# Prototype

# Tools

**Figma:** Figma is a graphic design application that allows us to embed links in the design to simulate an iPhone app.

**Iconify:** Gave us access to a library of simple, professionally designed icons within the Figma interface.

**Adobe Color:** Allowed us to explore images, color associations, and different standard distributions of color (like split complimentary). We ultimately decided on a single-color interface to reduce visual clutter.

# Operating Instructions

**General Notes**

Figma is designed to emulate an iPhone interface, but it can't do it perfectly. That being said, our prototype works best when the device is selected as an iPhone 14 Pro Max. This specific iPhone's measurements best allow our prototype's entire screens to be visible and completely functional.

Since Figma is just an emulator, you can't type anything in our app. In addition, almost everything is activated either by a hover or a button press. There is only one feature activated by a dragging motion, which is opening and closing the sidebar menu from the home page. There are no options to scroll or gesture as you might be used to on a phone. Further, there may be a few things that do not update based on your input that you would eventually expect to (such as the number of people in a question not going up when you join).

Moreover, only some buttons that will ultimately have functionality currently do due to time and platform constraints. The omitted buttons are nonessential to our tasks or are additional options for the same basic function (such as only one user-submitted question presently being joinable). If you cannot locate a working button, pressing the screen in any non-linked area will highlight in blue any buttons you can press.

There are three main areas of our app: the question submission process, the queue screen, and the huddle screen.

**Question Submission**
To submit a question for office hours, click the "Join" button for CS147. You will then be prompted to type a question- you can simply click to fill in the box and press "Next.". Alternatively, you can click "View queue" to skip to viewing questions submitted by other students.

Continuing through the question submission process, you will be prompted with questions similar to your own to join, in case you have the same question as someone else. This will, in the final version, function as a search. For now, you can press "Submit my question" to add your question to the queue page.

**Queue Screen**
This is the screen of the app that we expect the greatest amount of time to be spent on. As a result, feedback on the usability of this page would be especially helpful.

From here, you can return home, see information about office hours, view and join questions, add another question, and our notification bell returns. You can click the notification bell to see recent activity in your questions and questions you've joined.

You can also join the third question, "How do I upload files to AFS directory?" to view the final major section of our app: the huddle screen.

**Huddle Screen**
The huddle screen has the most limited functionality at present since it is so heavily orientated around user-generated content and there is no easy way to simulate chatting in Figma. However, the camera and join audio buttons are functional to explore. This will ultimately be a core feature, so feedback on how approachable it seems would be helpful.

# Limitations, Wizard of Oz, and Hard-Coded Items

**Limitations**
As mentioned in the operating instructions above, there are a number of buttons that are not clickable due to the high number of task flow permutations since they would create (screens for every set of potential and course questions you could join, etc).

In addition, not every input produces the responsive interface changes the app will ultimately have, due to the same constraint. You may notice, for example, that the number of people who have joined the question does not increase when you join.

Furthermore, since our prototype works optimally when set to an iPhone 14 Pro Max, it cannot replicate all device-specific features accurately.

**Wizard of Oz**

Our app depends heavily on typed, audio, and camera user input. These are not supported by Figma, so we've employed a Wizard of Oz approach to simulate these features.

**Hard-coded Items**
Our concept heavily depends on content created by your classmates. All of these questions and chat messages are hard-coded, to simulate the app experience when your classmates are also using it.

By implementing hard-coded items, we can test our prototype in realistic scenarios, even within the constraints of our design and prototyping tools. While they are not user-generated, they provide a foundation for testing the future app's functionality, ensuring it can handle the content and interactions of real users once the app is developed.