

Current design ideas (things will be deleted/added as project progresses)

Affordance & Signifiers:

- Telephone icon to clue the user that this will initialize the calling function
- Back arrow for user to go back to the previous screen
- "Emergency" written in multiple languages to let the user know they are calling emergency services
- Circle with six dots to represent num-pad to dial number
- Finger pointing at objects signifying that the user should click/interact with that object
- Numbered steps and total steps so user know how much they have completed

Metaphor:

- Speaker icon for audio on/off
- Telephone icon to call/hang-up
- Rotating incomplete circle to represent loading

Constraints:

- Cannot move on to the next screen without completing the activity on the current screen
- Have to dial 9-1-1 in the correct sequence to call operator
- Cannot call any other number
- Must be on Wi-Fi
- Only the operator can hang up
- Logical constraint on the natural mappings for button presses on the keypad. Each button clicked/tapped logically corresponds to dialing the number on the button
- Semantic constraint of a kid-first design. The kids should be comfortable interacting with the application without being overwhelmed by the overall experience. The content should be understandable given their cognitive skills(e.g., attention span, critical thinking)
- Cultural constraint of a more traditional North American approach to fire safety. Fire safety might not be the same for the kids if they grew up in another country and were brought here(e.g., second generation immigrants)

Proximity:

- The keys on the num-pad have strong proximity to each other so the user understand they are of their own function

Symmetry & Order:

- A simple triangle on top of a square are easily identifiable as a shape of a simple house