



kandi

LOW-FI PROTOTYPING & USABILITY TESTING

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WHO WE ARE



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VALUE PROPOSITION:

Celebrate connections,
one bead at a time

THE PROBLEM

The festival environment can be overwhelming and isolating to new attendees, making it difficult to enter the scene.

OUR SOLUTION

In gamifying the festival experience, we envision a platform that eases users of any experience into the community by rewarding tasks like creating and joining groups, sharing and receiving news, adding friends, and capturing festive memories.

PREVIEW

1

SKETCHING EXPLORATIONS

Concept sketches and realizations

3

USABILITY TESTING

Methodology and results

2

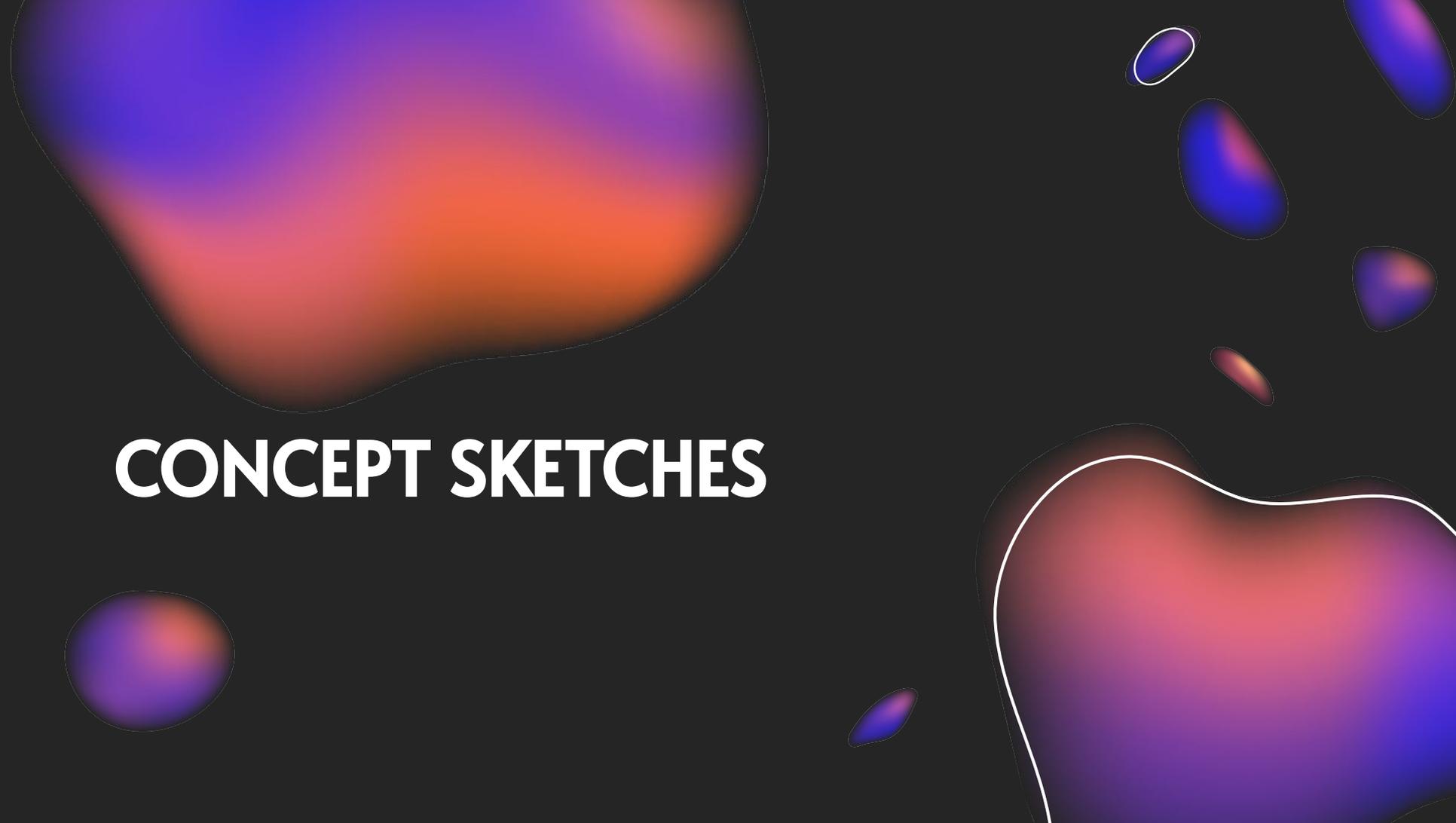
LOW-FI PROTOTYPE

Construction and task flows

4

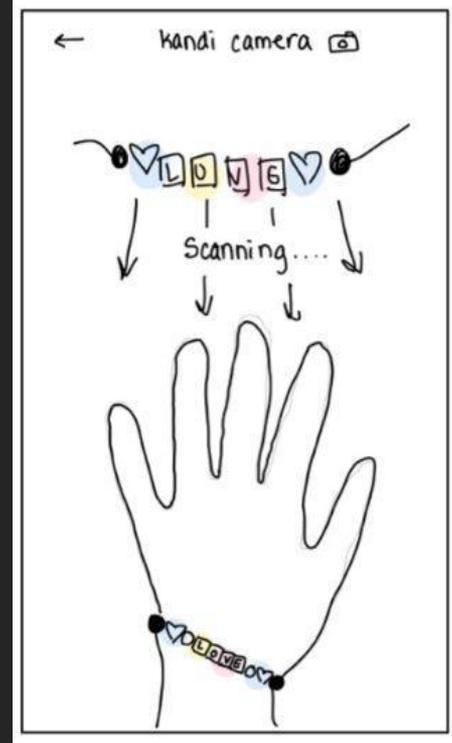
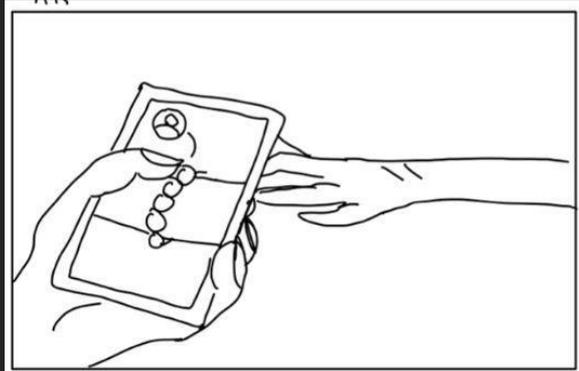
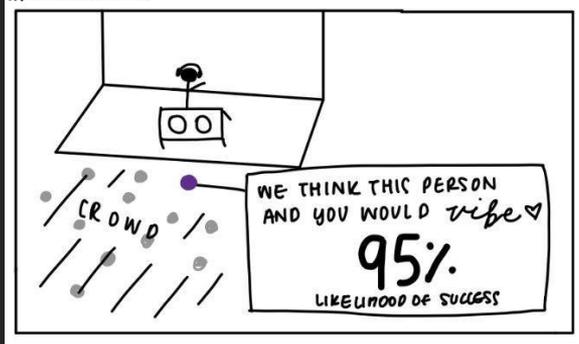
DISCUSSION

Implications, observations,
and considerations

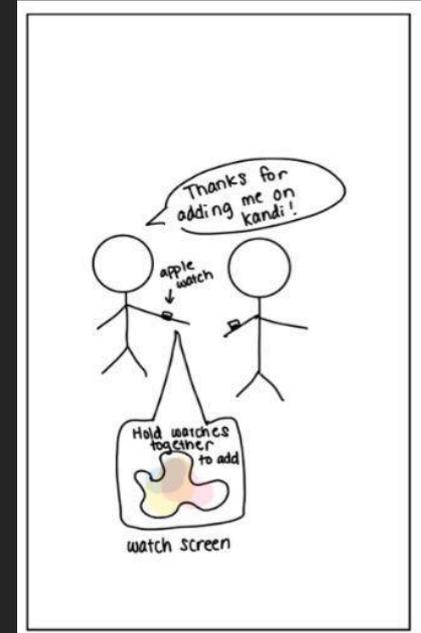
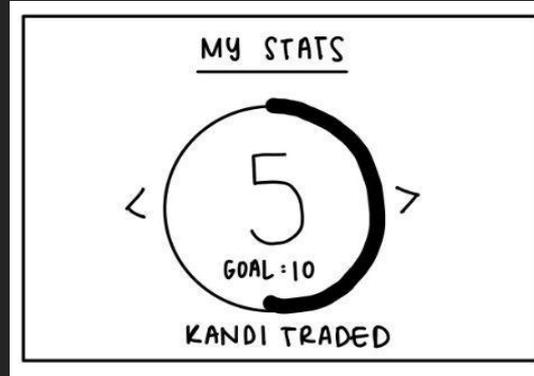
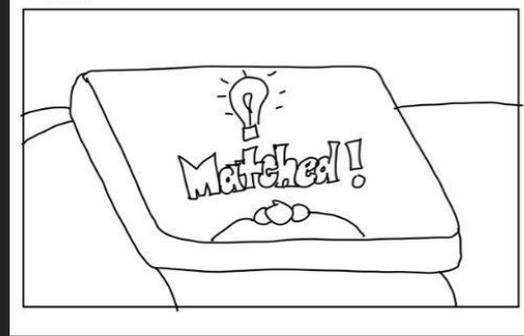
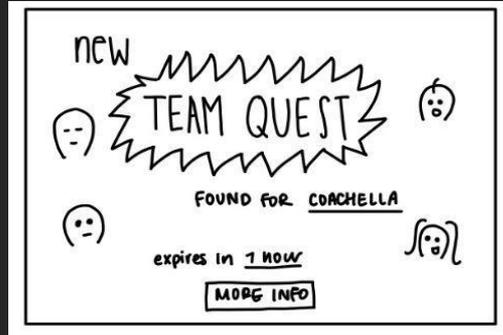
The background is a dark, almost black, space filled with several abstract, organic shapes. These shapes are filled with a gradient of colors, primarily transitioning from deep purple and blue on the outer edges to a bright, warm orange and red in the center. The shapes vary in size and orientation, some appearing as large, rounded blobs while others are smaller, more elongated forms. The overall effect is reminiscent of a nebula or a microscopic view of a complex material structure.

CONCEPT SKETCHES

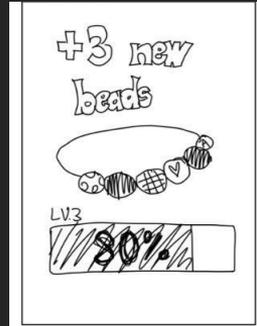
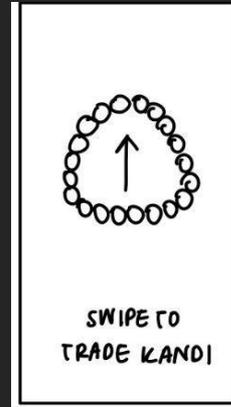
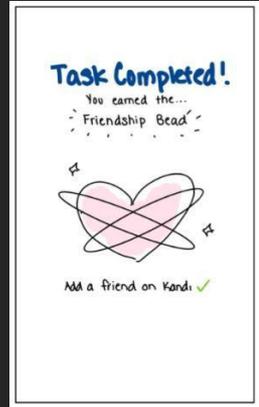
CONCEPT I: AUGMENTED REALITY



CONCEPT 2: WEARABLES



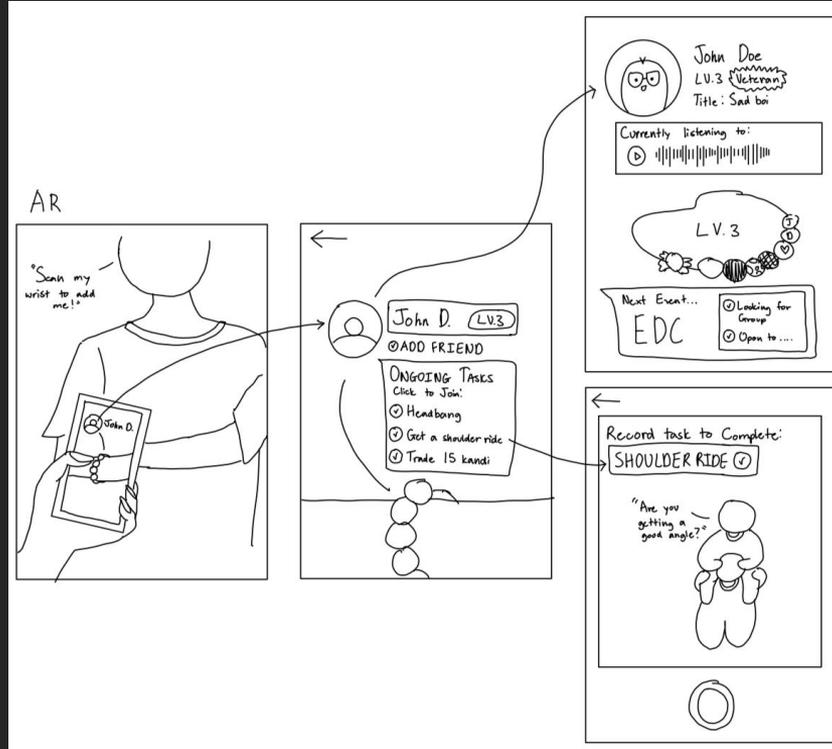
CONCEPT 3: VISUAL NOTIFICATIONS



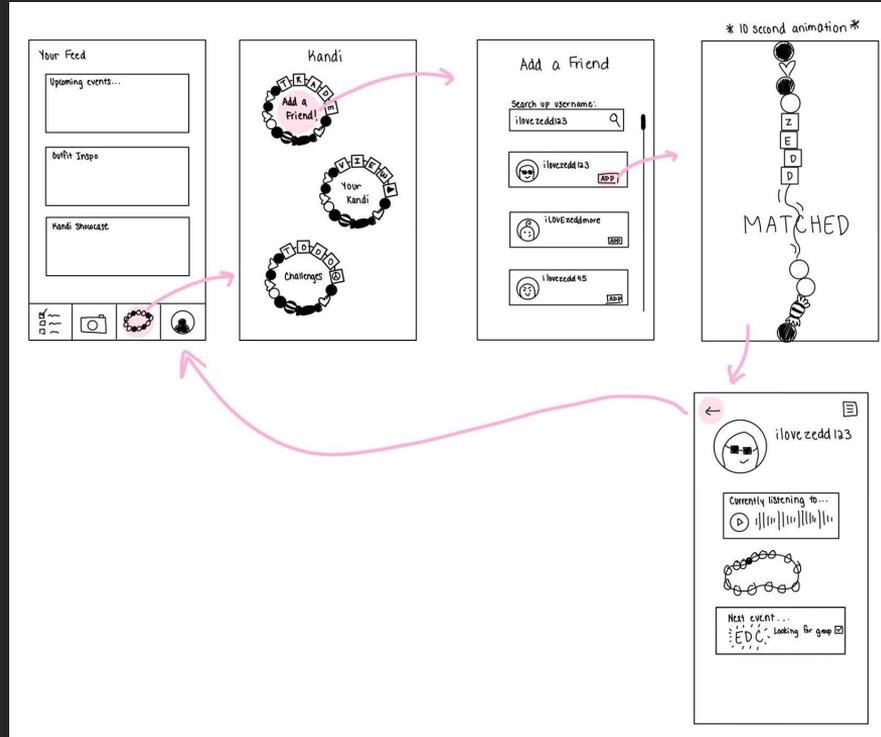
The background features several abstract, colorful shapes in shades of purple, blue, and orange against a dark background. A prominent white outline is visible on the right side, defining a large, irregular shape. The overall aesthetic is modern and artistic.

CHOSEN REALIZATIONS

AUGMENTED REALITY



MOBILE VISUAL NOTIFICATIONS



Chosen realization #1

AUGMENTED REALITY

PROS:

- More of an **immersive** experience
- **Mimics the physical interaction** of “trading kandi”
- **Novel** medium

CONS:

- **Digital interactions** take away from the true live festival experience
- **Potentially incompatible** with older or niche devices
- **Less functional** in darker or brighter environments

Chosen realization #2

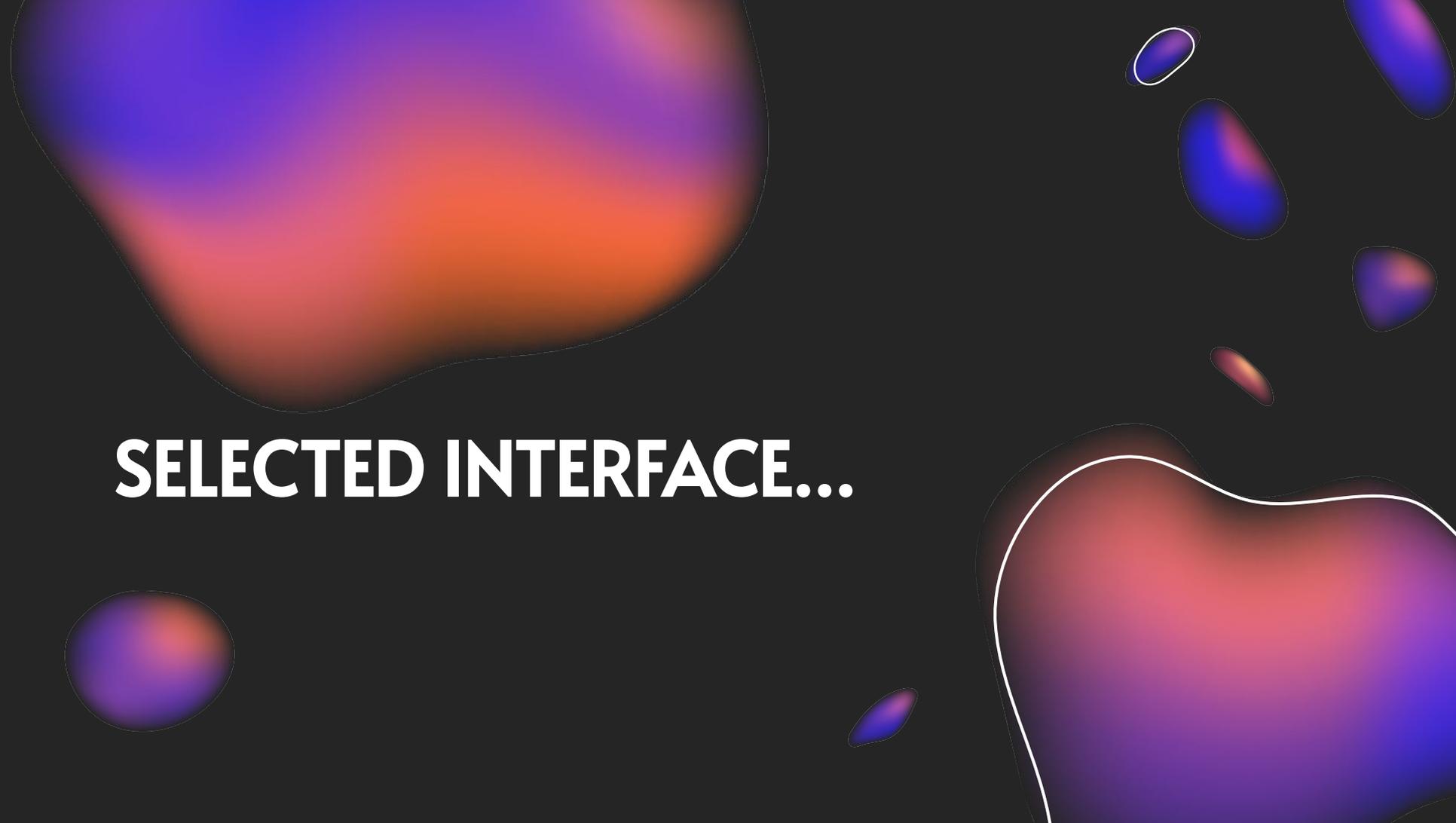
MOBILE w/ VISUAL NOTIFS

PROS:

- **User familiarity** with mobile interfaces
- **In-depth display of information** – view details, view full profiles, etc.
- Get access to **more features** within the app

CONS:

- **Common UI** – oversaturation of similar mobile applications
- **Less incentive** to use in a festival setting
- May lead to **congestion** of content on a mobile screen

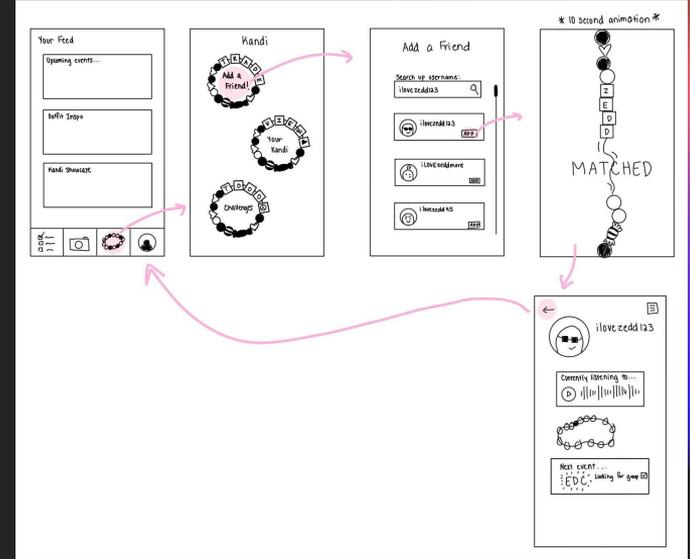
The background is a dark, almost black, space filled with several abstract, organic shapes. Each shape is filled with a smooth gradient of colors, primarily transitioning from deep purple and blue on the outer edges to a bright, warm orange or red in the center. The shapes vary in size and orientation, some being large and rounded, others smaller and more elongated. A prominent white outline is visible on the right side, tracing the boundary of a large, irregularly shaped area. The overall effect is that of a dynamic, multi-colored field or a collection of glowing, ethereal forms.

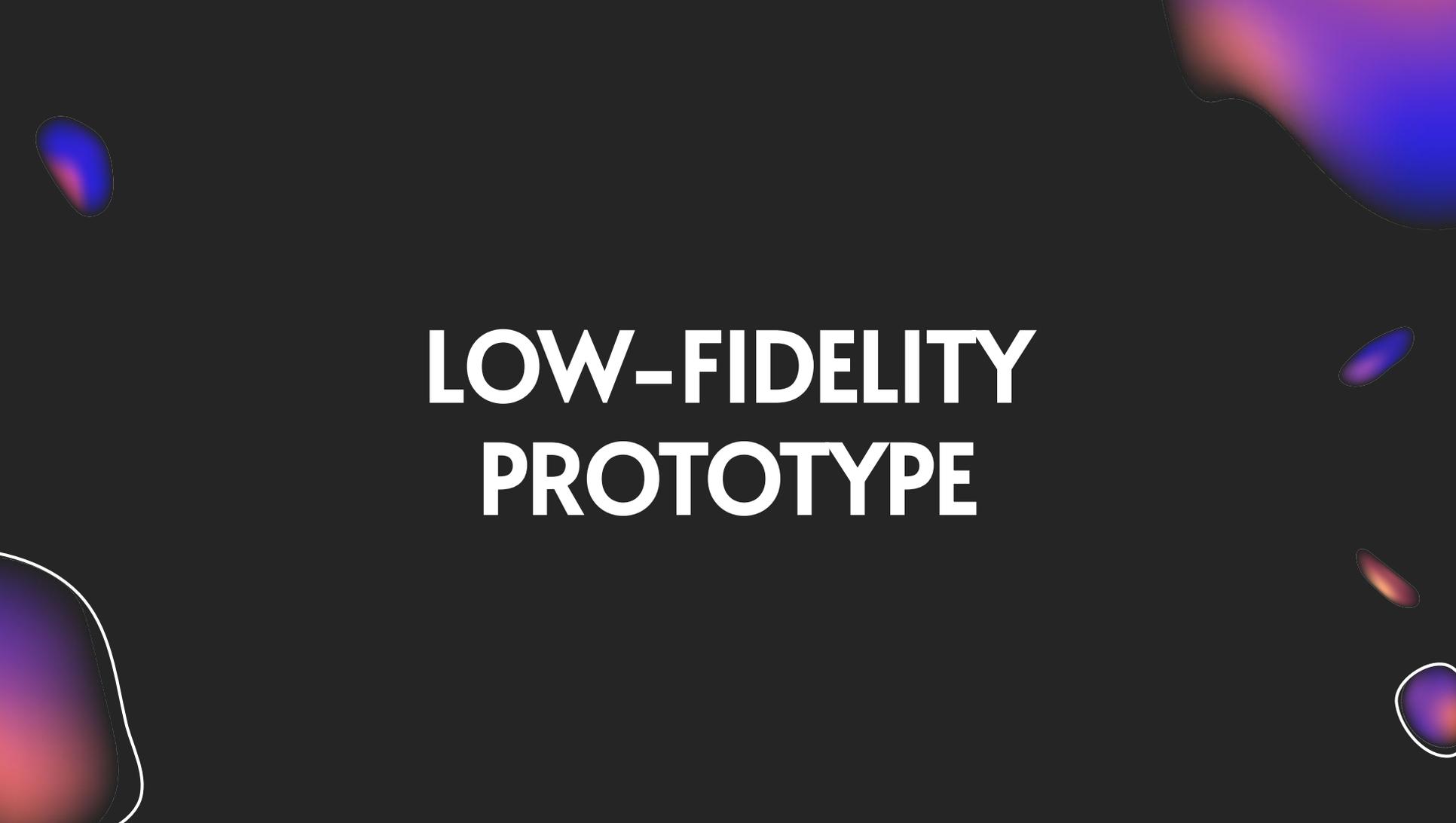
SELECTED INTERFACE...

MOBILE APP w/ VISUAL NOTIFS

Rationale:

With our goal of integrating users into a seemingly overwhelming scene, a complex AR interface that may only function on certain devices and in particular environments can hinder its ease of use.

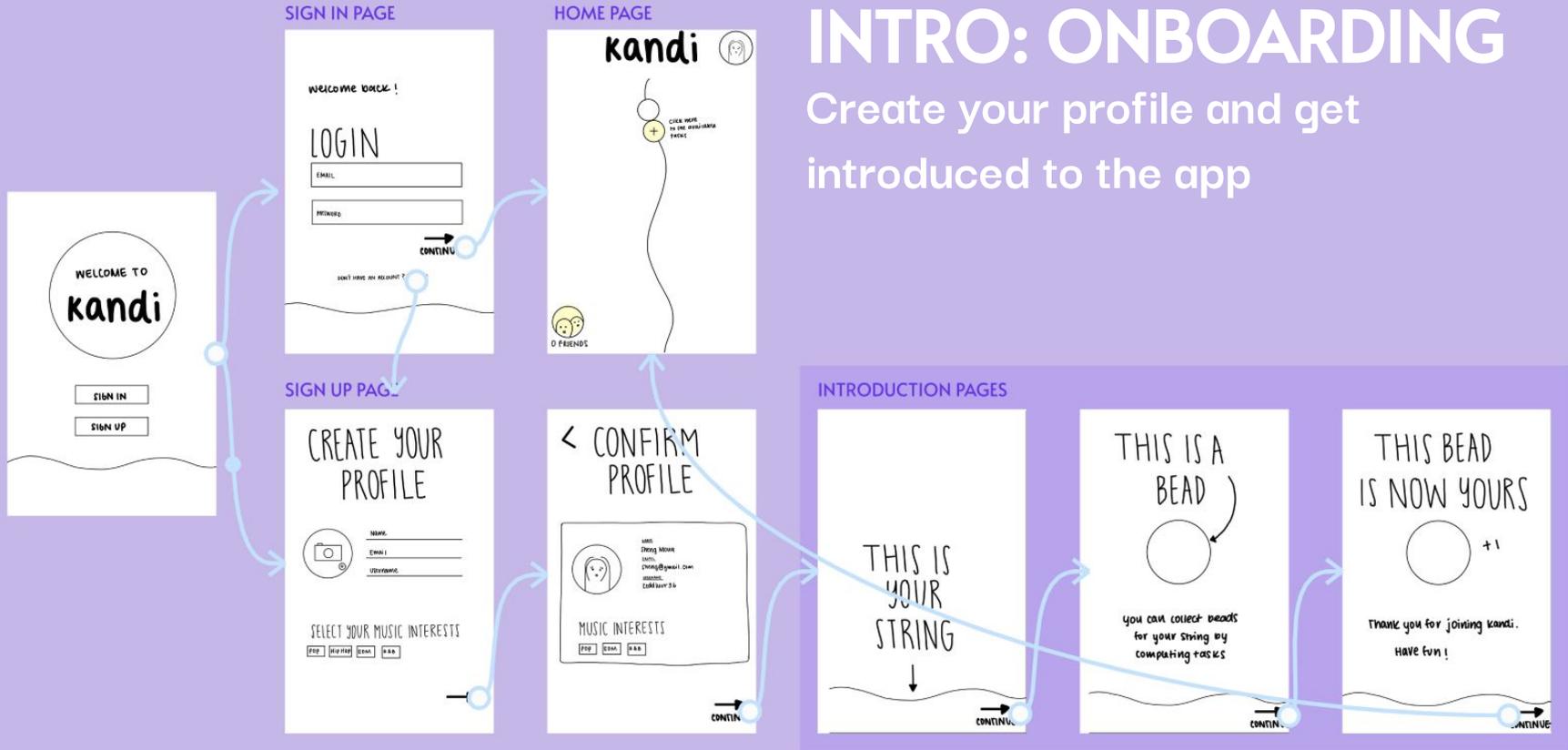




LOW-FIDELITY PROTOTYPE

INTRO: ONBOARDING

Create your profile and get introduced to the app

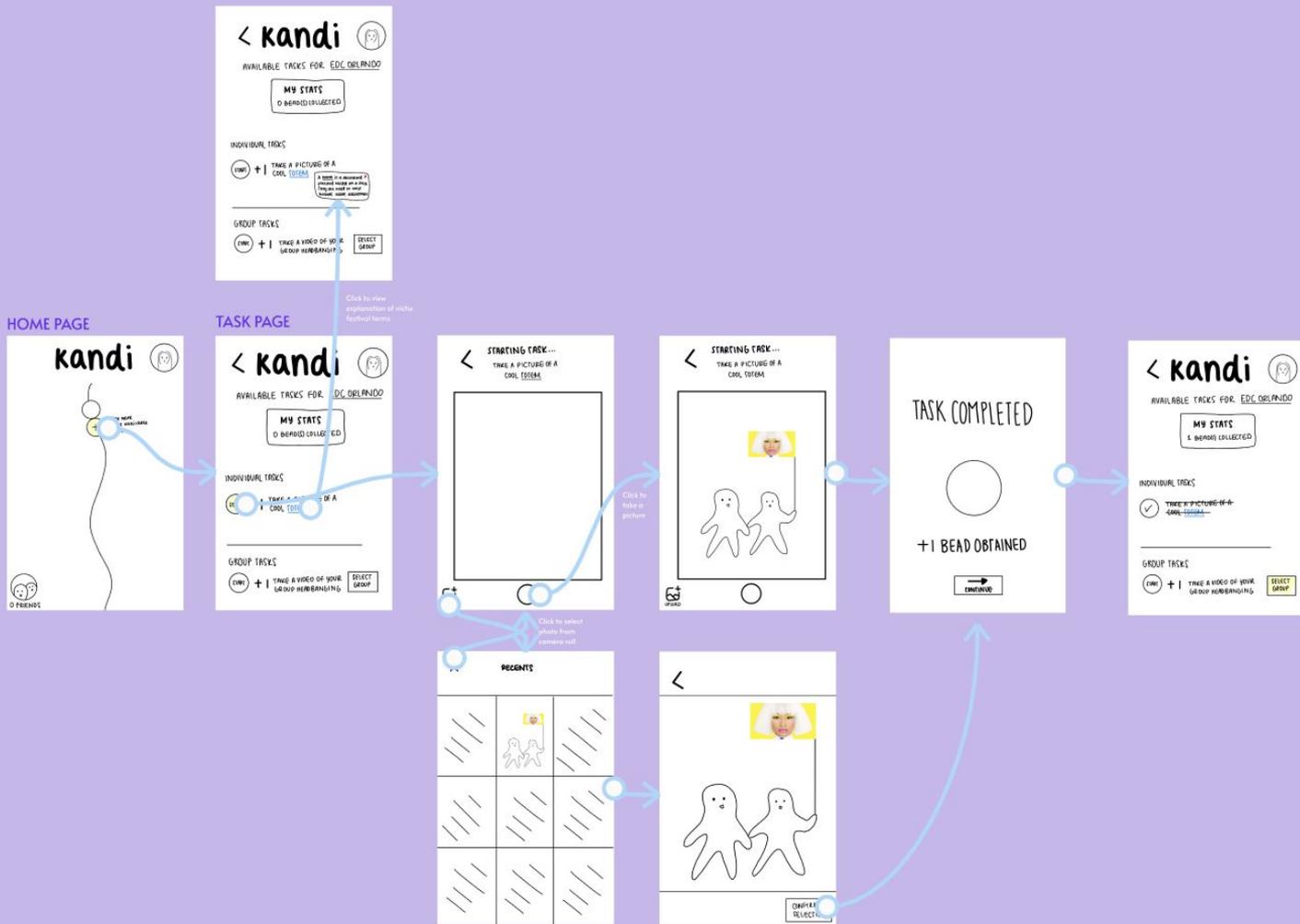


The background is a dark, almost black, space filled with several abstract, colorful shapes. In the top-left corner, there is a cluster of small, elongated, blue and purple shapes. In the top-right corner, there is a large, irregular shape with a gradient from blue to orange. In the bottom-left corner, there is a large, irregular shape with a gradient from blue to orange. In the bottom-right corner, there is a large, irregular shape with a gradient from blue to orange. The central text "3 TASK FLOWS" is written in a bold, white, sans-serif font.

3 TASK FLOWS

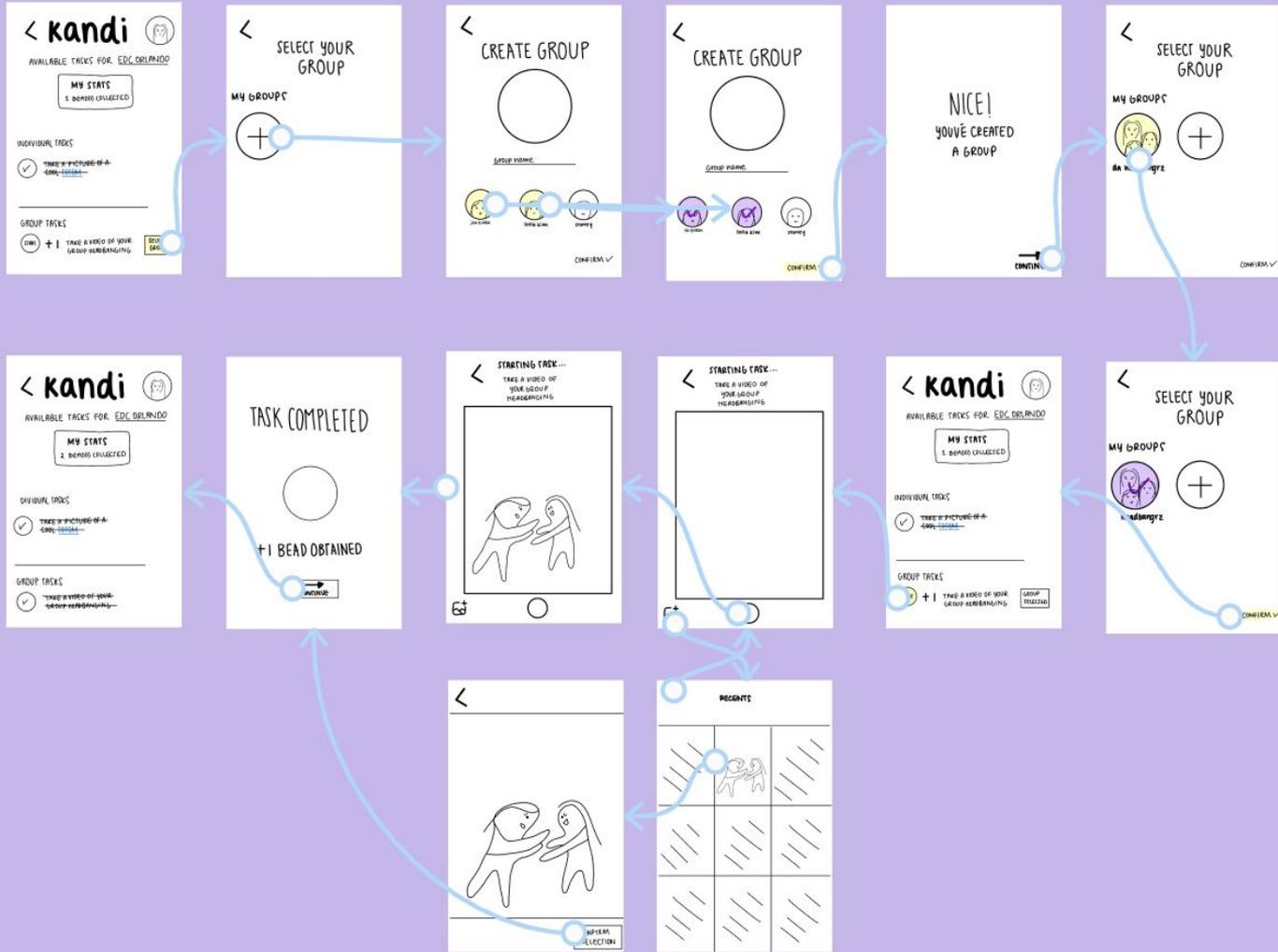
SIMPLE TASK

View and complete individual festival tasks



COMPLEX TASKS

Join or create a group to complete community tasks with friends



The background is a dark, almost black, space filled with several abstract, organic shapes. These shapes are filled with a gradient of colors, primarily transitioning from deep purple and blue on the outer edges to a bright, warm orange and red in the center. The shapes vary in size and orientation, some appearing as large, rounded blobs while others are smaller, more elongated forms. The overall effect is a vibrant, ethereal, and modern aesthetic.

USABILITY TESTING

RECRUITMENT



BRIAN

- Freelance Website Developer and part-time Bobarista
- Met at workplace in Cupertino Village
- Attended around 2 events



ANDREW

- UC Berkeley CS student
- Met at Cupertino Village
- Average event goer



DANA

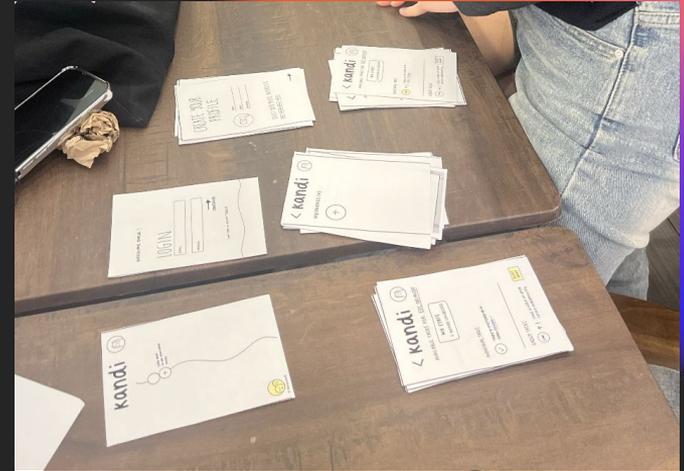
- UCLA Grad headed to Law School
- Met at Cupertino Village
- Has only attended one event

ENVIRONMENT & APPARATUS

We created a paper prototype with cards that represented screens with buttons that participants can point to, which would switch to the next card.

Roles:

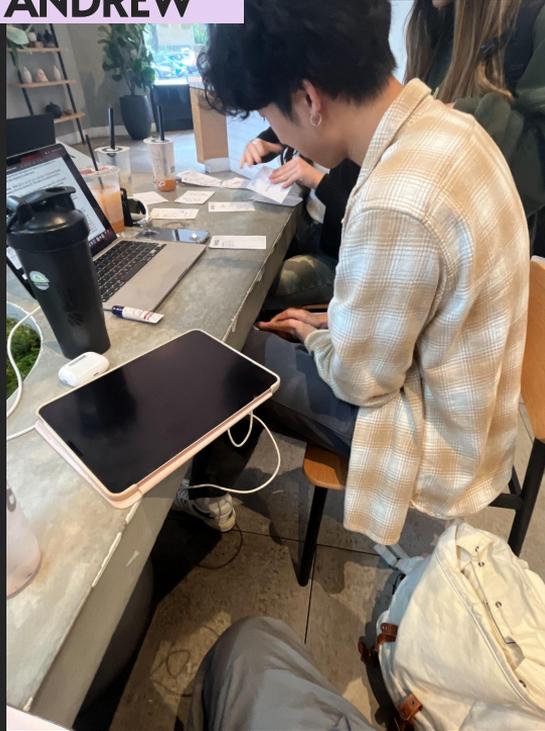
- **Jen** - Facilitator and greeter
- **Sofia** - Computer
- **Sheng** - Note-taker and observer



BRIAN



ANDREW



DANA



TESTING PROCEDURE

1. **Gave context behind 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 try all 3 features of the homescreen** (profile creation, manage friends, view and complete tasks); Participants navigated with auditory direction to gauge intuitiveness of app
3. **Final debrief** consisted of a discussion on **functionality, intuitive navigation, additional features to implement, and overall satisfaction**

USABILITY GOALS & KEY MEASUREMENTS

1

USER SATISFACTION

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

Measured by the number of mis-clicks; Noted questions or incidents where participant is unable to complete a facilitated task

3

FUNCTIONALITY

Measured through task completion, noting facilitated tasks that were indirectly succeeded



RESULTS AND DISCUSSION

PROCESS DATA

All participants...

- Appreciated **aesthetics** and **simplicity** of design
- **Successfully completed** simple, moderate, and complex tasks
- **Expressed confusion** on what to do after taking a picture of their task
- Understood and **easily navigated** the home screen

2 participants...

- Didn't understand the **main intent** of the app
- Expressed interest in a greater emphasis on **social connection features**,
- Struggled with the group selection and group task confirmation process due to **redundant steps**

1 participant...

- Asked what Kandi was during the onboarding process
- Wanted a way to see **which friends were at the same event** real-time
- Expressed desire for a **calendar feature** on friends' profiles to see future event schedule
- Concerned over lack of visual differentiation between group and individual tasks

MORE OBSERVATIONS

- Confusion about how the app will confirm a task is completed
- Expressed concerns over how to manage the “view tasks” screen once more group tasks and individual tasks were given
- Didn't understand whether the whole group or just one person would submit confirmation for completing a group task
- Asked if some tasks were festival specific

The background is a dark, almost black, space filled with vibrant, abstract shapes. A large, irregular shape in the center is filled with a gradient of colors, transitioning from deep blue on the left to bright orange and red on the right. Several smaller, elongated shapes are scattered around, some with a similar color gradient and others with a more uniform purple or blue hue. These shapes are outlined with thin, white, hand-drawn lines, giving the impression of a stylized map or a collection of data points. The overall aesthetic is modern and digital.

BOTTOM-LINE DATA

USABILITY GOALS & KEY MEASUREMENTS

1

USER SATISFACTION: Potential Usage scale (low, medium, high)

One user voted medium, two users voted high

2

INTUITIVE NAVIGATION: Number of mis-clicks

2 Mis-clicks during group selection process

3

FUNCTIONALITY: Task success rate

All simple, moderate, and complex tasks were successfully completed

CHANGES TO DESIGN

KEY 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

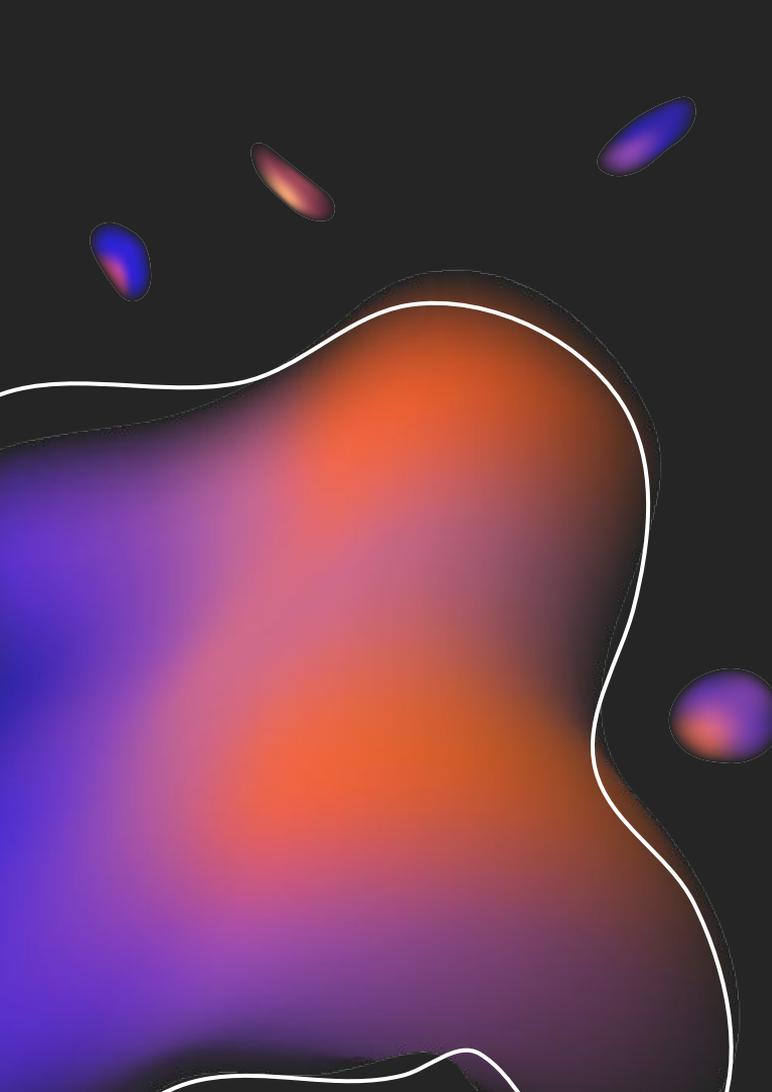
- **Adding a bluetooth connection feature** to see who is at the event real-time
- **Implement a profile calendar** to show friends planned future events
- Clicking on beads would show **memories of the media** used to complete tasks
- **Streamlining** group selection process and adding a **separate section** for group tasks
- Add **levels** for kandi to show experience

WHAT DID TESTING NOT REVEAL?

Would the app be used more during the festival or after?

How often would the user use the app?

Implementation concerns?



THANKS!

Questions?

Contact us!

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gabreu@stanford.edu

The background features a dark, almost black, field with several large, irregular, glowing shapes. These shapes are filled with a gradient of colors, primarily transitioning from deep purple and blue on the outer edges to a bright, warm orange and red in the center. The shapes have a soft, ethereal quality, with some appearing to have a thin white outline. The overall composition is abstract and modern.

APPENDIX

PROS AND CONS FOR SELECTED INTERFACE

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 ● Environmental incompatibility – festival environments tend to be darker thus, making it harder for AR apps to work due to the use of phone cameras.

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

LINK TO LOW-FI PROTOTYPE ON FIGMA

<https://www.figma.com/file/uNvzGnBBYrtMqi6hSX6bYu/kandi-prototyping-cs147?type=design&node-id=0%3A1&mode=design&t=CCGIXwUWEXRdzY8Y-1>

LINK TO TESTING SCRIPT

https://drive.google.com/file/d/1TGx8zNIW4JWcKXsfYCAbtDqi7japr58M/view?usp=drive_link

PARTICIPANT 1: BRIAN

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: ANDREW

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: DANA

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