

Discoverability:

- A tutorial to guide the children on how to navigate the User Interface will be played when the app is launched
- A dog graphic and a slide down status message will show the current state of the 9-1-1 call.

Feedback:

- Dialogue box of a dog talking about how to dial 9-1-1 correctly when the user has dialed 9-1-1 incorrectly.
- Cheering audio will play when a correct button is pushed accompanied with a streamer animation.
- A “wrong” audio will play when an incorrect button is pushed.
- A slide down status message will update the user.

Conceptual models:

- A dalmation character is used to guide the user since the dog is tied with firefighters and fire safety.
- A bar filling up to represent loading.
- Message icons to represent a quiz.
- Telephone icon to call.
- Telephone buttons are rectangular to represent classic telephone buttons from a landline.

Affordances:*Buttons*

- Drop Shadows on buttons to signify clickability.
- Buttons have rounded off edges to separate from the rest of the interface.

Graphics

- Finger pointing at objects signifying where the user is suggested to interact with.
- Speech bubble next to the dog mascot to help provide subtle clues on how users can interact with the interface.

Signifiers:

- Text labels on buttons to clarify what certain affordances do.
- Easy to understand icons are used to indicate features and functions.
- Touch animation will be used around ui elements as a signifier when the user should interact with a ui element.

Mapping:

- Natural mapping of telephone keypad is used when simulating a 9-1-1 phone call.
- Information is spatially grouped together to distinguish from interactable objects and tips.

Constraints:

- To break the task down of calling 9-1-1 helpful icons are displayed to focus on each phase of the call.
 - The user is only allowed to make a phone call when the correct sequence of buttons are pressed.
 - The user can only proceed when a correct button is pressed.
 - Users can not call any other number.
 - Only operator can hang up
- Cultural constraint of a more traditional north american approach to fire safety. The emergency phone number is 9-1-1 to accommodate with North american society.
- Semantic Constraint: All important functions are on geometric shapes or accompanied by a graphic to visually signify interactable objects in the interface.