



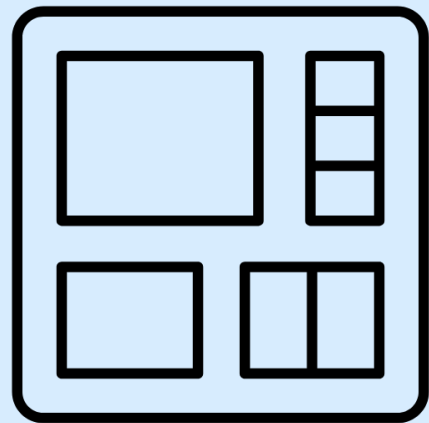
A6: Med-Fi Prototype

Team 2: Locked 

- Alexander Yue
- Evan Hsu
- Diego Valdez Duran
- Ecem "AJ" Yilmazhaliloglu

01

PROBLEM



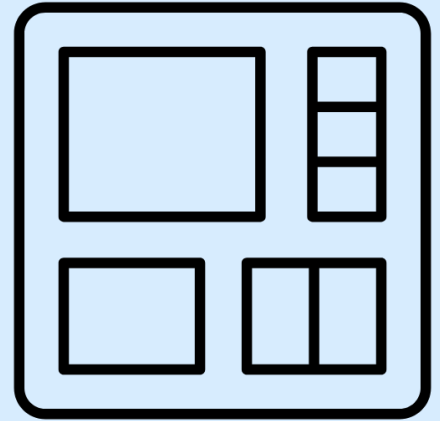
Primary User and their problem

Our interviews revealed that many us undergraduate students use **collaboration** as a study tool for academic success, but often find the formation, scheduling, and planning of such groups quite difficult.



02

SOLUTION OVERVIEW



Introducing:

Locked



*Effortless, personalized study groups tailored to your
schedule, preferences, and learning styles*

How does Locked work?

We collect information from students in classes and use AI enhanced tools paired with research on effective collaboration practices to automatically plan recurring study sessions and manage assignments



Research on Collaboration



Oyarzun, B., & Martin, F. (2023). *A systematic review of research on online learner collaboration from 2012–21*. Online Learning Journal, 27(3), 45-72.
<https://olj.onlinelearningconsortium.org/index.php/olj/article/view/3407>



Loes, C. N. (2022). *The effect of collaborative learning on academic motivation*. Teaching & Learning Inquiry, 10(1), 37-52.
<https://journalhosting.ucalgary.ca/index.php/TLI/article/view/71910>



Interview with Professor Granovetter, sociology professor at Stanford with nearly 200,000 citations

Key Takeaways



Systematic meta-analysis that shows correlation between collaborative activities and student motivation, engagement, and achievement in controlled online learning environments.



Uses data from 17 US undergraduate schools to show significant correlation between collaboration and academic motivation.

Hypothesizes that presence of **social factors** in education **reframes** student's mindset **to take more active role in learning**



Ideas about what survey questions to ask and how to match students.

- Will be unpacked in full presentation on Monday

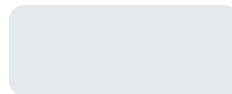
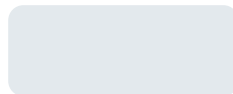
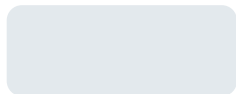
Competitor comparison matrix



Communities



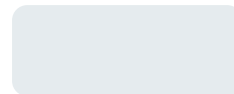
Profile based matching



Education focus



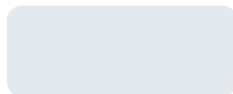
Communication



Mobile app



Task management



The Problem



many us undergraduate students use collaboration as a study tool for academic success, but often find the formation, scheduling, and planning of such groups quite difficult

Our Solution

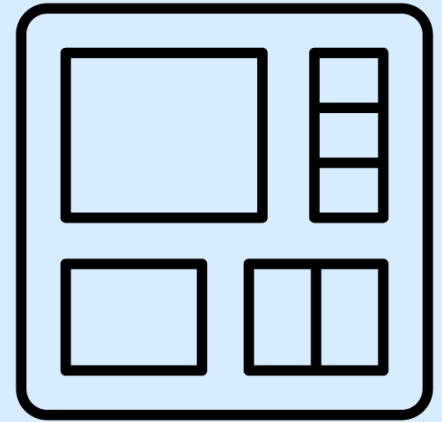


A centralized platform to foster academic partnerships with pre-planned and convenient study group sessions using preferences, schedules, and learning styles



03

VALUES IN DESIGN



Our Values



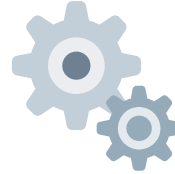
Inclusive

Users should have **equal access** to study resources and are matched with peers who **support** their learning goals



Intuitive

Discoverable study sessions, resources, and a clean interface that is **easy to navigate**



Reliable

Ensure that proposed features **support** and **keep up with** students' busy lives



Trustworthy

Be **transparent** in what features may be considered for AI matching to build **confidence in partnerships**

Value-aligned Features



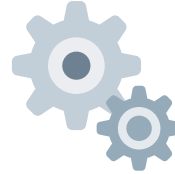
Inclusive

- Public study sessions available to all students taking the class
- create an **inclusive** and **collaborative learning** environment via norms and app values
- Aim for **equitable and diverse** matches



Intuitive

- Homepage showing all open study sessions and **easily interpretable** navigation tab
- **Recognizable** icons and helpful 'tutorial' functionality
- Sequential **bite-sized** steps for task flows



Reliable

- Login, discussion sessions, file uploads, and AI flows are **consistent**
- Integration of these tools so users can spend less time on planning



Trustworthy

- Checkpoint summarizing all files that will be included in AI and during the pairing process
- **Requesting** explicit consent
- **Transparency** in features used in AI matching in dedicated space

Value Tensions



Inclusive

- Public study sessions may cause concerns if students feel **uncomfortable** sharing information or joining open groups
- **Balancing** open access with user comfort may require **visibility options** for students

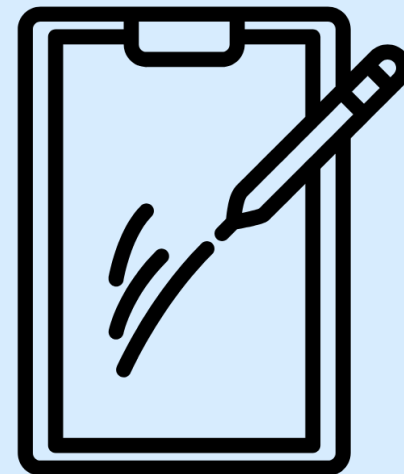


Trustworthy

- Matching diverse groups equitably might conflict with having explicit consent for matching conditions
- Some users may wish to **opt out** of certain group dynamics

04

TASKS



Slight simplification from A5



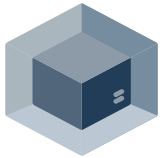
Simple

Discover public open study sessions for a class



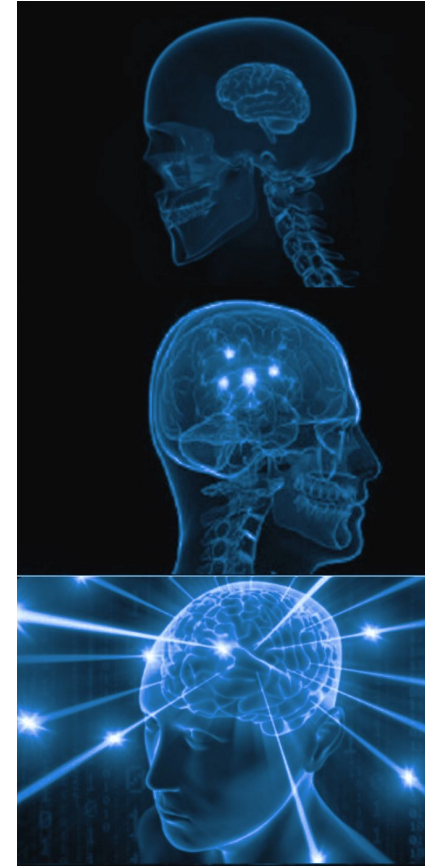
Moderate

Upload class syllabi and assignments to get AI powered study plans



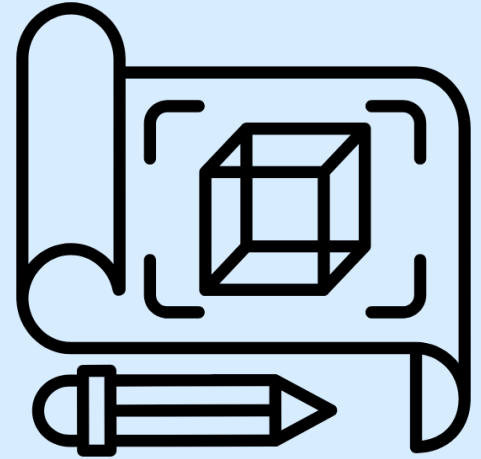
Complex

Create a study profile and get matched with recurring partners/study groups

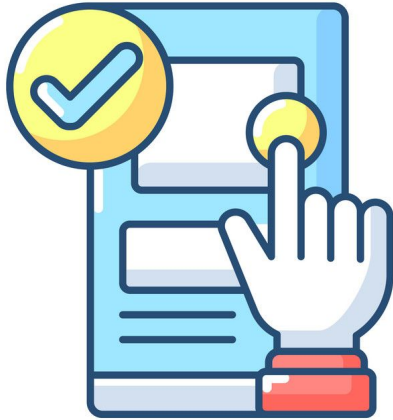


05

USABILITY GOALS AND KEY MEASUREMENTS



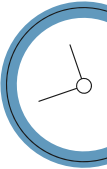
Usability Goals



Efficiency- our app flow aims to minimize the number of steps required to complete key tasks



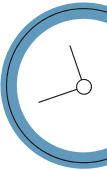
Error Prevention and Recovery- our app flow aims to mitigate misclicks and allow users to recover easily when they occur



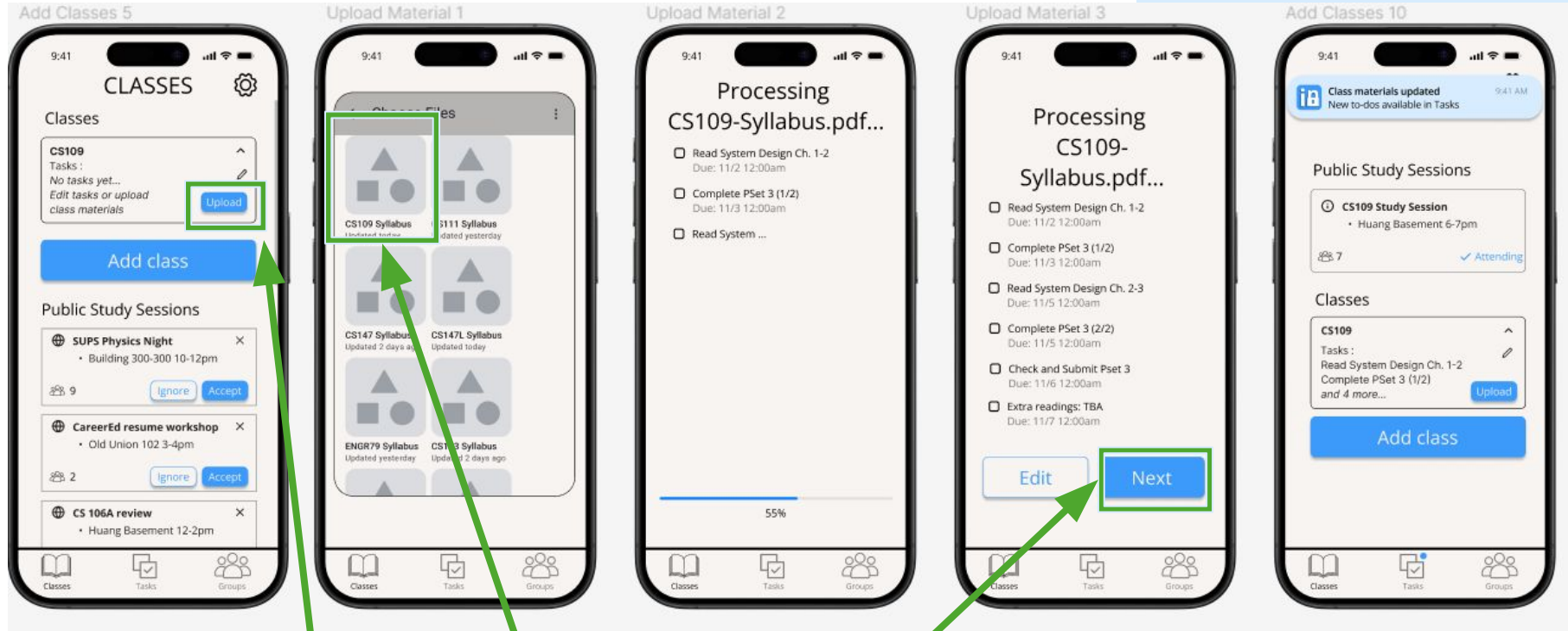
Key Measurements



1. **Time to Complete a Task**- we track the time it takes to complete each task from start to finish
2. **Misclick Percentage**- we count the number of misclicks for the duration of each task



Product Progression - Goal 1: Efficiency



Clicks are only necessary for essential functions - minimal user interaction needed to complete a task

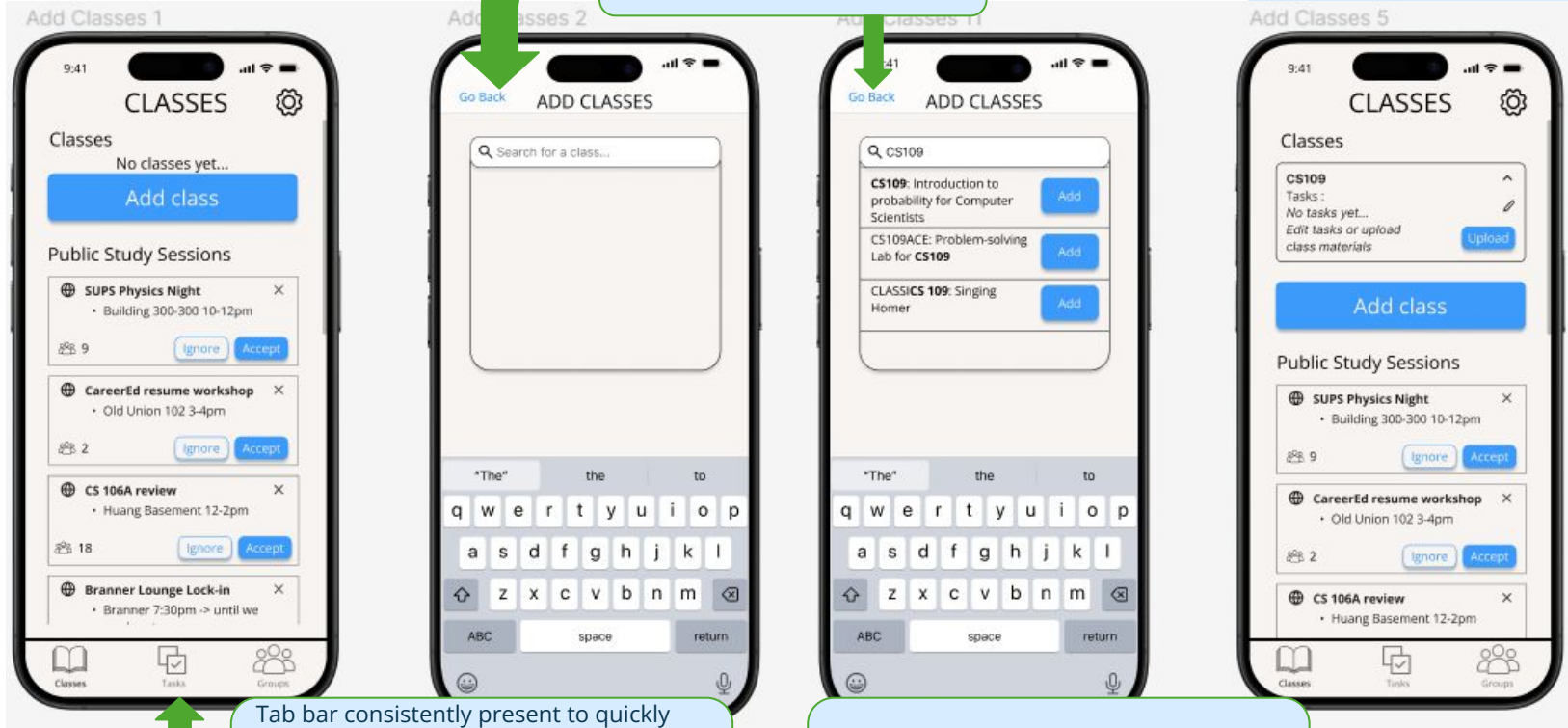
1. Open file selector
2. Choose file
3. Review and Submit

This improves our **key metric 1**: time to complete each task

Next steps:
Use hi-fi features like saved logins and file upload system to make user experience even easier

Product Progression - Goal 2: Error Handling

Added "Go Back" buttons to quickly return to previous screens



Tab bar consistently present to quickly navigate to task beginning screens
This improved our **key metric 2**: minimize times user requires guidance to continue

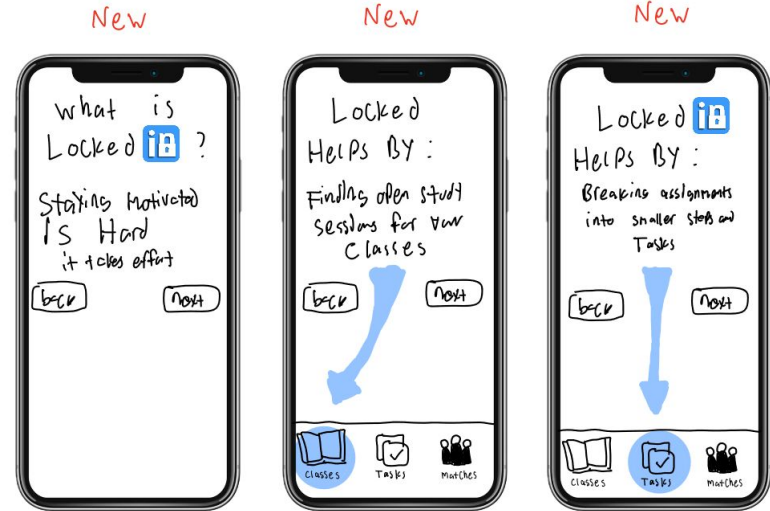
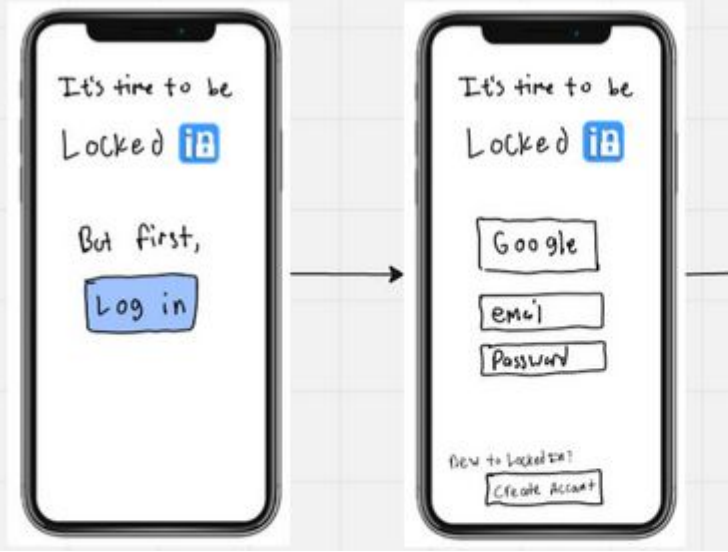
Next steps (in progress)
Have users test figma and identity and clear up confusing patterns

06

SKETCH REVISIONS



Revision 1: addition of onboarding pages



Revision 1: feed style for study sessions, viewable immediately

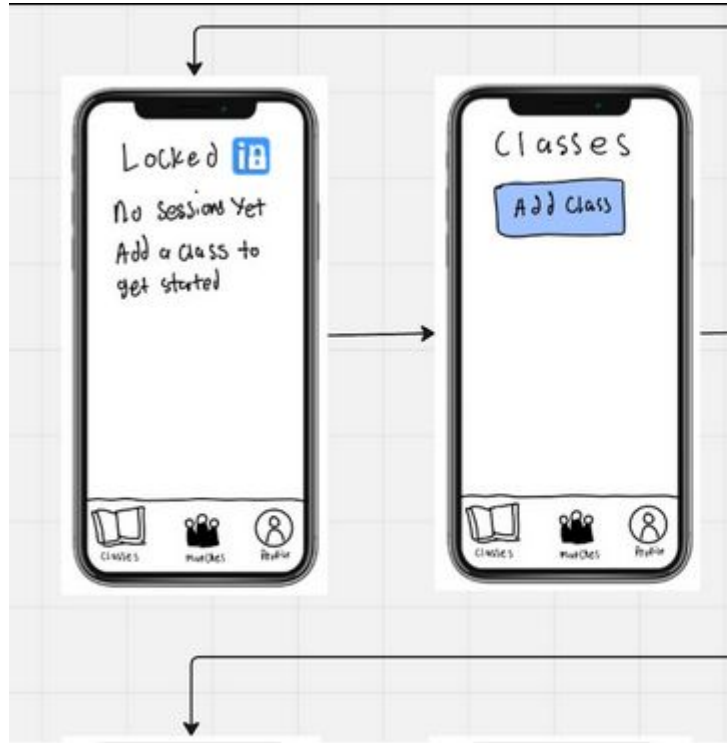
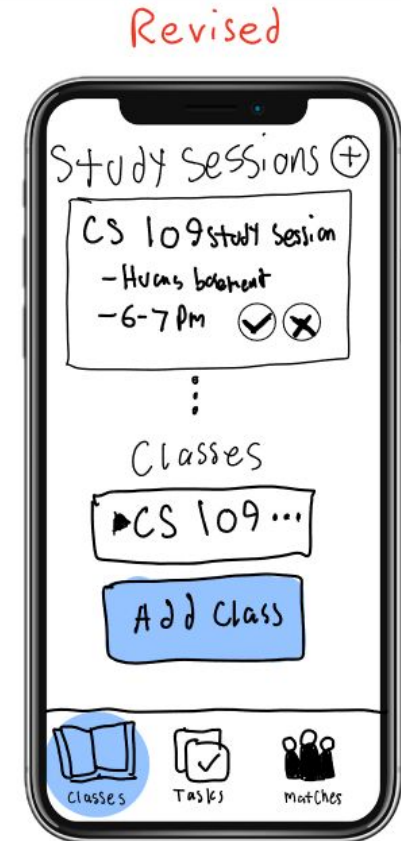
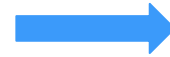
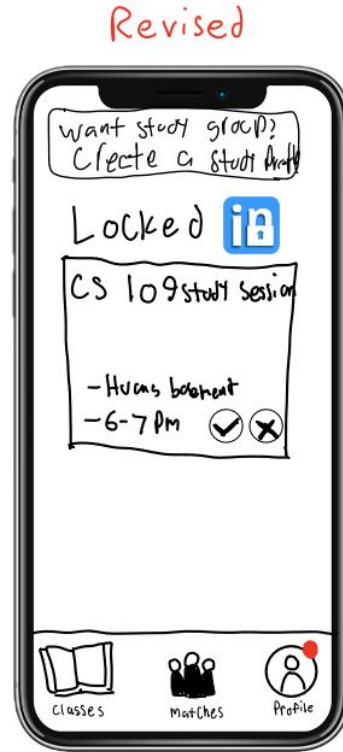
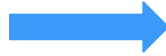


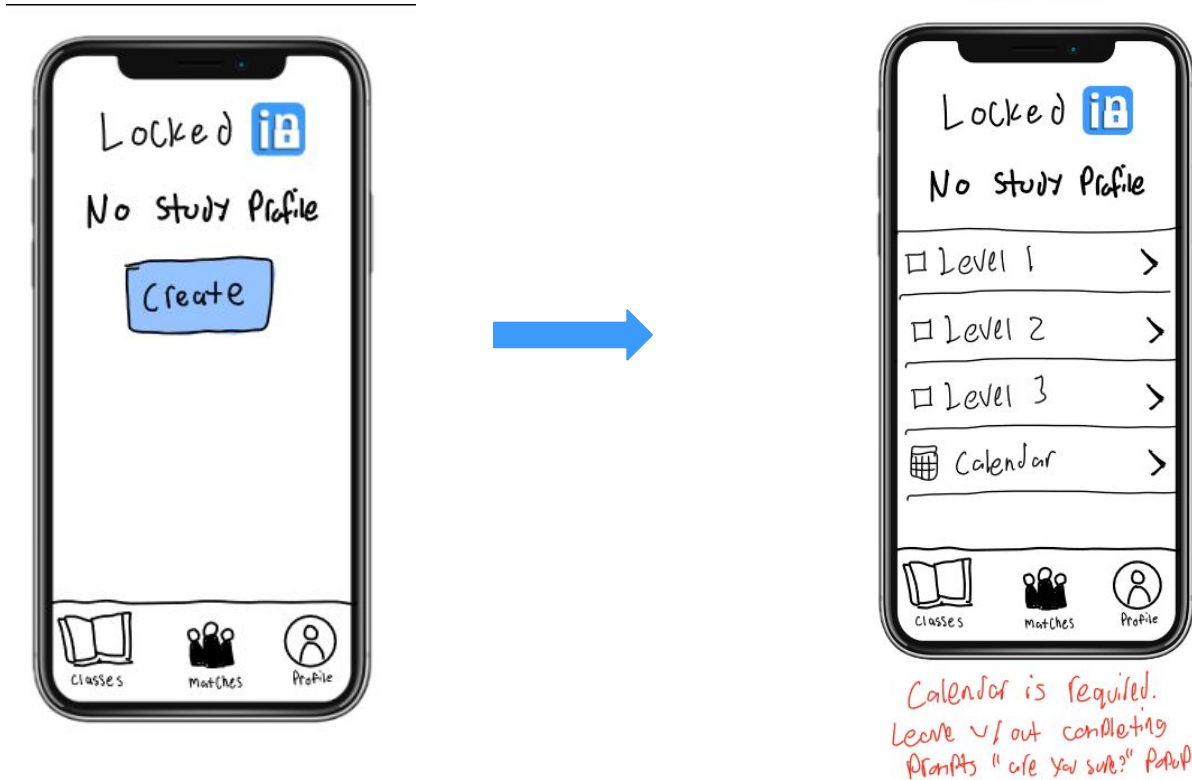
Figure 8. Adding courses and viewing



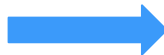
Revision 3: changed easily overlooked red dot to banner notification



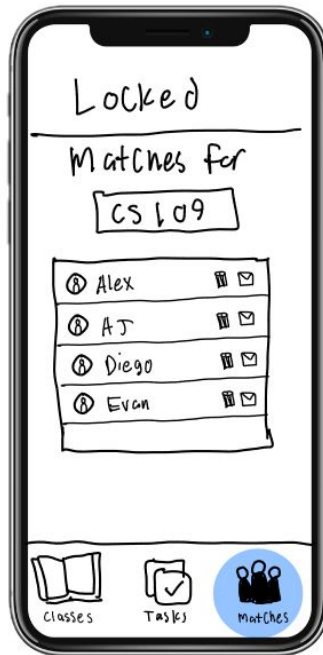
Revision 4: Allow users to put different levels of detail into their profile (not completed in med-fi yet)



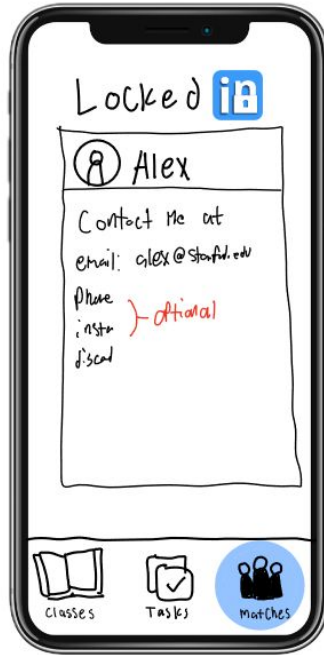
Revision 5: Remove in-app messaging, instead just give contact info



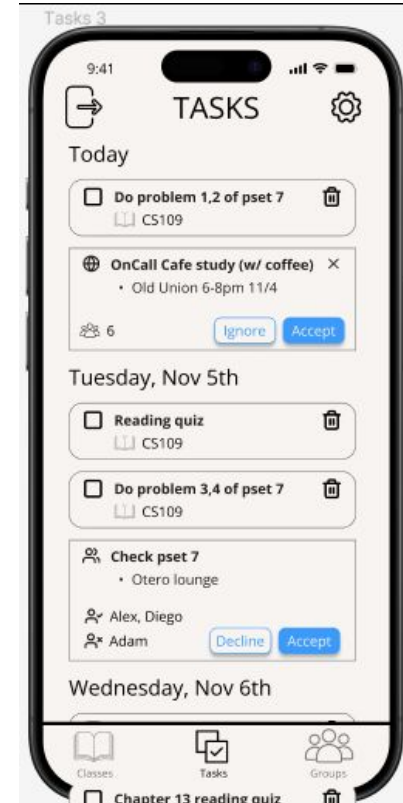
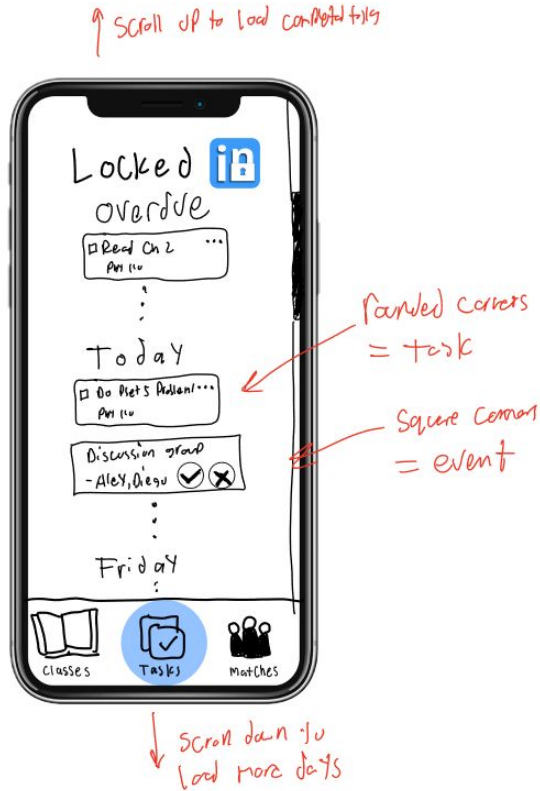
Revised



Revised



Major Addition: New tasks section which serves as feed-style homepage, listing tasks, group study sessions, & public study sessions

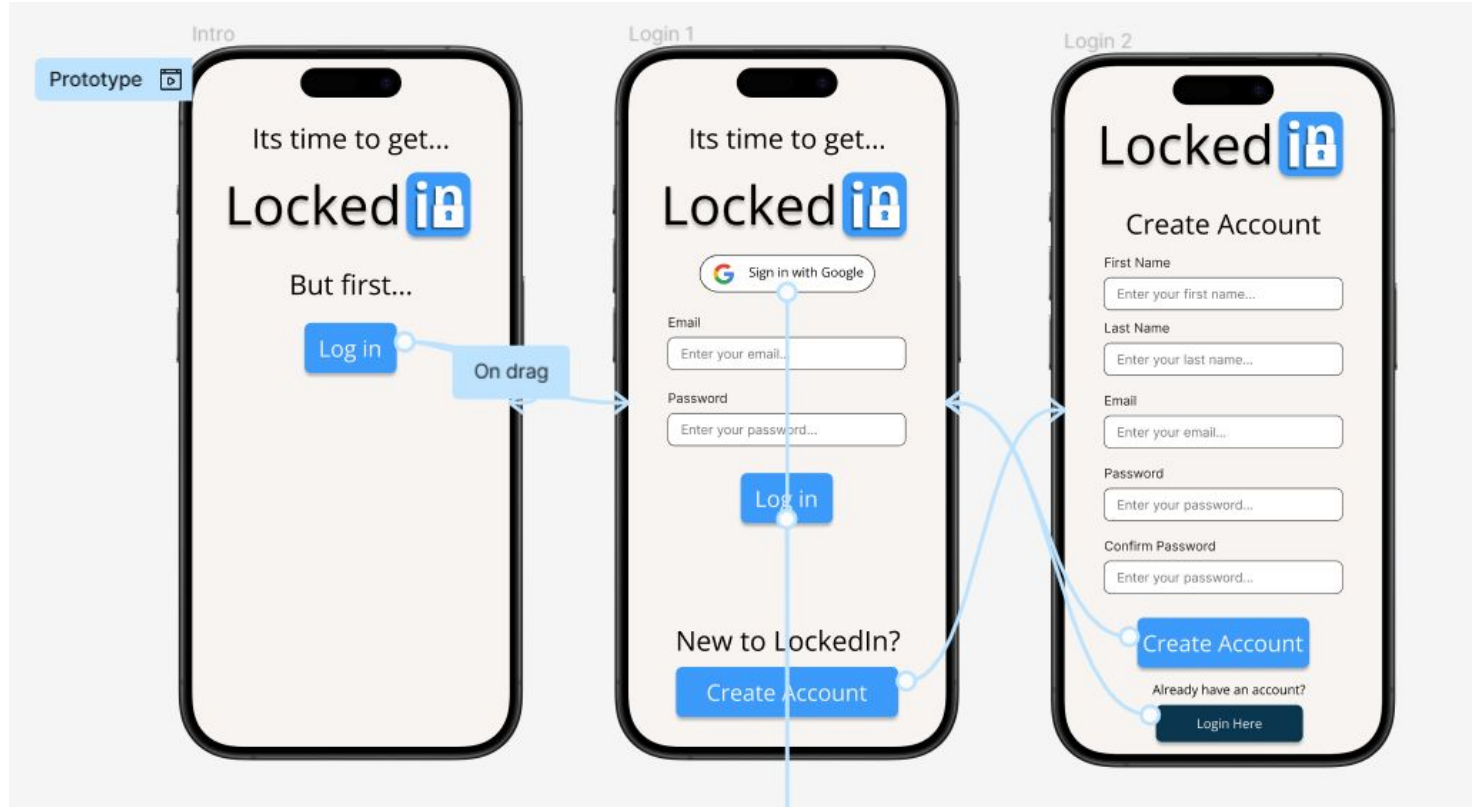


07

MED-FI TASK FLOWS

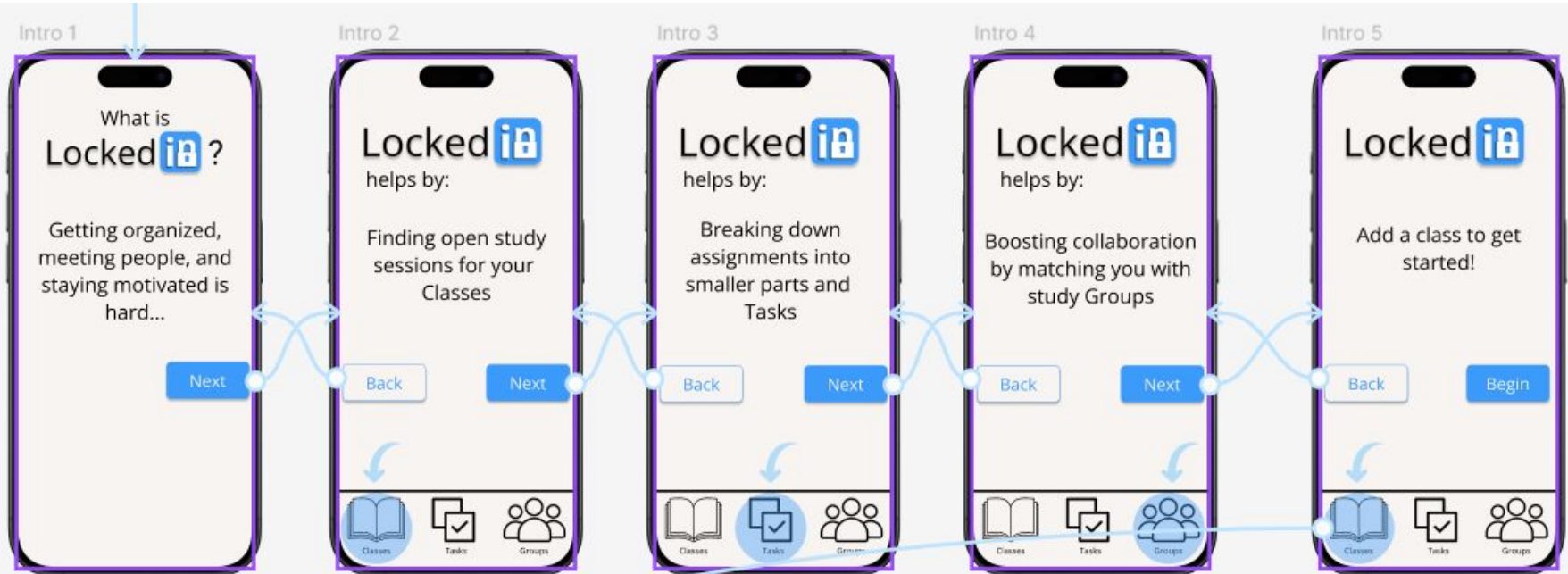


Task 0: Login/Register + Intro

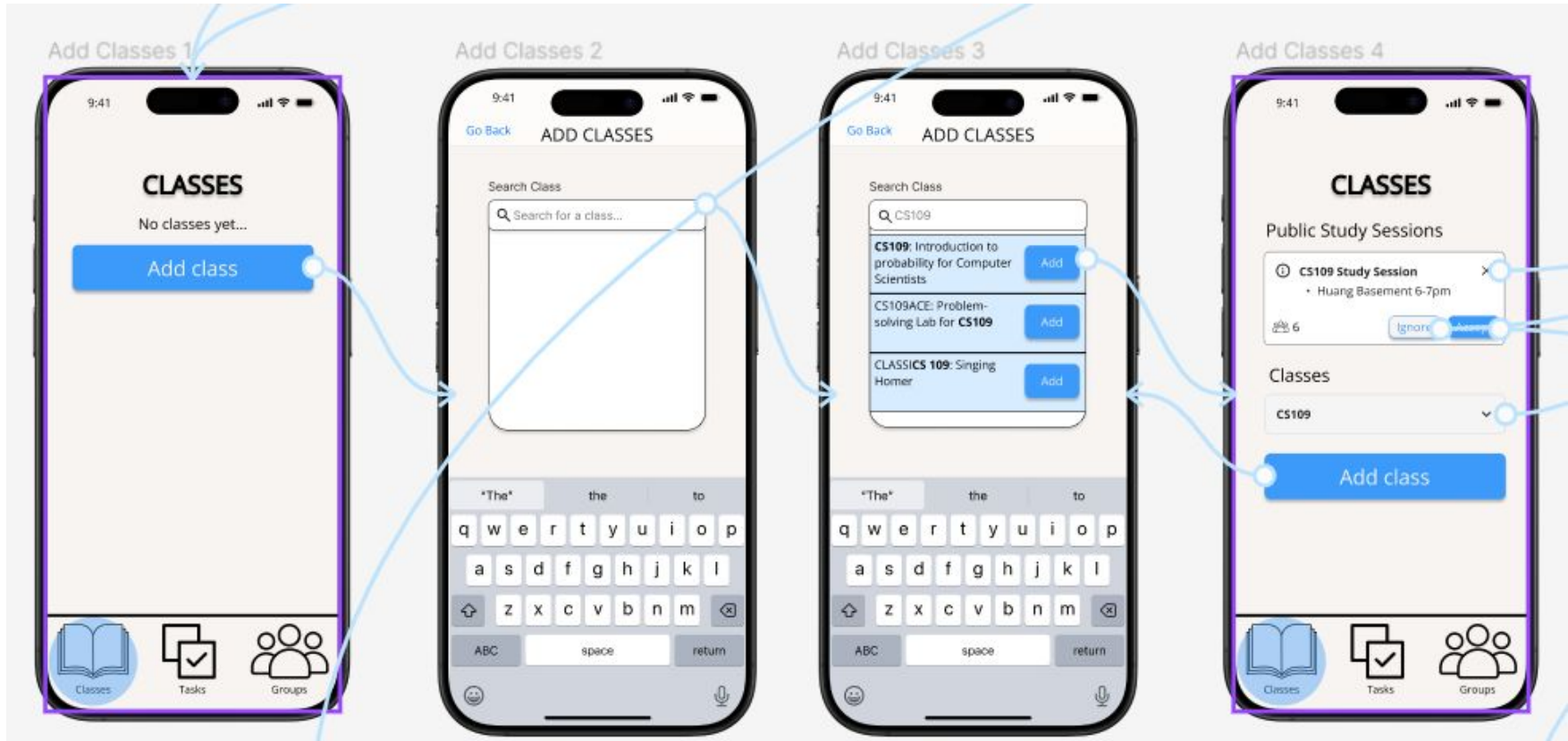


Task 0: Login/Register + Intro

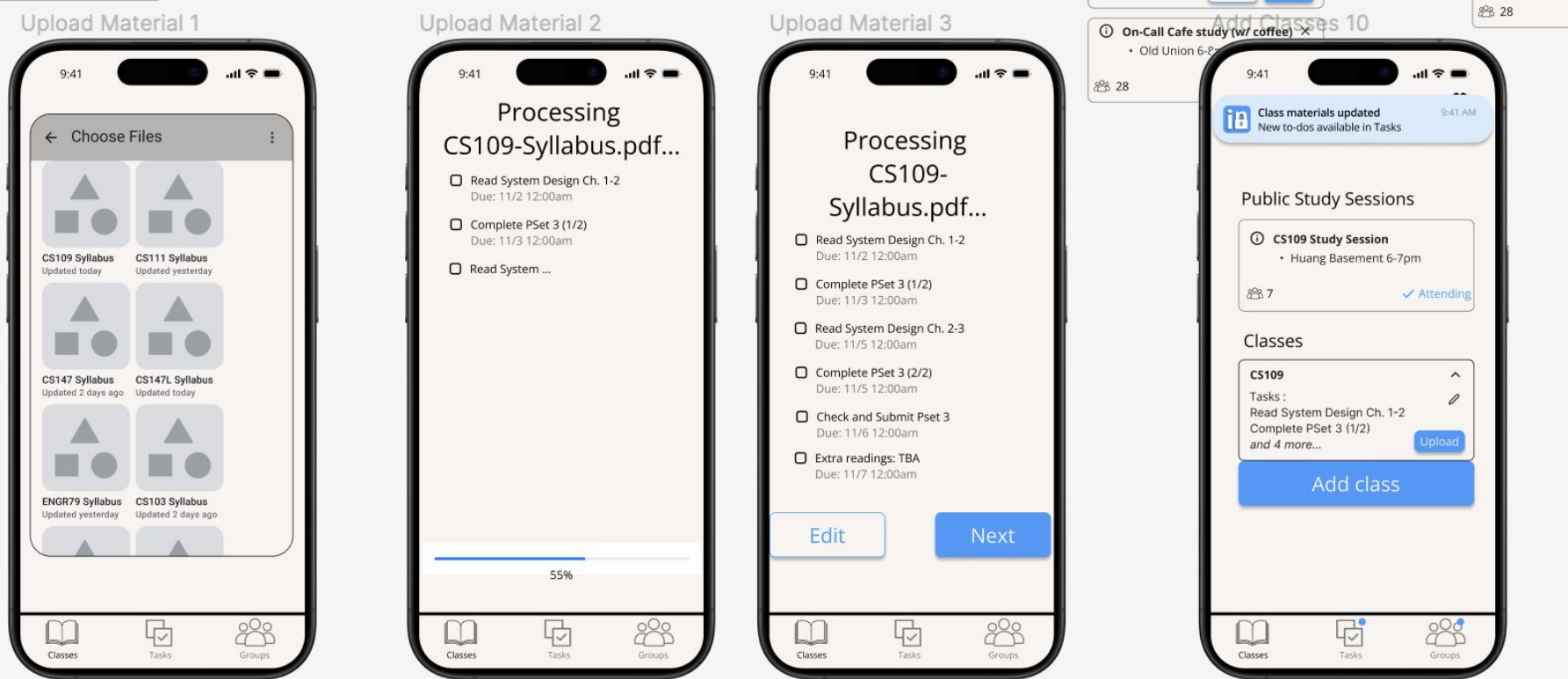
We are addressing some of the confusion that lo-fi testers had by adding an overview on first app entry



Discovering Study Sessions



Use AI Powered Tool to Organize Documents



Create Study Profile and Match with Classmates

Study Profile 2

9:41

GROUPS

Looks like you haven't created a study profile yet...

Create profile

Classes Tasks Groups

Study Profile 3

9:41

(1/4) PROFILE

Interests

About Me (optional)

University

Back Next

Classes Tasks Groups

Study Profile 8

9:41

(1/4) PROFILE

Interests

About Me (optional)

University

Back Next

Classes Tasks Groups

Study Profile 4

9:41

(2/4) PROFILE

How do you like to study?

Ideal Location

Collaboration Style

Learning Style

Goal Orientation

Ideal group size

Intractability

Back Next

Classes Tasks Groups

Study Profile 9

9:41

(2/4) PROFILE

How do you like to study?

Ideal Location

Collaboration Style

Learning Style

Goal Orientation

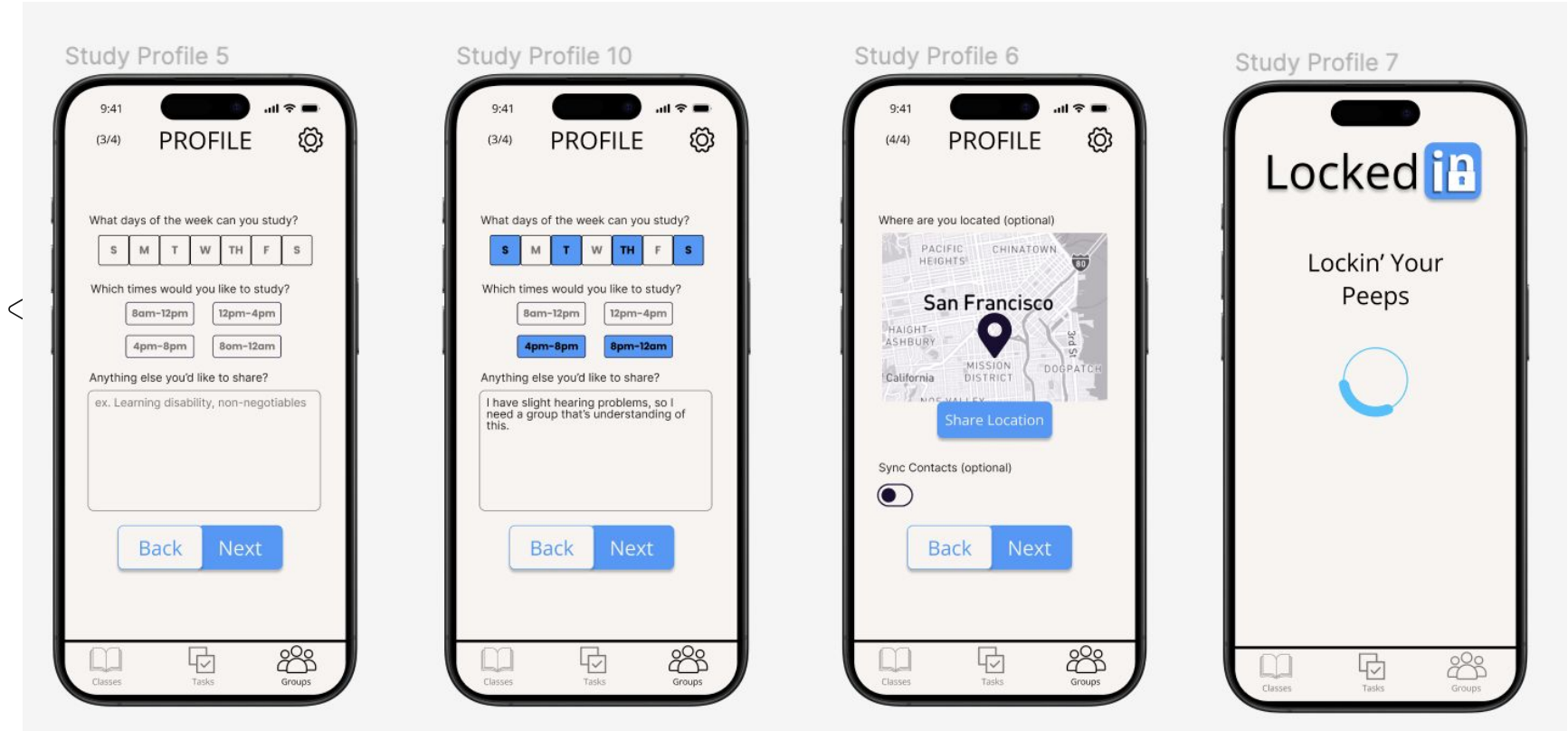
Ideal group size

Intractability

Back Next

Classes Tasks Groups

Create Study Profile and Match with Classmates





7.5 Expert Feedback

1

Whitespace: too much at the top, footer is a bit too large

2

Onboarding process should be visually distinct and more aesthetic

3

Need a consistent page title format

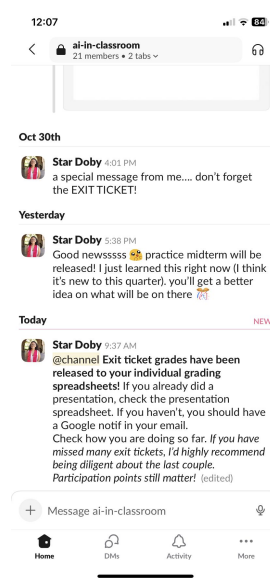
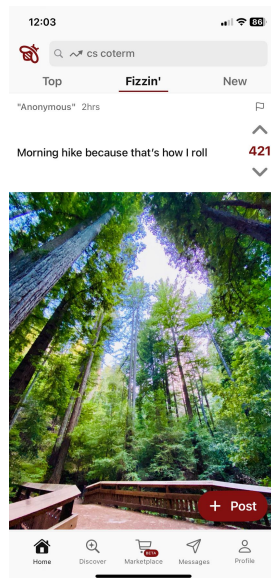
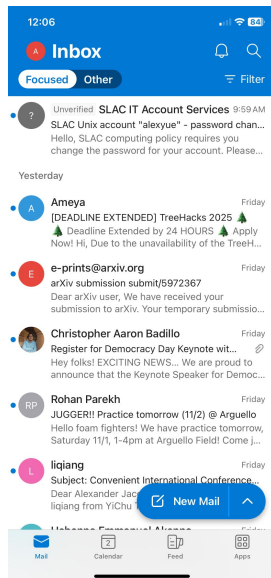
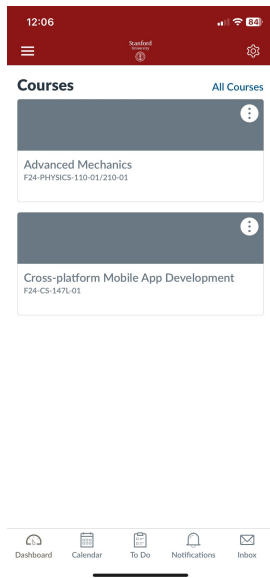
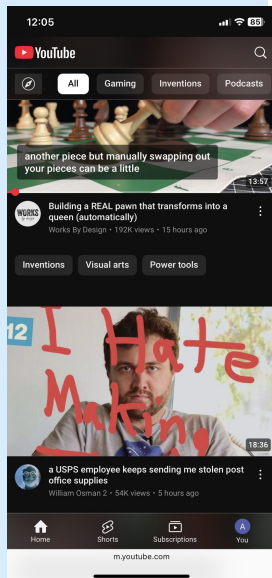
4

Would be nice to see all public study sessions before selecting class

1

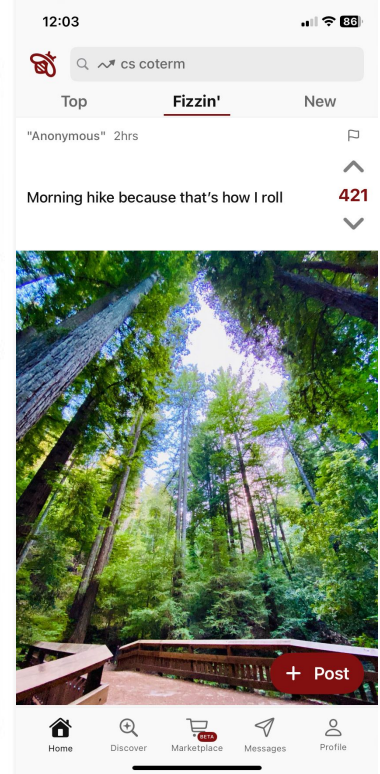
Whitespace: too much at the top, footer is a bit too large

Industry standard review:



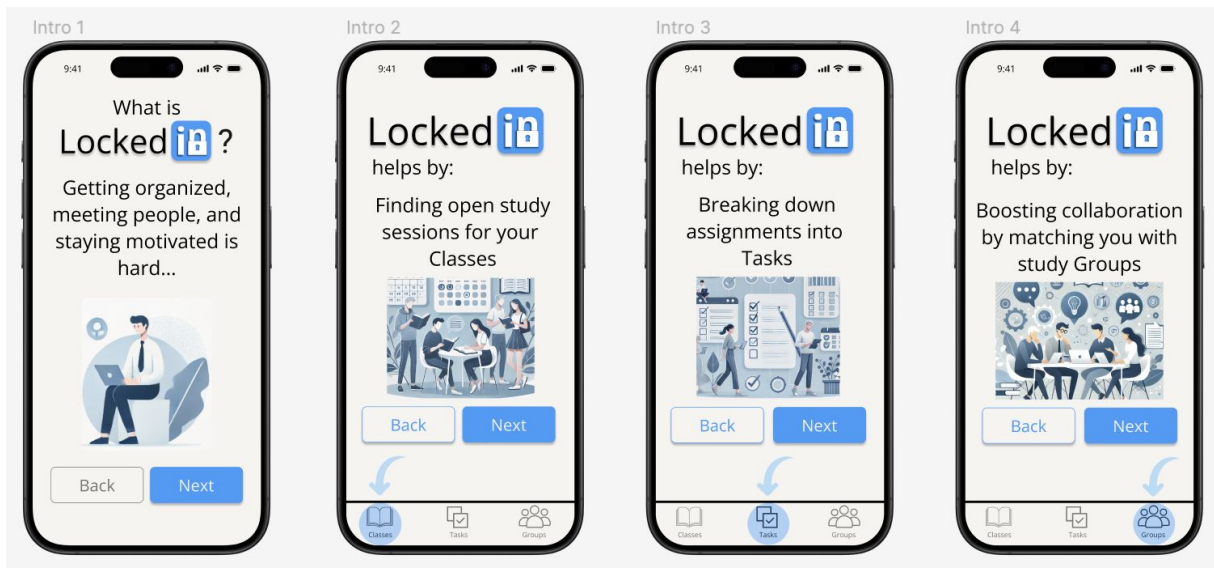
1

Whitespace: too much at the top, footer is a bit too large



Onboarding process should be visually distinct and more aesthetic

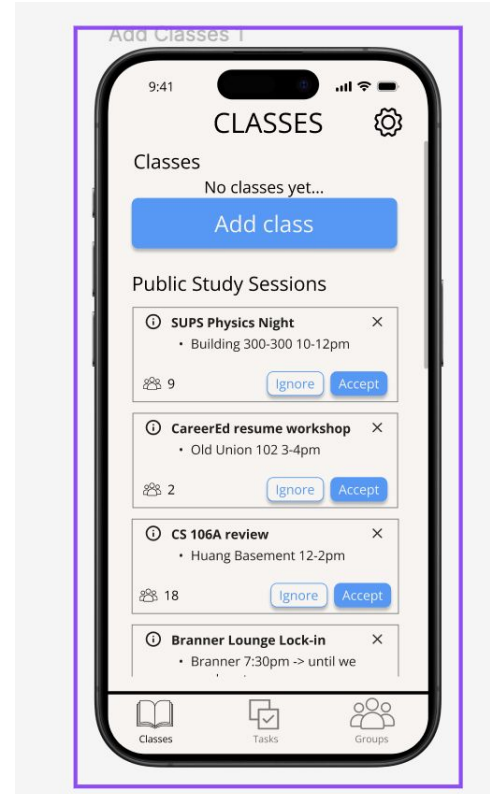
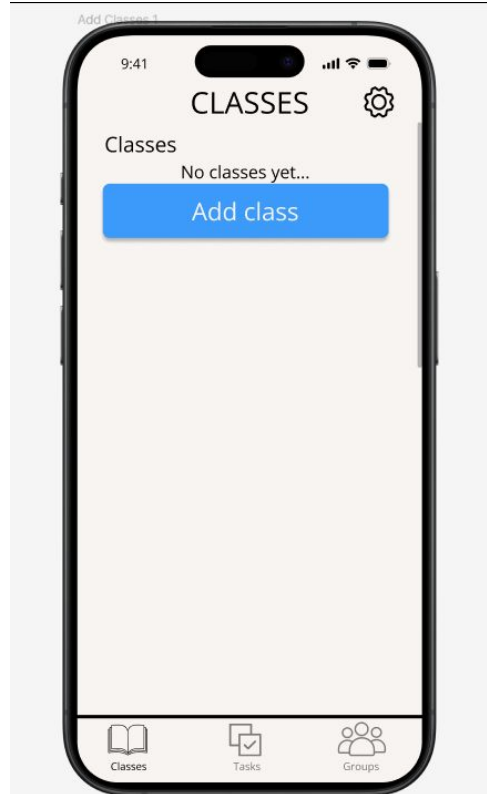
We plan to make the onboarding more interactive and exciting in the high-fidelity version when we have more tools, but for now we added some images:



Need a consistent page title format



Would be nice to see all public study sessions before selecting class



08

PROTOTYPE IMPLEMENTATION



Design Tools

Notability

For brainstorming ideas, initial sketches of interfaces/logos, and task flows we used Notability



Pros

- Great canvas for creative explorations
- Easy to iterate and make changes
- Simple and intuitive

Cons

- Difficult to work on the same file, more like individual work and then sharing ideas together
- Lack of wireframing
- Lack of community and presets

Prototyping Tools

Figma

For designing mockups and prototyping, we used Figma

Pros

- Group collaboration was great, allowed us to all work in unison
- Reusable components extremely useful
- Grid system helped a lot for alignment
- Large community, lots of resources and templates

Cons

- Learning curve to designing clean interfaces
- No stored memory needed variations of screens for different interactions
- Interactables increased in complexity the more screens there were






Limitations and Trade-Offs

What was left out of the prototype?

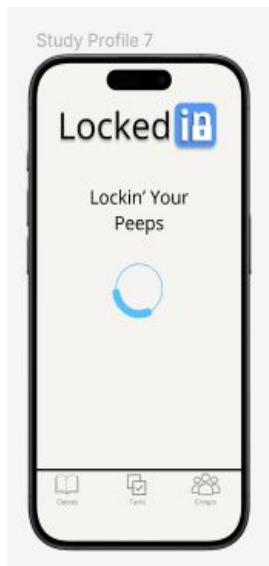


For designing mockups and prototyping, we used Figma

- Users can't input their own information for account or profile information
 - Requires a storage system which hasn't been implemented and won't be until high-fi prototype
 - Users have to follow the interactions we've designed for them
 - Leads to less exploration of class searches or file uploads
 - While users are free to click between designated screens, they have to complete tasks sequentially before doing so
 - Users can't edit their profile after its initial creation
 - Not part of a major task flow, more for high-fi prototype
 - Interactions with matches are mocked, no intractability here
 - Requires storage system... we assume initial interactions
- 

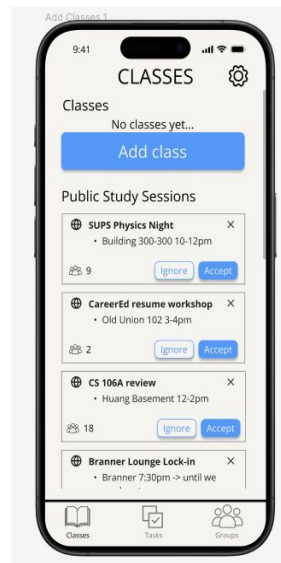
Wizard-of-Oz Features *What features were simulated?*

AI Matching



[AI matching system assumed to be implemented and capable of matching]

Home Feed

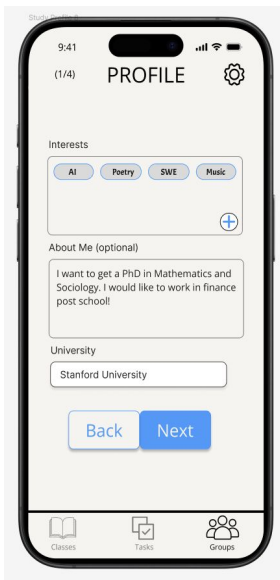


[Feed system assumed to be working and collecting information from other users]

Hard-Coded Features

What features did we pre-set?

- Users can't change their personal information when creating a profile, add their concerns, 'activate' other features
- Limited personalization for flexibility and additional concerns



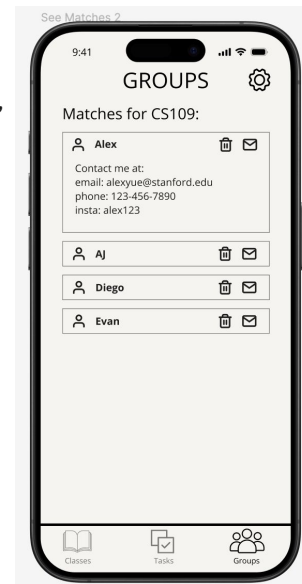
User information

- Users can't change the information used in searching or adding classes
- We follow a scripted interaction that limits exploration of how these features intend to work
- Similar for uploading documents to the AI algorithm



Searching & Uploading

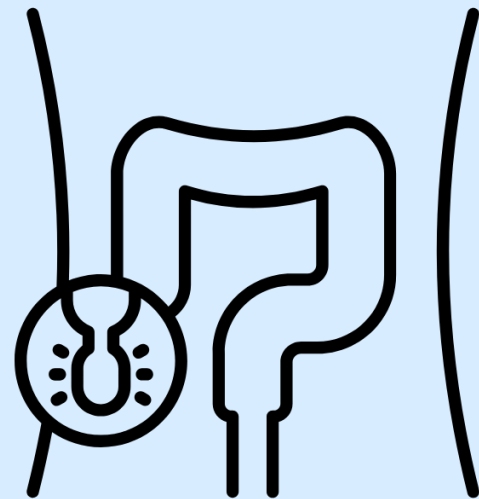
- Users can't interact with other matches, contacts are hardcoded and no actual interaction features
- However, this was not required to test prototype flows



Contact Info

09

APPENDIX



Link to Figma

<https://www.figma.com/proto/OCFo0SgSrsXFMxZrXMB7Am/LockedIn-Med-Fi-Prototype?node-id=0-1&t=8s75gByDfe2TJ0c0-1>

