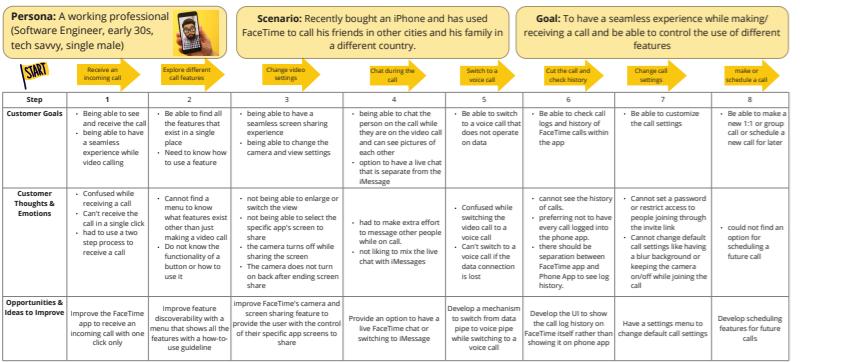


# **Assignment #4: Speed Dating & Low Fi Prototyping**

**Utkarsha Nerkar  
Sanaz Saadatifar**

## **A. Speed Dating**

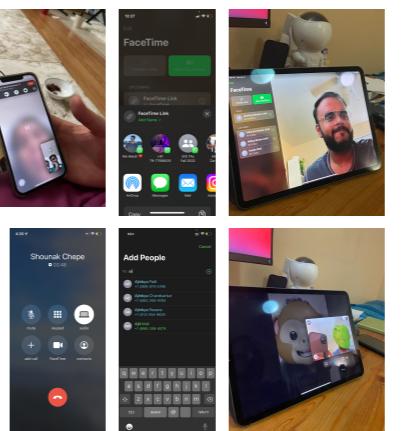
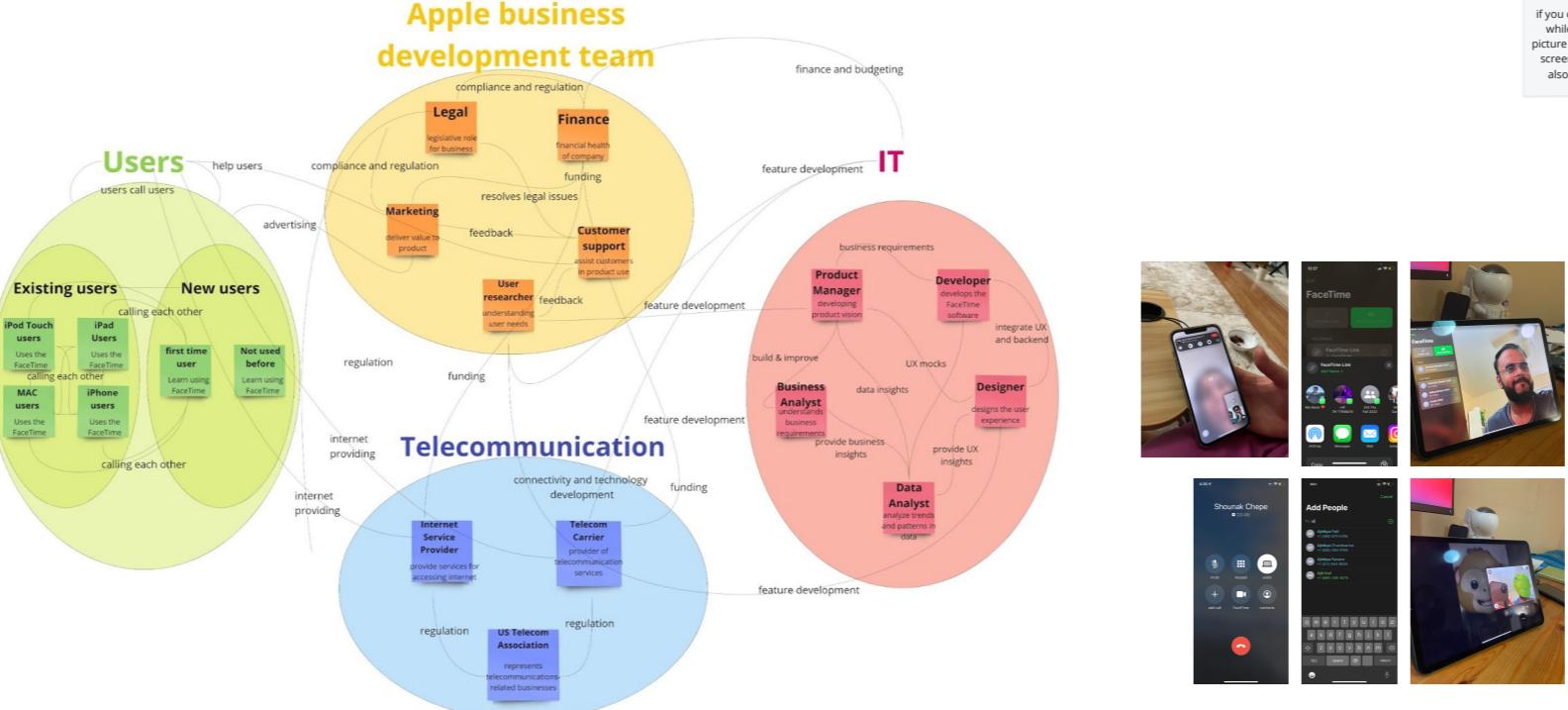
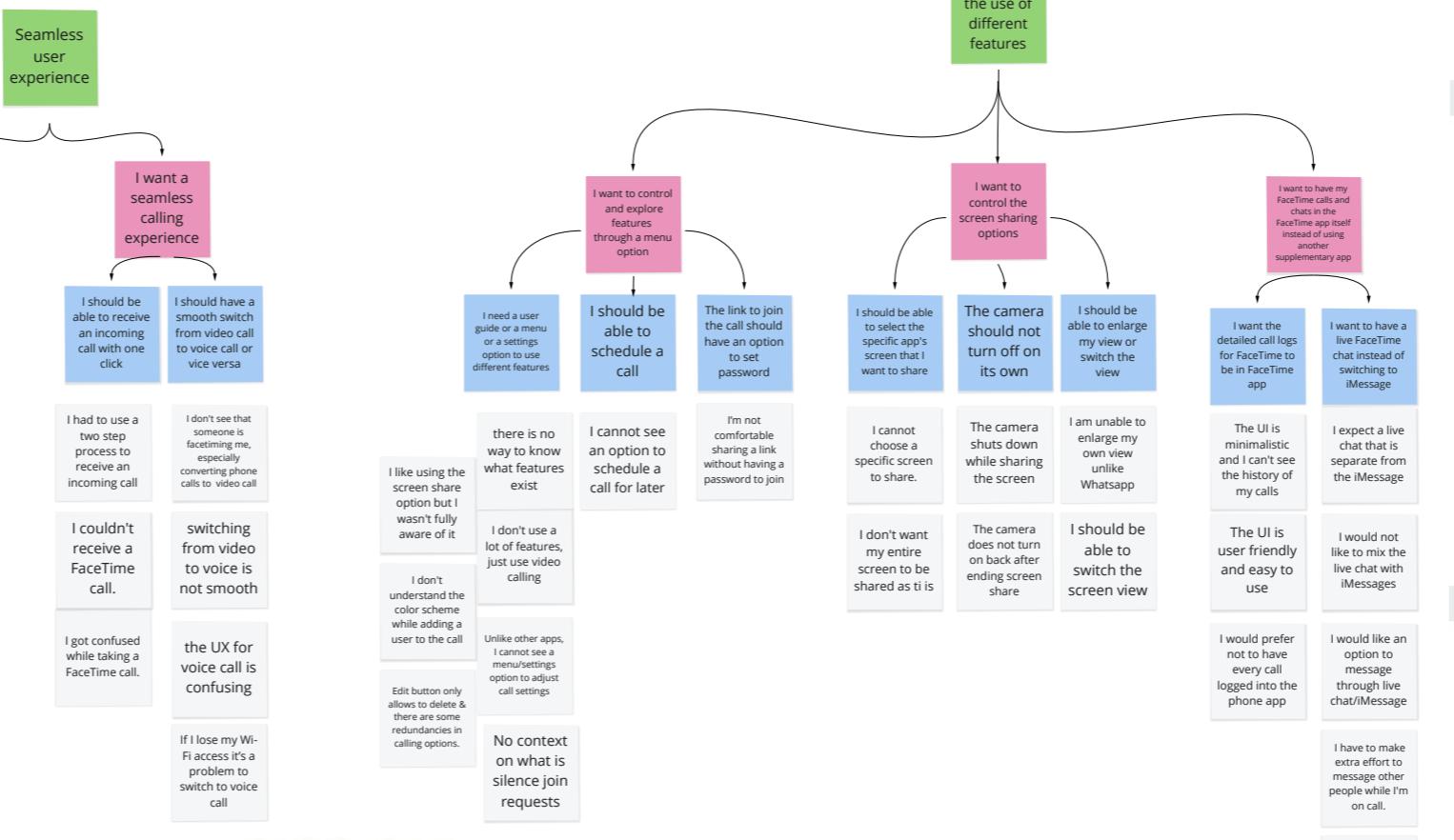
### **1. Walk the Wall**



### Summary of Key Insights from the Interviews

Generally, interviewees made both positive and negative comments about the FaceTime app. Almost all of the interviewees were highly satisfied with the quality of the FaceTime video call, especially in comparison with other video calling apps such as WhatsApp. However, some of the key negative points that pave the way for further developments are mentioned below:

1. Converting a video call to a voice call does not happen completely. P1 and P2 mentioned that whenever they want to switch from a video call to a voice call, only their videos are paused, and they are not completely switched to a voice call which is not comfortable especially if the wifi connection is lost.
2. There's no menu option or settings option. P3 and P4 mentioned the absence of a menu/settings option is inconvenient since they don't know where they could personalize the app features or explore new features. Additionally, P4 believes that it's good to have the features displayed at the bottom of the screen than at the top.
3. The FaceTime link to share a call with others does not have a password. P1 stated that although he liked the option of sharing FaceTime links with others, he is not fully comfortable with that since links can leak and he would like to have a link passcode similar to Zoom to increase the safety of using it.
4. Chat option limited to iMessage instead of FaceTime built-in chat while on call. P1, P3, and P4 mentioned that they would like to have FaceTime live chat while they have the other person's video in the background. In this way, they would not need to switch to iMessage.
5. The FaceTime screen share option does not allow users to select a specific screen to share. P2 and P3 declared that in case there are multiple apps open on their phone and they only want to share the screen of a specific app, FaceTime doesn't allow them to do so. They had to share whatever they had in the background, though they would want to be more selective about that.
6. Some UI enhancements are required. P2 mentioned that UI has some redundancies that cause confusion such as having the video or voice call icon used multiple times on a single screen, or the edit button only allowing to delete, etc.
7. Scheduling of a call is not present. P3 mentioned the absence of scheduling a call feature that is generally present in Zoom and Google Meet-like applications.
8. Receiving an incoming call is at times a two-step process. P1 and P4 noticed that receiving an incoming call is at times a two-step process that is not intuitive enough. When an incoming call is received as a notification with a green icon to receive the call and a red icon to reject the call, they are taken to the application screen after clicking the green button and are asked to join the call by clicking another button. This might be confusing the user for a few seconds before picking up the call.
9. The camera switches off upon screen share and does not turn back on after ending the screen share. P4 believes that it would be a good idea to automate the camera switch in sync with the screen share.
10. The camera screen view does not change from one person to another. P4 would like to be able to select a speaker mode as that of in Zoom video meetings.



### Insights

#### Areas of improvement:

##### General improvement area:

1. Almost all users mentioned that the APP is available exclusively for Apple devices only that limits its usability.[1]
2. Currently, no menu exists to explore features and capabilities of the application, which can be a potential improvement area.
3. Adding a feature in FaceTime app itself to make speed dials or a list of preferred people instead of saving favorites people in the Phone App [1]
4. Future developments could include Private Chat as well as Real-Time Chat[1]
5. To avoid lapse in communication or screen freezing in case of issues with network connectivity, one possible development area would be adding an option to immediately switch the video call to voice call. [4]

##### In terms of health care:

6. Further developments helping patients, especially old adults, feel more comfortable to communicate and discuss sensitive topics in their home environment, such as adding features that reduce patients' perception of interacting with a machine rather than a face-to-face individual provider.[3]
7. Adding features that enables users to change the ringtone. Some patients indicated that it was difficult to hear the soft ringtone of FaceTime and consequently would often miss the scheduled FaceTime appointment with the healthcare provider.[4]

### Insights

#### Strengths :

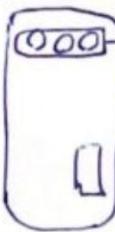
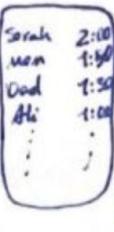
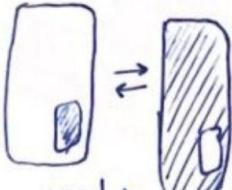
1. Top notch video quality as compared to its competitors (WhatsApp, Google Duo, etc.)
2. Seamless experience while making a call easily with contact number or Apple ID
3. FaceTime allows adding upto 32 people to an ongoing call [1]
4. Since COVID-19 pandemic FaceTime has been extensively used in healthcare industry. It can be used to increase patient access to a multidisciplinary care team. In person doctor visits have been replaced by virtual chatting using FaceTime.[3]
5. This technology allowed for real-time treatment and management of patient conditions, increasing convenience and efficiency in the management of specific disease such as diabetes, and patients with transportation problems. [4]

### Users' perceived needs

- User friendly UI that is understandable for everyone including elderly people
- Instant switch from video call to voice call without ending the call
- Being able to change the ringtone to a more hearable one
- High quality video without any screen freezing
- An explore menu to access its features
- Private chat and real-time chat options



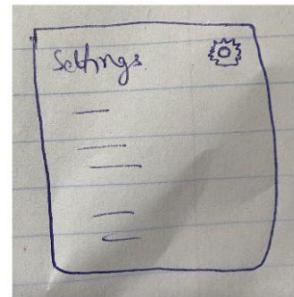
## 2. Crazy 8s

1	2
 → ? what are the features	 → Don't want to switch to phone app for call history
 → need to switch or enlarge the view	 → can't hear the call ring tone
 → Recording  → which app screen to share	 → could switch to voice call from video call
 → Don't want to switch to iMessage to chat while calling	 → not comfortable sharing my FaceTime link without pass word

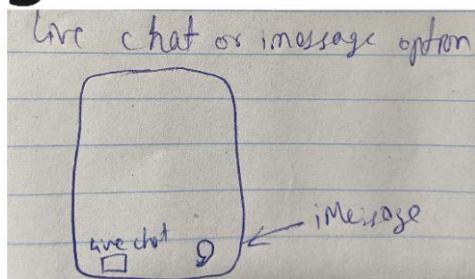
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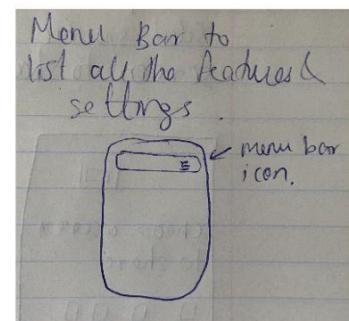
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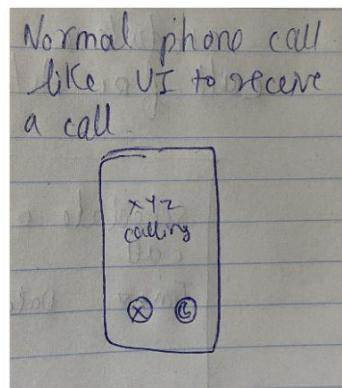
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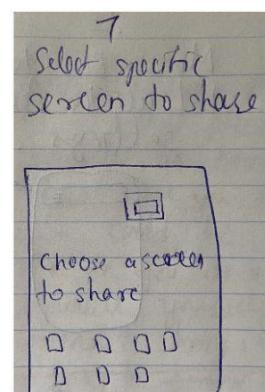
**4**



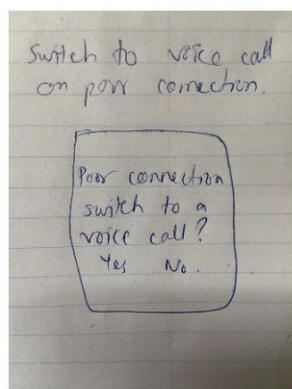
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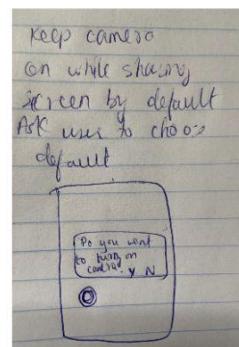
**6**



**7**



**8**



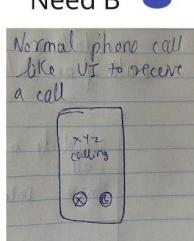
### 3. List of user needs

- (A) Need to control turning on or off of the camera while sharing the screen
- (B) Single step/easy process to receive an incoming call
- (C) Need to control changing the screen view
- (D) Need to schedule a call for later
- (E) Need for a live chat
- (F) Need to understand how to use the FaceTime app
- (G) Need for protecting individual privacy while sharing the screen
- (H) Need to have all the call information in one place
- (I) Need to have an uninterrupted call experience in case of poor network
- (J) Need to restrict the access of joining link
- (K) Need to be able to hear an incoming call

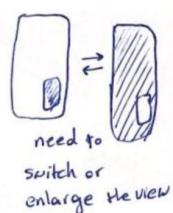
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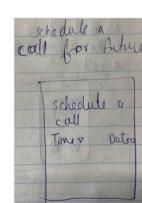
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Need C



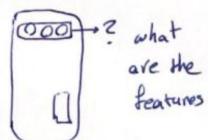
Need D



Need E



Need F



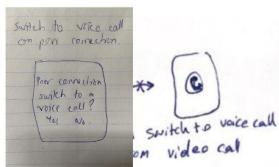
Need G



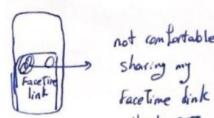
Need H



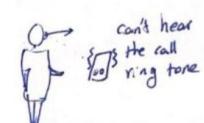
Need I



Need J



Need K



#### 4. Story Boards

##### Cover Page

**User need:** need for a live chat

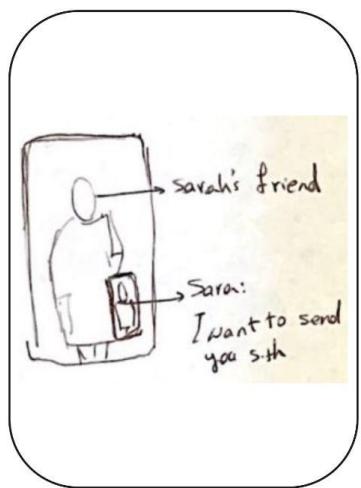
**Lead question:** Would you need to have a live chat in FaceTime?

##### Bullet points

- Chat within the FaceTime
- Live chat button
- Chat while seeing each other picture

#### Title: Would you need to have a live chat in FaceTime?

---



Sara uses FaceTime a lot and she needs to chat with the person on the call during the call

The live chat feature button enables Sara to chat within FaceTime while she is on the call

Sara can now chat within the FaceTime app without having to go to iMessage

## Cover Page

**User need:** need for a live chat

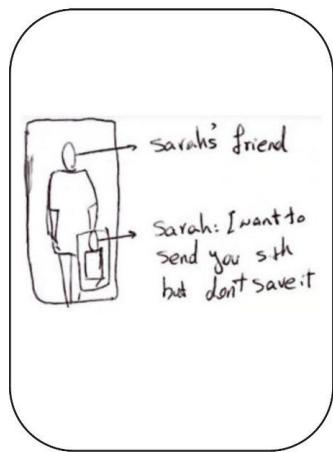
**Lead question:** Would you need to have a vanish mode of live chat in FaceTime?

### Bullet points

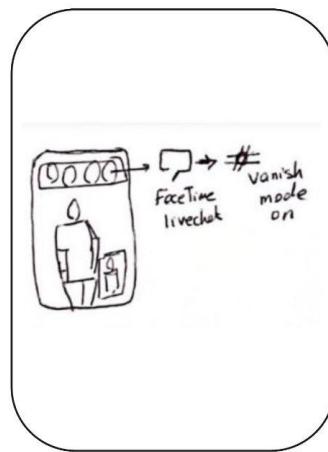
- Live chat without saving it
- Live chat button with Vanish mode
- Chat content disappears when someone leaves

## Title: Would you need to have a private live chat in FaceTime?

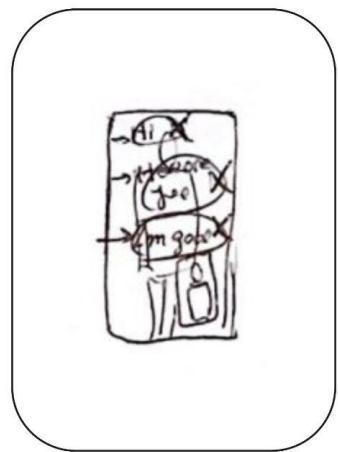
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Sara uses FaceTime a lot for video calls, Sara wants to send the other person messages that are limited to the call itself



live chat button with vanish mode feature is added that lets Sara send disappearing messages in the iMessage.



Sara shares text messages with her friend in the vanish mode of the live chat that content disappears when someone leaves the chat or turn vanish mode off

## Cover Page

**User need:** need for a live chat

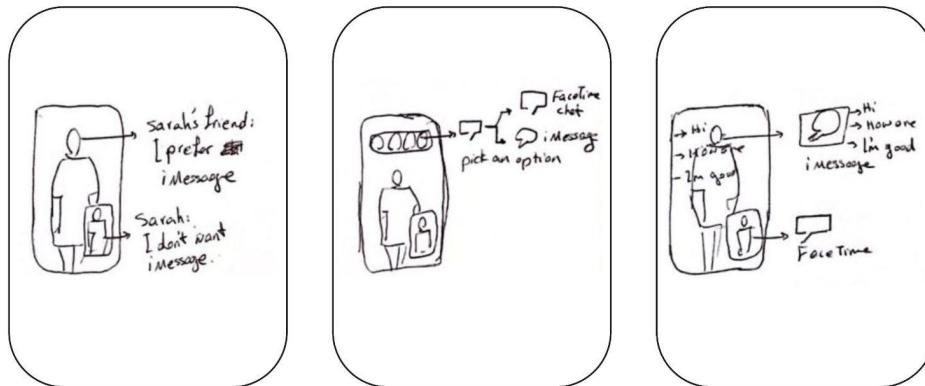
**Lead question:** would you prefer to be given both FaceTime live chat and iMessage?

### Bullet points

- both FaceTime and iMessage chats
- Live chat button providing both options
- Chats can be saved in both of apps based on users' preferences

**Title: would you need to be given both options of FaceTime live chat and iMessage?**

---



Sara uses FaceTime a lot and she have to switch to another app (iMessage) to chat while she prefers a live chat on FaceTime but her friend prefers iMessage

A chat button on the call first asks the user whether he/she wants to switch to the iMessage or use the FaceTime live chat

Sara and her friend can have the chat wherever they want, either live chat or iMessage

## Cover Page

**User need:** to understand how to use FaceTime

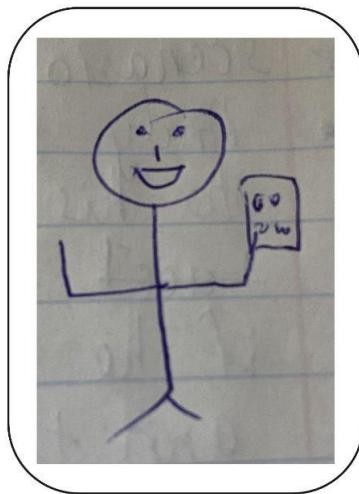
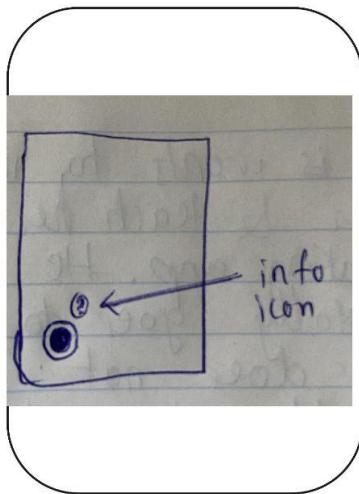
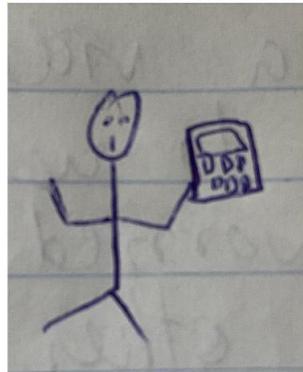
**Lead question:** Do you need to know what are different FaceTime features for?

### Bullet points

- how to use FaceTime
- different FaceTime features
- first time FaceTime experience

**Title:** Do you need to know what the features of FaceTime are for?

---



I want to make a video call to my friend. I can FaceTime my friend but how do I know what all I can do other than video calling

\*Makes a call to the friend\* Hey John, I wonder what this small round circle at the bottom does. Oh I can see an information icon over it, let me check

Oh, it says the small circle takes a screen shot of the screen. I now can easily see what different buttons are for

## Cover Page

**User need:** to understand how to use FaceTime

**Lead question:** Do you need to know all the different FaceTime features in one place?

### Bullet points

- where to find menu for features
- different FaceTime features
- first time FaceTime experience
- Know if a functionality exist

**Title:** Do you need a place to find all features of FaceTime?

---



I want to see if I can choose some default settings for every call I make on FaceTime but its hard to navigate and find where the settings are

I can see a menu option where I can find all the FaceTime features in one place

I can now see what features exist in FaceTime and what all I can do with the application

## Cover Page

**User need:** to understand how to use FaceTime

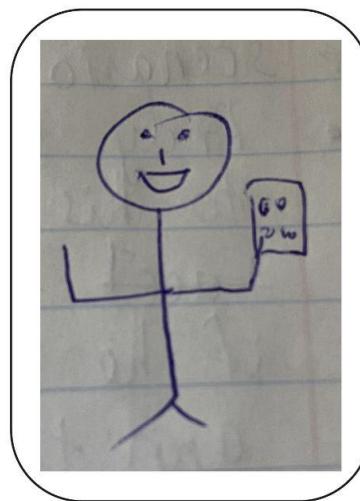
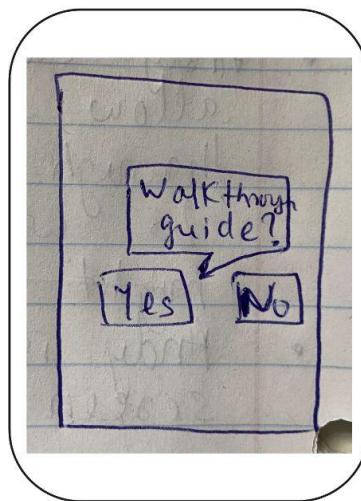
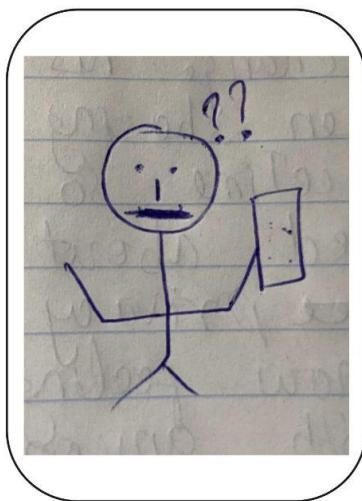
**Lead question:** Do you need to know how to use FaceTime?

### Bullet points

- how to use FaceTime
- new user experience
- Step by step walk through

**Title:** Do you need to know how to use FaceTime?

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I just bought an iPhone! My friend always keeps talking about amazing FaceTime video quality. I will surprise him by making a video call

I don't know how to use FaceTime. Oh there is a walk through guide for understanding how to use FaceTime. I can even turn off the walkthrough later

This is so easy to use. I can easily make a video call, add multiple people, share my screen and so on!

## Cover Page

**User need:** to be able to protect individual privacy while screen sharing

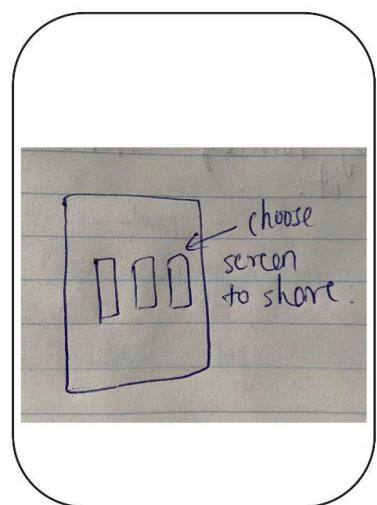
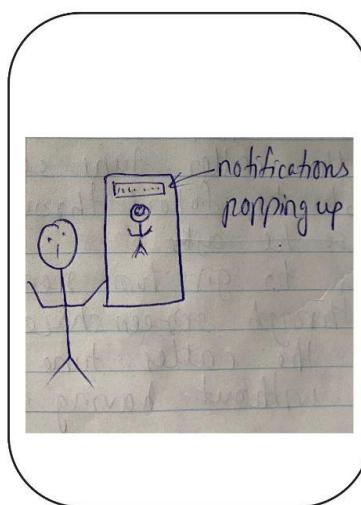
**Lead question:** Do you feel comfortable sharing your entire screen?

### Bullet points

- need for screen share
- how users use screen share
- challenges faced while sharing screen

**Title:** Do you feel comfortable sharing your screen as it is?

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I want to know how to change setting for Siri on FaceTime so I called my friend to help me. She asked me to share my screen with her

She gets distracted by notifications popping up. I can choose to select a specific screen to share instead of entire screen

Now I can easily understand and share a specific app screen with my friend without getting distracted by other phone activity

## Cover Page

**User need:** to be able to protect individual privacy while screen sharing

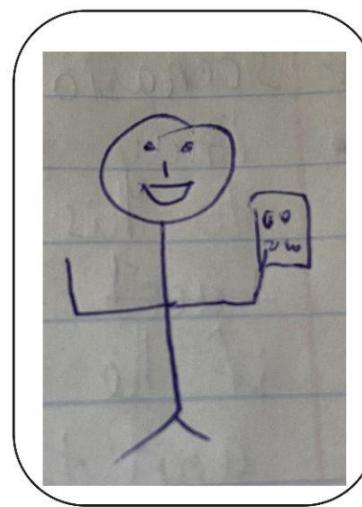
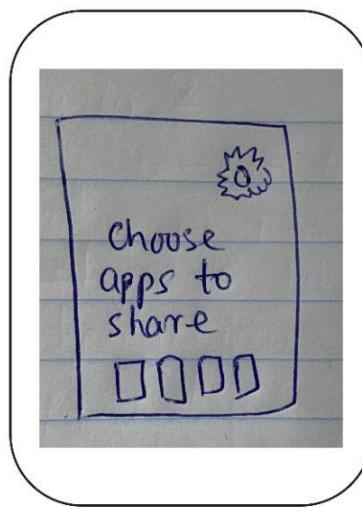
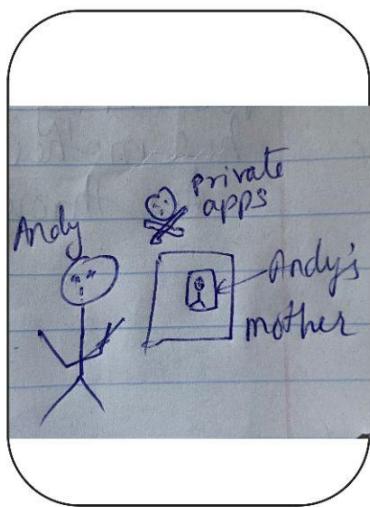
**Lead question:** Do you want to control what the other person can see on your screen?

### Bullet points

- need for restricting screen share
- compared to other apps, how safe is FaceTime
- frequency with which screen share is used

**Title:** Do you need to restrict apps that can be viewed on screen share?

---



Andy wants to make a video call to his mother & teach her how to use note taking app. He is worried if he accidentally goes to some private app that he does not want his mother to see

Andy can change his FaceTime settings to allow screen sharing only for certain apps through FaceTime so that he doesn't have to be worried about his privacy

Andy is now feeling safe with sharing his screen with anyone on the call

## Cover Page

**User need:** to be able to protect individual privacy while screen sharing

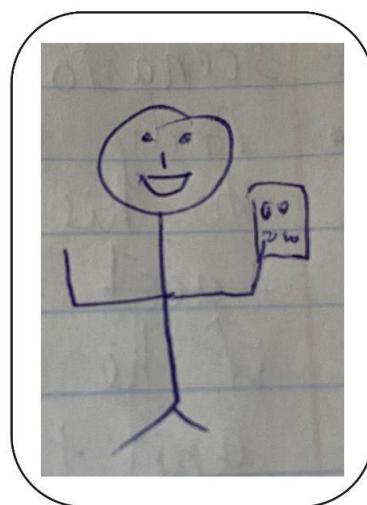
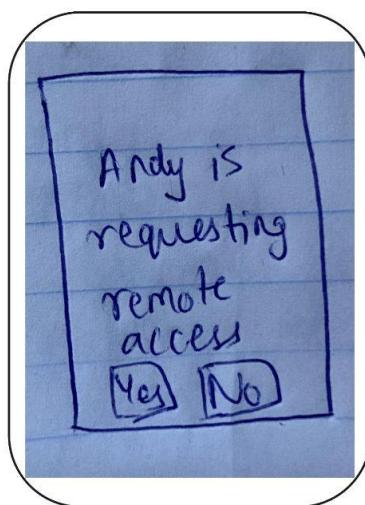
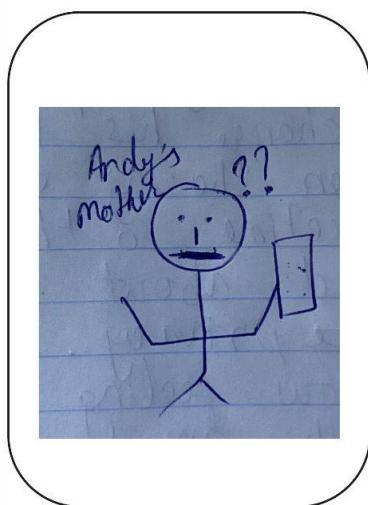
**Lead question:** Do you want to be able remotely control screen share feature ?

### Bullet points

- how safe user feels with remote control

**Title:** Do you need remote control for screen sharing?

---



Andy is talking to his mother on FaceTime and helping her change the caller tune settings. His mother is not able to follow through the instructions

Andy asked his mother to give him remote control of her screen through screenshare

Now Andy can change the caller tune for his mother by himself

## **5. Analysis and Summary of User Feedback**

### **Overall findings and insights**

The 'live chat' is not a pressing need for users. Users had mixed reactions to the different options of having a live chat. One user liked the idea of vanishing live chat within the iMessage while the other 2 users preferred having an option to choose between a live chat or iMessage. Having a live chat was cited as a need in a formal setting. Since FaceTime is mostly used for informal conversations, live chat was not deemed as necessary by the users.

Users unanimously agreed that a need to understand how to use FaceTime for new users was necessary. A walkthrough guide for the first-time users would be helpful where all required information to use the app is described. An additional menu bar would be a complex experience according to the users.

Users were unaware of the share screen feature of FaceTime. Since the app is not prevalently used for formal calls, users quite rarely use the screen share feature and hence did not feel the need to share the screen with the other person on call. Now that the users were aware of such a feature, the most common response was that they would like to have a control over what screen is being shared to the person on the call.

In general, iOS users have grown accustomed to using complex iOS UIs and usually do not mind learning to use the app overtime. High quality video call is the most lucrative factor about FaceTime that diminishes the problems with the user experience in other areas of FaceTime. Hence, its difficult to get unbiased feedback from the users in general.

### **Description of new design ideas or opportunities**

1. The walkthrough guide can have a skip feature in case the user does not want to continue with the guide. The walk through guide should be allowed to be turned off in case the user no longer wants it
2. When FaceTiming with multiple people and want to use the live chat, the FaceTime button can enable the user to choose their intended person on the call to text
3. With newer versions of iOS applications there generally exists a walk through guide for changes, if any. However, such a guide is not present for FaceTime. Hence, prioritizing a walk through guide for FaceTime would be the next step towards design improvement

## B. Lo-Fi Prototype

### 1. Prototype Rationale

#### Research Goals:

1. Since our assumptions of user needs were invalidated with regards to live chat and control of screen share, our primary goal is to test whether we are building the right thing. We want the low fidelity prototype to affirm and validate if the user actually needs the walk through guide.
2. Secondly, we want to test what level of detail for the walk through is expected by the users.
3. Thirdly, we want to test if the walk through guide is too time consuming and if there is an alternative design for letting the user know different functionalities of FaceTime.

#### Prototype Form and Fidelity:

We will be making sketched paper prototypes that describe step by step user journey through different actions that the user takes while interacting with the app. The users will be provided with the paper prototypes one by one, each representing a single change in the screen after user takes an action.

#### Rationale behind the prototype:

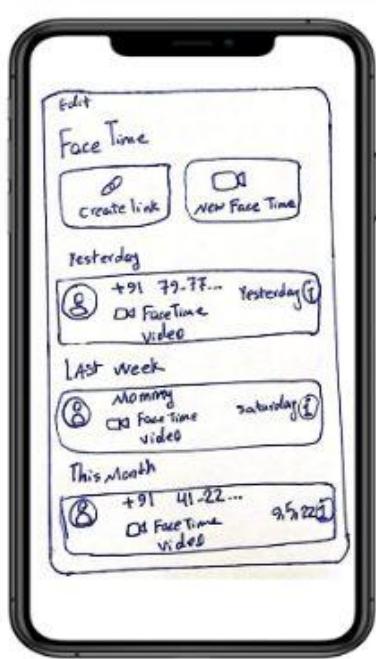
We decided to make a simple form of prototype that would help us observe the user actions one by one at a pace that would not be too fast or confusing. Since the screens will be presented by us to the user one by one, we will have significant time to observe user behavior. We want the users to focus on one specific need and hence we chose to make our own low fidelity prototype on paper so that the users are not distracted by other features of the app.

### 2. Prototype

The overview of the prototype:



The user opens the FaceTime app and this is the screen he/she sees:

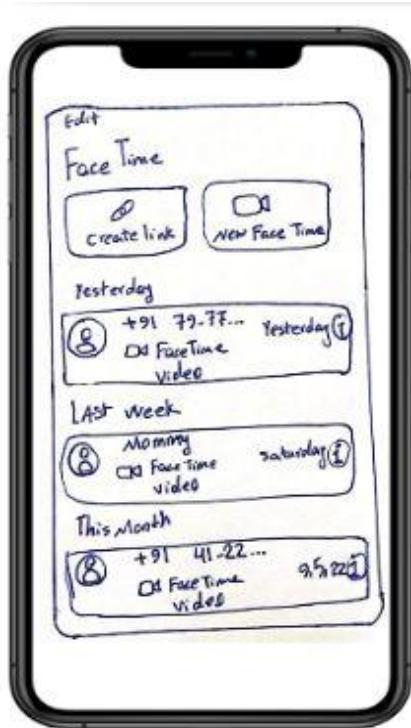


A pop-up screen asks the user whether he/she would need to have a walkthrough guide. Users can select Yes, or No. in case they select no, and click on the "dont ask me again", this screen will never pop-up again.

Here we assume the user selected NO.



Since the user selected no, he/she will be returned to the main page.



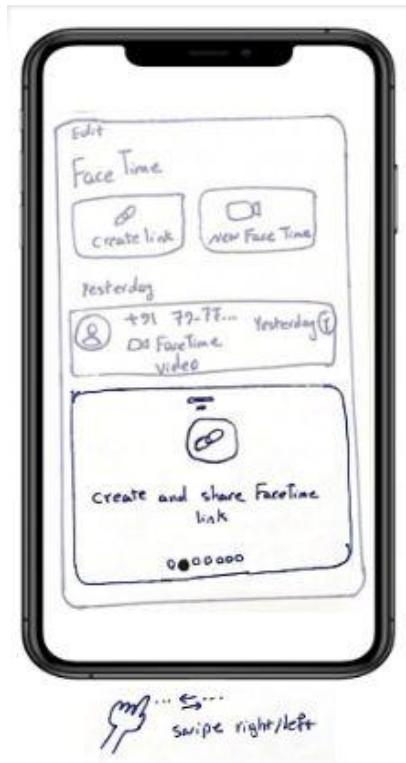
Here we assume that the user selects Yes.



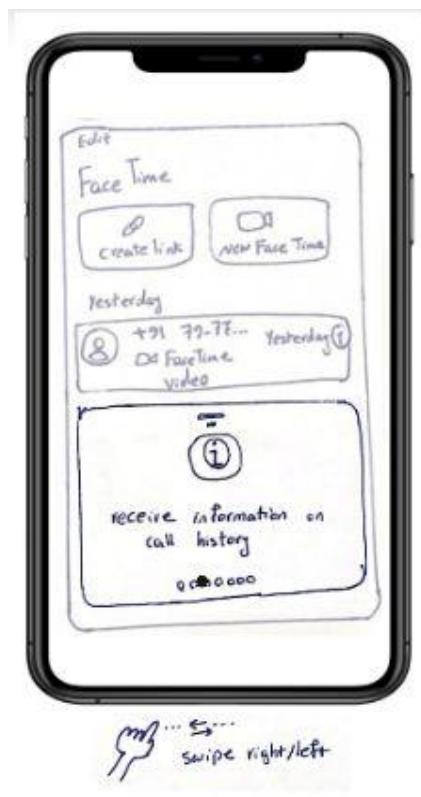
A new screen is seen where different features are described how to be used. Users can swipe right to see the use of the next feature, as well as swipe left, to see the use of the previous feature. User swipes right in this case.



User swipes right.



User swipes right.



User swipes right.



User swipes right.



User swipes right.



User swipes right.



User is returned to the main page where he/she can start using the features of FaceTime app.

