



Closer connections, no matter the hour

A6: Medium-Fi Prototype

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Nightshift workers are often lonely, believe that work and personal life can't go hand in hand, and that they have little to no time to care for connections with others

Problem Statement

Our Solution

An online community of night shift workers with similar backgrounds, work schedules, situations etc. to share resources, tips, and support each other

Values in Design

1

Values Encoded

Trust

Users should be able to build **trust and rapport** by receiving genuine responses and authentic insights from others that can empathize with them.

Personalization

Everyone on Lunar should be able to get an experience **specifically tailored to their needs** and unique positions

Compatibility

Users should be able to intuitively and **seamlessly integrate** Lunar's functionalities into their **existing organization systems.**

Design Decisions

Trust

Users should be able to build **trust and rapport**

Intimate Community Groups

Limit member count in community groups to encourage closer small-group connections.

Verified Users

Users must verify identity + contact during onboarding

"Star" Contributors

Frequent and trusted discussion contributors will earn star status, increasing trust for their posts

Personalization

Everyone on Lunar should be able to get

Custom Onboarding

Users can control degree of personalization by choosing how much information to provide during onboarding

Specific Group Themes

Onboarding data suggests tailored groups for user to join, based on their needs

Compatibility

Users should be able to intuitively and

App Integration

Posts suggesting specific actions have an option to integrate with Google Calendar, Reminders app, etc.

Flexible "Add to" Options

Lunar can host a variety of "add to" options depending on user's existing digital workflow: e.g. iOS vs Android, Watch vs Phone app.

Value Conflicts

PERSONALIZATION:

Custom Onboarding
Specific Group Themes

Address By:

Creating multiple smaller communities for broader groups -- for example, three 50-person "Nightshift Nurses" instead of one 150-person one

TRUST:

Intimate Community Groups
Verified Users
Star Contributors

Potential Conflict:

Users who choose to provide less information in onboarding are put in broader community groups, which are capped

COMPATIBILITY:

App Integration
Flexible "Add To" Options

Value Conflicts

PERSONALIZATION:

Custom Onboarding
Specific Group Themes

Address By:

Including a question in onboarding about user's workflow and adapting answer into post integration options (e.g. paper to-do list or digital calendar?)

TRUST:

Intimate Community Groups
Verified Users
Star Contributors

Potential Conflict:

Reminder/calendar compatibility is limited to most commonly used apps, which may make Lunar less personalized to users with unique preferences.

COMPATIBILITY:

App Integration
Flexible "Add To" Options

Tasks

2

Our Tasks

Simple

Viewing and pinning relevant resources within a night shift community group

Moderate

Sharing wisdom and contributing to a community forum

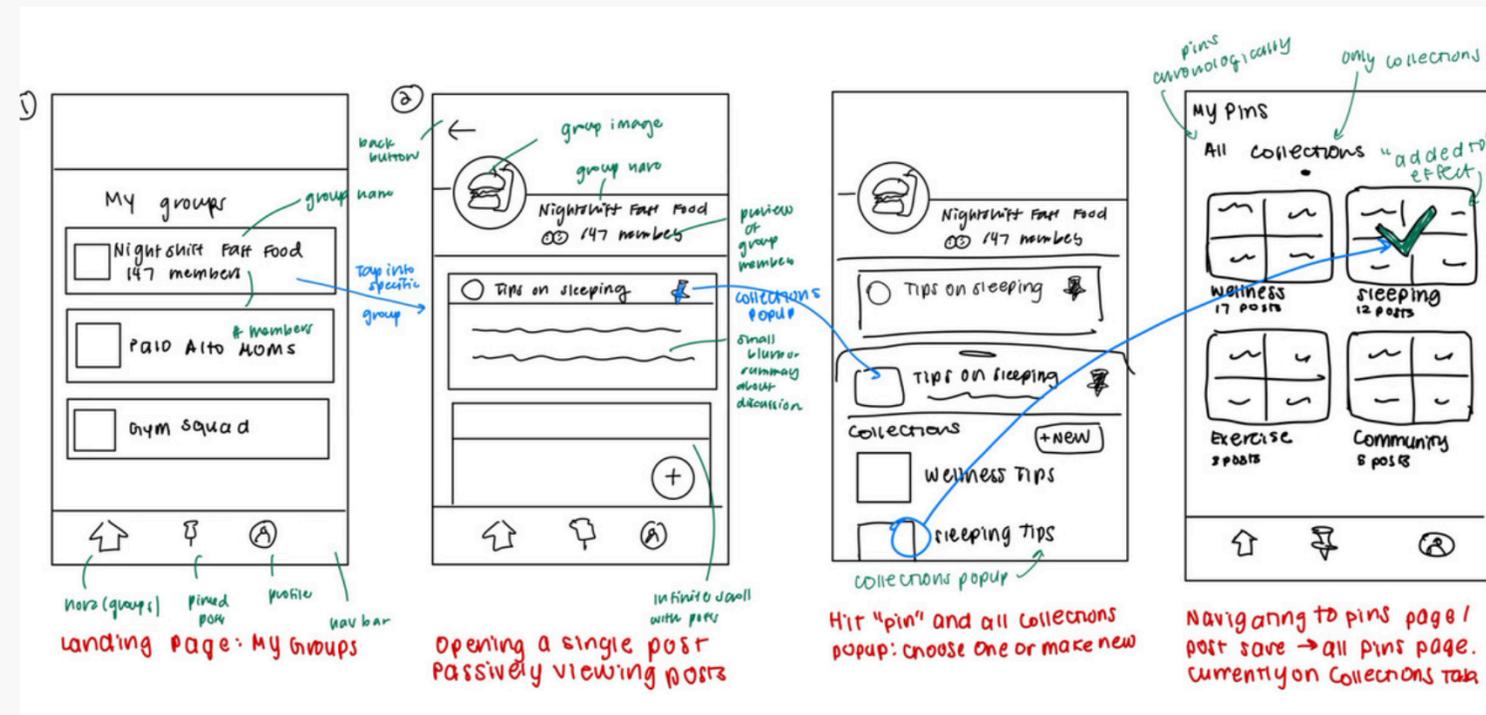
Complex

Taking action on post suggestions through calendar and reminders integration

Simple Task

Viewing and pinning relevant resources within a night shift community group

Lofi Prototype



Changes Made

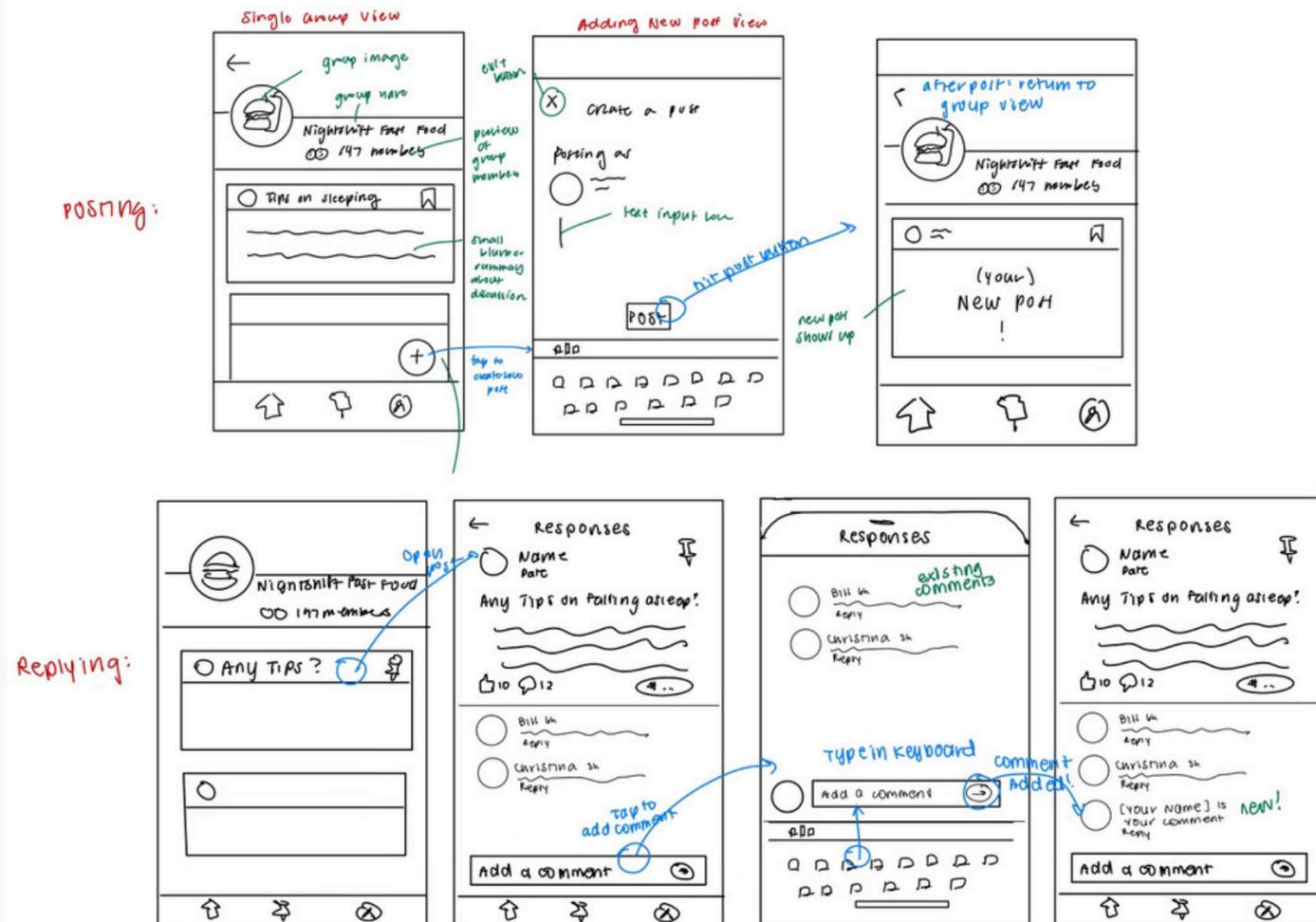
- Added pinning/adding to collections as a part of simple taskflow: users often **first passively browsed posts and built private collections together** in tests
- Implemented **consistent "pin" icon** instead of both pins and bookmarks: users were confused about the difference between icons
- Made task flow start at landing page instead of including onboarding based on TA feedback
- Added **half sheet save to collections** feature based on existing social media app flows to improve intuition and reduce user friction

Moderate Task

Sharing wisdom and contributing to a community forum

Lofi Prototype

Moderate Task: Actively contributing to forum (replying/sharing wisdom)



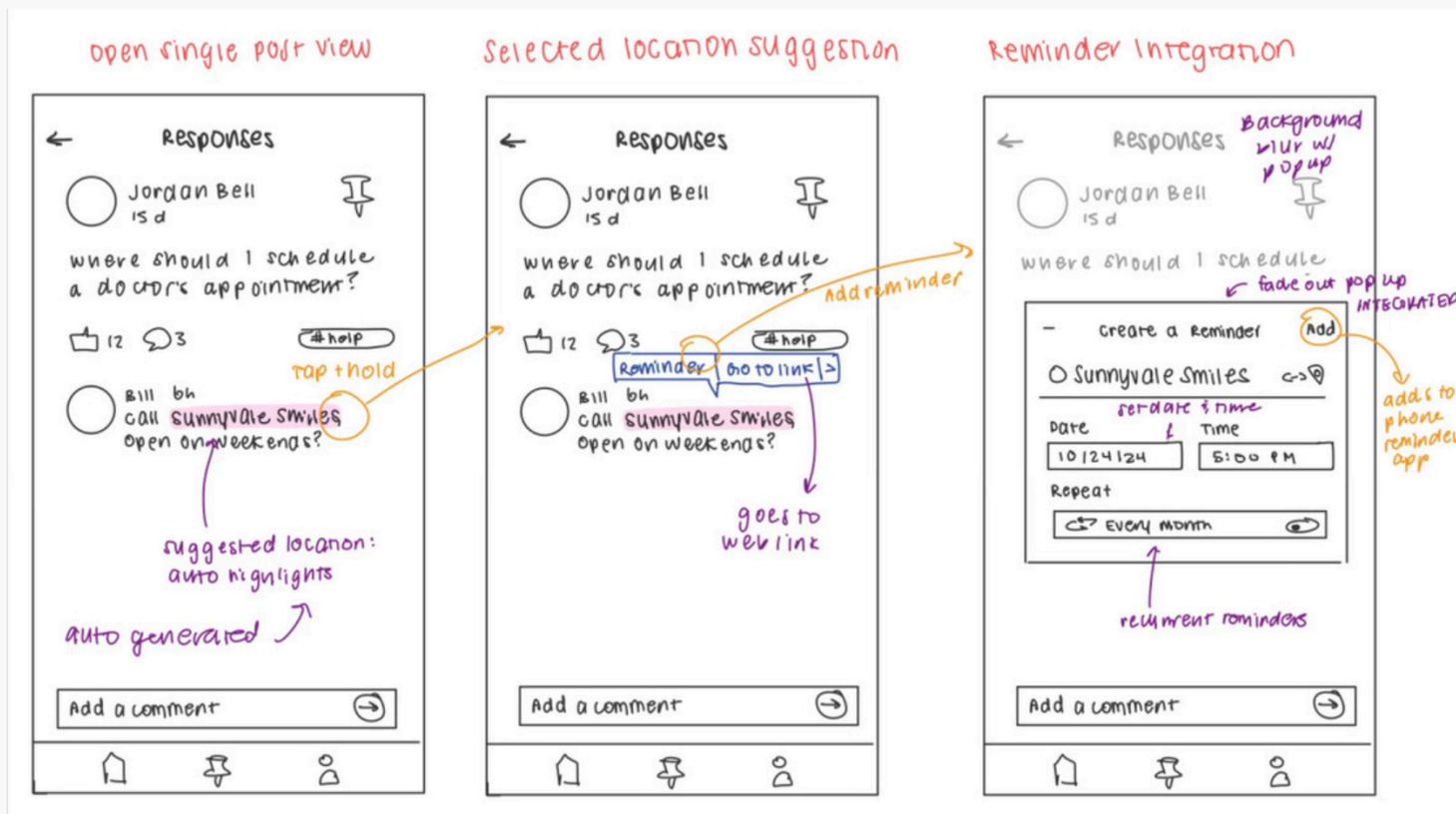
Changes Made

- **Combined posting and replying into one task flow** (contributing to forum) based on CA/professor feedback
- Added clearer post and upload comment **buttons** based on user interviews – users were confused on how to actually upload their content
- Added **like and comment counts** to highlight crowd favorites, satisfying user request for insight into community engagement on each post
- **Ordered posts by like count** so users don't need to spend time scrolling through every post chronologically

Complex Task

Taking action on post suggestions through calendar or reminders integration

Lofi Prototype



Changes Made

- Separated pinning/post collections (simple task) from taking action on post suggestions (complex task) to **simplify process of navigating to complex task**: initially had to go through pins page
- Iterated on popup and highlight designs, implementing an Apple-inspired auto-highlight and in-page popup to create a **familiar interface for users** (found prior design unintuitive)
- Removed in-app calendar and reminders tab, opting for **integration with user's existing apps**: users wanted something more adaptable into their lives

Usability Goals & Key Measurements

3

Usability Goals + Key Measurements

Current Goals + Refined Key Measurements

1. Efficient App Navigation

Key measurements: Ease of finding right pages (community groups, pins etc)

Previous Objective Metrics:

- Time it takes to complete tasks
- Number of errors

Additional Objective Metrics

- **Reduced Clicks and Taps:**
 - On shift fatigue makes lowering amount of taps vital for nightshift workers
- **Quick Returns to Previous Tasks:**
 - Nightshift workers have to respond to other duties without starting over if bouncing between tasks

2. Commission Fewer Errors

Key measurements: Lowering error rate, time to correct errors

Additional Objective Metrics:

- **Error Rate per Task**
 - Identifying this metric allows us to create a straightforward, dependable interface that workers can use when they're tired
- **Backtrack Rate**
 - A high backtrack rate allows us to ensure that users are finding what they need, especially for workers that are trying to find something on the first attempt

3. Greater Pleasure and Satisfaction

Rationale: Positive user experiences directly impact job satisfaction, productivity, and mental well-being

Refined Subjective Measurements:

- **Clarity and Prominence of Reminders**
 - We plan to ask "how noticeable and clear are alert or notifications that appear during your shift"
 - This can help mitigate alerts missed due to fatigue
- **Community Connectedness**
 - We plan on asking "how often did you feel connected with a group online"
 - This subjective metrics provides us insight degree of community orientation

Usability Goals + Key Measurements

Progress Towards Usability Goals + High Level Design Changes

Goal 1: Efficient App Navigation

High-Level Design Changes

- Adding **separate “reminders” column**
- **Combining posting and replying** into one task flow
- Creating Home View to **combine groups and top posts** as shortcuts for users to navigate to select groups and trending posts

Progress

- Significant progress to simplify and address high-level design
- Status: Complete, with minor refinements as needed in user testing

Goal 2: Commission Fewer Errors

High Level Design Changes

- **Emblem consistency** for pinned and saved
- Leverage **toggles and sliders** for turning on and off reminders
- Cutting down on excessive information on screen

Progress

- Refined all minor design changes to address errors from initial testers
- Status: Complete

Goal 3: Greater Pleasure and Satisfaction

High Level Design Changes

- Title text (black / white) is in **high contrast** with main purple color
- **Integration** with 3rd party calendar apps

Progress

- Major changes to integrate with 3rd party apps and change color scheme
- Status: Complete

Limitations

Was there anything that the testing couldn't reveal?

1

Although we were able to gauge users' initial impressions of our project, this is not indicative of **long-term use** and behaviors of the actual app. For example, how **often** a user would post or return to a post.

2

We had features such as swiping up on a specific post which expanded a view or sharing elements, and those cannot **replicate the nuances** of a real touch gesture on the phone.

3

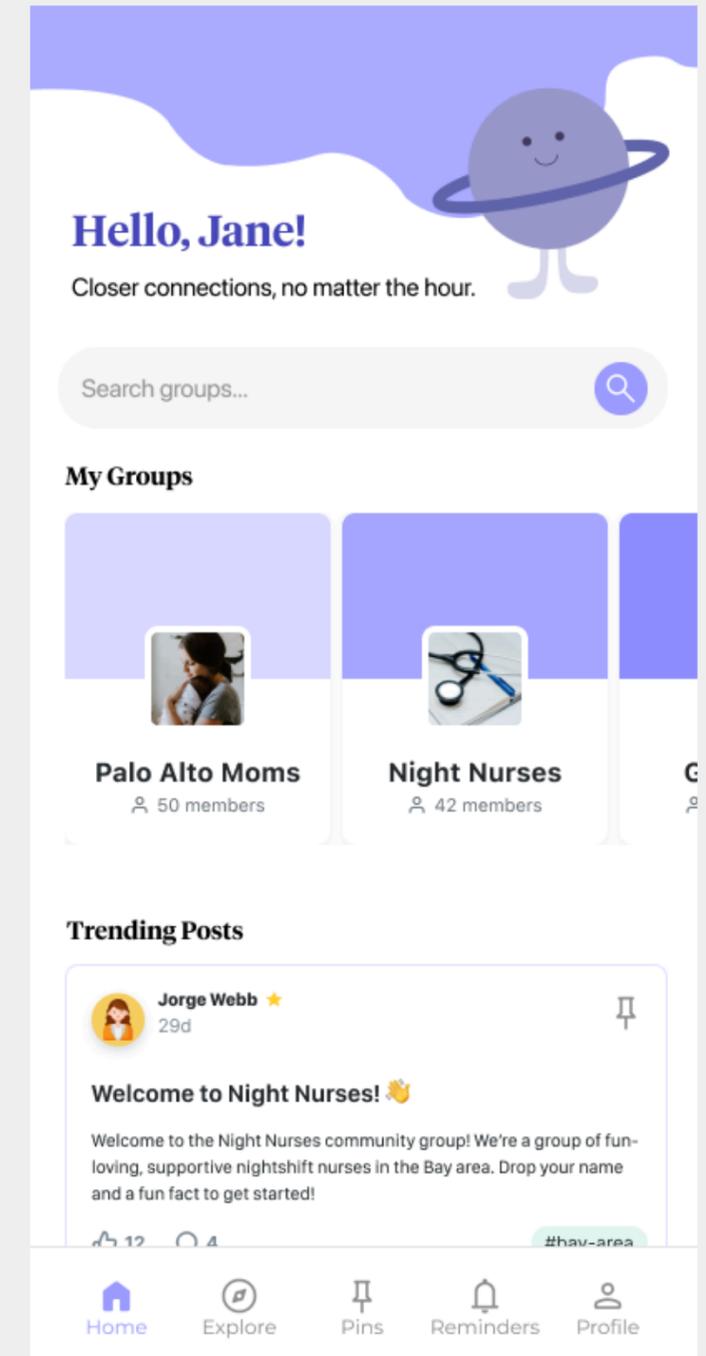
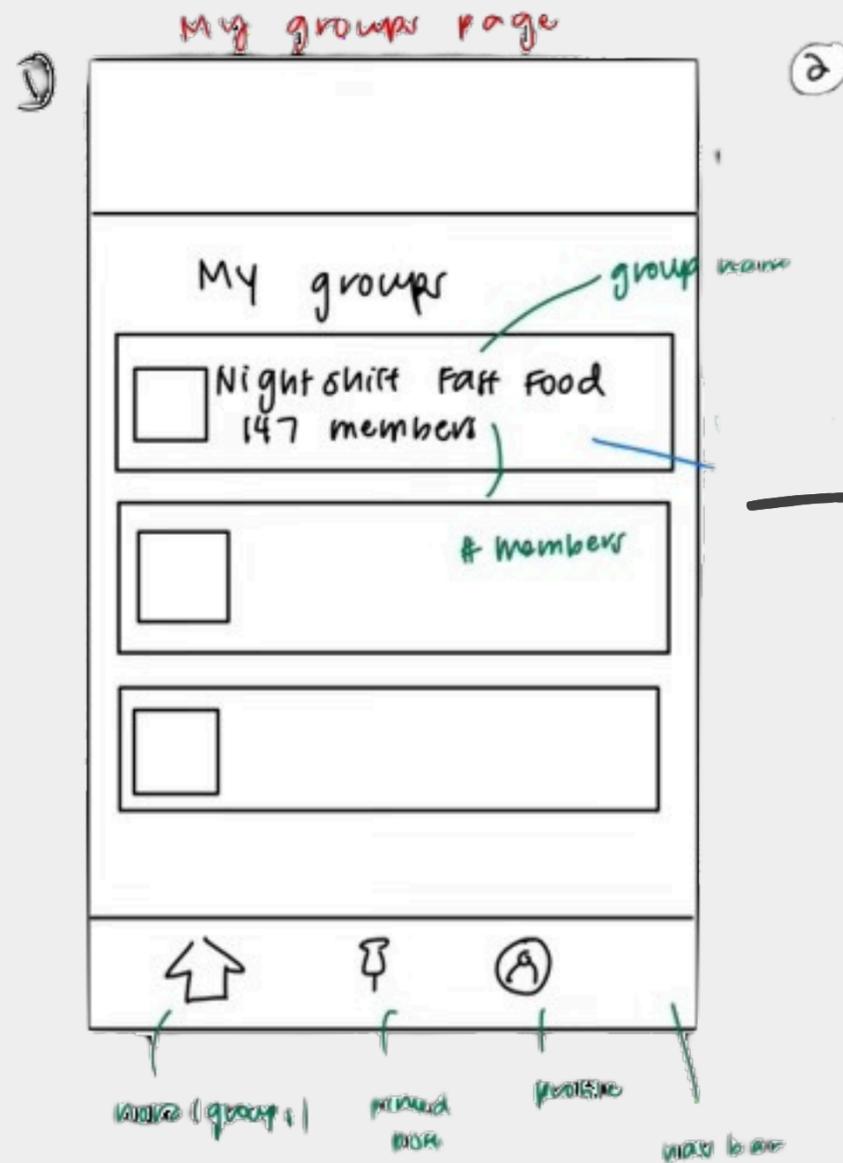
Although we introduced the idea of integrating with user's **calendar or reminders**, we were not able to test follow-through with those integrations or evaluate **how helpful** they actually were within our user's workflow.

Revised interface sketches

4

Major Design Change #1

Home Page Layout & Navigation





Too Modular

All 3 users frustrated with having to tap into every group to see posts, and only opened top few groups.

Scroll Search

Users that join many groups may find it tedious to only access a group through scrolling to it

Chronological Feed

User tests demonstrated preference for opening most relevant/liked posts within a group, didn't want to scroll through every post

Stuck in onboarding groups

Guest feedback indicated no way to join + explore new groups, giving users a stale experience



Trending Posts

Home allows for both group exploration and top posts across groups, suggested based on number of likes and relevant hashtags.

Search Bar

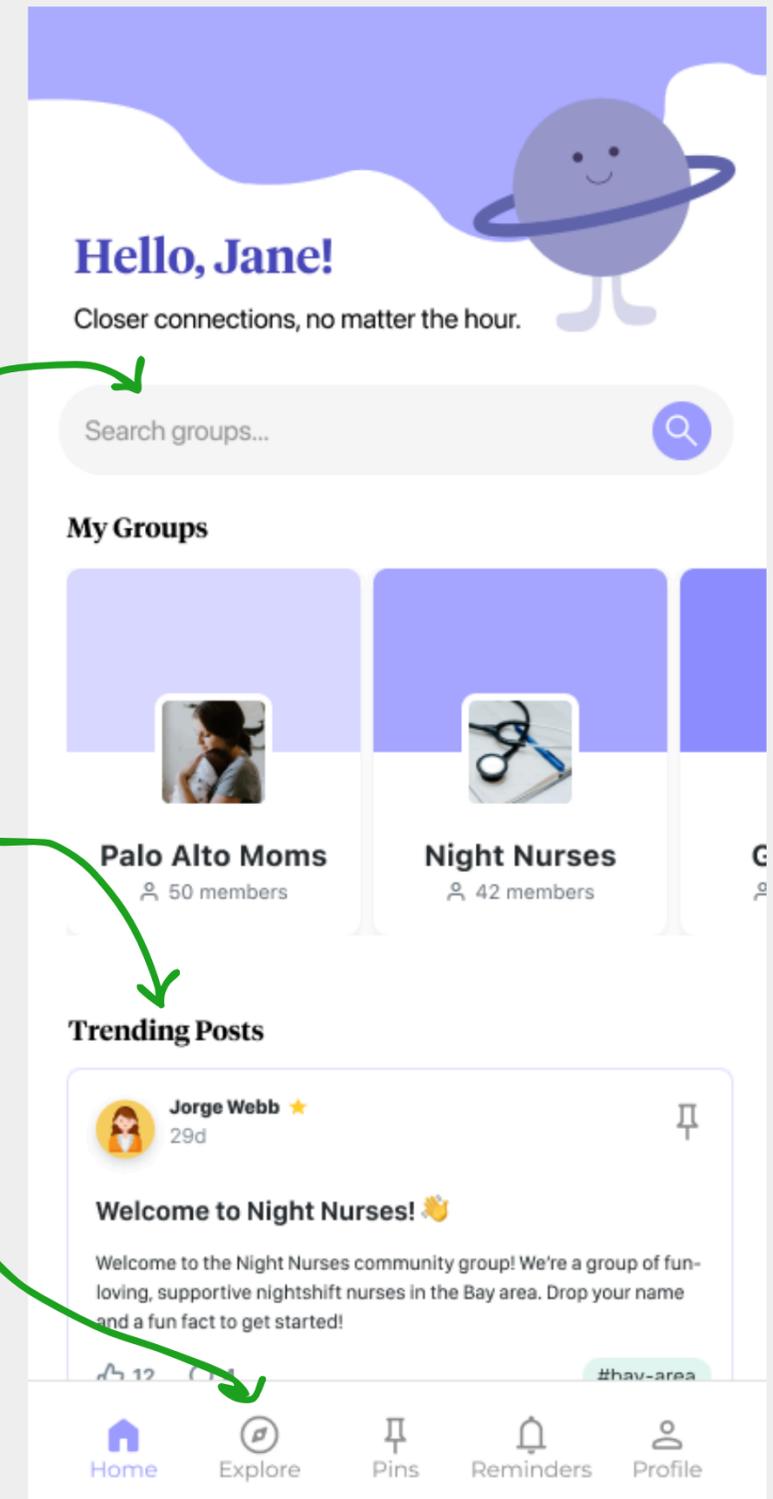
Added a search bar to search for a group, reducing size taken up by group tabs and search friction

Most Liked Feed

Changed feed within groups and in "Trending Posts" to be organized by number of likes instead to stimulate interaction through social influence

Explore Page

Added explore groups page so users and search for and join new groups after initial onboarding



Progress toward Usability Goals

 **Efficient App Navigation**

 **Commission Less Errors**

 **Greater Satisfaction**

Trending Posts

-  Allows user to get an “all in one” look at recent updates on Lunar without having to navigate through each group separately.
-  Satisfies specific user-test request for such a feature and suggests more tailored posts to the user.

Search Bar

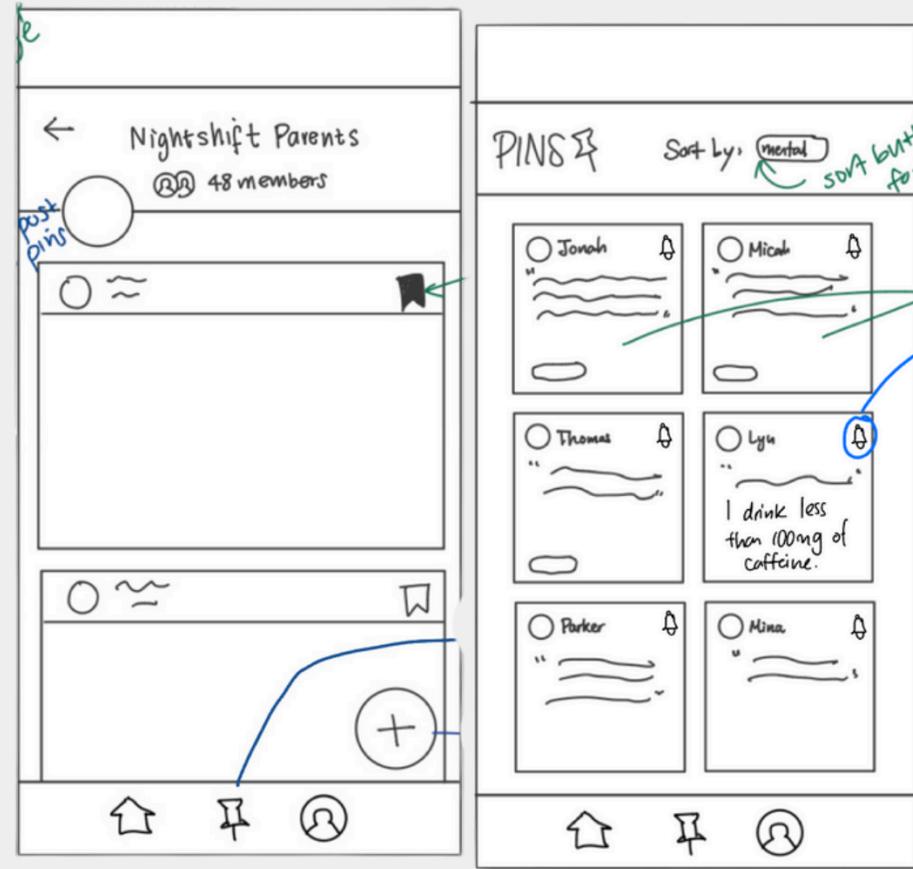
-  Prevents user from having to scroll through every group to find one in mind with easy to use and intuitive search bar flow.

Most Liked Feed

-  Users already interacted with highest-liked posts most, so sorting by relevancy (number of likes with relevant tags) suggests them more applicable results for increased user satisfaction.

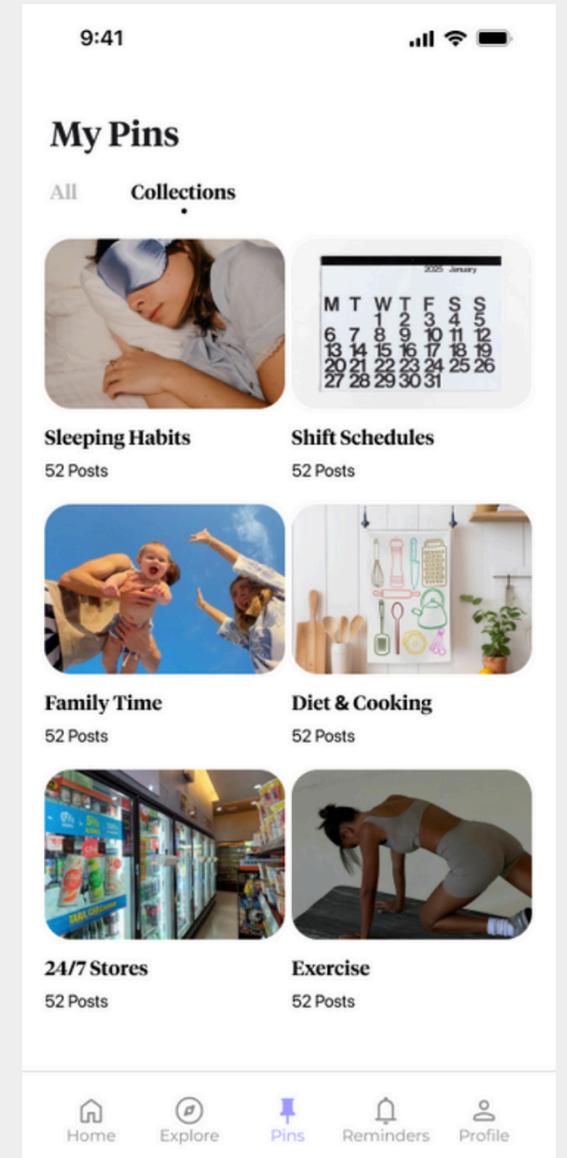
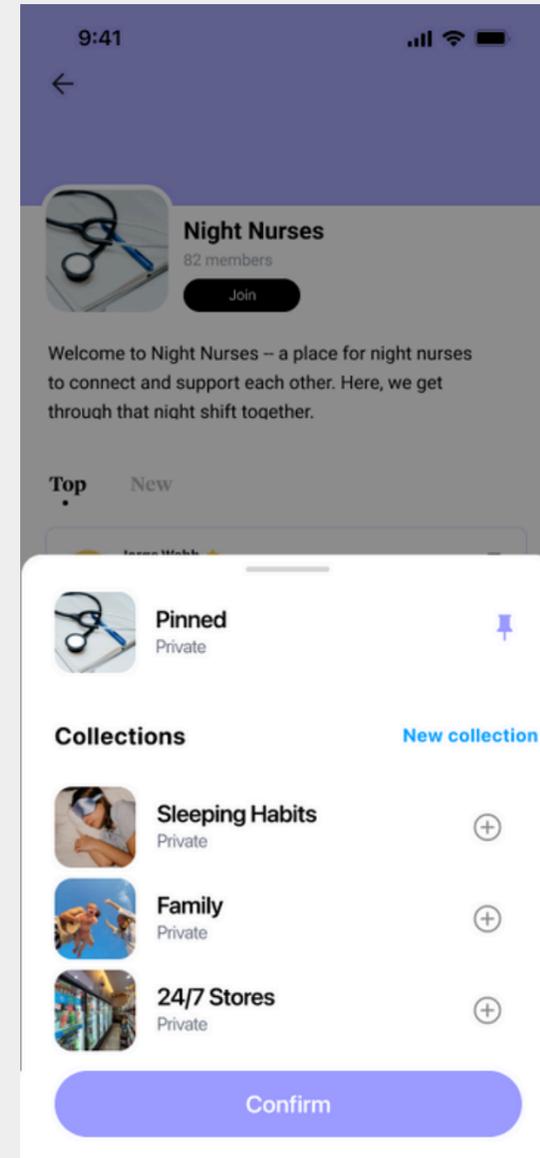
Explore Page

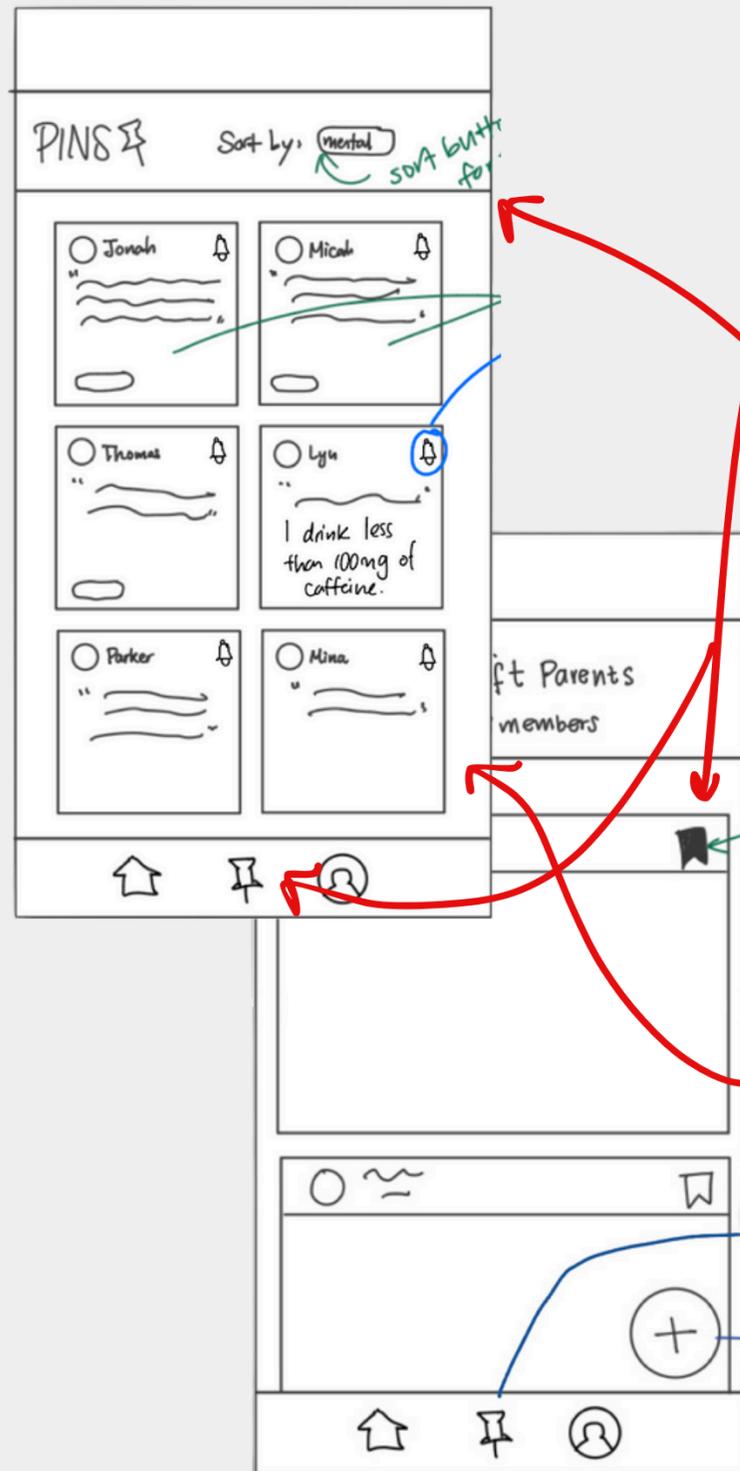
-  Users whose relevant situations have changed or may have made errors in initial onboarding can “revert” those errors by joining other groups
-  Prevents deterministic onboarding stress since users can change/ join groups later



Major Design Change #2

Pinned Page and Collections





Confusing Icons

One user indicated the presence of both bookmarks and pins were confusing, since they referred to the same thing.

"Sort By"

Pins would save chronologically and could be sorted by tags ("sleep", "health" etc). Users found this tedious and hard to follow when pin count increased, and old pins would get buried.

Auto Save to "All"

When users pin, it automatically saves to "all pins" and tags can be added for sorting later on. User tests indicated users didn't usually refer back to past pins to add documentation, so this approach didn't make sense and would lead to lots of pin backup.

Consistent Pin Icon

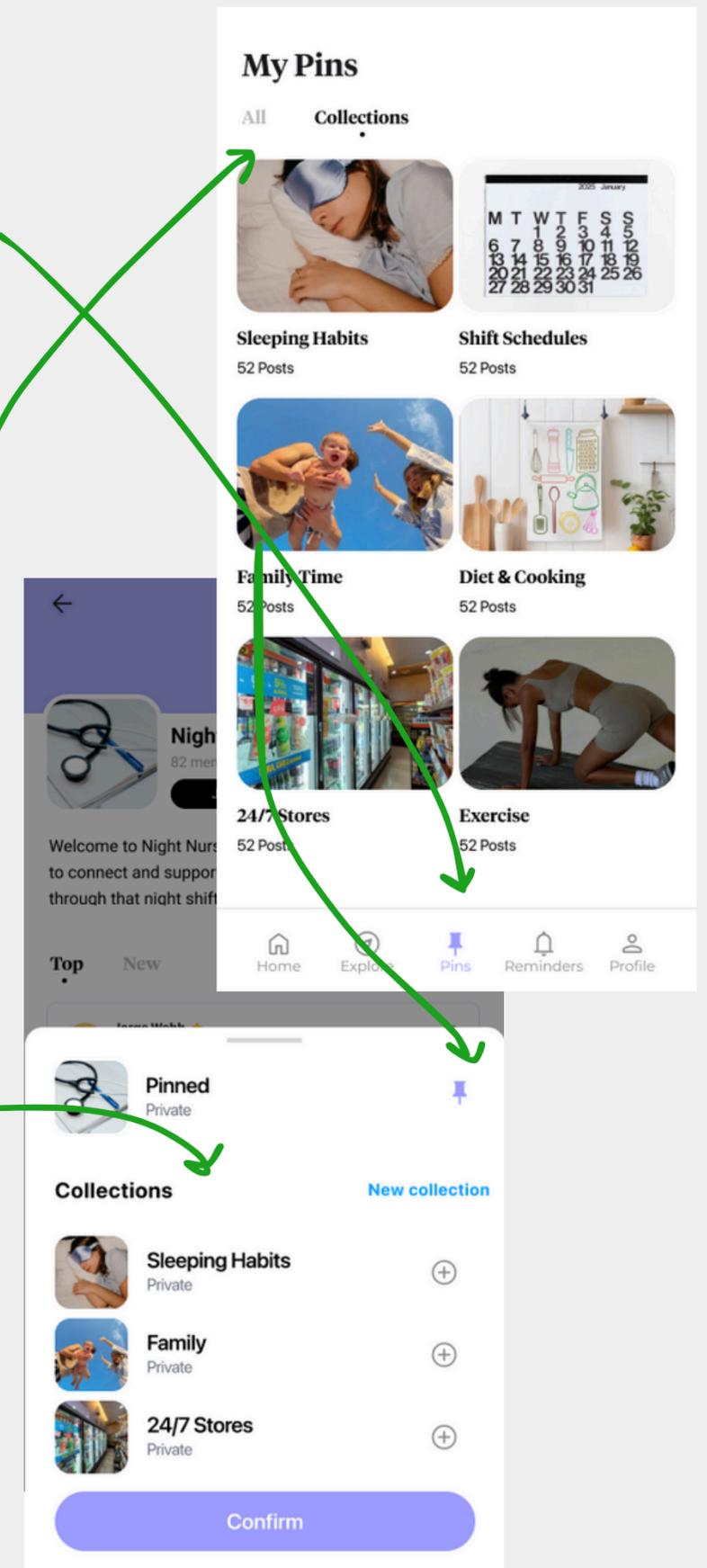
We changed all pin-related icons to an actual pin and kept terminology consistent on relevant pages..

Collections

When pinning, users can choose a collection to add it to and look through pins either chronologically or by collection, allowing clearer distinction between groups. Tab switch between "All" and "Collections" allows for both use cases..

Default Collection Save

When pinning, users are default asked to add to a collection to encourage pin organization and ease of browse and reference later on in the Pins page.



Progress towards Usability Goals

 **Efficient App Navigation**

 **Commission Less Errors**

 **Greater Satisfaction**

Consistent Pins

-  Prevents icon confusion on the user's part -- users asked "what's the difference between the two?". Improved intuition of icons and frictionless flow pickup.

Collections

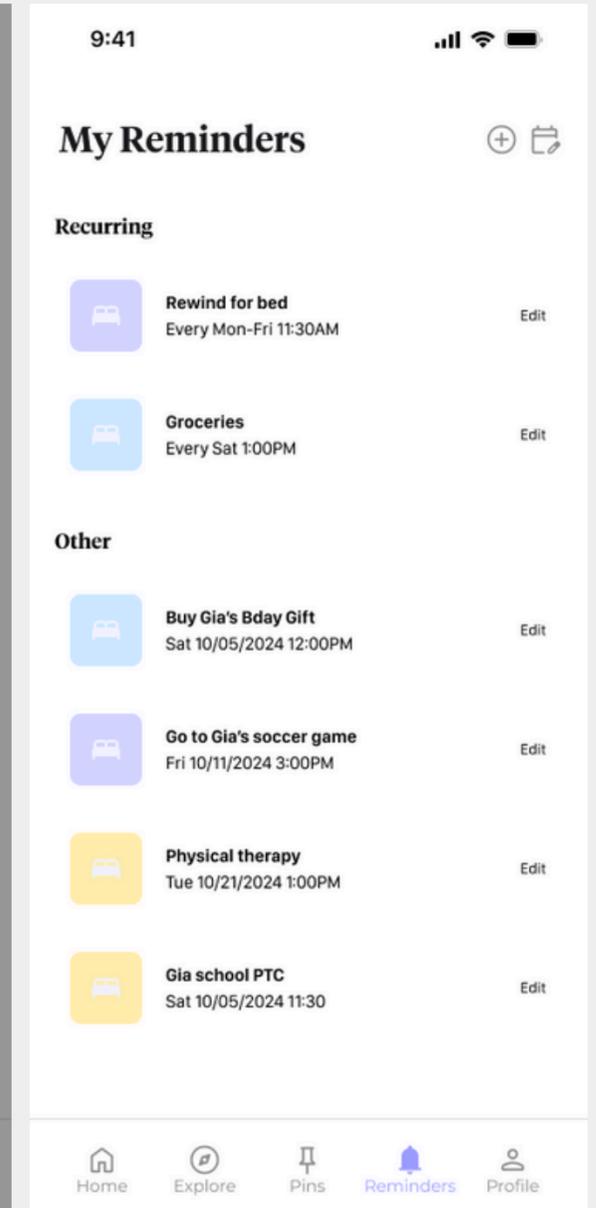
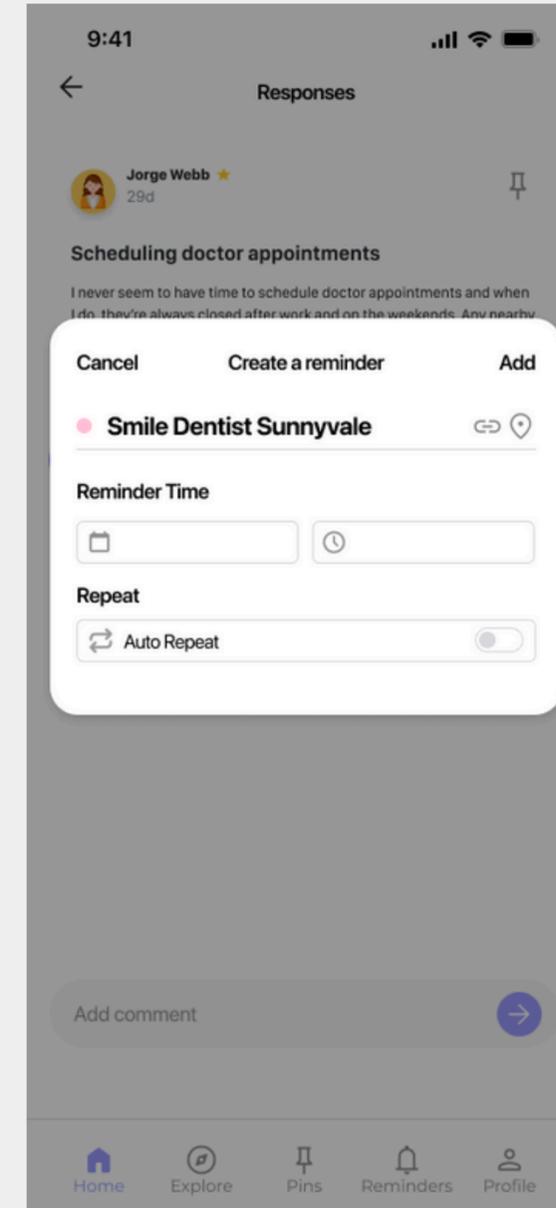
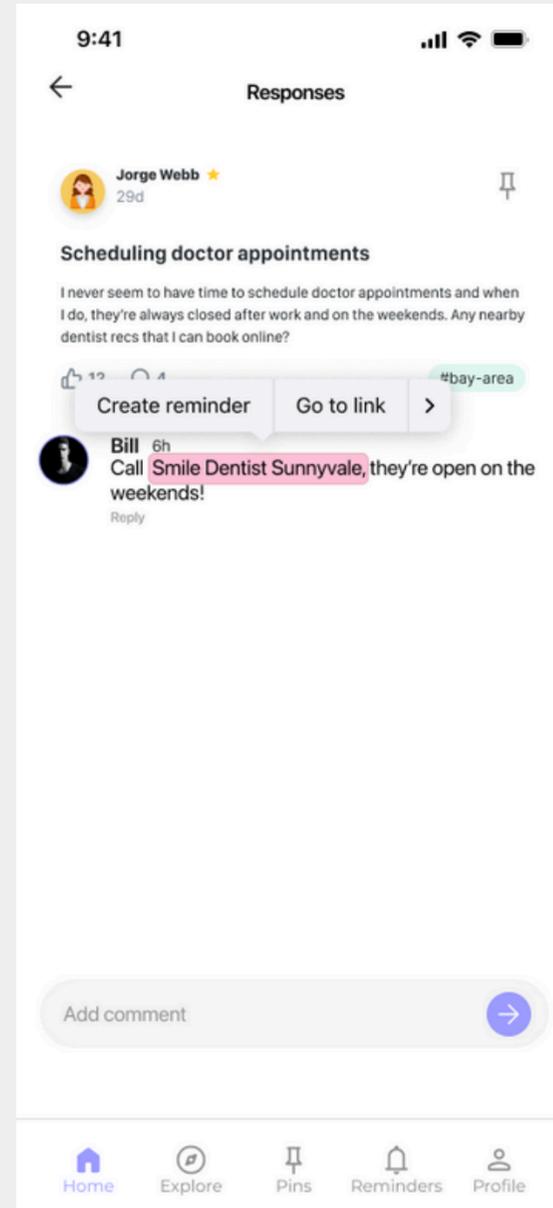
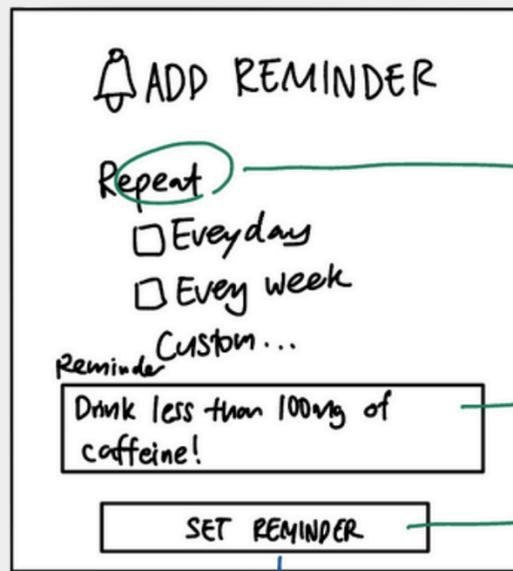
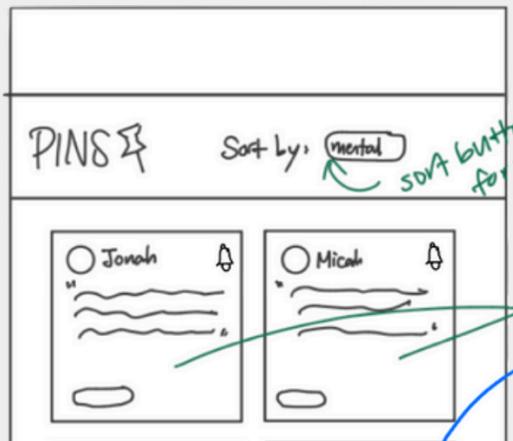
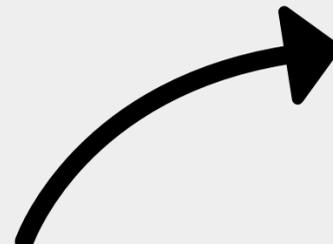
-  Users can more easily access a specific "tag" (now a "collection") by tapping on an album, instead of having to sort through posts they need to separately tag.
-  Better organizational UI and familiar social media saved-posts interface so users can more easily adapt to Lunar's interface.

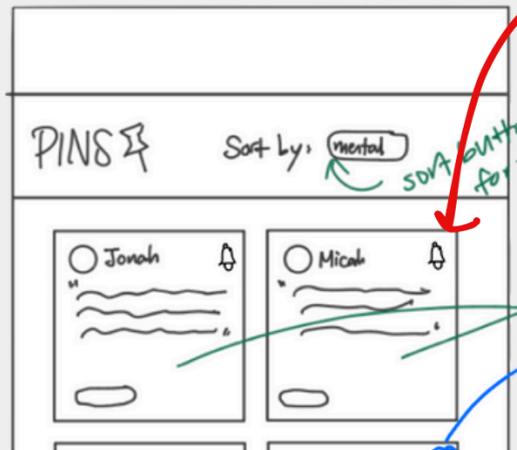
Default Collection Save

-  By setting saving to a collection as default, users are encouraged to keep their pins more organized, so when app use increases there isn't backlog from too many pins.

Major Design Change #3

Reminder Suggestions & Flow





Remind from Pins

Users indicated pinning a post and setting a reminder from it didn't always correlate, and having to pin first created unnecessary friction.

Manual Input

Requiring manual reminder name input after selecting it from a relevant post seemed repetitive to 2/3 interviewees.

Reminders App Integration Only

Originally, reminders could only be made into user's existing reminders app. This was not clear to all 3 testees, who asked us where their reminders went.



Remind from Post

Changed reminder/calendar invite functionality to start from auto-suggested locations and times in posts for simplified UX flow



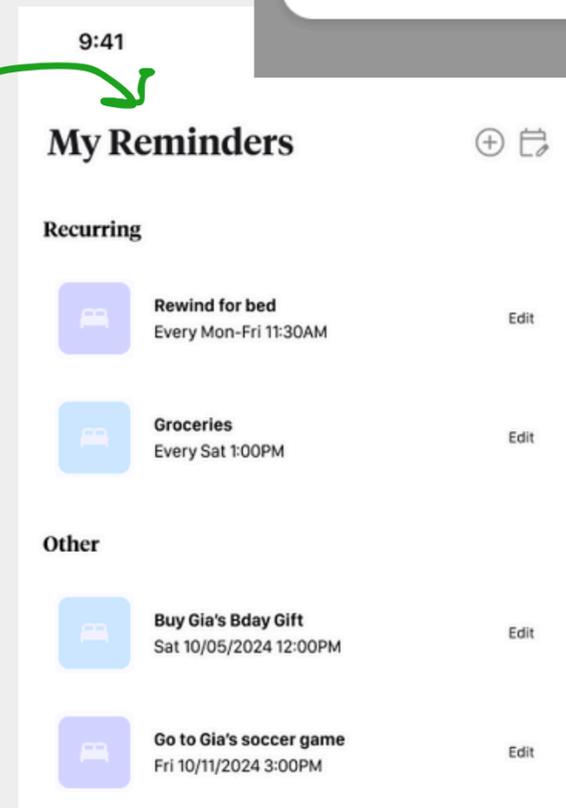
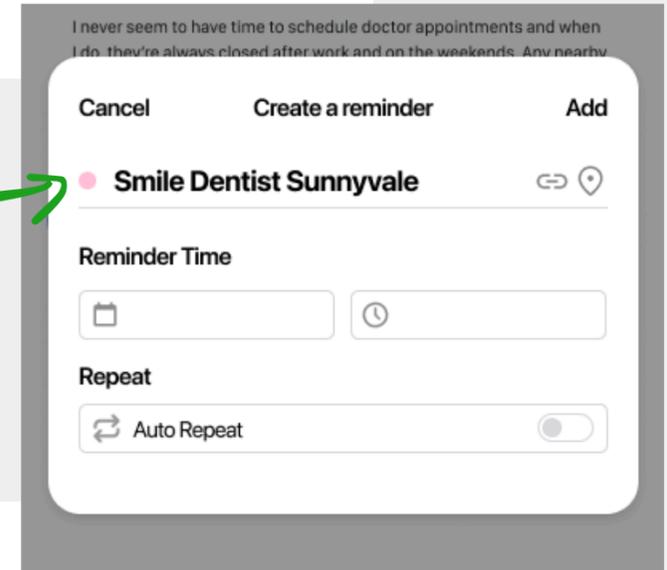
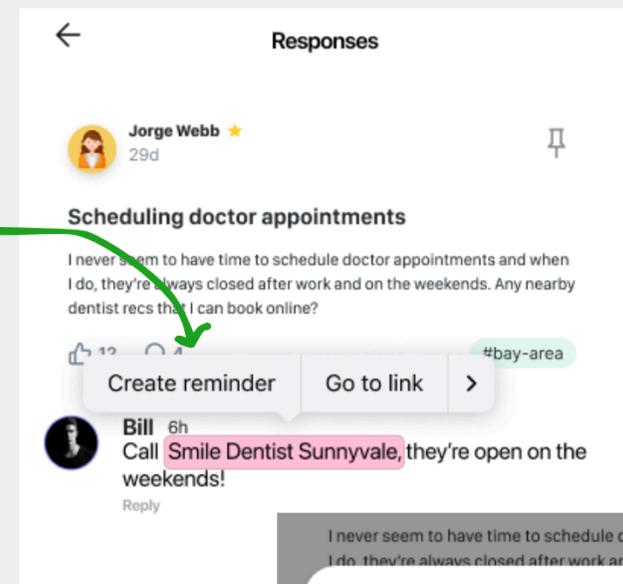
Auto Suggestions

Posts correlating to a potential reminder are auto-highlighted and name of reminder is automatically taken from highlighted text, similar to Apple's iMessage reminder interface.



In-App Reminders

To make the use case flow clearer, we created a separate in-app page that held reminders created from Lunar apps that also supports adding custom reminders and integrating into existing calendars.



Progress toward Usability Goals

 **Efficient App Navigation**

 **Commission Less Errors**

 **Greater Satisfaction**

Remind from Post

-  Setting a reminder from a specific place/time in a post reduces confusion on what exactly the reminder is for -- for example, the whole post vs. a segment of it.
-  Reduces need to pin a post, then create a reminder from it – tap count and effort to remind cut in half, making navigation more efficient.

Auto Suggestions

-  Users can more efficiently create reminders by not having to manually input text that's already on the post.
-  A UI similar to Apple's iMessage suggestions gives users more flow familiarity and ease of adoption.

In-App Reminders

-  Users are able to see all Lunar-created reminders together, improving organization and distincts between iPhone Reminders app additions and Lunar-created ones.
-  Eliminates user confusion on “where reminders go”, especially since reminders app vary by phone model.
-  User confusion between Lunar reminders page and actual Reminders app reduced.

Medium-fi Task Flows

5

1. Simple Task Flow

Viewing and pinning relevant resources within a night shift community group

Home page with user's joined groups & trending posts

Group feed shows header with important info + member posts

page shows all posts with same

Home Page Annotations:

- Personalized for user
- Tagline: Closer connections, no matter the hour.
- Search within joined groups
- Search groups...
- My Groups: User's joined groups
- Horizontal scroll
- Group profile pic
- Group name
- # of group members
- Trending Posts: Trending posts from user's groups
- Vertical scroll
- Nav bar: Tap to navigate to each screen
- Home (My groups)
- Explore Groups
- Pins page
- Reminders/ calendar page
- Profile page

Group Feed Annotations:

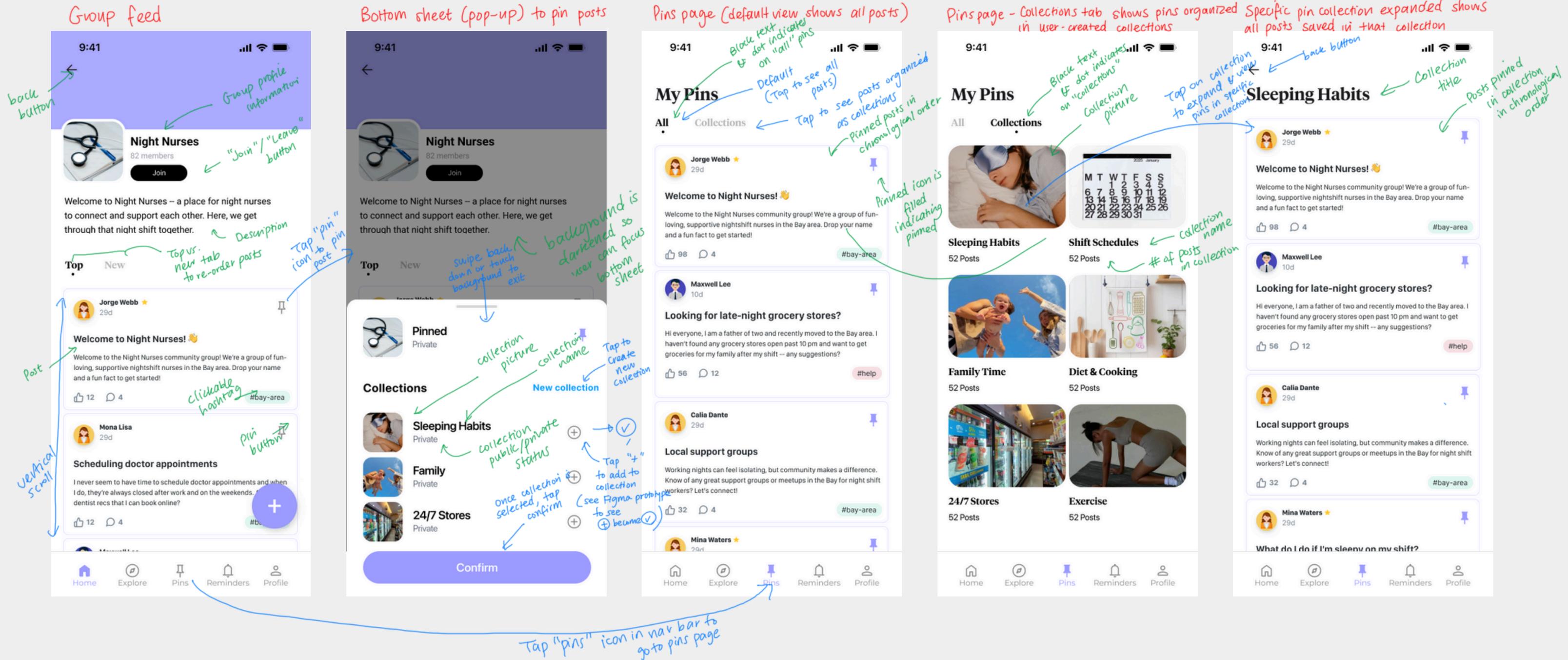
- Back button
- Group profile pic
- Group header info
- "Leave" or "join" button
- Group Description
- Tab to switch between top and new (chronological) posts
- User profile
- star status for top users
- Pin icon
- Post
- clickable hashtag
- # of likes & comments
- create post button

Hashtag Page Annotations:

- Hashtag name
- Posts with same hashtag
- Vertical scroll

1. Simple Task Flow

Viewing and **pinning** relevant resources within a night shift community group



2. Moderate Task Flow

Sharing wisdom and **contributing** to a community forum

Group feed

back button
Group pic & info
"Leave" / "Join" group button
Description
Top vs. new posts tab
Post
Pin post icon
clickable hashtag
Create post floating button
Vertical scroll

Post expanded shows all comments

Tap back to go back to group feed
specific post expanded
Timestamp of post
of likes & comments
#help
comments
User profile pic & name
Timestamp of comment
Reply button allows user to @ specific user for response

Keyboard pop-up for text input

back button to go back to feed
text input is highlighted to show that it's "active"
attach link
attach picture
Post comment button
Tap text input to prompt keyboard pop-up

User inputs text

Typed comment appears in text input
Tap on keyboard to type

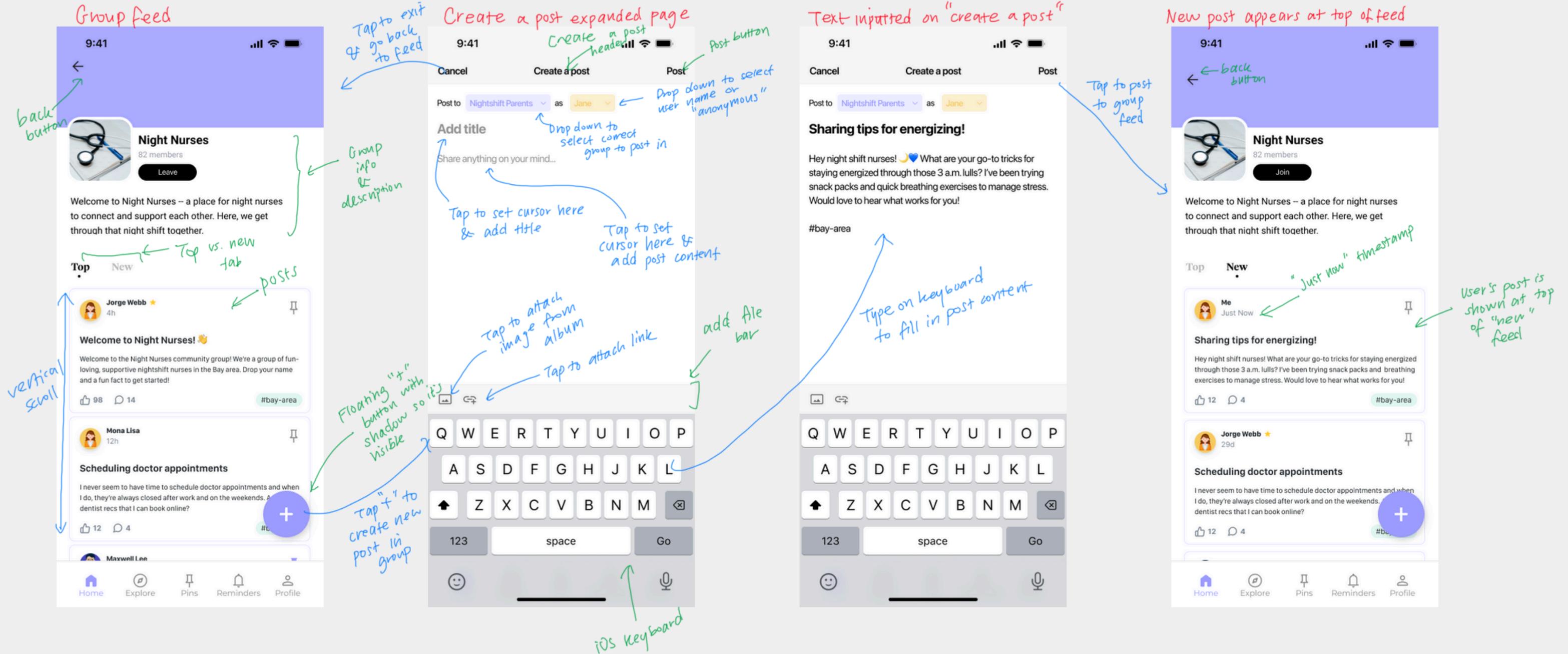
User's comment appears under post

"Just now" timestamp
User's profile pic & name
Comment appears under post
Tap to post comment

ios keyboard

2. Moderate Task Flow

Sharing wisdom and contributing to a community forum



3. Complex Task Flow

Taking action on post suggestions through **creating reminders** and calendar integration

Highlighted locations/recs are clickable

Create a reminder pop-up

Text input to add details to reminder

Reminders page shows all reminder

"Create reminder" also accessible on reminders page

Tap to cancel & go back

Tap to create reminder

Tap to go to link open on browser

Tap to add link

Tap to add location

Tap to toggle to turn on/off repeat

Tap to prompt keyboard for text input

Background is dimmed for better pop-up visibility

Tap to add reminder

Tap to create reminder from scratch

Tap to edit reminder details

Tap to create title manually

Tap to "Reminders" icon in nav bar to go to reminders page

* All interactions same as "create a post" from before

locations, links, recommendation names appear highlighted

Tap & hold on highlighted text

Tap to create reminder

Tap to add location

Tap to add link

Tap to toggle to turn on/off repeat

Tap to prompt keyboard for text input

Tap to add reminder

Tap to create title manually

Tap to edit reminder details

Tap to create reminder from scratch

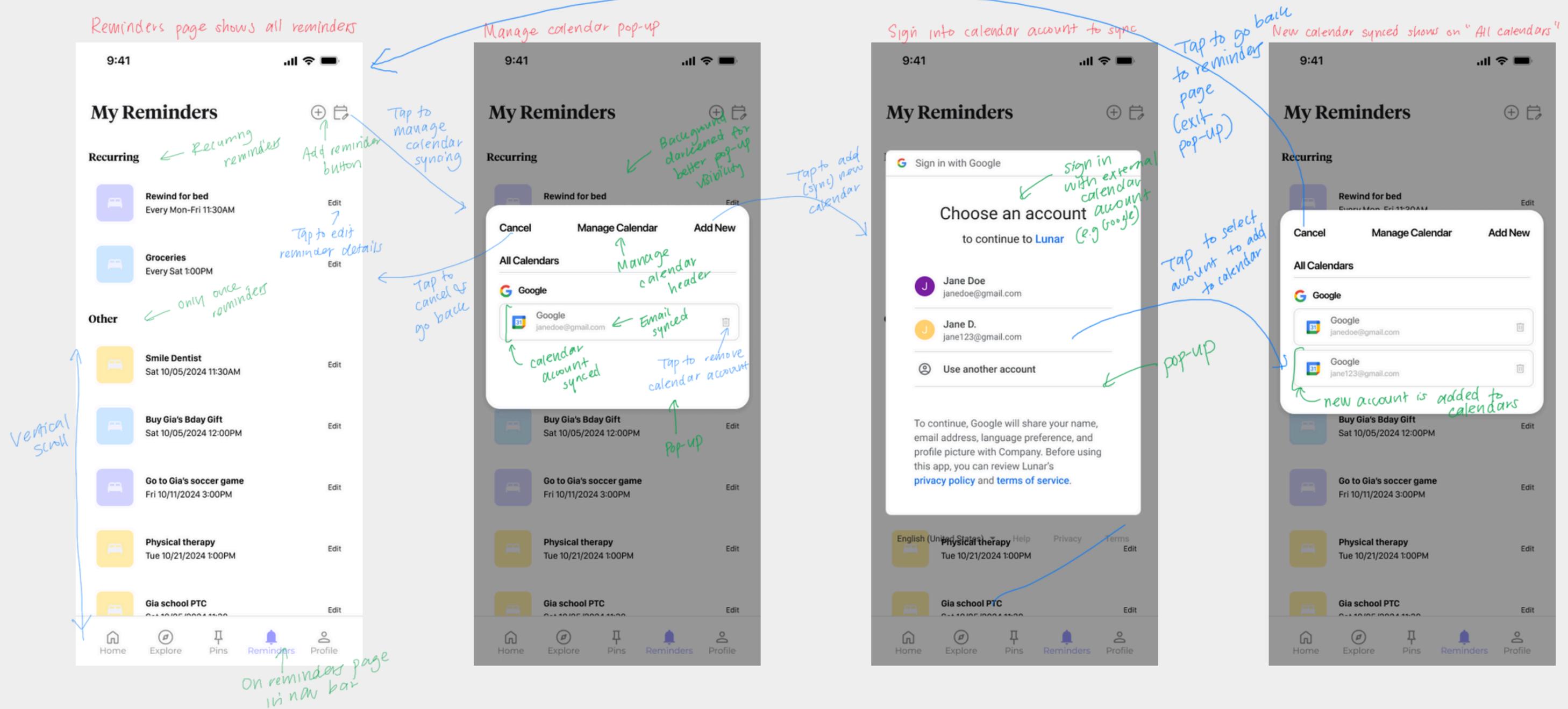
Tap to create title manually

Tap to "Reminders" icon in nav bar to go to reminders page

* All interactions same as "create a post" from before

3. Complex Task Flow

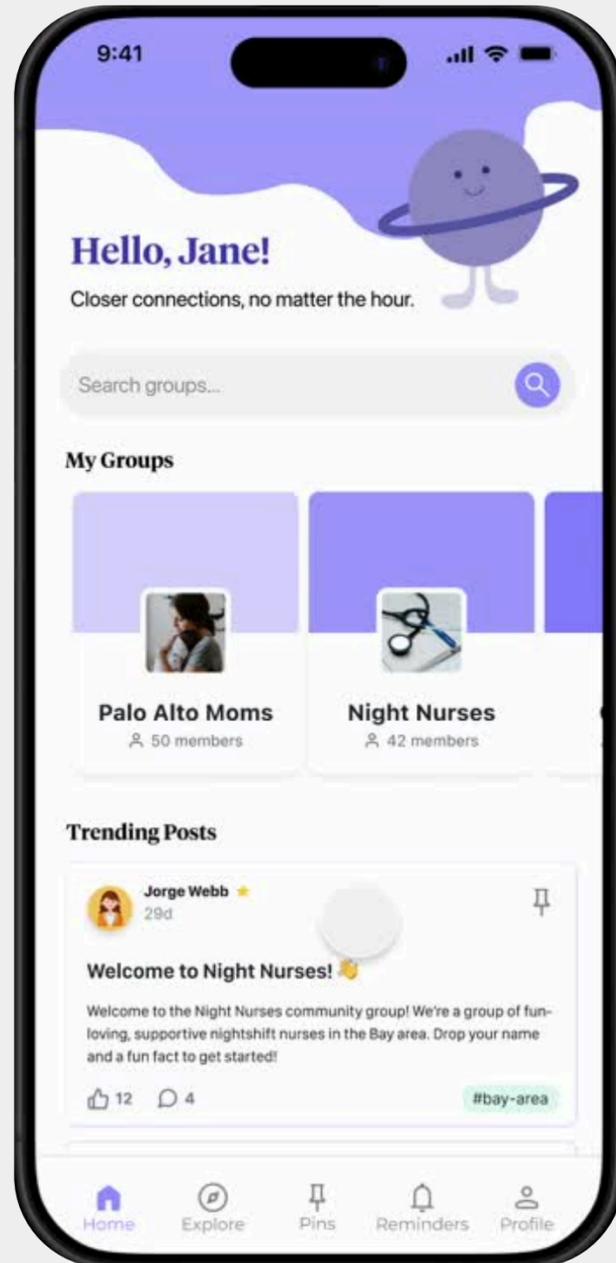
Taking action on post suggestions through creating reminders and **calendar integration**



[Link to Figma](#)

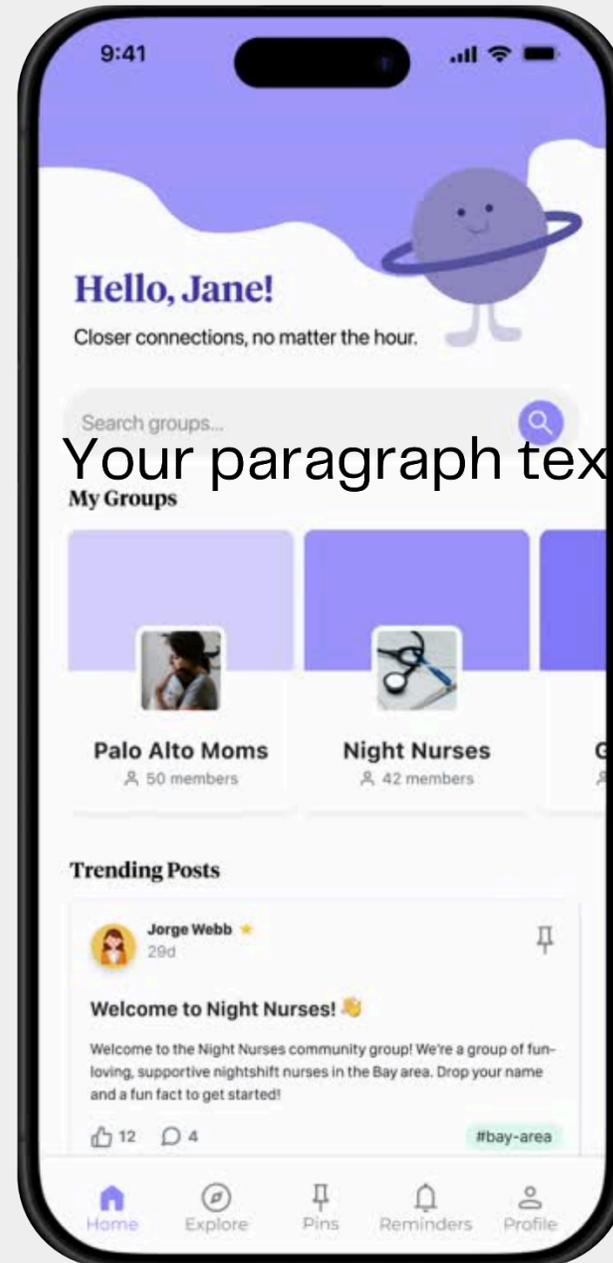
Prototype Demos

Simple Task



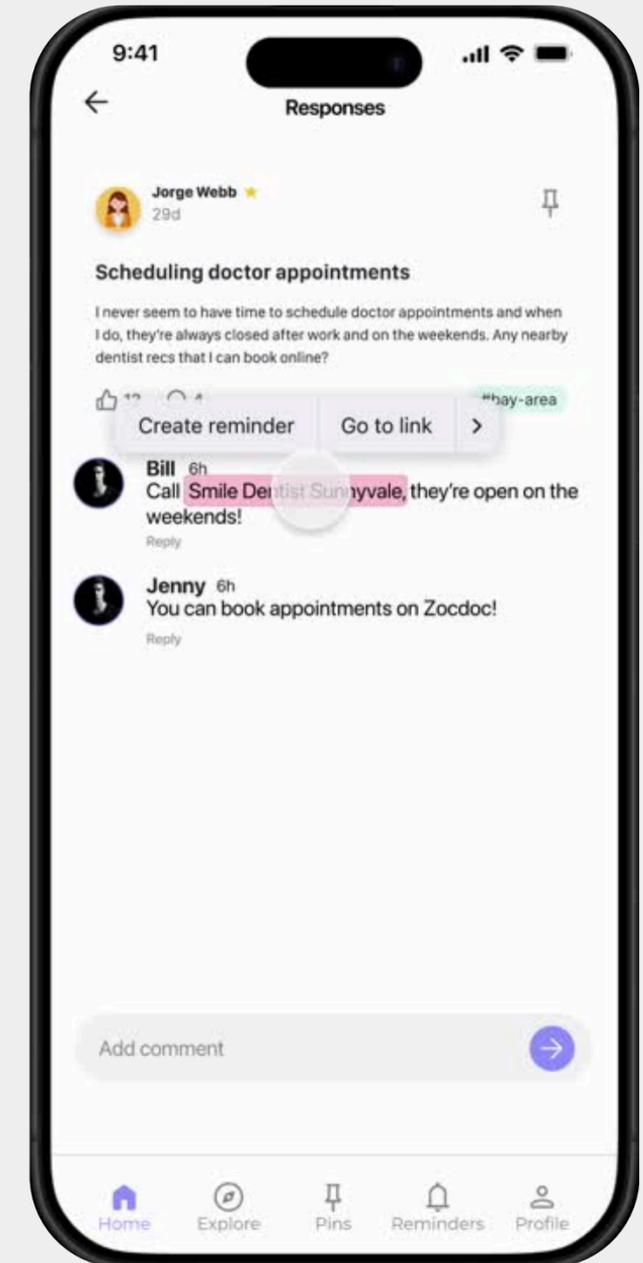
<https://youtube.com/shorts/nBzbqF9hrbg>

Medium Task



https://youtube.com/shorts/IO_5Eh_MVfU

Complex Task



https://youtube.com/shorts/WKlfje3X_Jk

Prototype Implementation

6

Selected Tool

We decided to use **Figma** as a tool due to the ease of collaboration and wireframing.

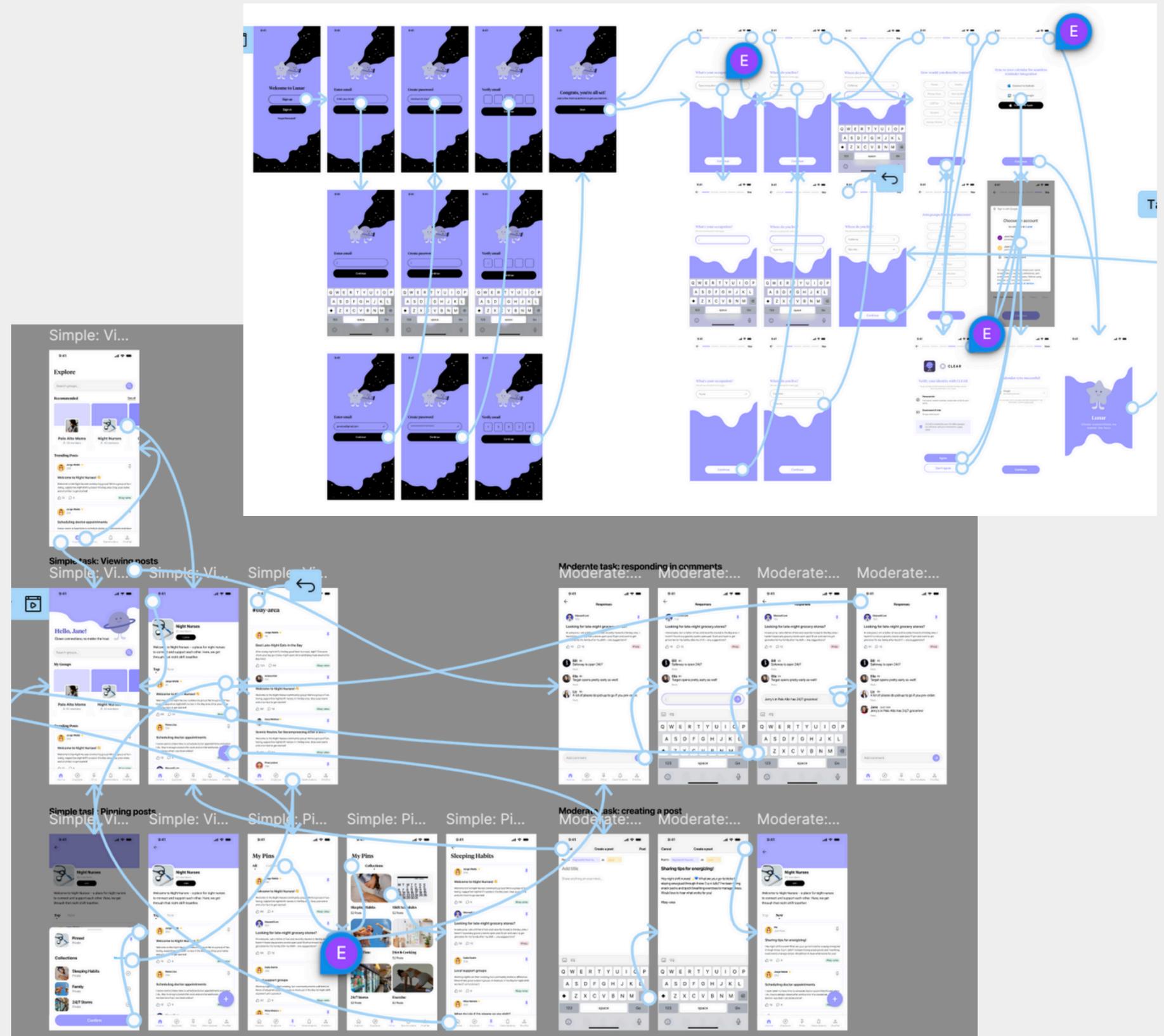
Pros:

- Unified design system emphasizes consistency
- Mimics coding structures through components, constraints, etc.

Cons:

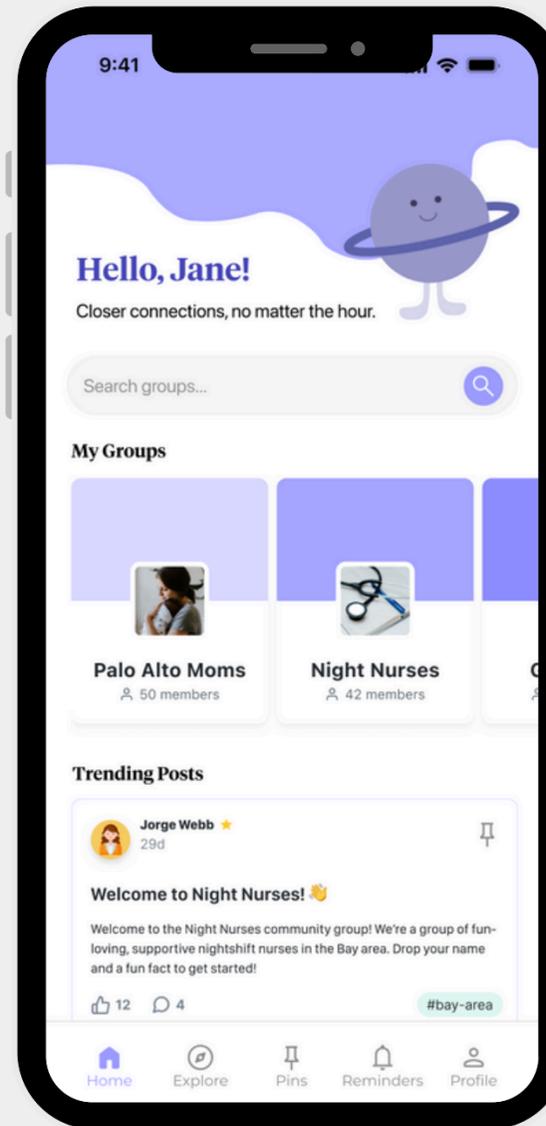
- Falls short when creating complex interactions
- Potential problems when coding (ex. converting auto-layout to flex box)

Adobe Illustrator was used to develop some graphics and logos.

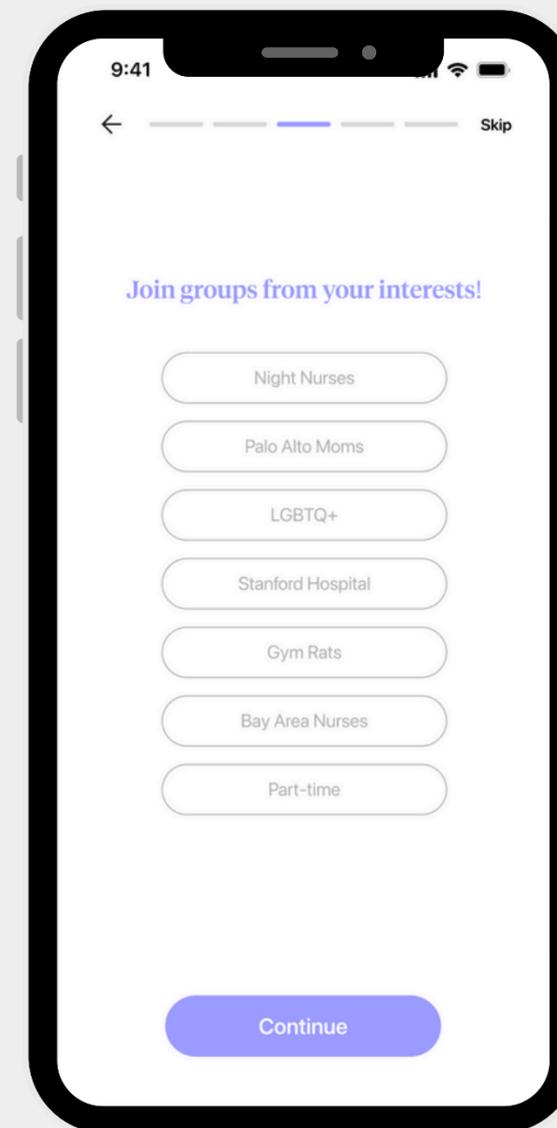


Limitations of Figma

- Preventing expression of complex interactions
 - each interaction is limited to **one** action
 - limited **animation** (most could only do smart animation)
- Requires extensive hard-coding, resulting in a lack of certain interactions, such as **input typing**
 - While some interactions are technically feasible, they necessitate considerable effort on the design end
- Lack of integration of **third-party apps** (Google Calendar)



Trending posts are not based on user recommendations. We can still test engagement even without full personalization.



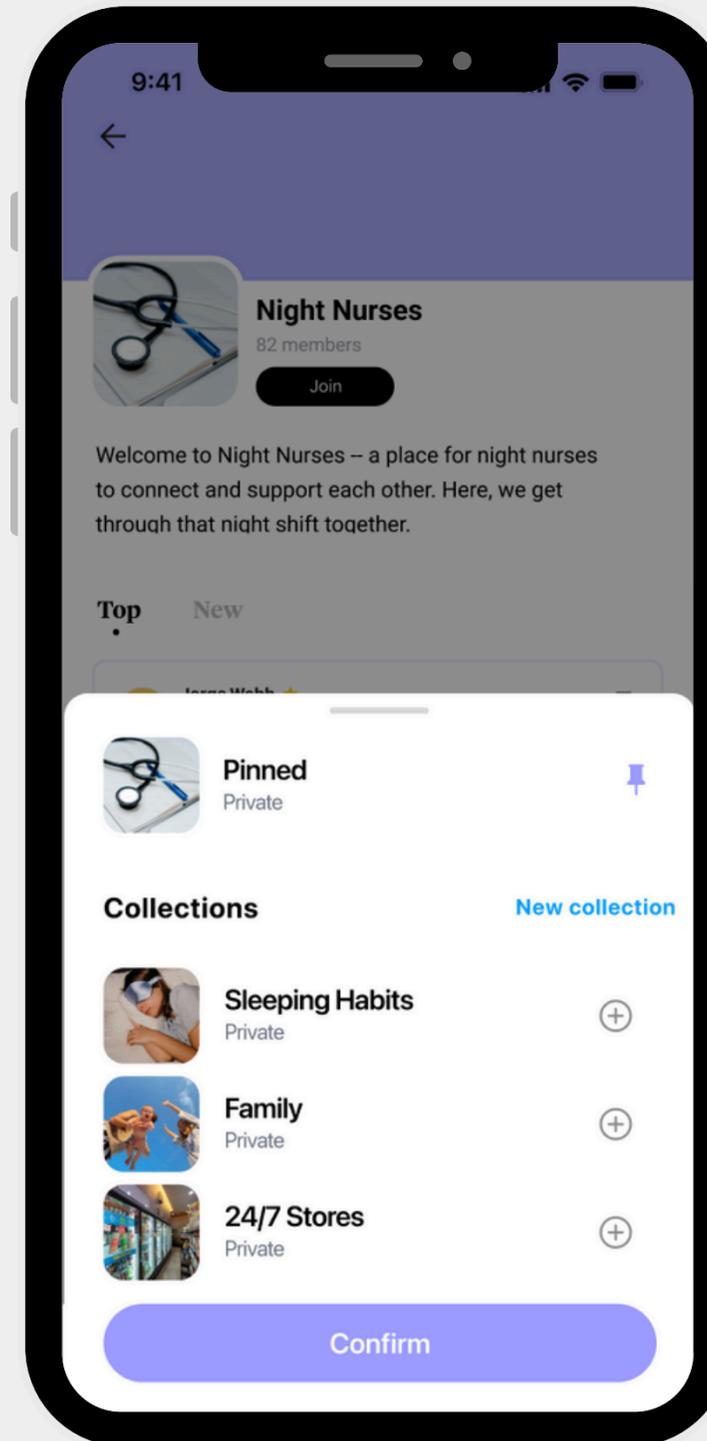
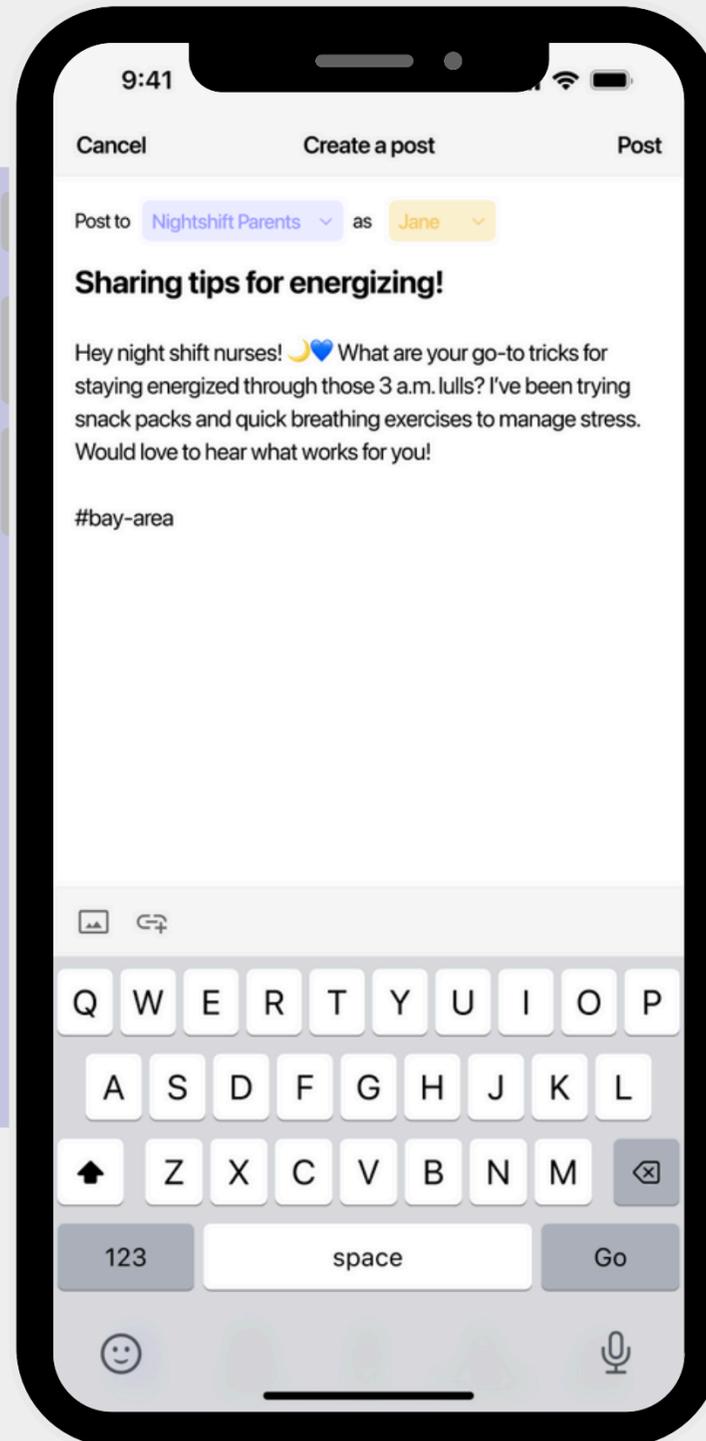
Recommended **groups** don't actually **correlate** with their stated interests. It can still help to **clarify** what users expect from recommendations

Wizard of Oz Techniques

Hard-Coded Features

Users are restricted to **predefined** responses and cannot type desired input: **forced** choice experience

Any slide where it shows an updated post or comment is **hard coded**



When you pin a post, Figma prevents from having **two actions**—showing overlay, pinning—hence, requires hard coding to show both actions

Appendix

[Figma prototype](#)

[Readme doc](#)

[Lunar Website](#)

[Additional Med-Fi Slides: Onboarding Flow](#)