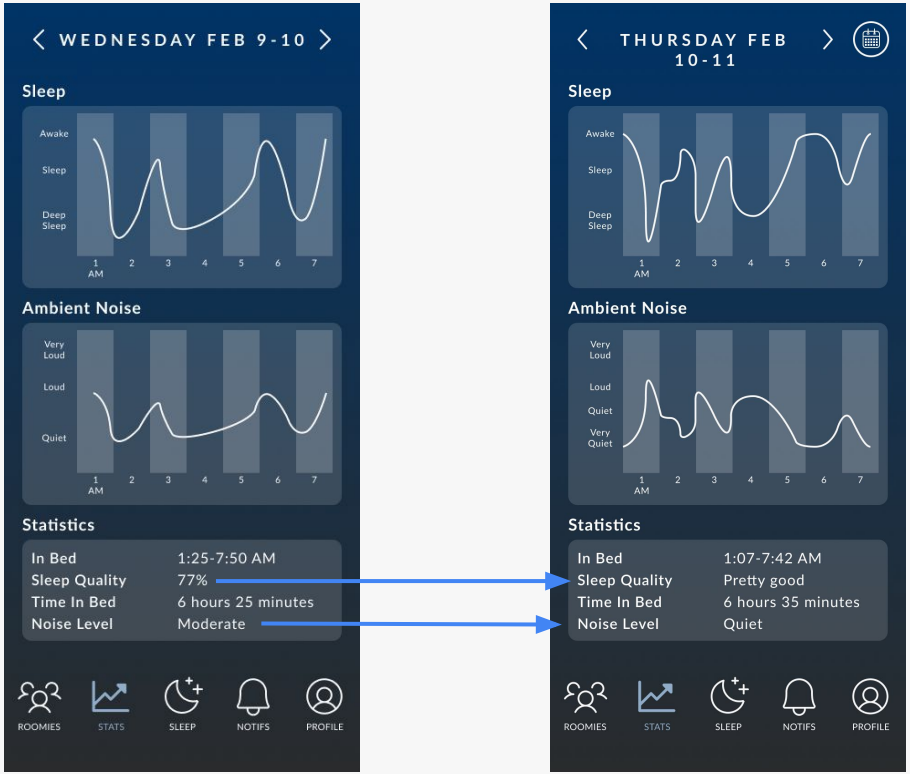
H6

Users can't see their own sleep statistics averages (3)
We've added average statistics to the profile page.

H7

It's difficult to view sleeping statistics from different dates (3)
We've added a calendar view that allows users to switch to dates farther away.

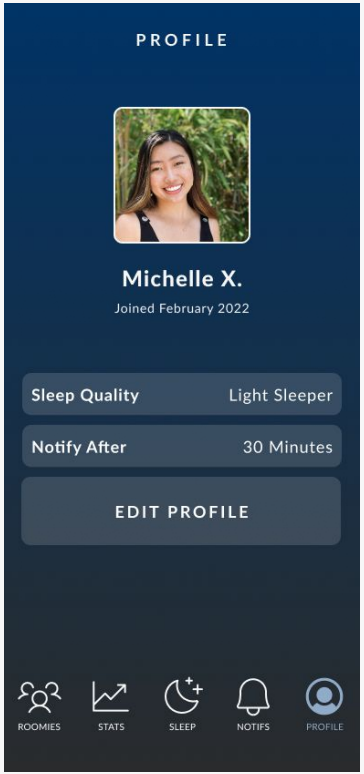
Revision: Statistics Page | Clarified Wording



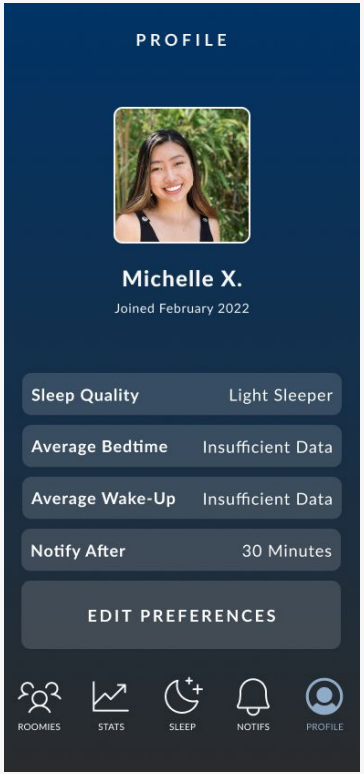
Before

After

Revision: Statistics Page | Added User Avg. Stats

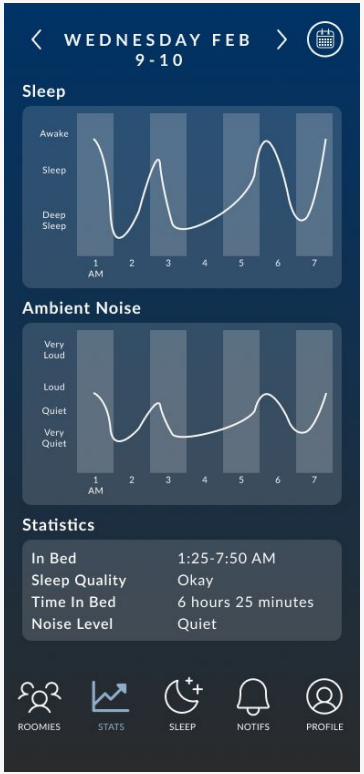


Before



After

Revision: Statistics Page | Added Calendar View



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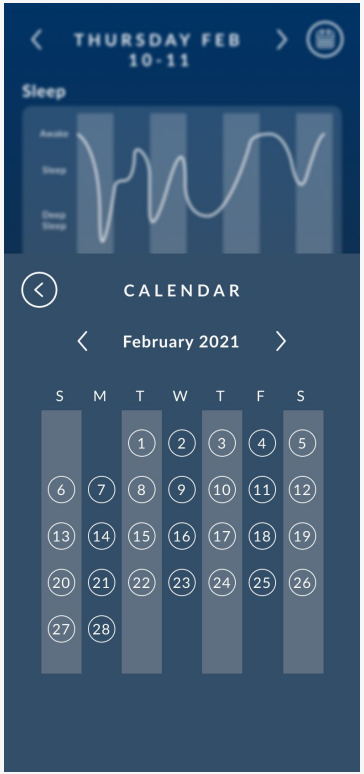


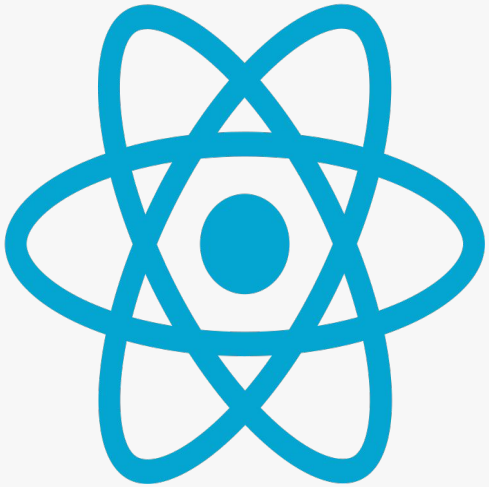
After

Other revisions we've made

- Users need to hold the sleep button for 5 seconds for sleep mode to activate for error prevention.
- We've added a confirmation dialog for roommate inviting for error prevention.
- We've standardized our terminology across different screens.

Prototype Implementation

Tech Stack

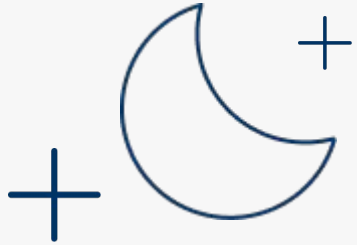


React Native
(application
framework)

VSCode
(IDE)

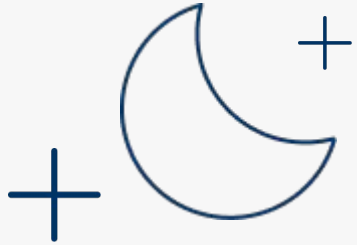
SQLite
(DB)

Implemented Features



- Home page along with a “timer” when you press the sleep button
- Waking up page that displays the time
- Notify your roommates that you’re going to bed (task 1)
- Statistics page that shows historical sleep sound data (breathing, ambient noise)

Unimplemented Features



- Roommates page that displays your current roommates
- Modify your household by adding/removing roommates (task 2)
- Profile page that displays your own sleeping preferences
- Update your sleeping preferences to notify your roommates that you're still awake after X hours (task 3)
- Fix any bugs and smooth out transitions
- Detailed README to help others use SleepMate

Wizard of Oz Technique

Pressing the “sleep” button immediately moves the time to 7:59am

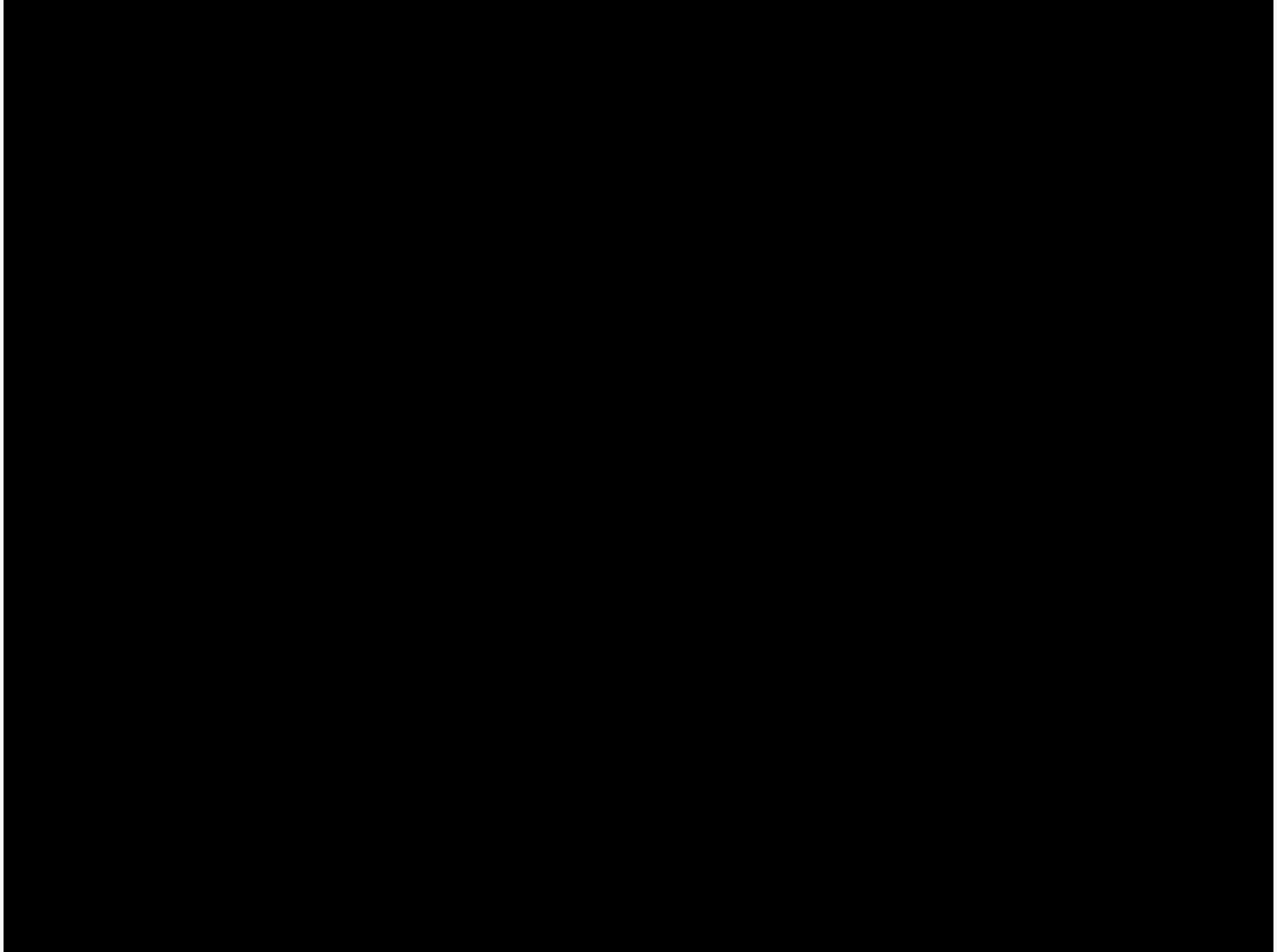
Hard-coded Data

Roommates that can be added are hard-coded

Stats page is populated with randomly generated numbers

Our Timeline

Demo Video



Summary

- The major heuristic violations have been addressed through the design changes.
- Next steps are to implement the other two tasks and make the app look ~nicer~ prior to project expo.
- Plan set to finish by deadline!