



*Hybrid Collaboration ~ CA: Yuyu Lin
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Prototype Link

[Link to Prototype](#)

Operation Instructions

We used Figma because it allowed us to collaboratively design and prototype screens with version history. Furthermore, the grid feature enabled precise positioning in addition to scrolling features. We used an iPad Mini 8.3 as a device size because tablets offered larger screen real estate that is more conducive for video conferencing screens.

In order to use this prototype, click the link above. After loading, make sure the top navigation bar of Figma is visible by moving your cursor around. Open the sidebar by clicking the sidebar icon in the top left corner of the screen. You will see two flows: 1) Start App and 2) How to Play. Although Start App contains most of the functionality of the prototype, begin with How to Play to learn more about the application. The How to Play is completed when you can no longer click the “Next” button.

After the tutorial is finished, you may begin the “Start App” flow. The following gestures are available in this prototype:

- Tapping
 - Dropdown screens
 - Toggling certain buttons’ two different states (e.g. highlighted or not)
- Swiping (scrollable elements)

To know what you are able to interact with, clicking anywhere on the screen (that’s not interactable itself like most whitespace) will prompt blue boxed regions around certain parts of the screen.

Enjoy!

Limitations

Although Figma is a powerful prototyping tool, the prototype still has many limitations, including a lack of dynamic content and user interactions/gestures.

We gleaned interesting insights from our Lo-Fi prototype tests, but we could not resolve one key issue because Figma can’t support a particular swiping feature. Some testers were

confused on how to select through avatars, and they revealed that they would've preferred to swipe through the available options. Although Figma offers swiping scrollable content, it can't scroll to certain parts of the screen, so it wouldn't stop at a specific avatar. Because of this, we had to reuse the same logic from the Lo-Fi by clicking on adjacent avatars to choose. However, the smart animation slides the avatars as if it was scrolling.

One issue that led to many of the hard-coded items is the absence of functional text fields. The user wasn't able to input their username, age, or any room details. Likewise, Figma doesn't allow embedding video/audio options so it led to another hard-coding implementation of static images in shows and games.

Wizard of Oz

Our prototype relies on Wizard of Oz for three main interactions: 1) video conferencing, 2) tv shows/games, and 3) map based on location. When the user enters the room, the tester only sees 4 static images of characters. In the actual application, users would be able to communicate and interact with each other through their avatars. Furthermore, we couldn't embed videos or games into the prototype, so this is also simulated with a static image of a popular Netflix TV show called Stranger Things and a common multiplayer video game called Jackbox. Ideally, these would be replaced by any game/show available in the library.

In the create a room flow, the user is allowed to define a region to search for other players based on their location. To represent this, we have a fake map with a bounding box overlaid on top. This has draggable icons on the corners to demonstrate that you can change the region on the map.

Hard-coded Items

We can't implement actual video conferencing and embedding other media, so we hard-coded several parts to represent multiple users and shows/games.

To simulate the feeling of other people in the rooms, we created four people representing the current tester and three other users. After avatar selection, the same four avatars are always in the room regardless of which avatar you actually chose. The messages in chat are also pre-written and correspond to the four users in the room. Likewise, in the create a room flow, we hard-coded the maximum number of buds (users) to 4 people.

In the join a room flow, the user can select a range of rooms, but we hard-coded the topic of each room to different episodes of Stranger Things. Furthermore, the show screen corresponds only to Stranger Things, and the game screen corresponds to Jackbox.