



UniVerse

“College mentorship with freedom and ease”

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Meet the team

Sally

Economics '25
Hong Kong



Steve

CS '25
California



Zijian

Symsys '26
Chengdu, China



Eric

CS '24
California



Title & Value Proposition



UniVerse

“College mentorship with freedom and ease”

Problem & solution

Our Primary User:

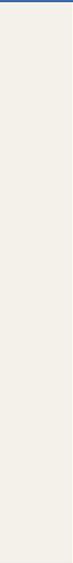
College Counselors

Problem we are tackling:

Counselors lack independence when choosing students they want to work with (and topics) as they often work under a centralized topic

Brief synopsis of our proposed solution:

An app to allow Counselors to choose to work with small groups of students with interests and backgrounds that cater to their own knowledge.



Tasks

Tasks

SIMPLE

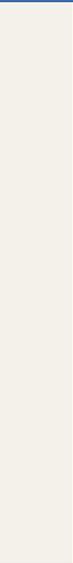
Find students who
counselors want to
work with

MEDIUM

Teach students in an app
environment

COMPLEX

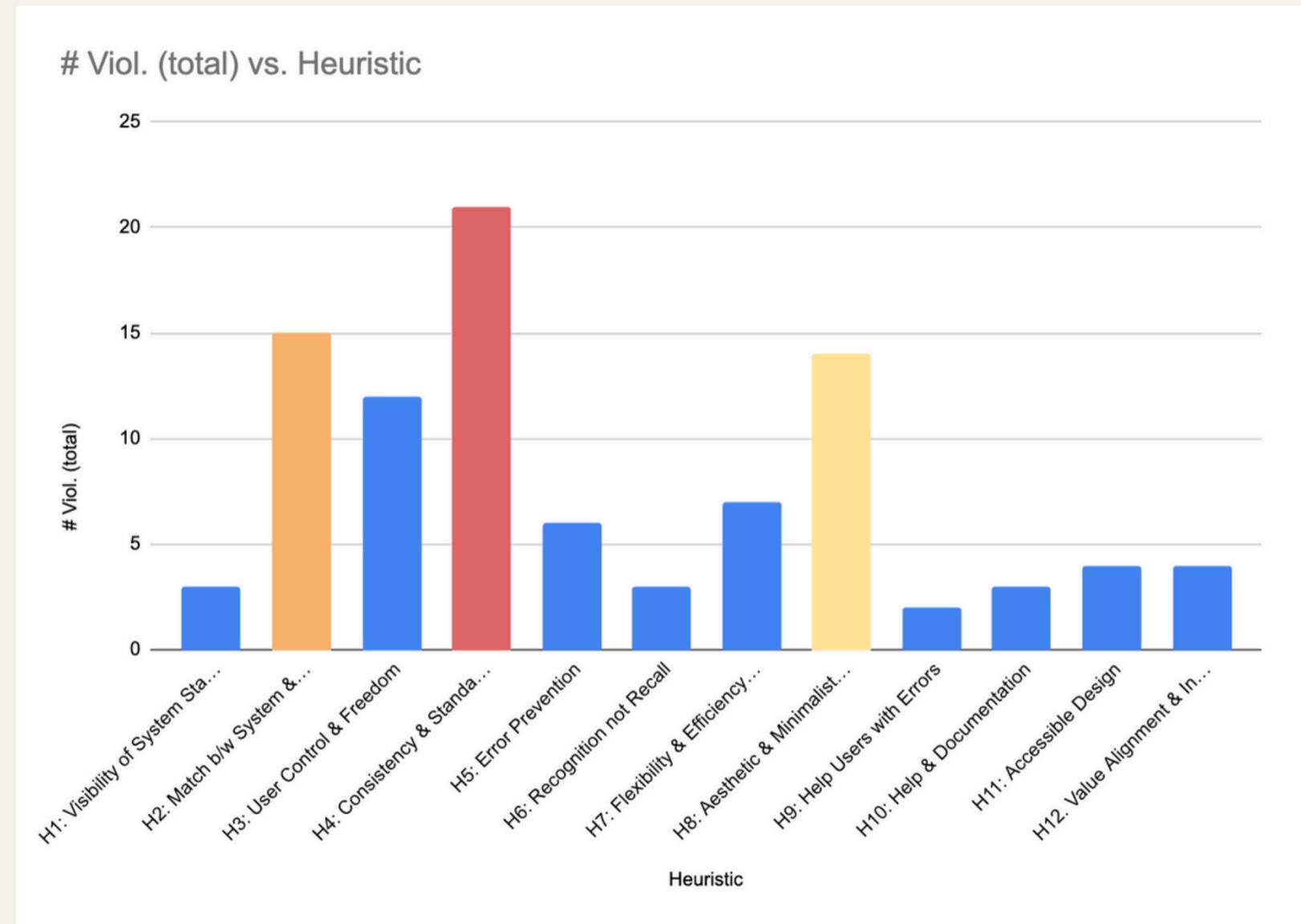
Have AI-powered tools that
make generate insights on
student progress and give
actionable recommendations



Heuristic evaluation results

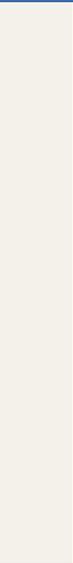
High-level overview

- 94 total violations
- Most frequent heuristics violations
 - H4: Consistency & Standards - 21
 - H2: Match b/w System & World - 15
 - H8: Aesthetic & Minimalist Design - 14
- 28 Severity 3 + 4 issues
 - 26 Severity 3 issues
 - 2 Severity 4 issues

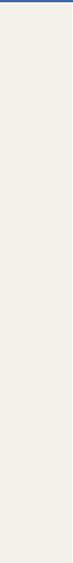


Broad violation patterns

1. The UI is not aesthetically matching for an education app
2. Terminology is inconsistent across tasks and was not abundantly clear to users what they meant, e.g. classes vs. sessions
3. Some screens are too cluttered, making navigation difficult
4. Navigation bar titles do not match with page headings



Major product & UI revisions



Usability goals

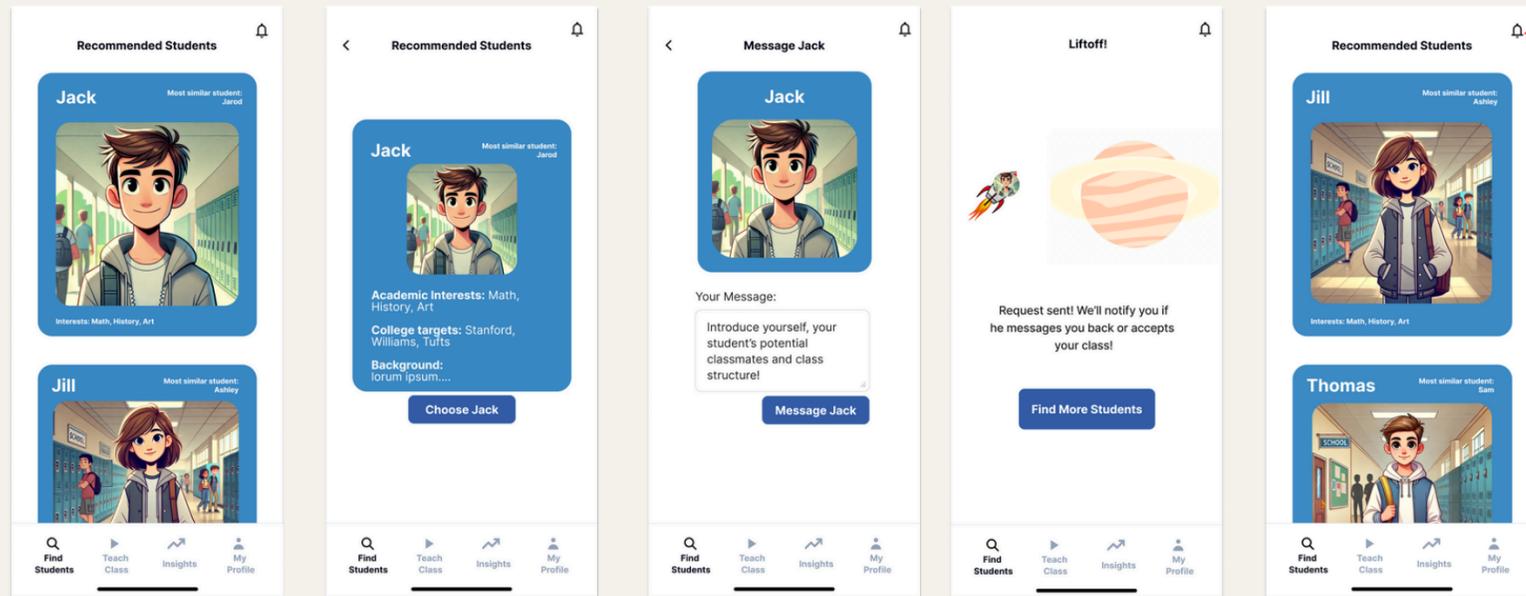
Usability Goals & Key Measurements

	Intuitive	Efficient
Explanation	Want the UI to be easily understandable so that first-time users can enjoy it as well as power users	Counselors can perform different tasks quickly, which boosts their productivity
Key Measurement	Number of times the user presses the back button	Time spent on a particular task
We want the measurement to be	Reduced	Reduced

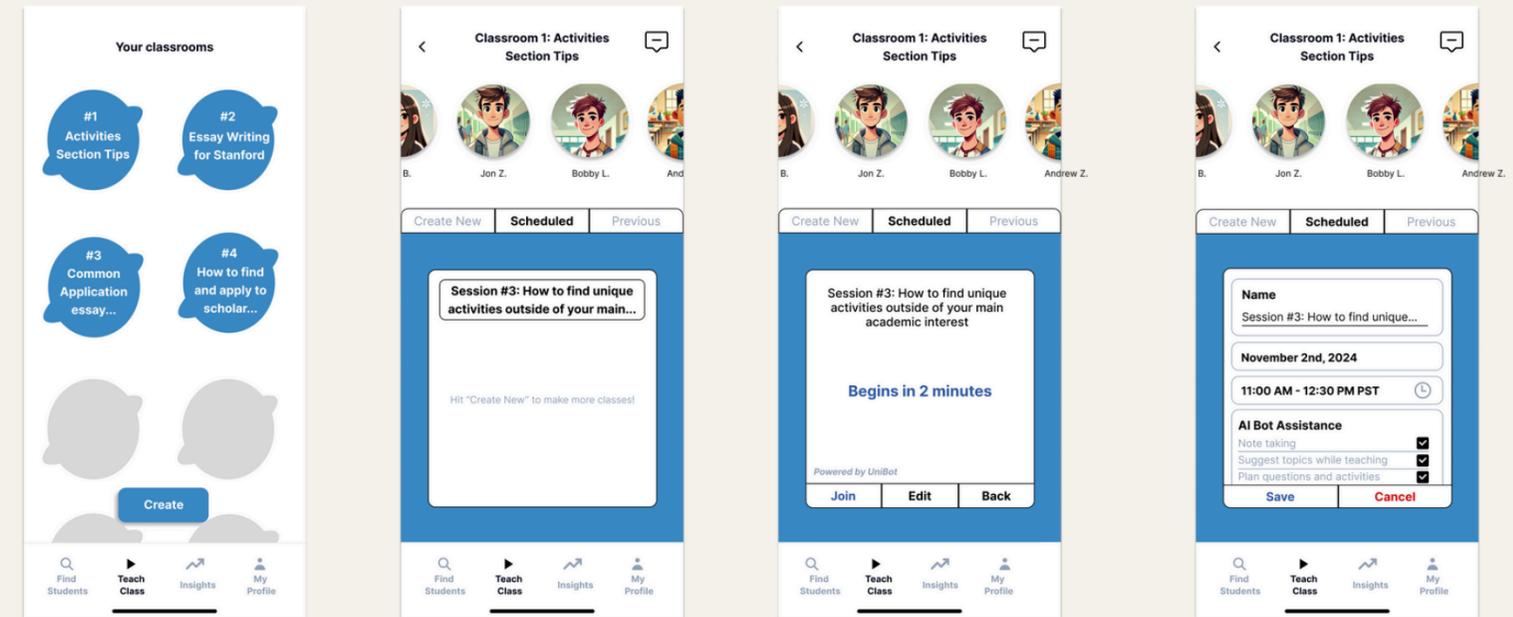
Changes at a glance

Before: 3 tasks (key frames)

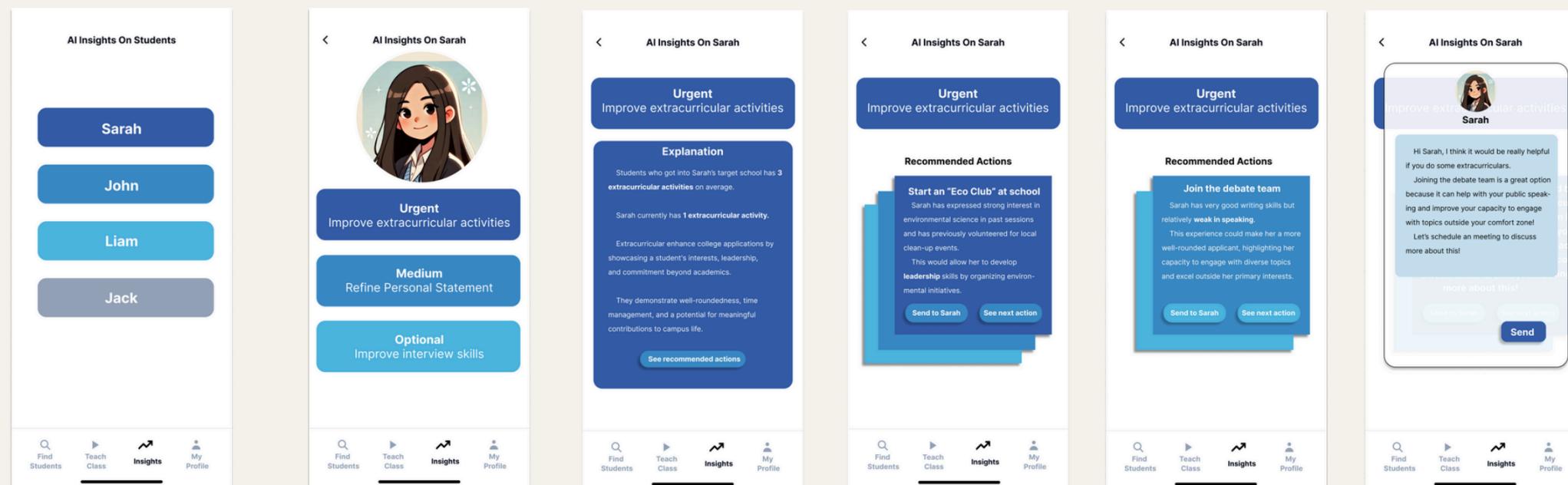
SIMPLE



MODERATE

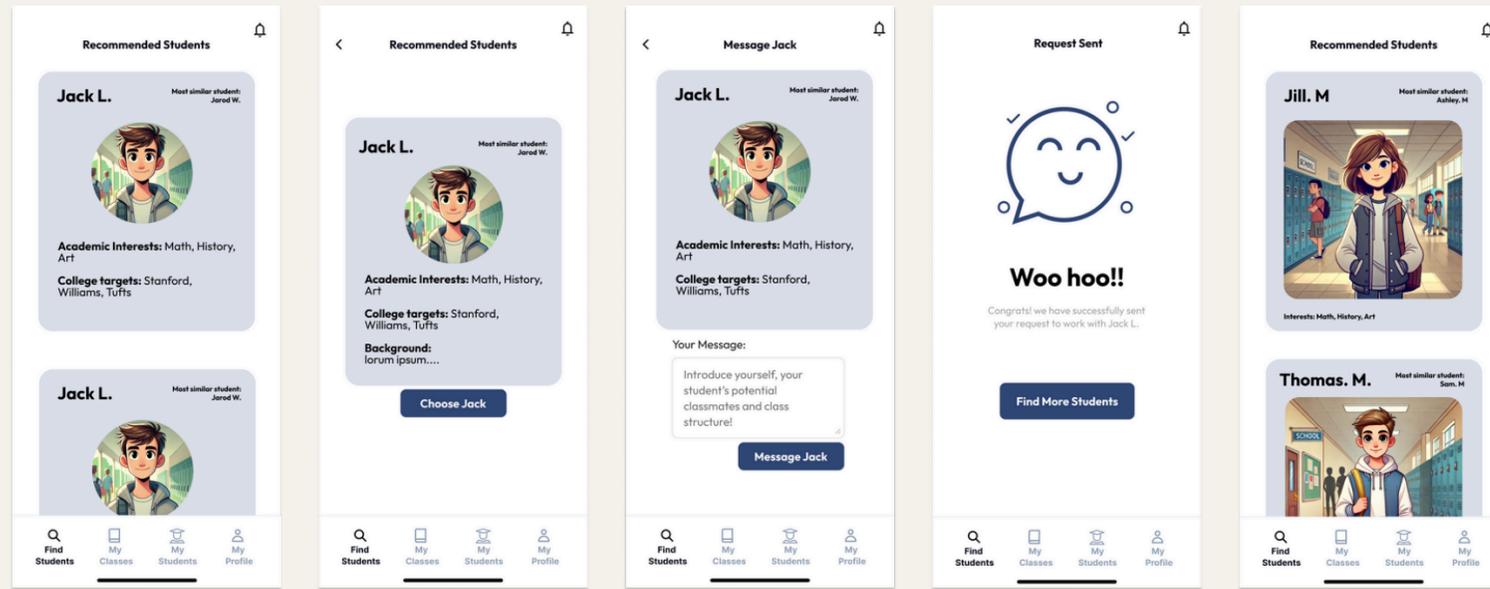


COMPLEX

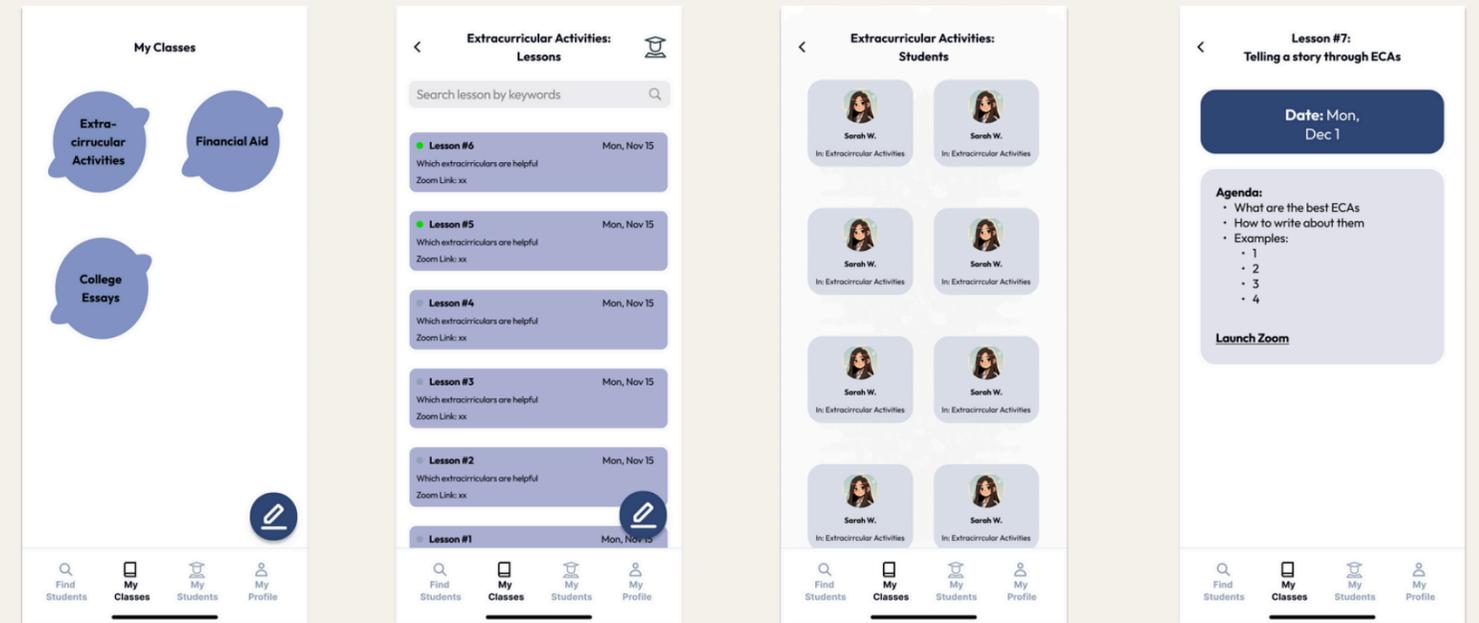


After: 3 tasks (key frames)

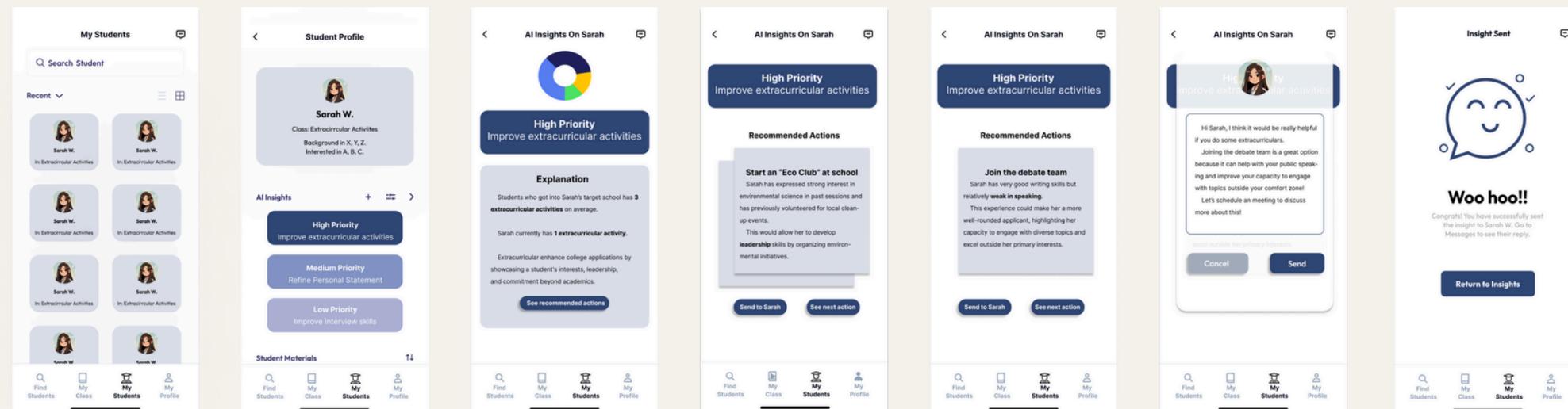
SIMPLE



MODERATE



COMPLEX



Specific changes &
rationale

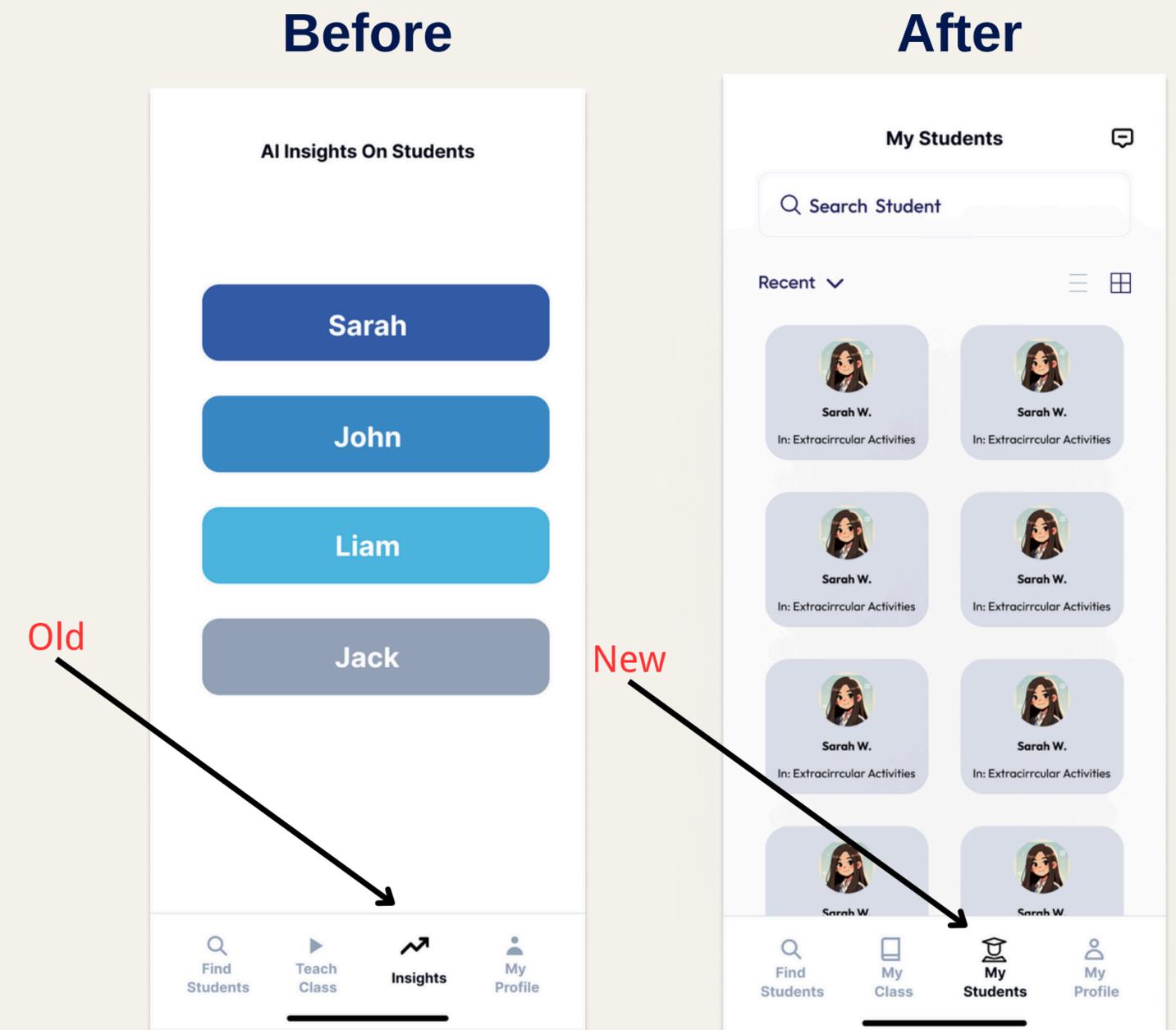
Severity 4

H3 - No way to engage with students beyond insights

Rationale: Students need to receive guidance from counselors in more ways than just the “Insights” functionality.

Fix: Change naming of tab from “Insights” to “My Students”. The “Insights” name makes the functionality of the tab too narrow as counselors are limited to viewing/sending insights to students.

Progress towards usability goals: This is more intuitive as counselors should be able to interact with students in various ways, and not just limited to just AI insights.



Severity 4

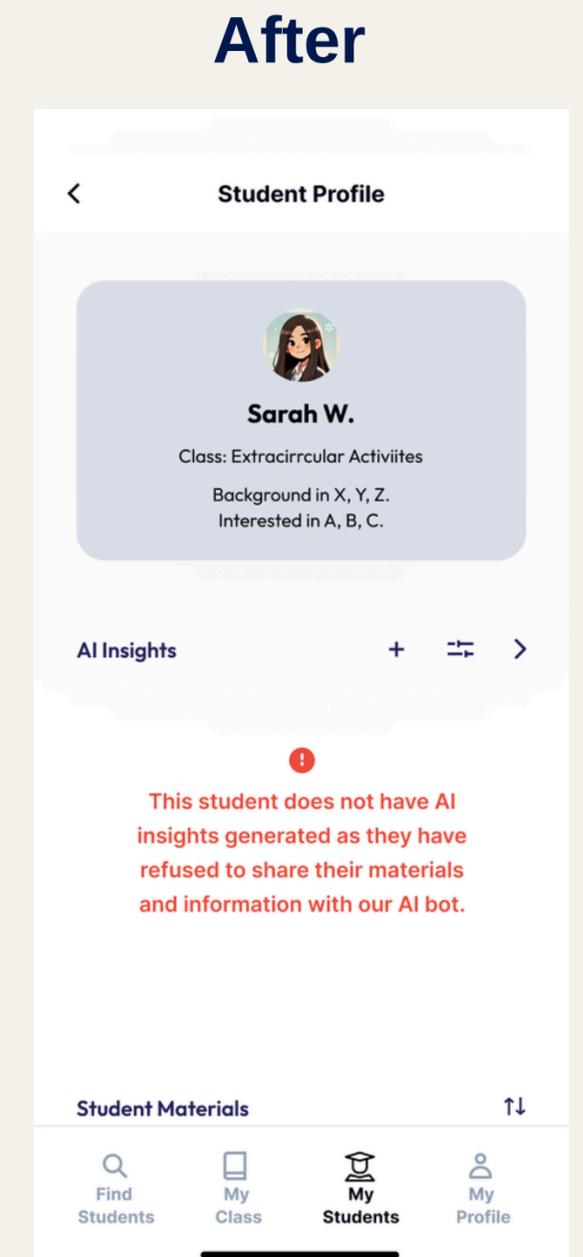
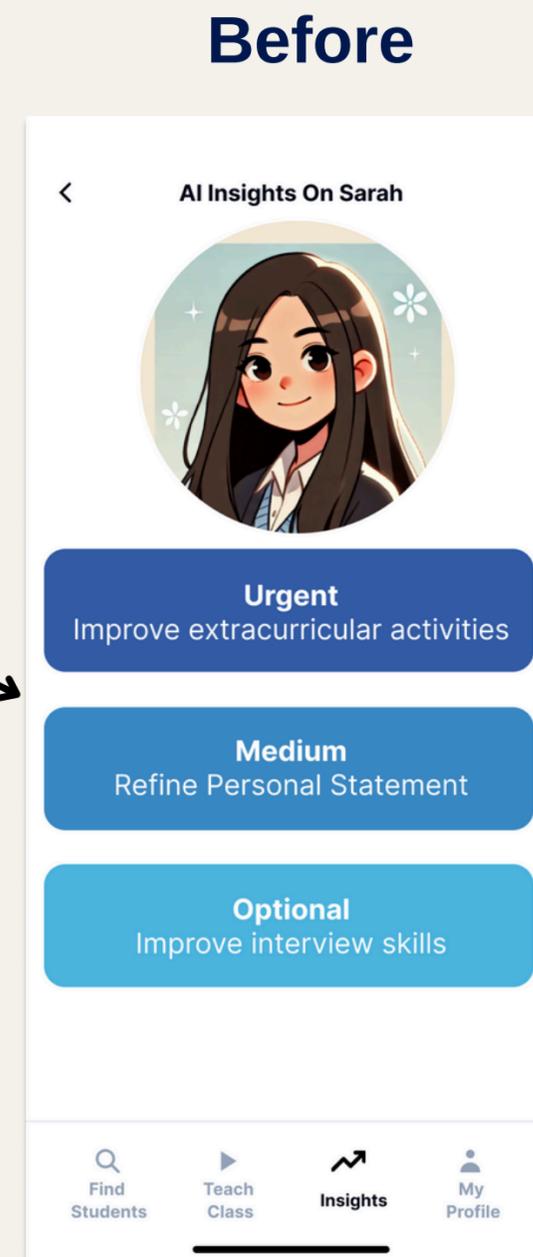
H12 - Some students might not consent the AI to access their information

Rationale: Did not take into account that some students can refuse allowing AI access to their information, which means there won't be any AI insights generated.

Fix: Give students the choice to refuse access on their end (not implemented in our counselor-focused interface). When the counselor clicks on a student who did not consent to AI use, show an error messages explaining this.

Progress towards usability goals: Counselors are updated quickly on the absence of AI insights, and the clear error messages tell them the reason behind the absence - which improves intuitiveness. It also generally makes the app more inclusive.

No option for students to refuse AI access



Severity 3

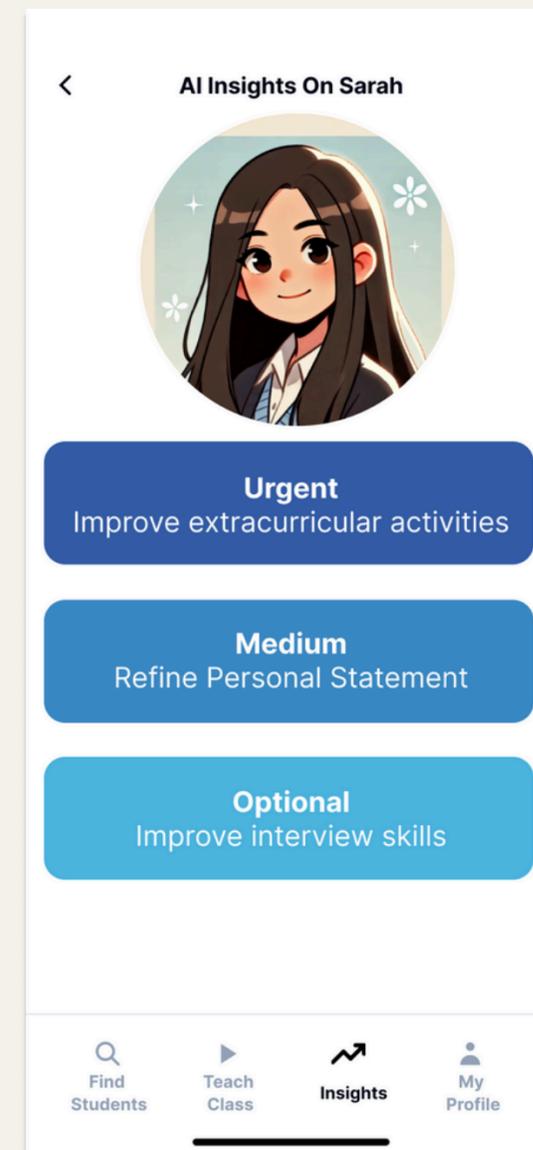
H2 - Within each student's AI insights, the descriptions of "Urgent", "Medium", and "Optional" are unclear.

Rationale: The urgency of tasks should be communicated differently and consistently. Just saying "Urgent" can cause confusion.

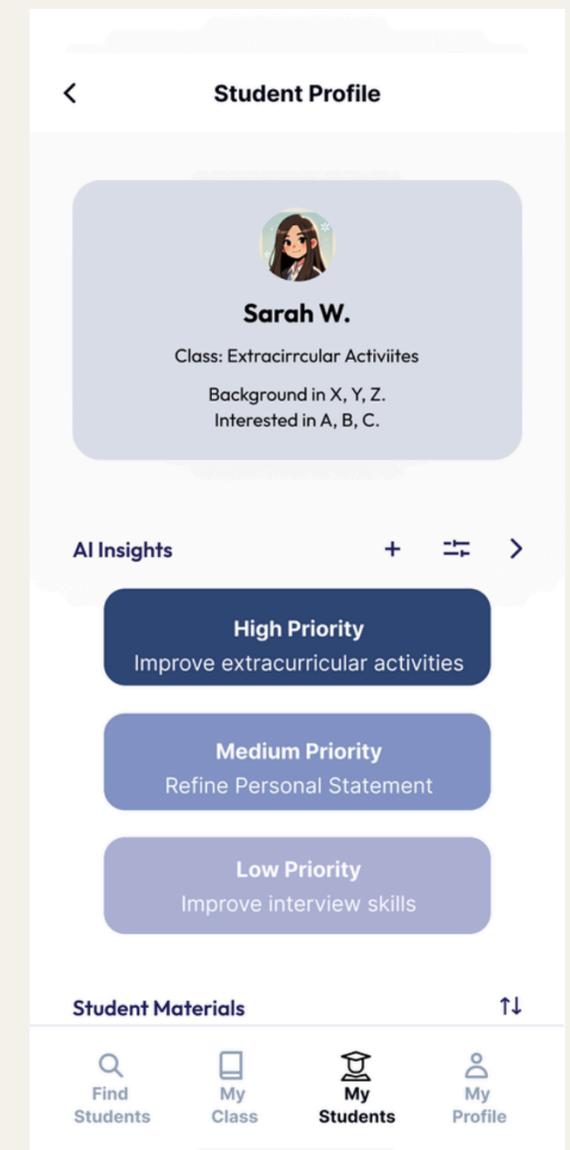
Fix: Change the labels to "High priority", "Medium priority", and "low priority" to explicitly let users know the ratings have to do with priority.

Progress towards usability goals: Improves intuitiveness as users no longer have to guess what "high," "medium," etc. are in regards to.

Before



After



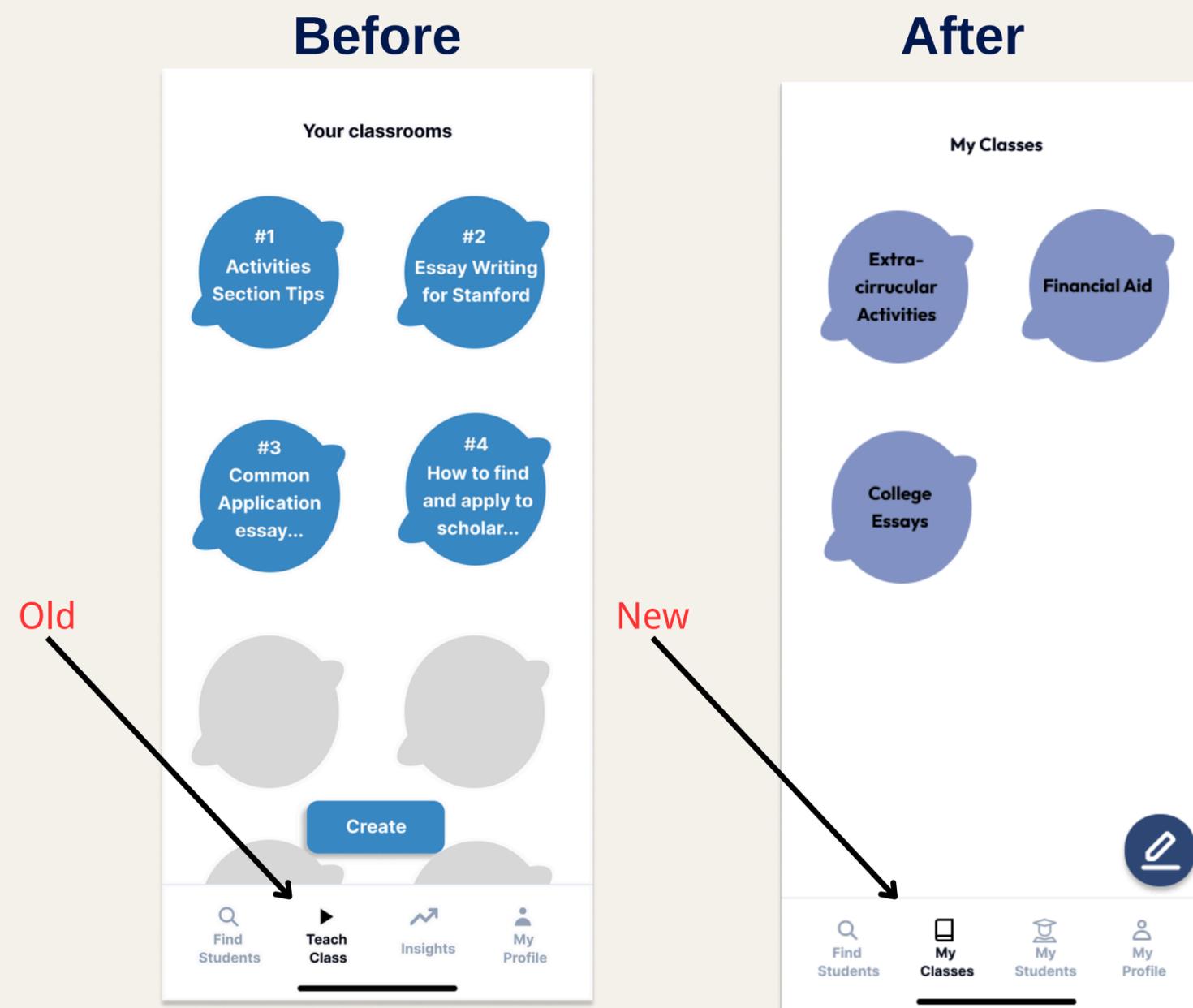
Severity 3

H2 - The image for the teach class tab does not convey its functionality

Rationale: It is currently a play button which suggests video recordings, but the function has more to do with teaching a group of students.

Fix: Change the the icon to something more fitting - the icon of a textbook.

Progress towards usability goals: Improves intuitiveness as users can learn more about what the “Teach Class” tab offers visually in addition to having the text to guide them.



Severity 3

H4 - Unclear if there is a difference between class and classrooms

Rationale: The navbar name does not match the page heading. For instance, On the "Teach Class" page, it says "Your Classrooms". Inconsistent terms might signal to users that they mean different things.

Fix: Have terminology consistent, especially if it is a recurring concept throughout the app.

Progress towards usability goals: Improves efficiency as users will not be confused about where they are in the navigation progress as the feedback they get matches their expectations.



Severity 3

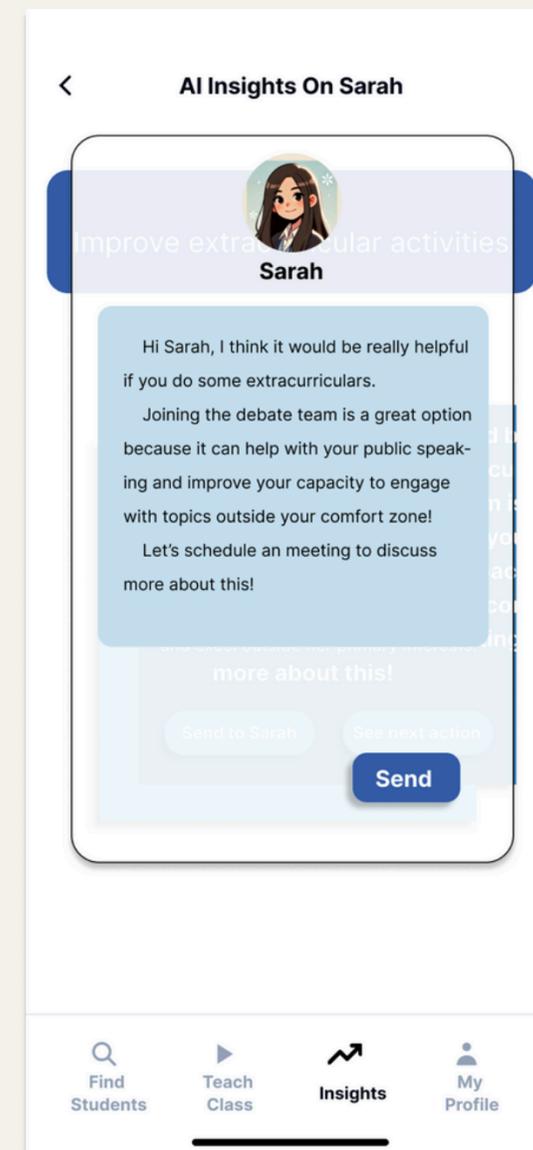
H7 - No option to return to insights after sending an actionable step

Rationale: Once sending a message to a student regarding an insight, the user is returned to the insight that they were just looking at. There should be an option to return to the insights page where they just were.

Fix: Add a notification to let the counselor know their insight/actionable step has been sent, and add a button to allow them to return to the insights page.

Progress towards usability goals: Improves efficiency as users can navigate back to where they came from after completing the action. Improves intuitiveness as the notification updates the status of the user's actions.

Before

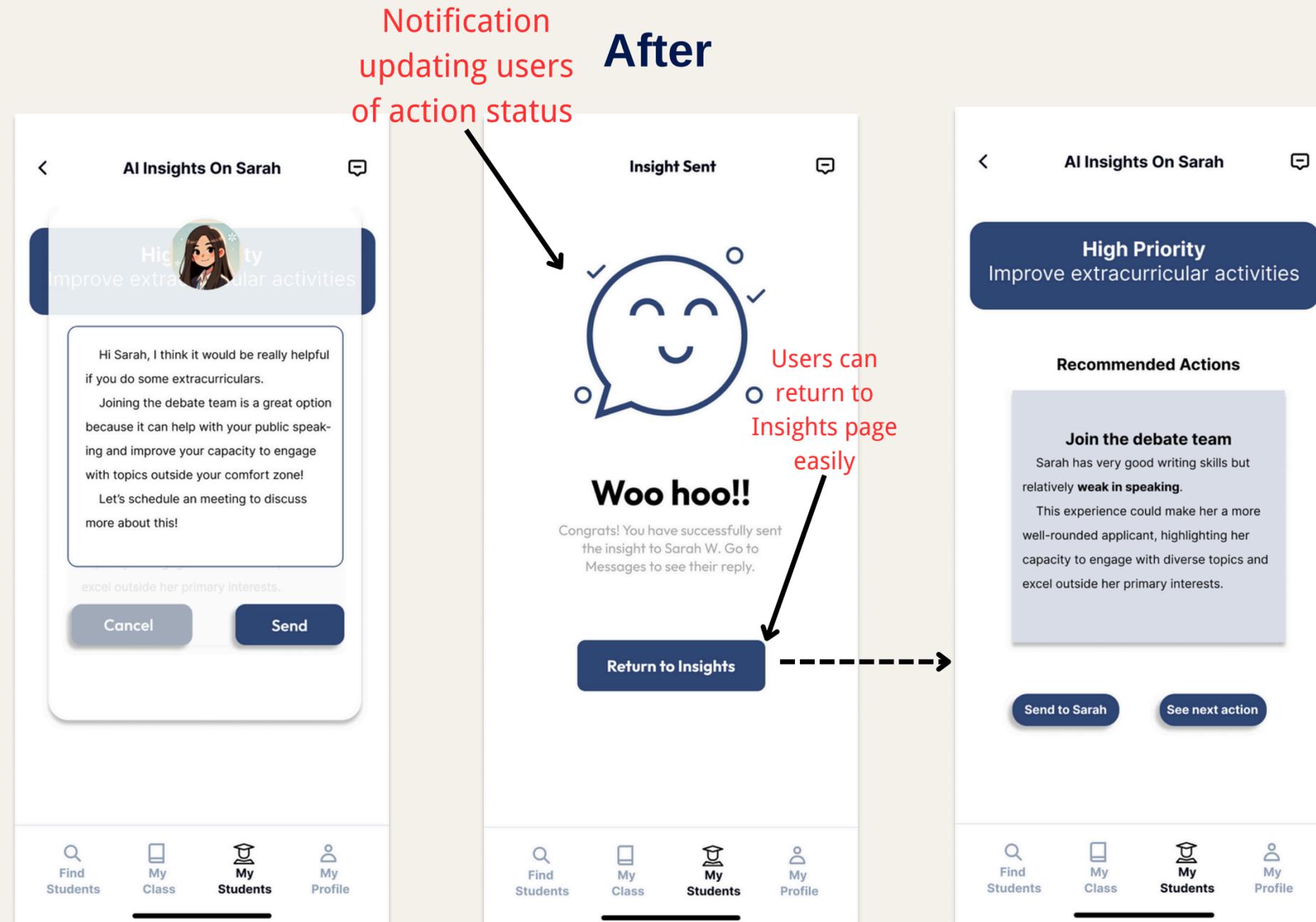


After

See on next slide.

Severity 3

H7 - No option to return to insights after sending an actionable step



Severity 3

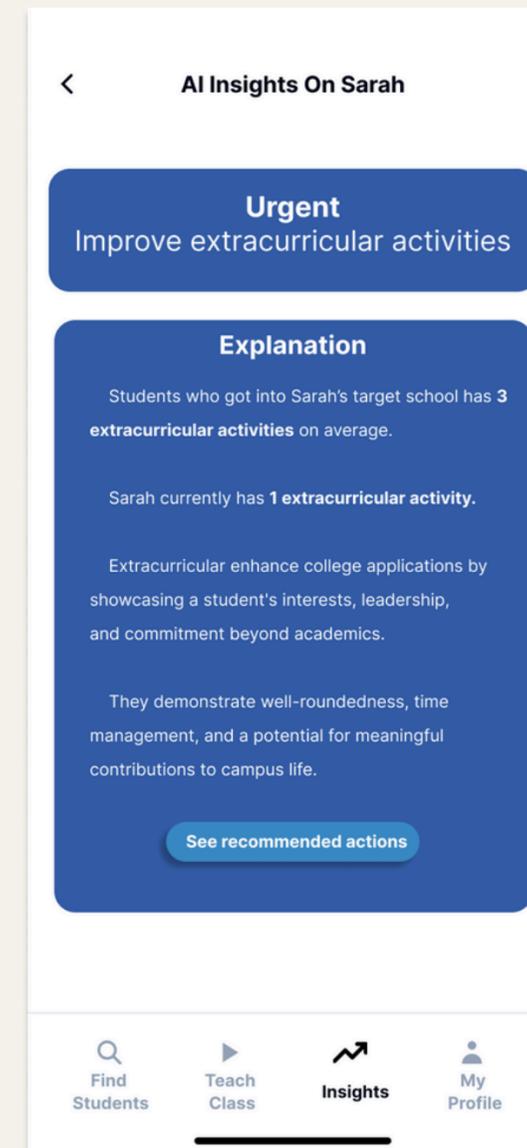
H8 - Insights page is too text-heavy

Rationale: The insights page is too filled with text, and both sections sharing the same background color makes it hard to differentiate them.

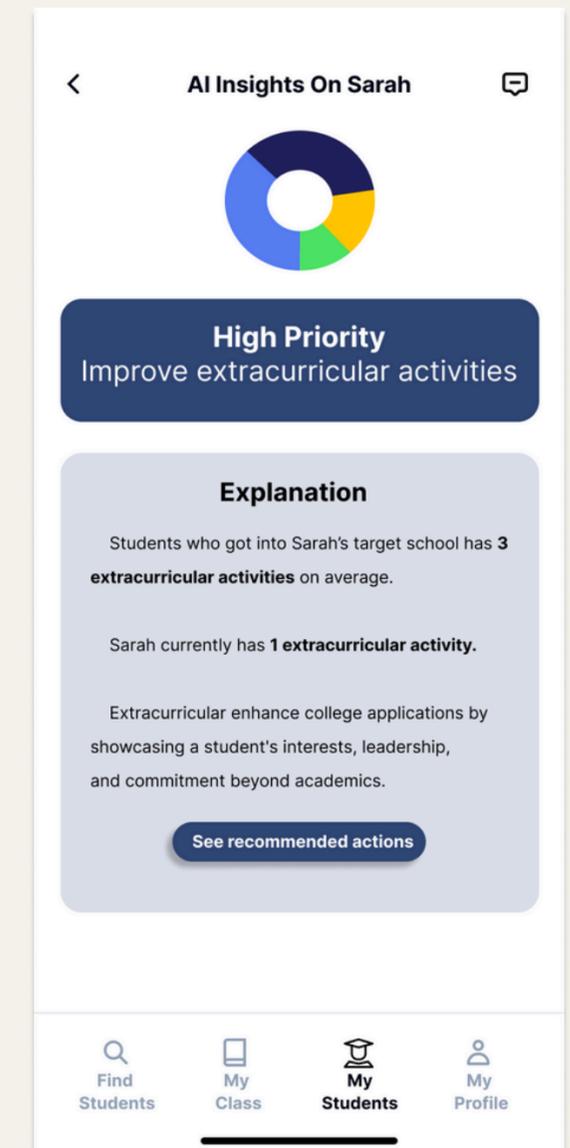
Fix: Break up text more with some images/data to support the insight visually, and use different colors to separate the insight with the explanation.

Progress towards usability goals: Improves intuitiveness as the contrast in colors (e.g. the navy of the first section) guides the user first read the insight section, then look at the explanation section, which is the logical flow.

Before



After



Severity 3

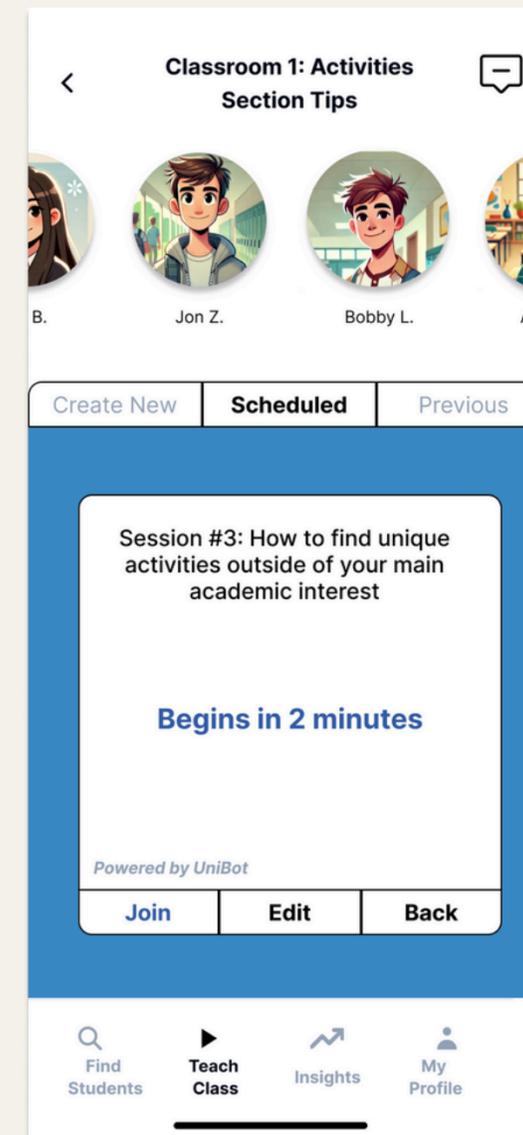
H8 - Clean and spacious design is better

Rationale: The layout of the medium task screen is too complicated, with too many options presented to the user at once.

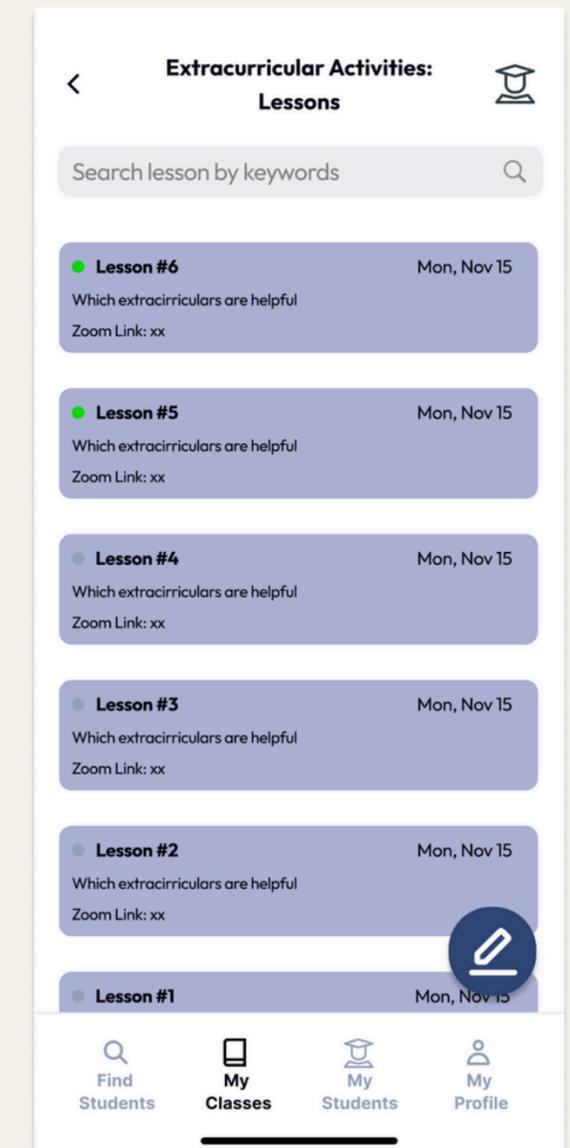
Fix: Make sessions a list format where the most recent sessions are at the top and the least recent sessions are at the bottom.

Progress towards usability goals: Improves efficiency as users do not have to navigate to different tabs to see past/upcoming sessions. This can be achieved by scrolling, and the search bar makes finding a specific session even easier.

Before



After



Severity 3

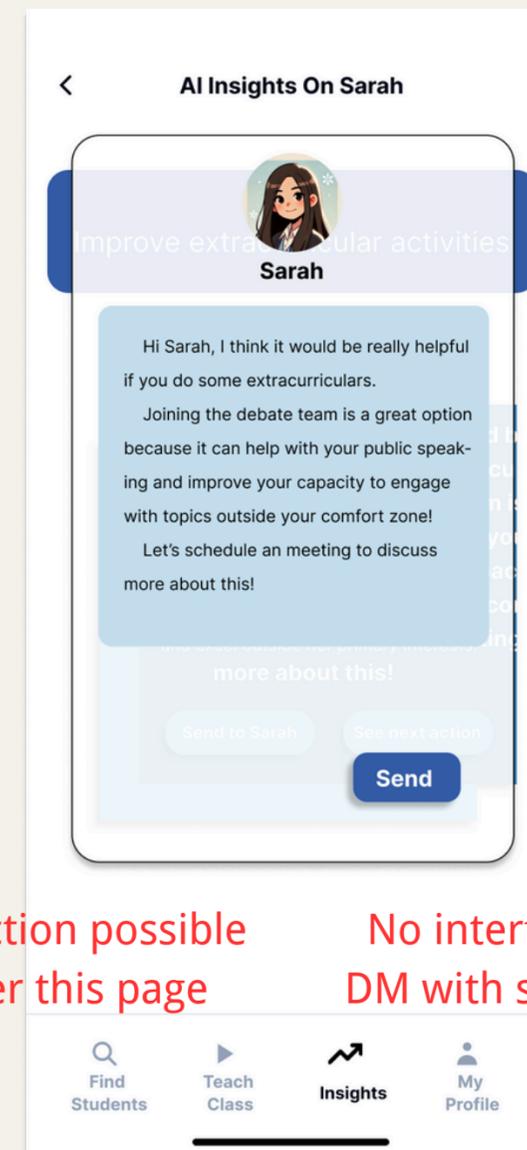
H12 - No way to build long-term relationships with students

Rationale: In the old UI, the only way for students to individually interact with the counselor is through AI-generated recommendations (outside of lesson settings).

Fix: Added message functionality where a counselor can chat with students 1-on-1 and can see the students' response to the insights.

Progress towards usability goals: This is more intuitive as counselors should be able to communicate with students outside of the lesson format.

Before



No action possible after this page

No interface for DM with students.

After

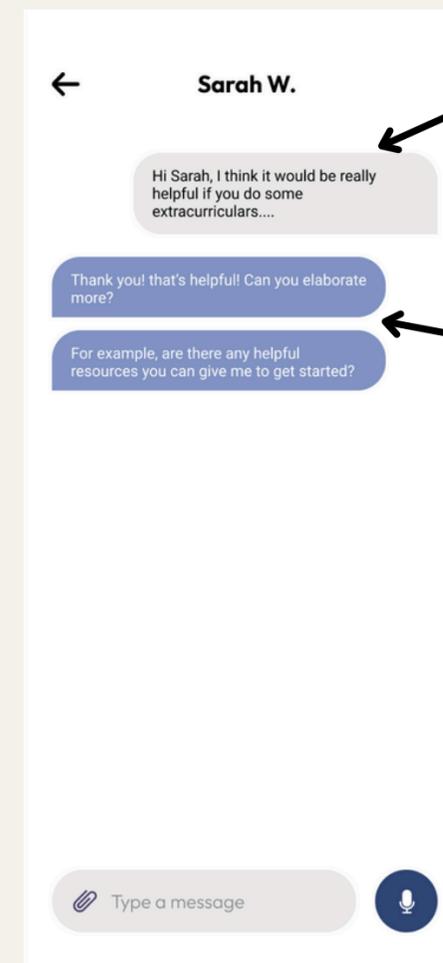
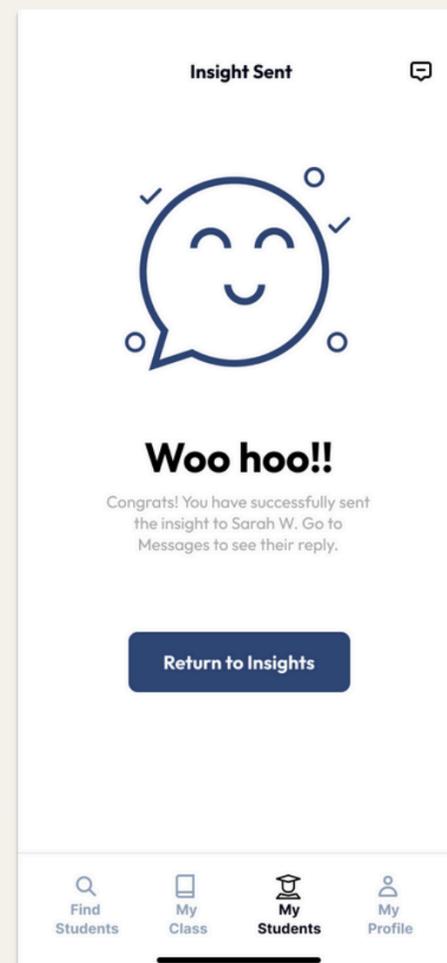
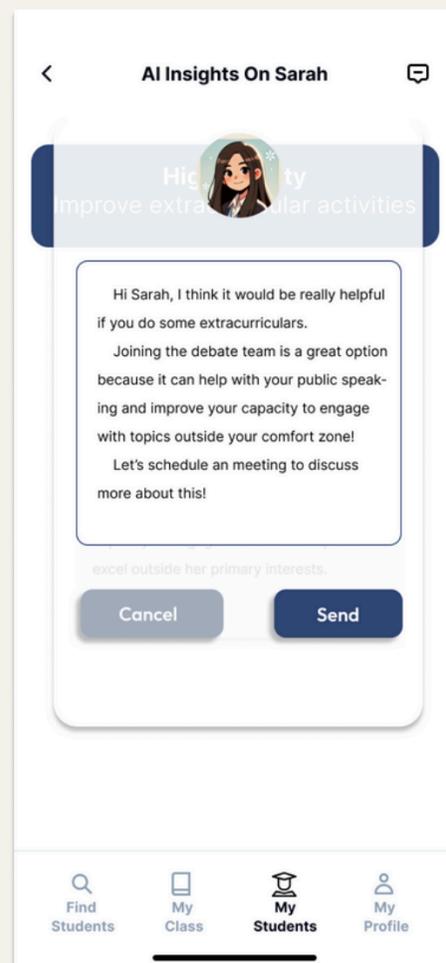
See next slide

Severity 3

H12 - No way to build long-term relationships with students

After

Access messages interface



Insights immediately sent to student

Students can respond to insight

Severity 2

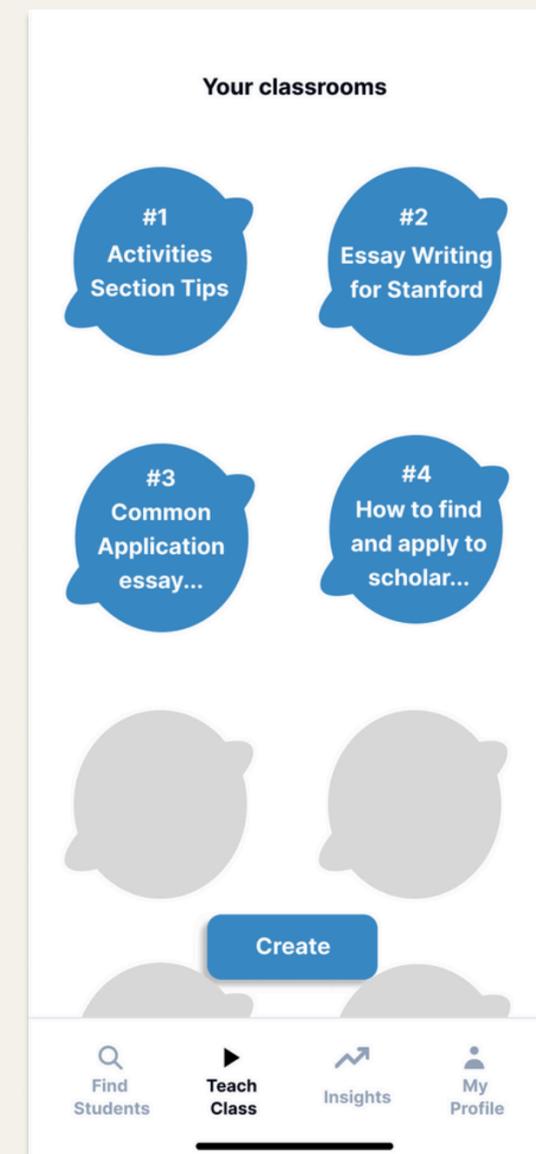
H8 - Font does not match theme of edtech app

Rationale: The font is very standard and does not hint at what field the app is in.

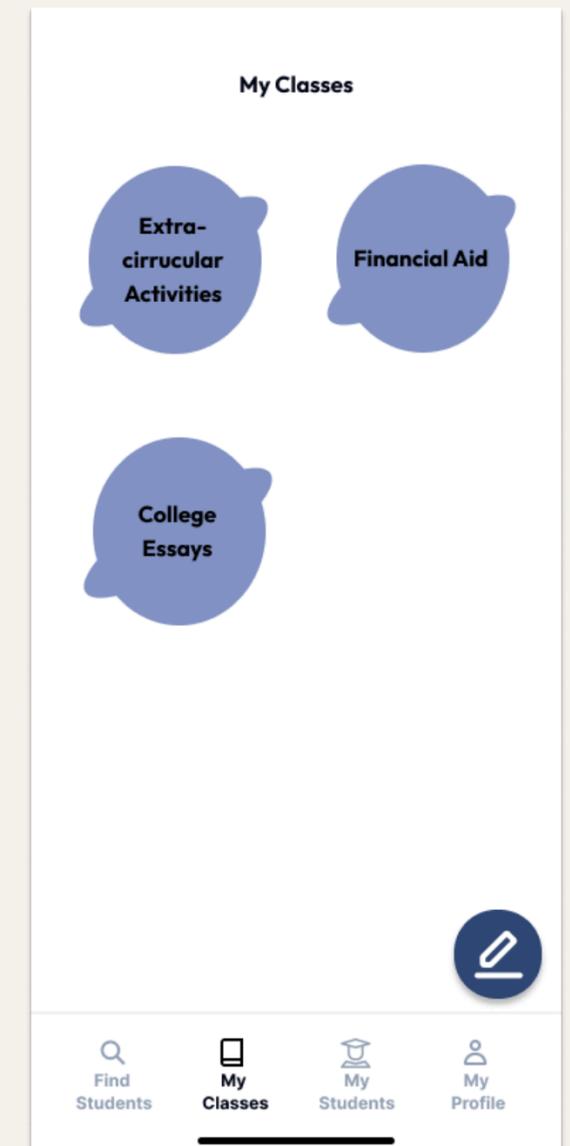
Fix: Change the font from the default to a more lively font (“Outfit”).

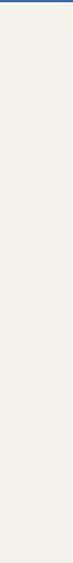
Progress towards usability goals: Improves overall user experience as it makes the app more enjoyable visually, but also improves the intuitiveness of the app’s interface.

Before



After





Prototype implementation

Tools we used & plan to use

We have used these tools so far:

1. React Native
2. Expo
3. Vscode
4. Figma

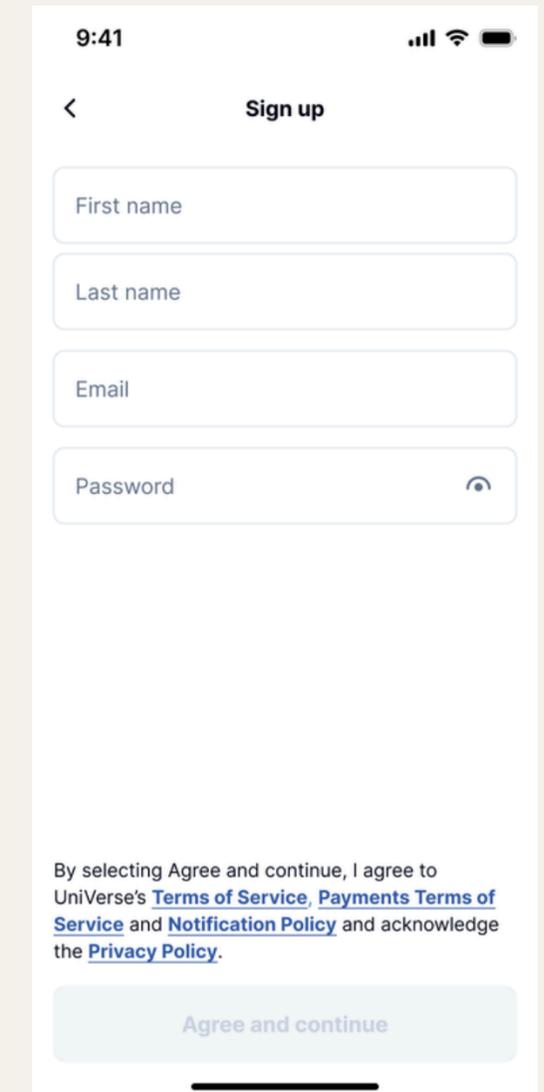
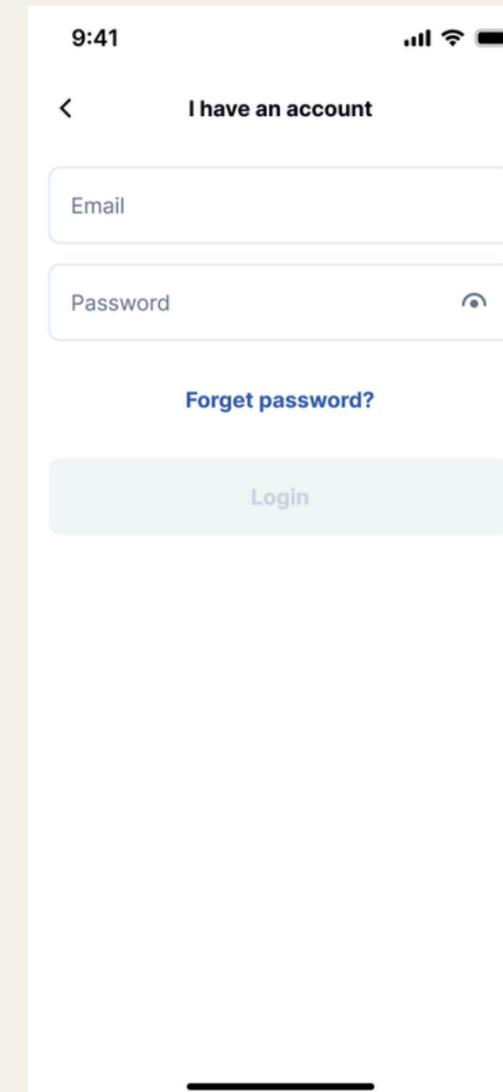
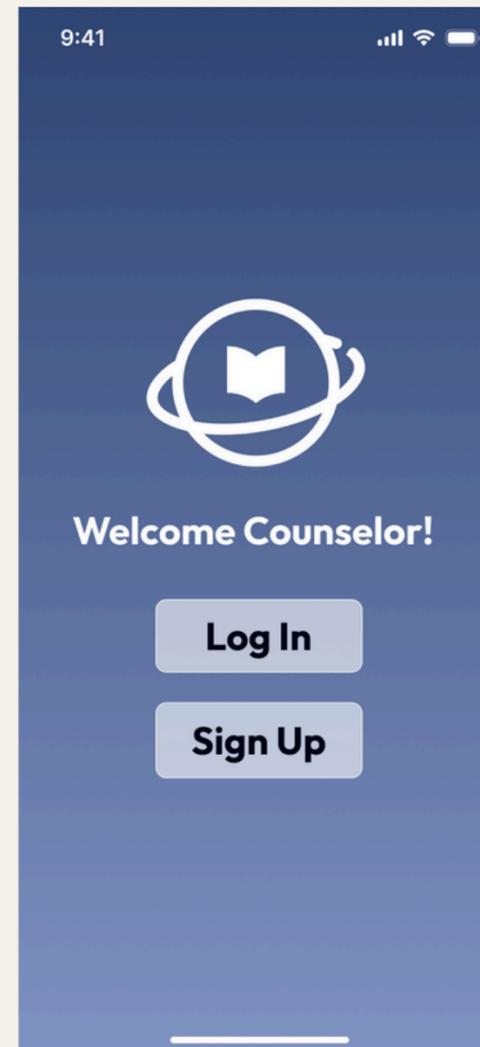
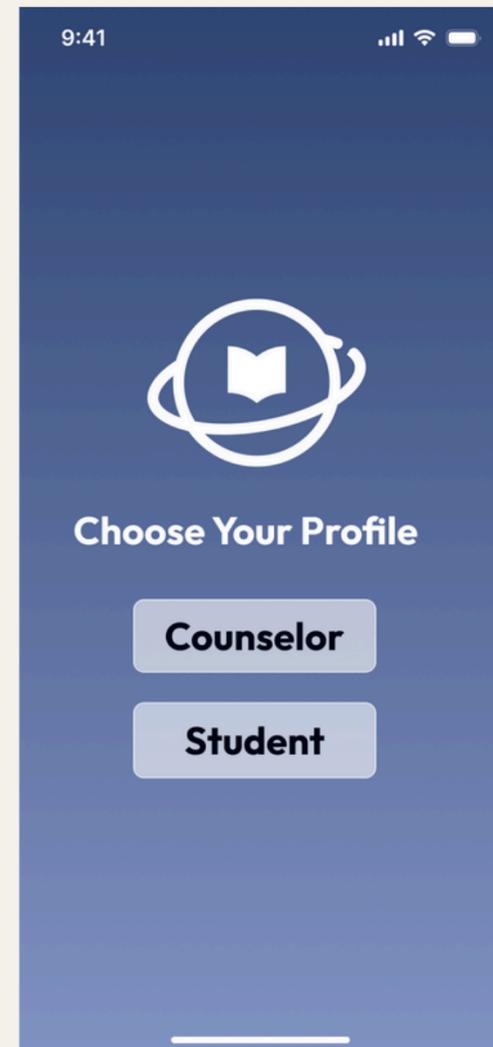
We plan to also use these tools going forward:

1. Supabase
2. Gemini

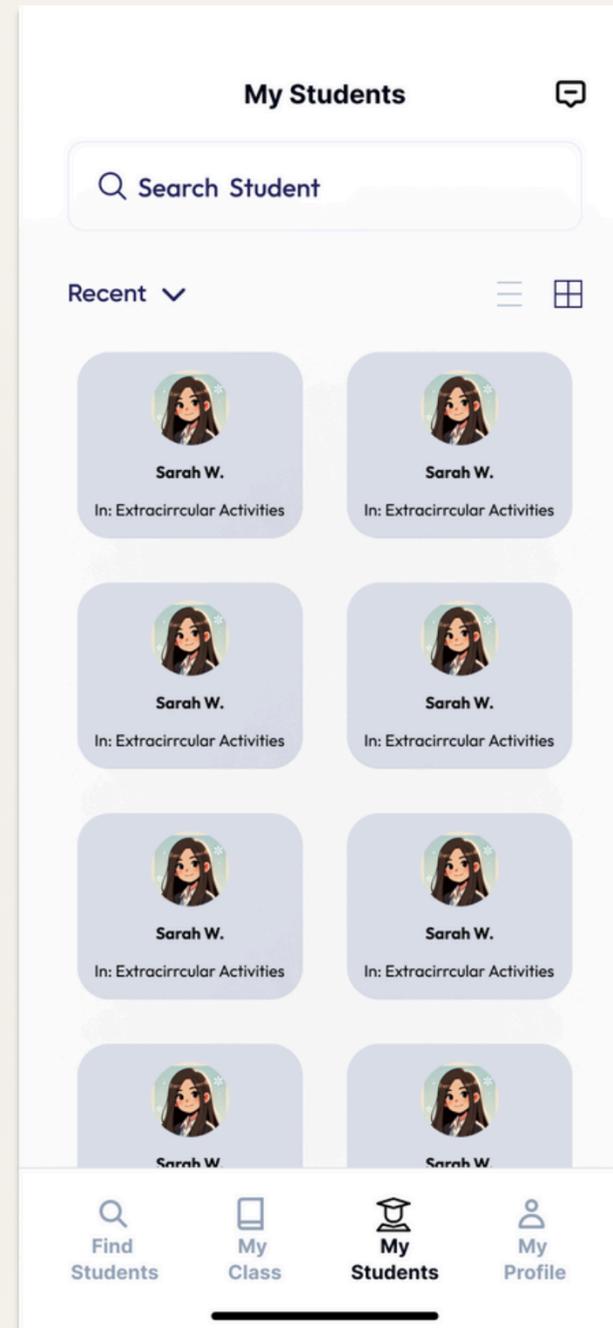
Features implemented so far

1. Login/Sign Up flow
 - a. User signs in as counselor
 - b. User can choose to login/sign up
2. Navbar
3. **Complex** task
 - a. My students page
 - b. Students Profile
 - c. AI insights on [student name]
 - i. View recommended actions
 - ii. Sent insight & action to student
 - iii. Alert of action being successful

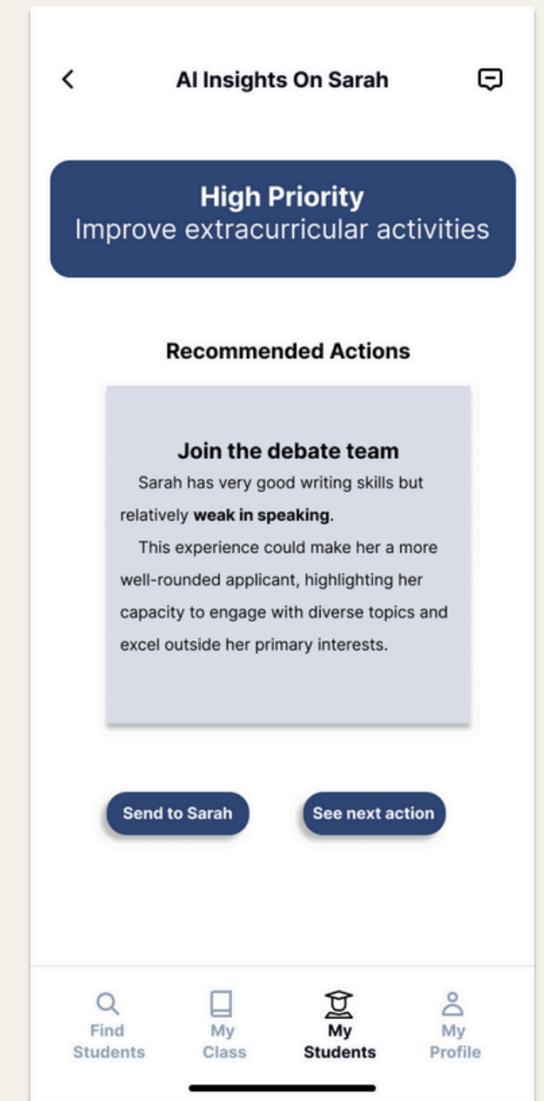
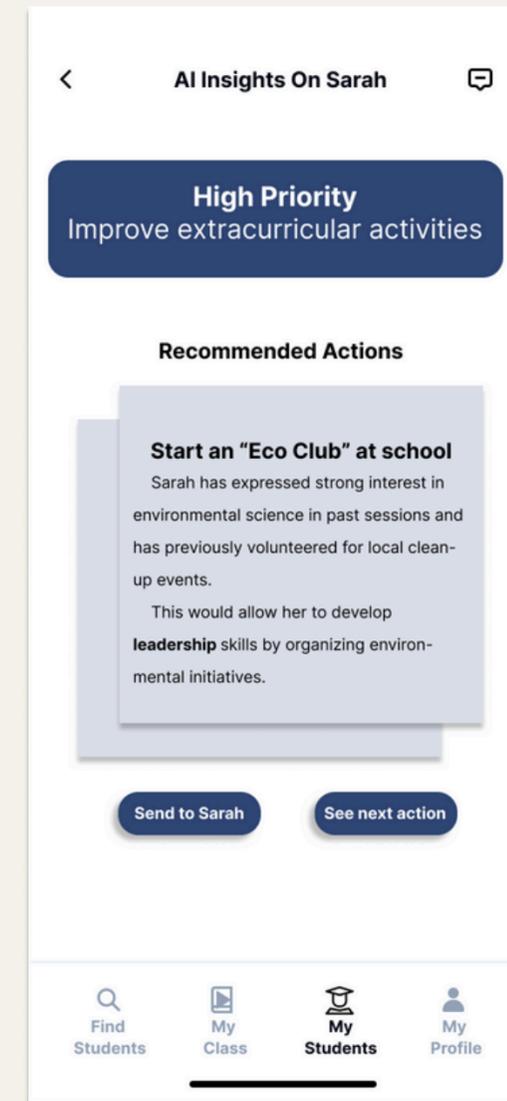
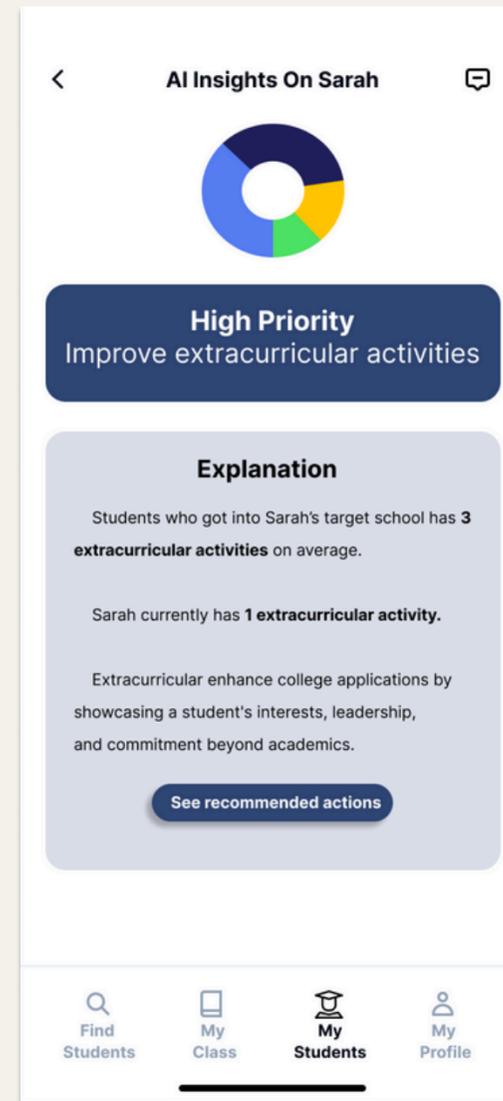
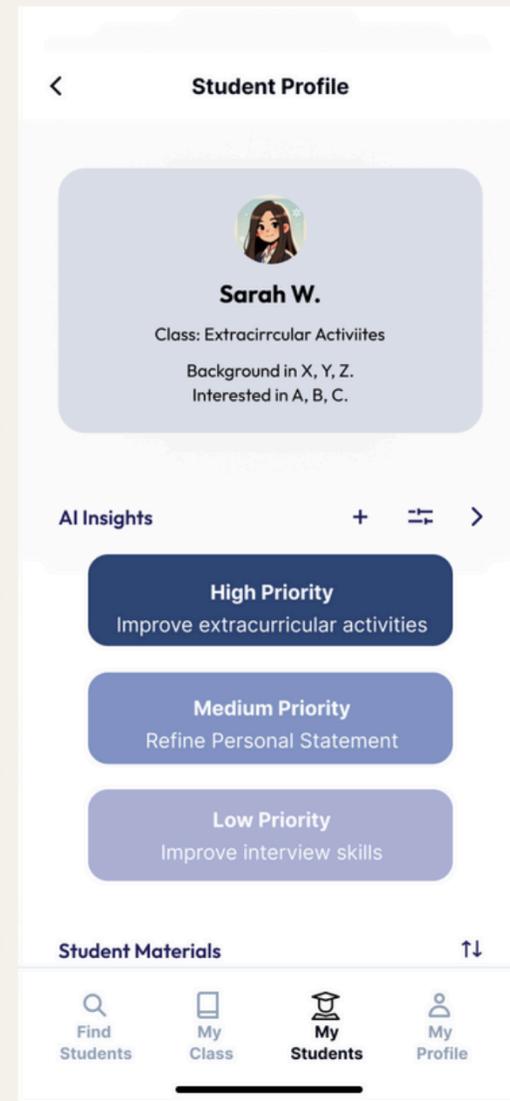
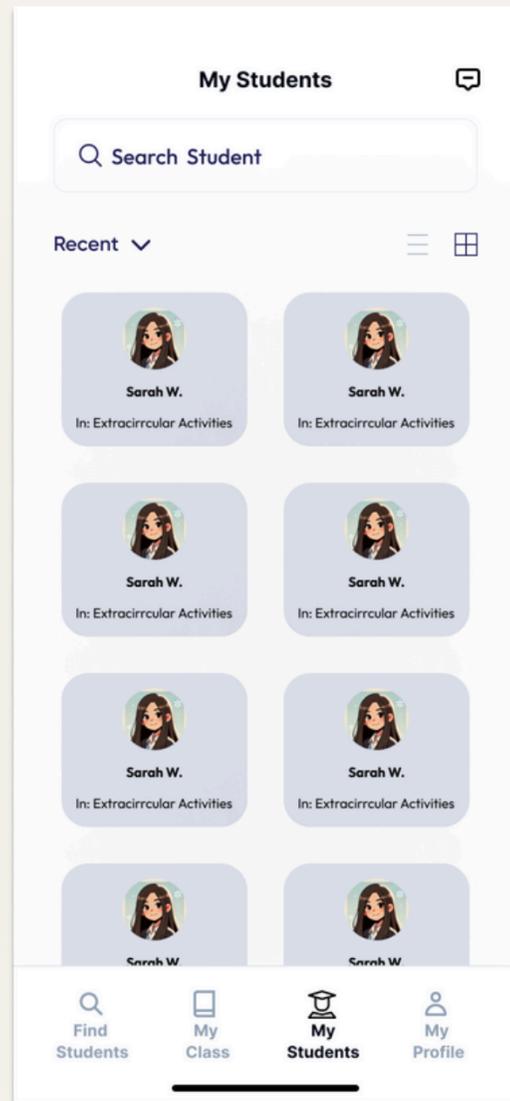
Features implemented - log in/sign up



Features implemented - navbar



Features implemented - complex task

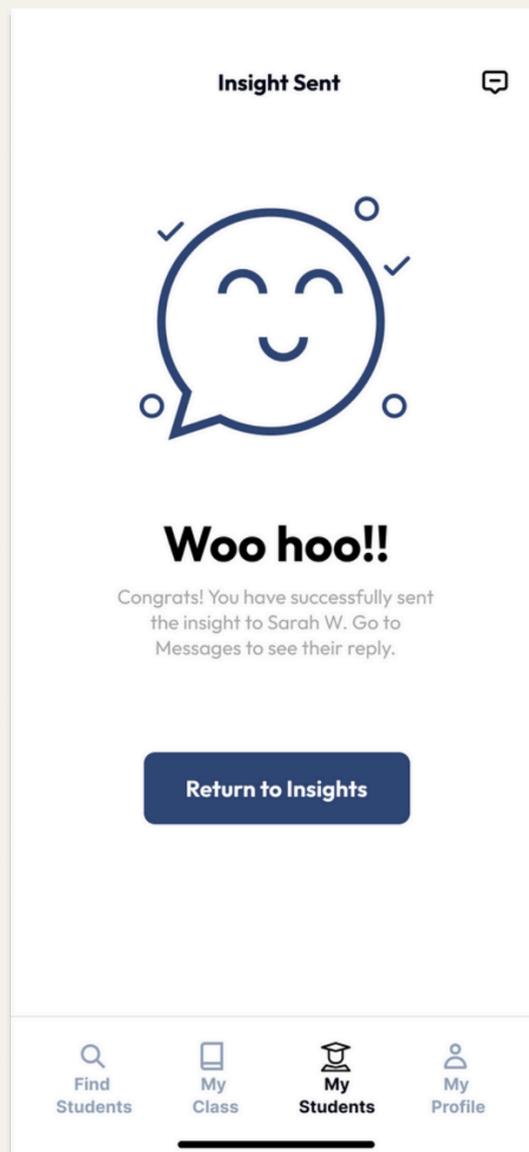


Features to be implemented

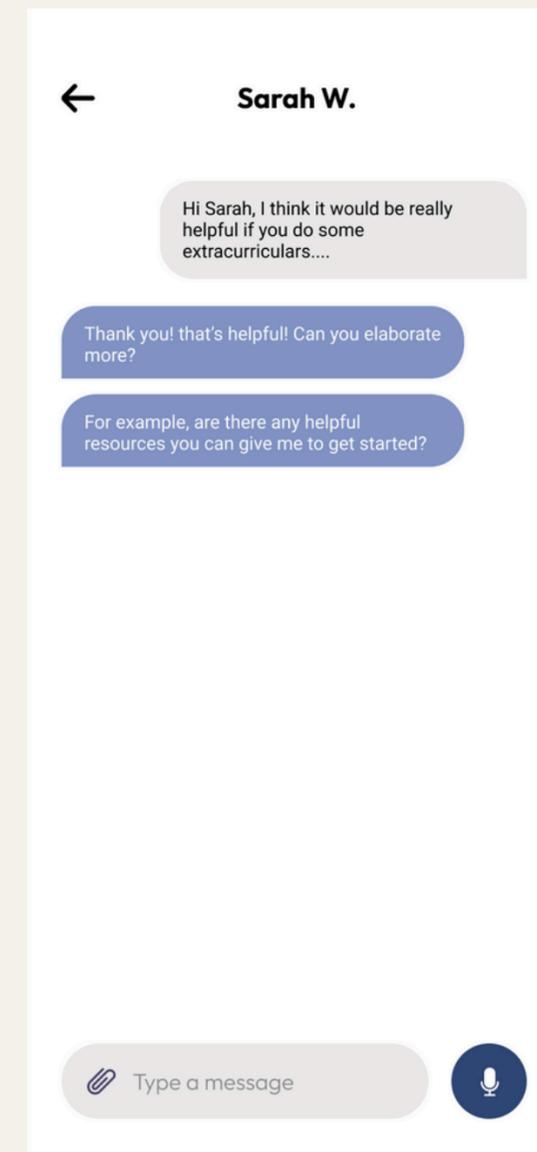
1. Log in/sign up flow user input logic
2. **Simple** task
3. **Medium** task
4. Finish off **complex** task
 - a. Notifications page instead of just having an alert
 - b. New chat interface (due to heuristic feedback)
 - c. *Optional: use Gemini in generating AI insights*
5. Profile page

Features to be implemented (Re: complex)

1. NOTIFICATION PAGE

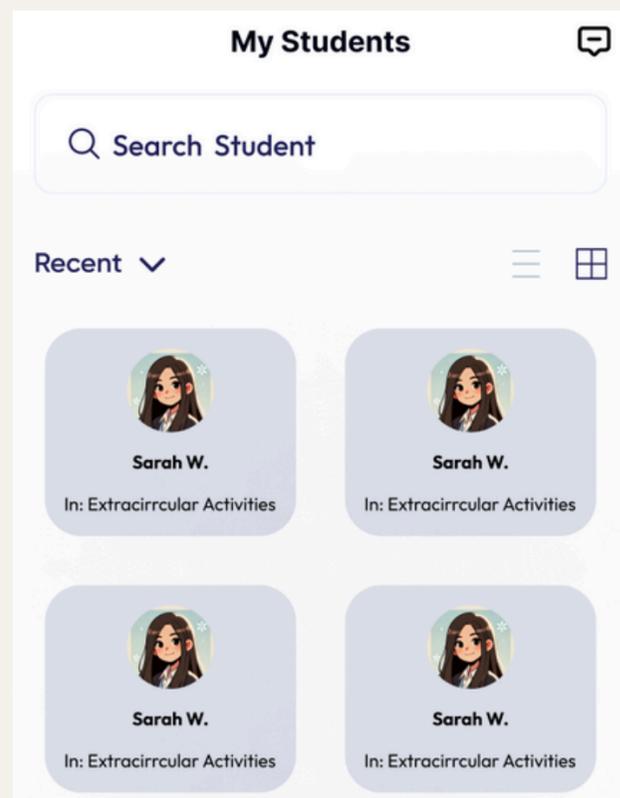


2. CHAT INTERFACE



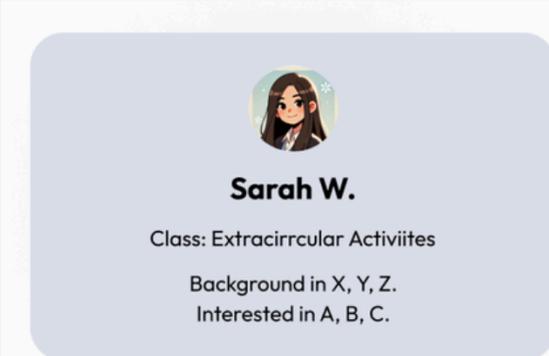
Wizard of Oz Features

- User input in log in/sign up flow is bypassed
- We showed that the counselor has a number of students to start with, so they can view AI insights for the selected student
 - In theory, the counselor can be a first-time user with no existing students



Hard Coded Items

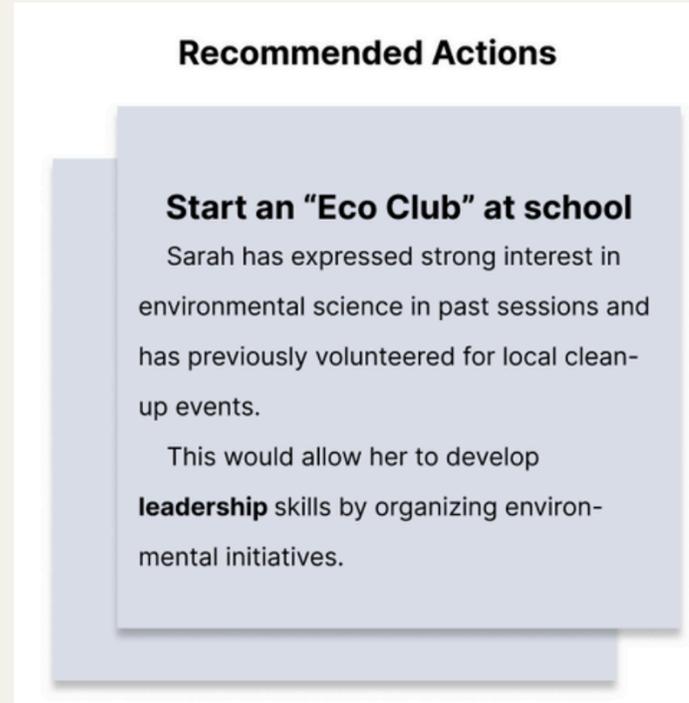
- We created students and their profiles so the counselor would have people to work with
- All the “AI” insights, recommended actions, and the message are written by us (the “counselor”) are pieces of content we wrote to demonstrate functionality.



Sarah W.
Class: Extracurricular Activities
Background in X, Y, Z.
Interested in A, B, C.

AI Insights + ≡ >

- High Priority**
Improve extracurricular activities
- Medium Priority**
Refine Personal Statement
- Low Priority**
Improve interview skills



Recommended Actions

Start an “Eco Club” at school
Sarah has expressed strong interest in environmental science in past sessions and has previously volunteered for local clean-up events.
This would allow her to develop **leadership** skills by organizing environmental initiatives.

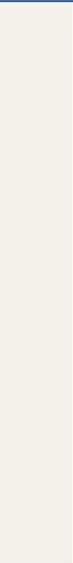
Questions

- What are some “must-haves” features in our profile page given the rest of our app?
- How should we demonstrate adding a student who just accepted the counselor’s request to a class? Where does it fit in to our current interface?
- Should we give counselors full control over modifying classes/lessons/students?

Plans to finish

Overall, we plan to each tackle a portion of the remaining features simultaneously and help each other as needed. We all plan on creating/sharing components to reuse. We had a hackathon earlier this week and found it helpful, so we plan to have hackathon(s) closer to the deadline to connect all flow together.

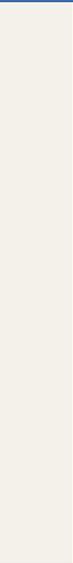
1. Finish Log in/sign up flow user input logic - **Eric**
2. **Simple** task - **Sally**
3. **Medium** task - **Steve**
4. Finish **complex** task - **Zijian**
5. Profile page - **Eric**



Demo!



LINK



Appendix

Additional product/UI changes

- In addition to revising our product/UI designs based on heuristic feedback, we also adjusted our UI based on feedback from TA/section
- During team discussions, we also found new ideas to incorporate that would make our UI more effective
- Some examples will be shown in the following slides

Feedback from TA/section

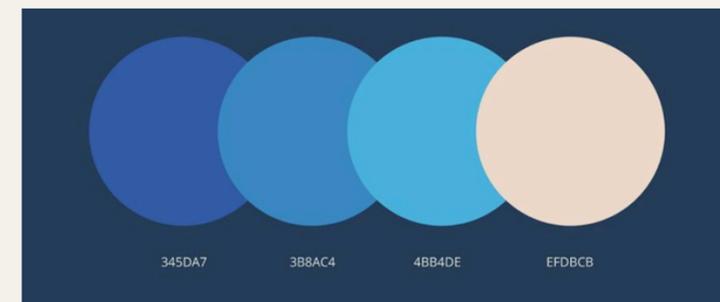
H8 - Colors do not match theme of edtech app that well

Rationale: Although the “blues” convey the seriousness of an education app, they might be too heavy for a teaching app whose values are “freedom” and “ease”

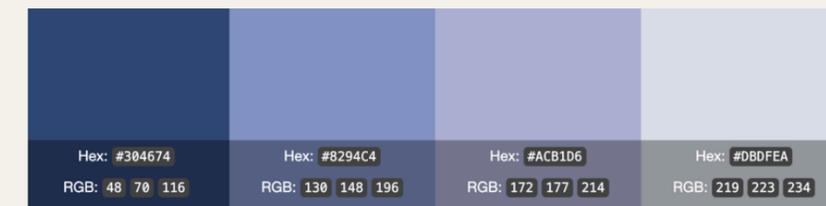
Fix: Change the color palette to something more fitting and more aesthetically pleasing.

Progress towards usability goals: Improves overall user experience as it makes the app more enjoyable visually, but also improves the intuitiveness of the app’s interface. Also, the old colors may have given more “ocean”, though we wanted to convey more “space” (uni-verse).

Before



After



Figma Prototype Link

Note: go to "prototype - updated" page

LINK



Website

LINK

Other changes

- Change 2nd tab name from “Teach Class” to “My Classes”
 - The former is too narrow - it might limit what the user thinks about the functionality of the tab & subsequent pages
 - Within “My Classes,” there are features to modify (add/delete) classes, view students within each class, and view lessons within each class & more

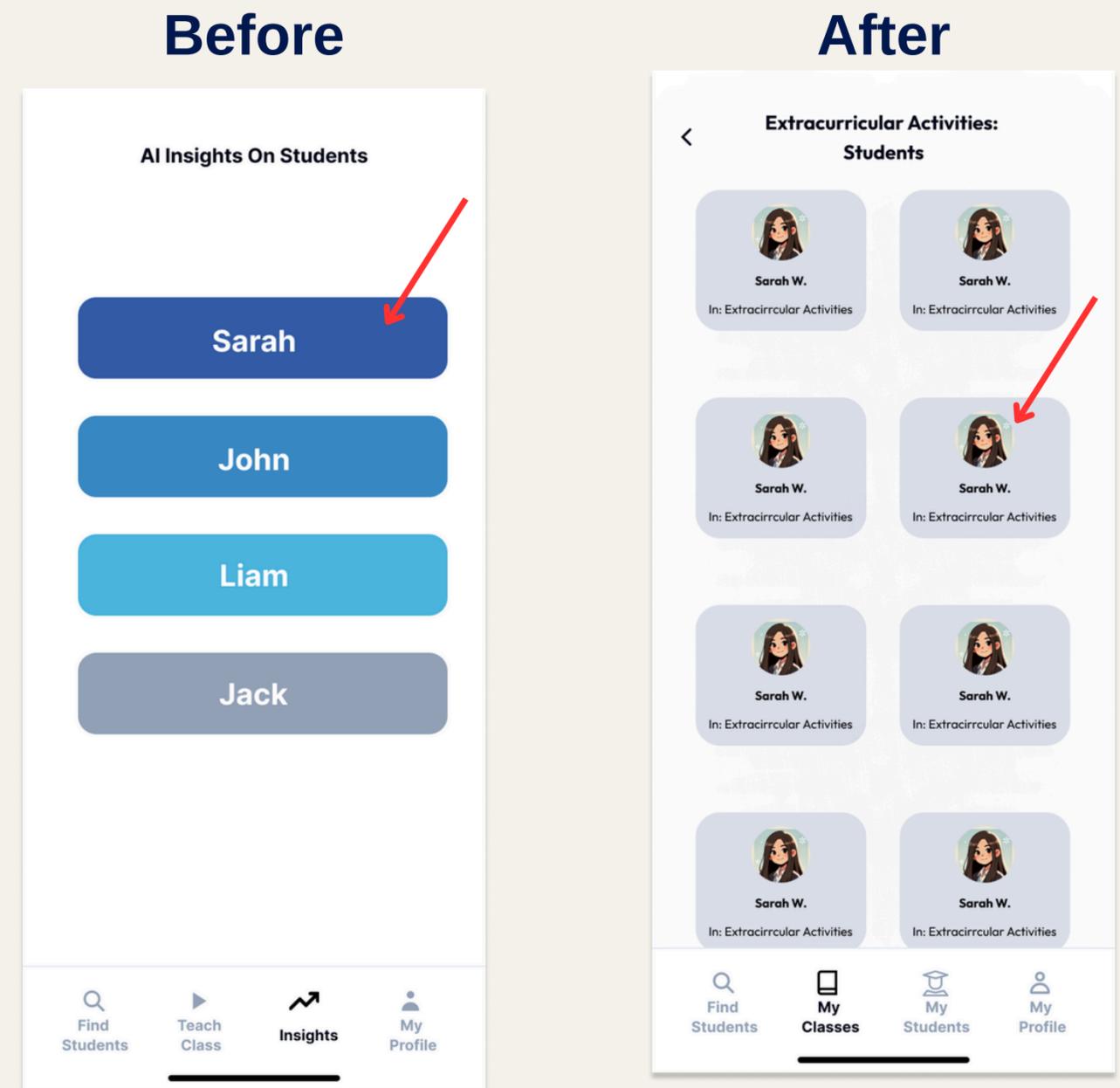
Severity 3

H5 - Students are only listed by their first name with no other identifier

Rationale: Under the insights tab, students are listed by their first name with no other identifier, such as the first letter of a last name or a profile picture. This might cause errors when multiple students share the same first name.

Fix: Add a profile picture next to the name and the first letter of their last name.

Progress towards usability goals: Improves efficiency as counselors can quickly identify their students' identify without having to search more more information when just being given their first name.



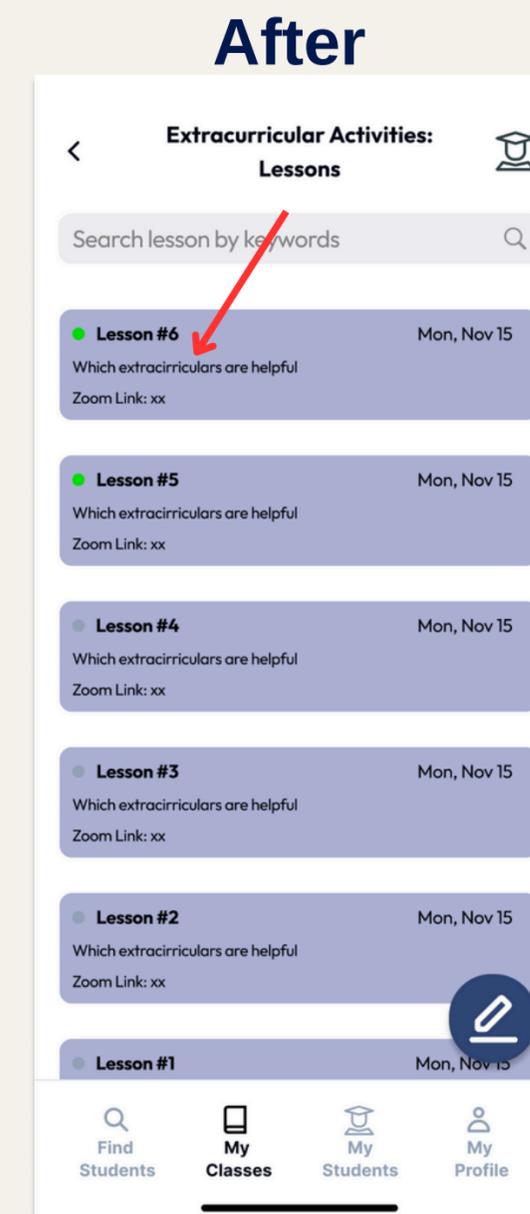
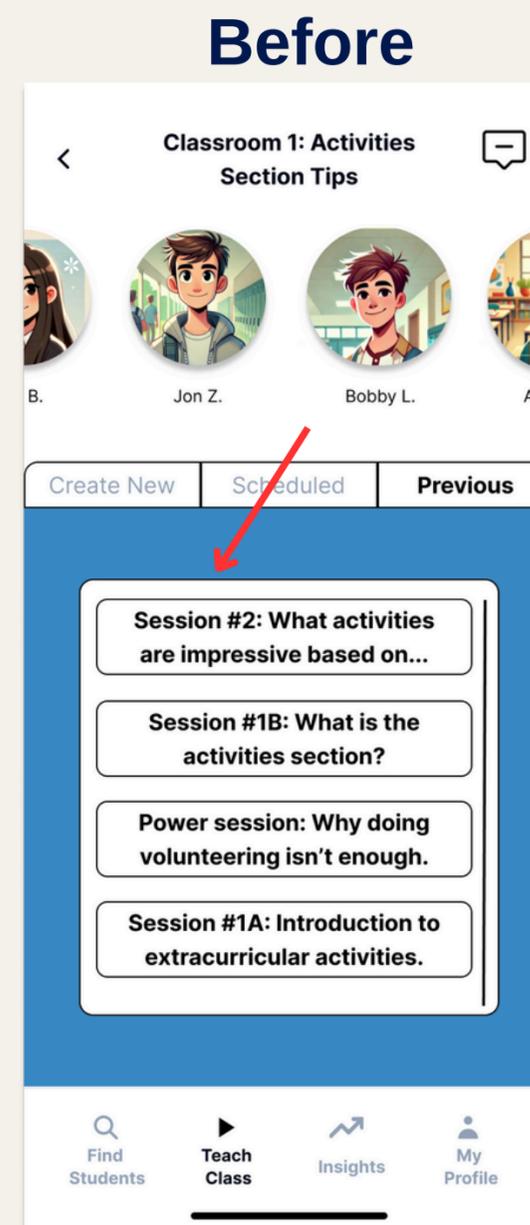
Severity 3

H4 - Naming/categorization of "sessions" is confusing

Rationale: There seems to be inconsistencies with how sessions are named. The evaluators weren't sure why some sessions were numbered e.g. "Session #2", and why some had a specific name e.g. "Power session"

Fix: Remove session identifiers and use a simple format like "Lesson 1", "Lesson 2," etc.

Progress towards usability goals: Improves intuitiveness as the contrast in colors (e.g. the navy of the first section) guides the user first read the insight section, then look at the explanation section, which is the logical flow.



Severity 3

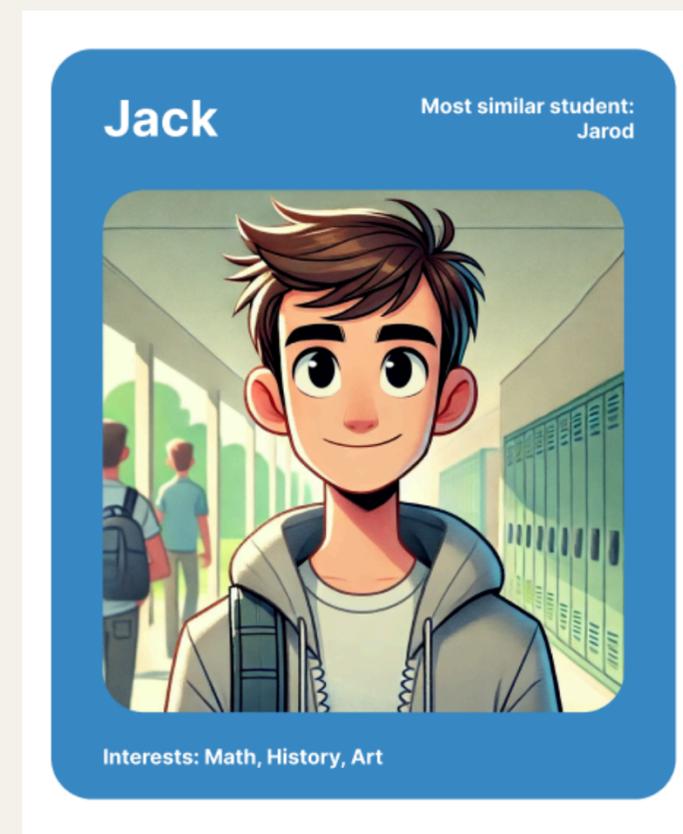
H8/12 - Profile photo too big on the "find students" tab/information section to small

Rationale: The most important part of the counselor's selection process is not the image, but rather, the information, especially given the app's niche focus on allowing counselors to pick based on background and interest fit.

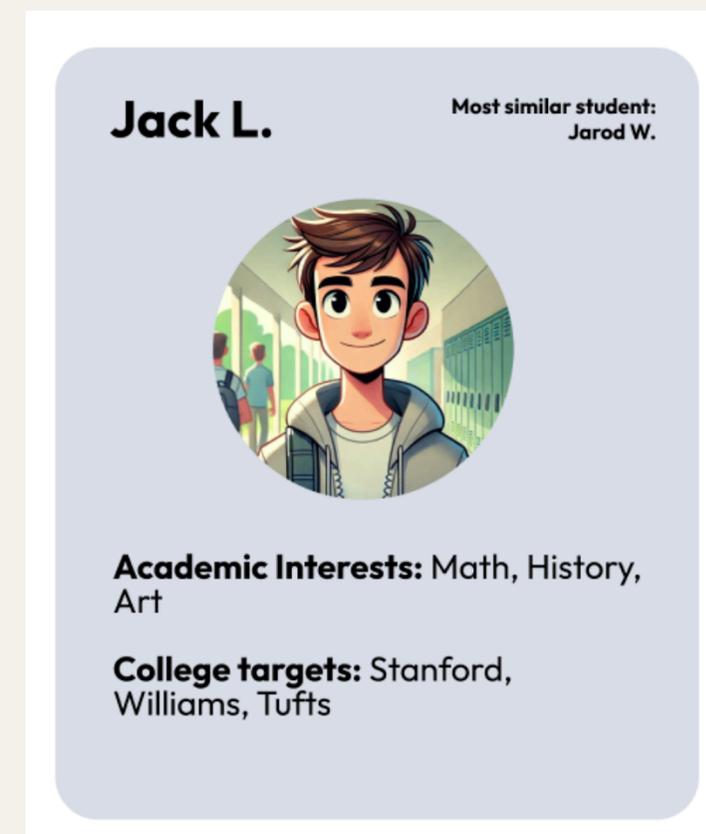
Fix: Reduce the size of the image, and put more emphasize on the student's background.

Progress towards usability goals: Conveys the app's value proposition more strongly. Improves efficiency as it might make the process of choosing students with similar interests more smoothly for the counselor.

Before



After



Severity 3

H8 - Unnecessary description field when creating a new class

Rationale: The description of the class is redundant as the name already reveals the theme/nature of the class and no where else in the app relates back to this.

Fix: Remove the field to enter a description when creating a new class.

Progress towards usability goals: Improves efficiency as it is not a necessary input field, so removing it allows the counselor to create a new class more quickly.

Before

The screenshot shows a mobile app interface for creating a new classroom. At the top, there is a back arrow and the title "Create new classroom". Below the title is a large, light gray circular placeholder for a profile picture. Underneath is a blue-bordered box titled "New classroom information :". This box contains three input fields: "Theme:" (a single-line text field), "Students:" (a single-line text field), and "Description:" (a multi-line text area). At the bottom of this box is a blue "Create" button. The bottom navigation bar has four items: "Find Students" (magnifying glass icon), "Teach Class" (play button icon), "Insights" (line graph icon), and "My Profile" (person icon).

After

The screenshot shows the "My Classes" screen in the app. At the top, there is a back arrow and the title "My Classes". Below the title are two class cards. The first card is titled "Extra-cirrucular Activities" and has a red "Delete" button below it. The second card is titled "Financial Aid" and also has a red "Delete" button below it. Below these cards is a white box titled "Create New Class?". It contains a "Class Title: xxx" label and two buttons: a gray "Cancel" button and a dark blue "Create" button. The bottom navigation bar has four items: "Find Students" (magnifying glass icon), "My Classes" (book icon), "My Students" (graduation cap icon), and "My Profile" (person icon).

Violations we did not address & why

1. H2 - Displaying images of students on the “Find” tab could lead to potential biases or discrimination from the counselor

- a. In theory, when a student creates a profile, they have the choice to use avatar images instead of their real photos
- b. But since our app focuses on the counselor’s POV (alternative login as student exists in theory, but not for the purpose of this class)
- c. All our existing student profiles

2. Violations regarding the video-chatting interface (medium task)

- a. We have decided to remove the in-app video-chatting functionality
- b. This was both because of considerations for the actual implementation, which would be tricky, but also we thought that Zoom is already an industry-standard that students and counselors might be more familiar/comfortable with using already, so actually using an external provider like Zoom could contribute to our “efficiency” usability goal