



KANDI

Low-Fi Prototype

CSI47 Autumn 2023

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INTRODUCTION

VALUE PROPOSITION

Celebrate connections, one bead at a time.

MISSION STATEMENT

Our mission is to foster interconnectedness and promote community amongst festival goers through gamifying the festival experience.

PROBLEM AND SOLUTION OVERVIEW

The festival environment can be overwhelming and isolating to new attendees, making it difficult to enter the scene. In creating a social platform to ease users into the community and its traditions by gamifying the festival experience, we hope to close the gap in experience amongst attendees by giving all a fair chance to create their own groups, add friends, share and receive news on upcoming events, and capture festive memories through a series of tasks to earn achievements and rewards.

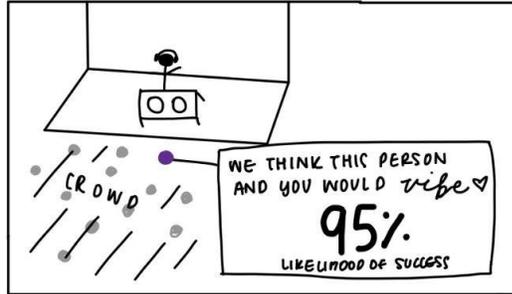
CONCEPT SKETCHES

We began our low-fi prototyping process by having each of our group members create concept sketches for 3 different modalities of realization—AR, wearables, and mobile visual notifications.

AR

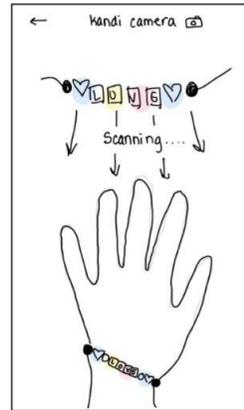
SOFIA'S SKETCHES:

AR Realization



SHENG'S SKETCHES:

Augmented Reality



JEN'S SKETCHES:

AR

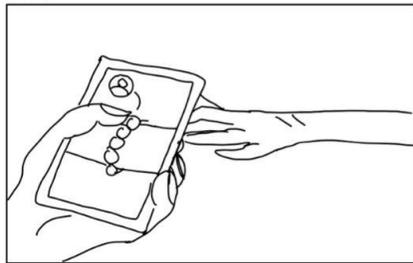
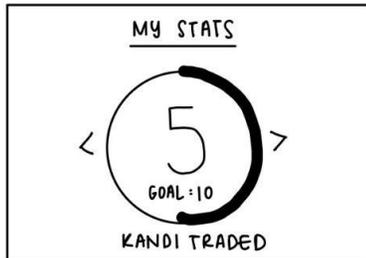
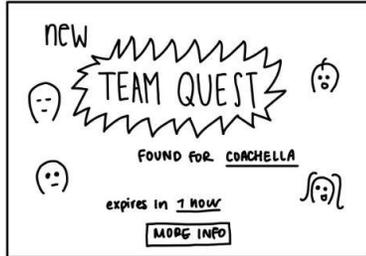


Figure 1. This is an AR app realization.

WEARABLES

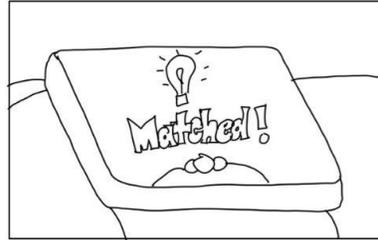
SOFIA'S SKETCHES:

WEARABLE APPLE WATCH



JEN'S SKETCHES:

Wearable



SHENG'S SKETCHES:

Wearable

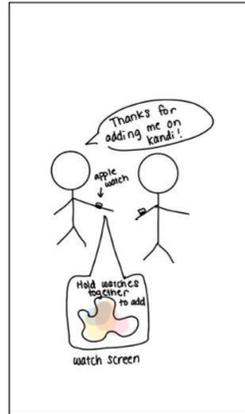
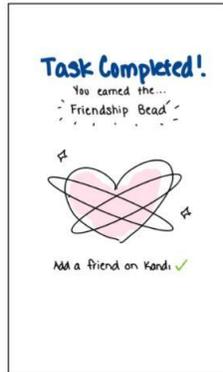


Figure 2. This is a wearable realization.

MOBILE VISUAL NOTIFICATIONS

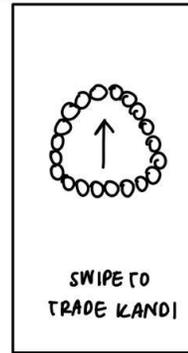
SHENG'S SKETCHES:

Visual Notification



SOFIA'S SKETCHES:

Visual Notifications



JEN'S SKETCHES:

Visual Notif



Visual Notif

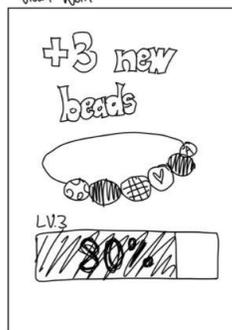


Figure 3. This is a mobile app visualization centered around notifications.

SELECTED REALIZATIONS

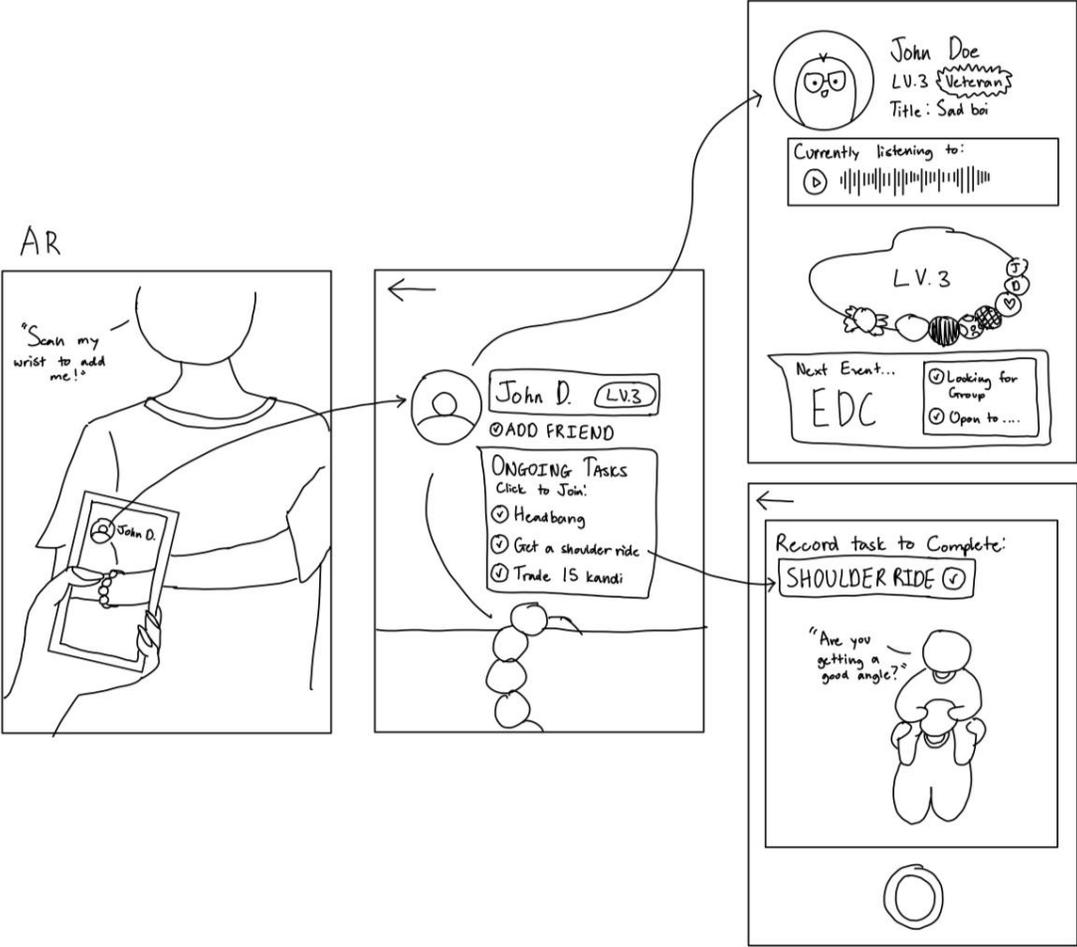


Figure 4. A more detailed realization of an AR app.

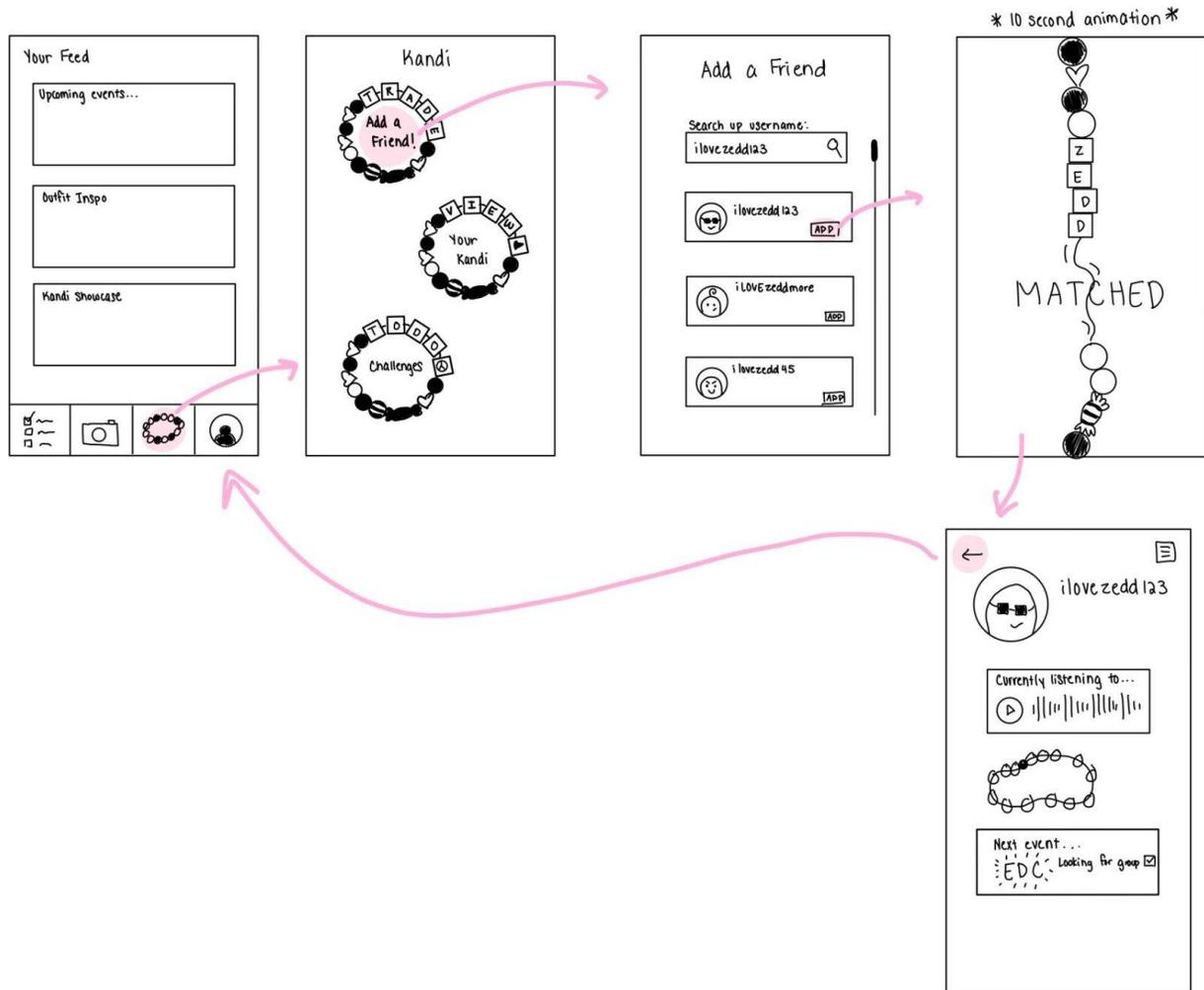


Figure 5. A more detailed realization of a mobile app.

AR APP

Pros	Cons
<ul style="list-style-type: none"> ● More of an immersive experience ● Mimics the actual physical interaction of “trading kandi” for the purposes of our app ● Novel medium - Generates high user satisfaction and interest from niche platform features 	<ul style="list-style-type: none"> ● Might take away from the true live festival experience due to interactions happening through cameras and a visual interface ● Less accessible for users with older generations of devices and harder cross mobile platform integration ● Steeper learning curve– need to be in actual festival environment to understand how AR app works

	<ul style="list-style-type: none"> ● Environmental incompatibility – festival environments tend to be darker thus, making it harder for AR apps to work due to the use of phone cameras.
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MOBILE VISUAL NOTIFICATION APP

Pros	Cons
<ul style="list-style-type: none"> ● Increased user familiarity with mobile interfaces – easier for users to adopt ● More information can be displayed through this medium – view details, view full profiles, and other features such as a chat-based interface ● Get access to more features within the app ● More accessible for variety of devices – different devices as well as generations 	<ul style="list-style-type: none"> ● Monotonous and more common UI – oversaturation of similar mobile applications ● More limited forms of interactions with the application ● Less incentive to use at a festival environment – some people may prefer to limit the use of their phones during festivals ● May lead to over congestion of content as tasks get longer

SELECTED INTERFACE DESIGN

We chose to proceed with a mobile app interface due to concerns over the overall accessibility and functionality of an AR interface. With our goal of connecting and integrating users into a seemingly overwhelming scene, a complex AR interface that may only function on certain devices and particular environments can hinder its ease of use. A mobile app offers a simpler and more user-friendly experience that can better carry our message of promoting community and tradition across.

LOW-FIDELITY PROTOTYPE

We drew our prototype on an iPad and wired up the sketches on Figma to demonstrate the transitions of each task flow. Additionally, we also printed the sketches so that we could conduct in-person tests with our participants.

Our prototype first shows the onboarding process, allowing the user to create a new account or log into an existing account. If the user chooses to create a new account, they are given a quick tutorial and explanation of the concept of kandi. Next, the user is shown the homescreen where they can begin to

complete the 3 different tasks. The first task is for the user to complete their first individual challenge and earn a bead. The second task is for the user to add a friend. The last task is for the user to complete a challenge with their group to earn another bead.



Figure 6. Introductory screens and onboarding process.

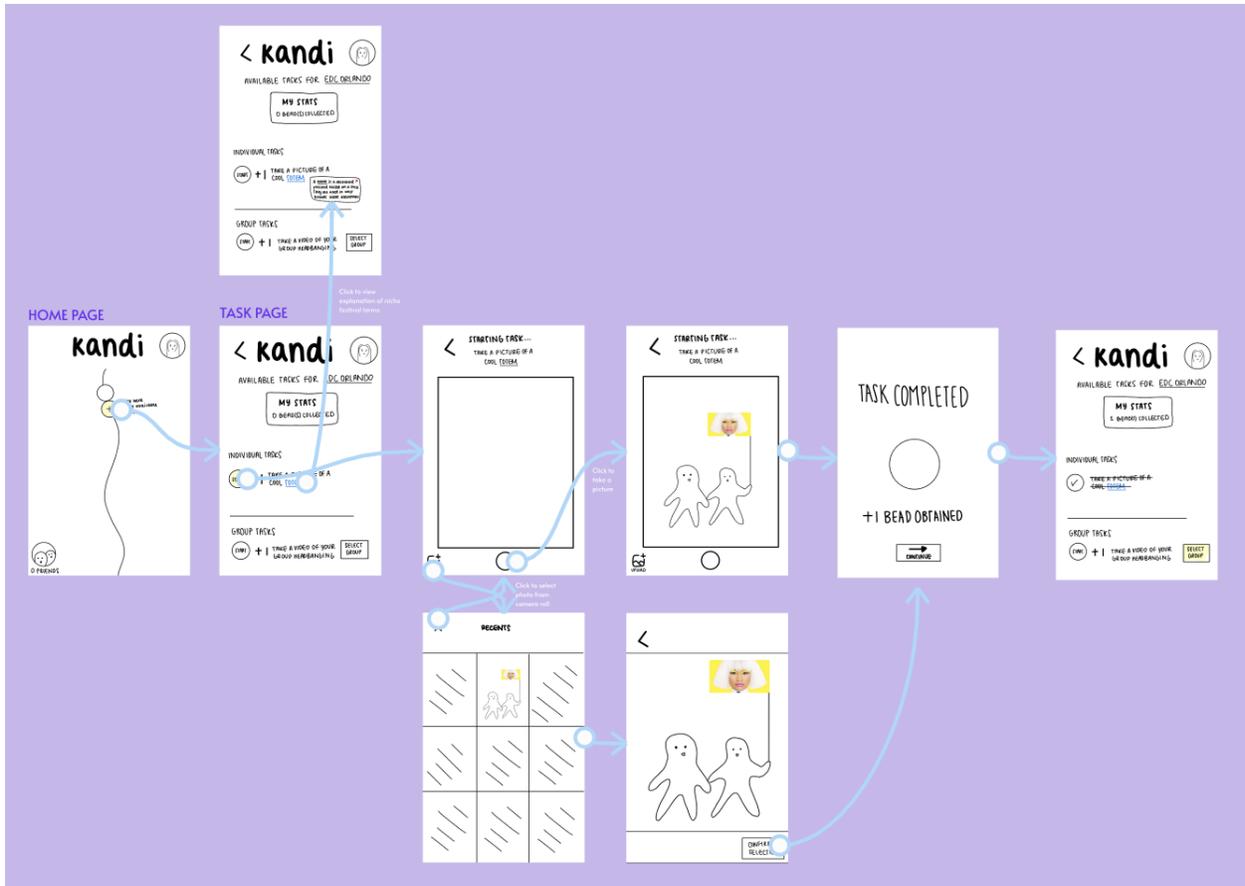


Figure 7. Simple task flow: completing an individual task

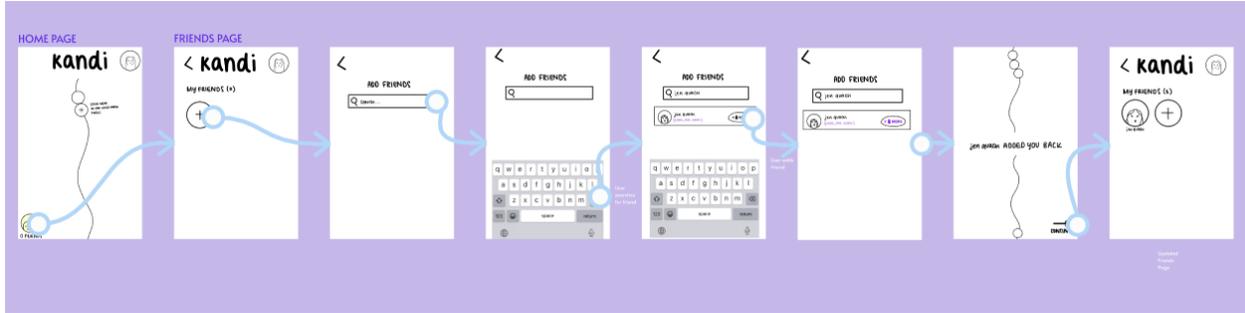


Figure 8. Moderate task flow: adding a friend

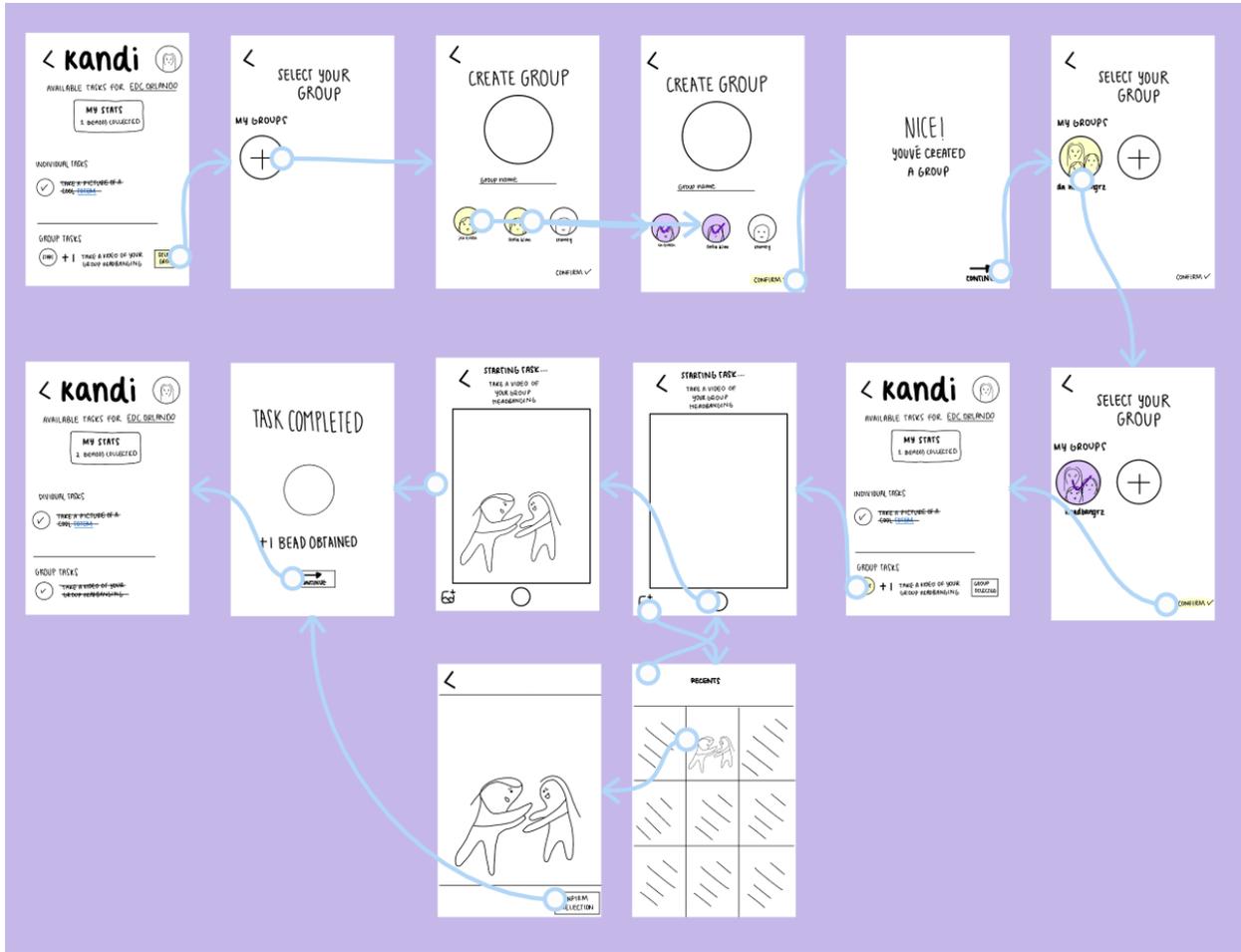


Figure 9. Complex task flow: creating a group and completing a group task

TASKS

1. Simple task: Complete an individual task and earn a bead
2. Moderate task: Add a friend
3. Complex task: Create a group and complete a group challenge

PROCEDURE

1. Provided the participant context about Kandi and a hypothetical scenario: the user just downloaded the app for an upcoming event at EDC Orlando
2. Participants were given 3 tasks to complete: profile creation, manage friends, view and complete tasks. Participants navigated with auditory direction to gauge intuitiveness of app
3. Conducted a final debrief where participants were asked about functionality, intuitive navigation, additional features to implement, and overall satisfaction

USABILITY GOALS & KEY MEASUREMENTS

1. User Satisfaction
 - a. Asked how likely the user would be in using each feature by giving it either a low, medium, or high potential usage rating
2. Intuitive Navigation
 - a. Measured by the number of mis-clicks; Noted questions or incidents where participant is unable to complete a facilitated task
3. Functionality
 - a. Measured through task completion, noting facilitated tasks that were indirectly succeeded

TEAM MEMBER ROLES

- Facilitator: Jennifer Quach
- Computer: Sofia Kim
- Notetaker: Sheng Moua

RESULTS

USABILITY GOAL MEASUREMENTS

1. User Satisfaction: asked to rate potential usage on a scale of low, medium, high
 - a. One voted medium
 - b. Two voted high
2. Intuitive navigation: number of misclicks

- a. 2 misclicks during group selection process
3. Functionality: task completion rate
 - a. All tasks (simple, moderate, and complex) were completed by all participants

OBSERVATIONS

- Most participants didn't struggle with finding buttons/tabs and liked the overall simplicity and aesthetics of the design
- 2 participants struggled with the group selection process
- All participants successfully completed simple, moderate, and complex tasks.
- All participants seemed a bit confused with what to do after taking a picture for their tasks—indicates a need for better connection between the process of taking a picture, and confirming the image for submission as well as options to retake or maybe go back rather than automatic movement from taking a picture to the “task completed” page
- 2 participants didn't understand the intent of the app
- 2 participants expressed interest for more emphasis of social connection features within the app and wanting to see what events their friends are going to
- Participants seemed to want more user-to-user interaction (e.g., ability to customize profile to include Spotify playlist, map where you can see your friends at a festival, feature that alerts you if someone else using the app is nearby)
- The participants with more festival experience required less onboarding than the the participant who had only gone to one festival (participant 3 was confused by concept of kandi and app)
- Participants were thrown off by the group challenge, logistically and functionally (in terms of navigating the UI)
- Participants appreciated the simplicity of the UI (expressed verbally and completed tasks faster when less buttons/options on the screen)

DISCUSSION

IMPLICATIONS

- Users wanted to enhance social aspect of the app to see who is currently at an event and how to see the schedules of your friends
- Wanted more visual clarity on how tasks are completed and organizing group and individual tasks
- Users want more features that improve their festival experiences logistically (i.e., finding friends at festival using some sort of map) that aren't available on other platforms

CHANGES TO DESIGN

- Streamlining group selection process and adding a separate section for group tasks
- Add levels for kandi to show experience
- Add features to help emphasize the social and community aspect of the app

WHAT TESTING DIDN'T REVEAL...

- Would the app be used more during the festival or after?
- How often would the user use the app?
- Implementation concerns?
- User satisfaction with the actual aesthetics of our app

APPENDIX

CRITICAL INCIDENT LOGS

Participant 1

Incident	Severity Rating
Attempted to start group task before selecting a group	4
Struggled with group selection – selected friends for the group but didn't click the confirm button.	3
Successfully added a friend with ease	0
After taking a picture for one of the tasks felt confused regarding whether they had to do something to confirm the picture was taken	3
Found friends page easily (within 1 second and with no prompting)	0
Wanted more confirmation that group had been created-such as a screen with the group name and/or members before returning to the task screen after group creation	3
Easily navigated to the task screen	0
Concerned about how the app is going to confirm that the uploaded picture/video is actually fulfilling the task specifications - "How are you going to check that I actually did it? AI?"	4

Participant 2

Incident	Severity Rating
Confusion with lack of visual differentiation between individual tasks and group tasks	2
Appreciated the simplicity and intuitiveness of the design	0
Difficulty understanding the purpose of the overall app in community building	4
Would like to see a bluetooth friends connection feature to identify who's at what event	1
Didn't know whether to click on "select group" or "start task" for group task	3
Instantly knew how to access "friends" page and "tasks" page as well as how to return to home screen	0
Understood premise and concept of app	0
Struggled with group selection screen – after selecting group members didn't know whether to click confirm	3

Participant 3

Incident	Severity Rating
Would forget to click continue button	2
Asked what Kandi was in the initial home screen, as there was a lack of a definition– didn't understand what the beads were	2
Didn't understand whether the whole group participated in group tasks or just one group leader to take the picture	3
Completed "add a friend" task smoothly	0

Knew what buttons to click for certain tasks	0
Wished there was a calendar feature to show future events friends are going to	0
Confused about task generation and completion - "Are some tasks specific to certain festivals? Or can you complete them all at one festival?"	2
Potential privacy concern - "Can other people see the picture you use for your task?"	3

LINK TO LO-FI PROTOTYPE ON FIGMA

<https://www.figma.com/file/uNvzGnBBYrtMgi6hSX6bYu/kandi-prototyping-cs147?type=design&node-id=0%3A1&mode=design&t=CCGIXwUWEXRdzY8Y-1>