



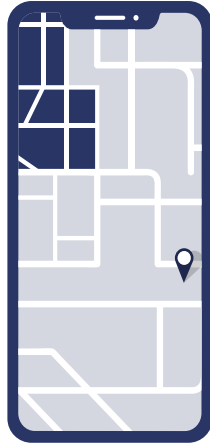
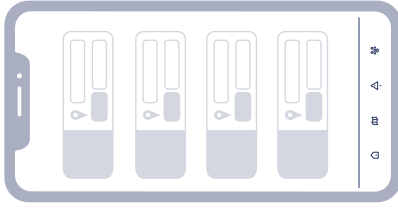
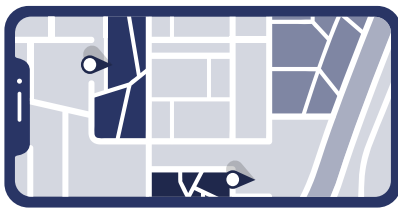
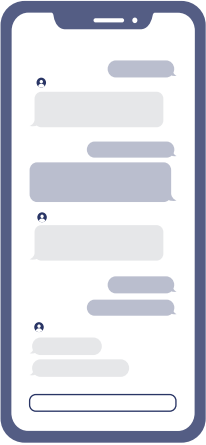
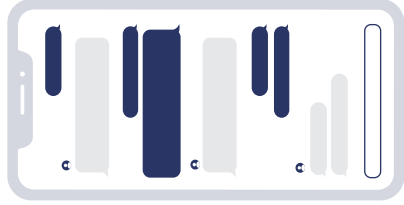
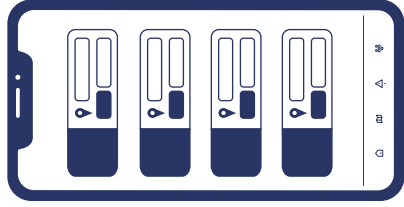
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AGORA



CALIFORNIA POLYTECHNIC STATE UNIVERSITY
TECHNICAL ASSOCIATION OF THE GRAPHIC ARTS

ARTICLE 3



3

AGORA



AGORA

Lexi Berryhill and Taylor Leslie

Agora is a mobile application that aims to connect live event-goers with safety protocol and information about the event's safety measures and plans. We are targeting live events with many attendees because there is a need for more safety and group planning support.

Through initial conversations with friends, family, and peers, we discovered that it is constantly challenging to coordinate schedules, determine meeting points, message group members, and find medical and safety protocols at live events. This app will improve the user experience of live events and benefit attendees and event holders.

PROBLEM STATEMENT

Attending large-scale live events often faces logistical challenges that detract from their overall experience. Currently, there is a lack of infrastructure and software available to manage these logistical issues, resulting in increased stress effectively and decreased enjoyment for attendees. In order to enhance the event experience and ensure attendees are fully immersed in the activities, there is a need for a comprehensive logistics management system that can alleviate these challenges and provide a seamless experience.

PROPOSAL

Agora's prototype will feature solutions such as planned activities, location sharing, emergency information and resource system, interactive maps, group meetup, chat, schedule sharing, event information, and meditation guides to solve user needs when attending live events. The scheduling screen will be used so attendees' friends can see where and when they will be during music festivals. Users can plan meetups and notify their group when they get separated. The emergency information will house where the nearest exits are, an emergency siren, medical attention locations, a meditation guide to decrease stress, and an incident report form. An interactive map in the application will allow users to always see the event's layout.

LITERATURE

Graphic Communication practices are applied in Agora by implementing storytelling, user-centered design, and user experience principles. Agora needs to apply these practices to be an enjoyable prototype or possible product. To craft a successful prototype, specific design principles must be used to support better decision-making (Rosala, 2020). Agora implements storytelling through consistent brand identity, copywriting that describes events, and defining the scope of our project. Storytelling is useful when expressing brand values and creating a solid connection between consumers and brands (Fog et al., 2010). It allows the people at the company to share their values and culture with consumers, enabling the bond between the two.

Agora will foster a connection with its users by sharing a compelling brand story by describing why the application was made, whom it was created by, and its purpose in the large-scale event planning industry. In addition, the copywriting within the application will guide users through storytelling. Combining storytelling and copywriting persuades users to keep reading throughout an application (Marlsen, 2015).



Lastly, when defining the scope of our project, we will use storytelling to create a compelling connection between potential users and reviewers. From our research, we will create a user persona that is a fictional story of a potential user (Harley, 2015). This persona will act as a bridge to persuade people to understand the purpose of the application and who will be utilizing its benefits. Through storytelling, Agora connects users meaningfully with an event mobile application.

Agora employs user-centered design by designing with the users at the core of everything we do. Designers must dig deeper than just hypothesizing about the user's needs themselves to create a product that fits the needs of those using it. The users must test products to see what is and needs to be fixed. The article "Design Methods and Critical Historiography: An Example from Swedish User-Centered Design. Design Issues" clearly shows how Swedes in the 70's utilized user testing.

Ergonomic design groups changed their way of working to put users at the forefront of their decision-making. They first "work[ed] with the people using the products, rather than those who purchased them or made decisions about their manufacture," helping them to get accurate reviews of their product in an unbiased way (Goransdotter et al., 2018). We will replicate this approach by finding user-testing subjects from all backgrounds to get the most genuine feedback possible. Second, the Ergonomic group changed their process by doing more than just asking users about what they wanted. They observed how their users worked during a workday (Goransdotter & Redstrom, 2018). This method helps to solve problems users may not vocalize. By doing observational testing with our product, we hope to see how our users naturally interact with the product. We can alter our interface to create a more streamlined and understandable task flow by watching where they struggle or get frustrated.

Ensuring the right users are selected for user testing is paramount when evaluating results. The article "Encyclopedia of Human-Computer Interaction" outlines the three types of users. Some primary users use the product, secondary users will occasionally use the product, and tertiary users are affected by the use of the product or make decisions about its purchase (Abrams et al., 2004). A successfully designed product will consider each type of user to include a wide range of stakeholders. This ensures that all user groups are considered in design decisions. We will be sure to select participants for our user testing who fall into all three of these categories. We will find live event goers who would use the app, people who have worked at live

events and perhaps would be on the receiving end of a help request in the app, and lastly, other types of people involved in the production of live events which would be affected by the app. This method will help us receive unbiased feedback that considers all user needs.

Usability is another core part of user-centered design. For a design to be focused on the user, it must be easy to interact with. In the article, “User-Centered Design and Usability Testing of a Web Site: An Illustrative Case Study,” Jakob Nielsen is quoted to define the usability of a system. He explains that it comprises five attributes: 1. learnability, 2. efficiency, 3. memorability, 4. errors, and 5. satisfaction (Corry, 1997). These five points will guide us in making our application easy to use.

We will strive to implement learnability by having clear instructions and tutorials when tasks need explanation. We will make our tasks flow as efficiently as possible. This will help our users be able to focus on the event they are at and not spend excess time navigating an app. We will use memorability to our advantage by creating a compelling design that keeps users engaged and excited to use our interface. We will avoid errors in our app by user testing and eliminating confusion in our designs.

When we see users struggling to complete a task or ending up on the wrong screen, we will make the flow more straightforward to avoid the errors encountered. Lastly, we will aim to satisfy users and measure this during testing. By asking how users feel while completing tasks, we can see where they are satisfied and implement those methods to create a more satisfactory experience. In addition to user-centered design and storytelling, Agora will successfully use user experience design principles to enhance engagement with the application. The Gestalt principle of perception, commonly known as the proximity principle, will positively impact our application. The principle states that humans can perceive relationships with objects that are closer together.

On the other hand, humans perceive objects that are further apart to have less relation. So, it is easier to perceive an application when groupings are based on function (Lowdermilk, 2013). The principle of hierarchy is inspired by the Gestalt principle of perception, meaning that it ties in space and alignment with the Gestalt principle of perception. However, it also includes color, contrast, and size to create compelling visuals (Blair-Early et al., 2008).



Finally, the flexibility-usability tradeoff blends hierarchy and the Gestalt principle of perception. Flexible functions are like a Swiss Army Knife, and it is considered the jack of all trades, master of none (Lidwell et al., 2003). So, when a design is over complicated and has too many functions, it makes perception and hierarchy need to be clarified. Agora will employ hierarchy, the Gestalt principle of perception, and the flexibility-usability tradeoff to create a simple, elevated design.

The design will allow users to feel comfortable using the app and leave them wanting to continue using the technology. Storytelling, user-centered design, and user experience design principles help create a better application. Agora will be a more recognizable and usable app due to these graphic communication practices.

RESEARCH

BACKGROUND RESEARCH

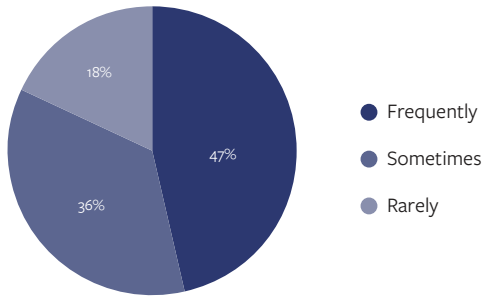
The event industry is ever-growing, especially in a post-Covid-19 world. The media industry is stressing the importance of event software to achieve better business outcomes, which means that Agora would help the event attendees, creating more business for event stakeholders.

For instance, the global events industry will bring in a whopping \$2.194 trillion by 2028, significantly more than the \$887 billion the market commanded in 2020 from COVID-19. (Bizzabo, 2022). In addition to the market growing, there is predicted to be a 2X increase in hybrid and in-person events over the last three months of 2022 (Bizzabo, 2022). 94% of respondents within the media industry, from a Bizzabo survey, believe event software makes it easier to achieve business outcomes (Bizzabo, 2022). 40% of event planners are unsatisfied with the tech options available to them (Howarth, 2022).

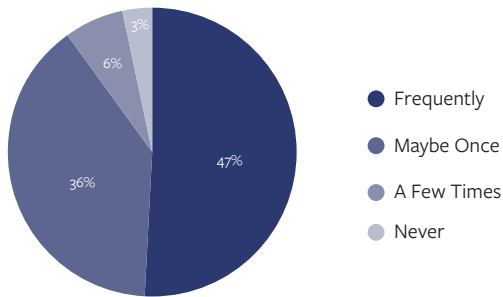
USER SURVEYS

To better understand our users, we surveyed the Graphic Communication student body, friends, and family to get the most accurate and diverse responses. We asked 60+ users about their experiences at live events through multiple choice, a scale of one to ten, and open-ended questions. We used our findings to shape our app to solve problems users were facing. We mapped out valuable insights and highlighted some critical survey responses below.

How often do you attend live events with large audiences?



Have you ever been at an event and not been able to contact the people you went with due to lack of service, phone barrery, or stolen device?



Would you like to use your phone as a resource to navigate an event and contact your friends?

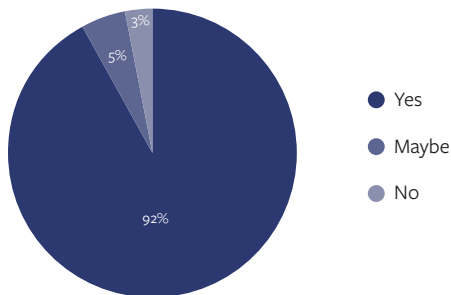
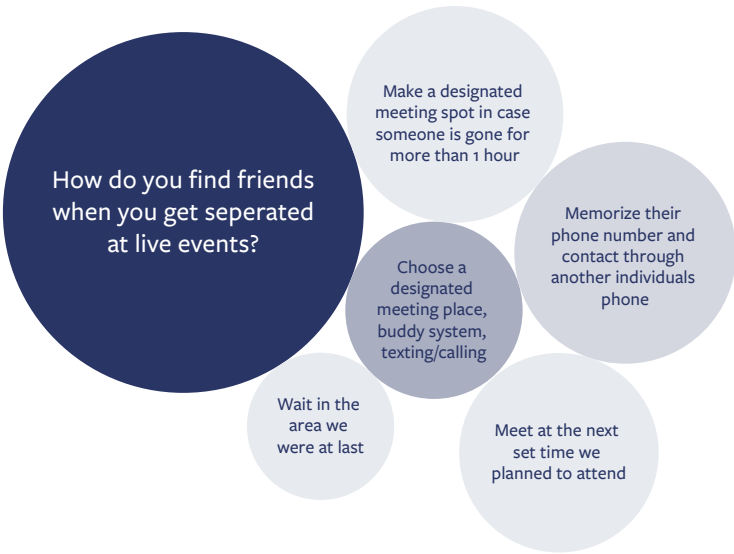
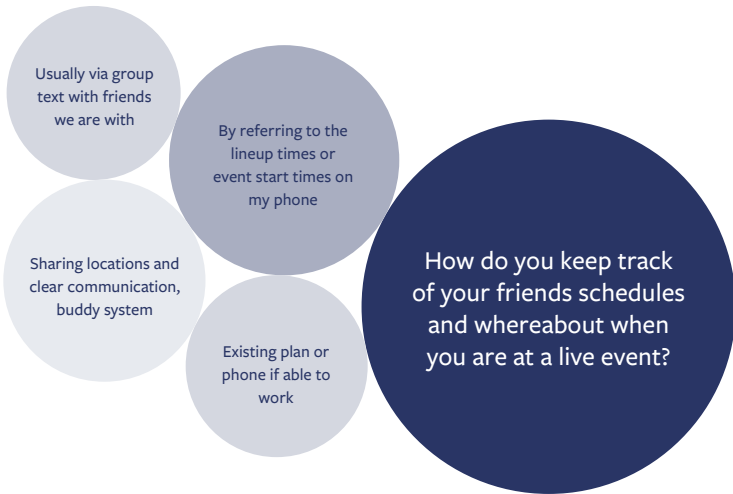


Figure 1.1 - 1.3 Survey results







Figures 2.1 - 2.5 Short answer question survey results

PERSONAS

After researching the demographics of live eventgoers, surveying potential users, and speaking with frequent event attendees, we created two personas. These personas helped us to better empathize with the user and understand their journey in the app.

Natalia

Natalia is a 22-year-old student who loves going to live music with her friends. She frequents festivals like Lightning in a Bottle and Coachella. She likes to go to smaller concerts and raves near her college town as well as an occasional sporting event.

Wants and Needs

- Wants to find friends, food & drinks, bathrooms
- Wants a way to remember meeting points to make finding friends easier
- Wants to track lines so she doesn't miss a set while waiting for food or a bathroom
- Wants a way to contact friends when service is spotty
- Wants to know where her friends are
- Needs to know where exits are located
- Needs to be able to get medical/security help quickly when necessary

Frustrations

- Finds it easy to lose friends in a crowd and doesn't like getting separated
- Doesn't want to miss part of the concert because she has to look for friends
- Is stressed when service is bad and she gets separated from parts of her group
- The setup or size of a venue is unfamiliar and/or not what she expected
- Struggles to remember plans and keep track of friends and meeting points when using recreational drugs or drinking
- Difficult to coordinate transportation home with friends after an event

Chris

Chris is a 52-year-old from Mill Valley, CA and is an avid 49er fan and loves seeing live music. He enjoys attending all the 49er home games with his friends and family, catching a few Dead and Co. shows, and Outside Lands or BottleRock.

Wants and Needs

- Consistency in coordination when attending live events
- Clear map system with marked exits
- Location finder
- Track his kids when they are also at the festival
- A way to find VIP bathrooms and food areas
- An easy way to meet up with his kids at the end of the festival

Frustrations

- Overwhelmed with the amount of people at events, especially as he is getting older and appreciates getting away from the crowds
- No clear understanding where resources are at events
- Doesn't like having a rigid schedule, likes checking out unknown artists but wants his friends and family to still know where he is
- Transportation is frustrating around the Bay Area
- Unclear where VIP area is when attending event

COMPETITIVE LANDSCAPE

We analyzed eleven competitors to get a feel for what event goers are familiar with and to see what does or does not work well. We first explored each app as much as possible and took screenshots of effective pages or something we wanted to avoid. We gathered all the information on FigJam and made a list of what we liked and disliked about each app (including opinions we saw in the app store reviews). We

then created a matrix of what apps had each feature we thought was valuable. This helped us show how our app would stand out from the competition.

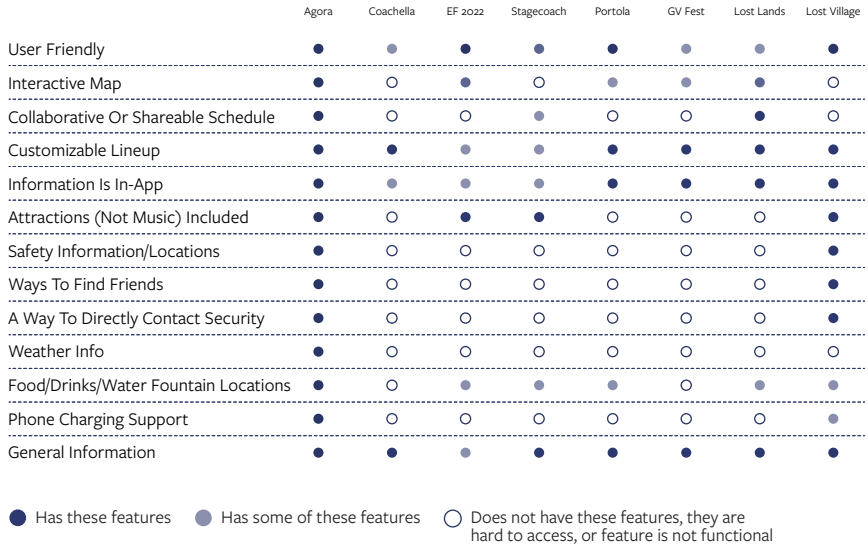


Figure 3 Competitive landscape

BRAINSTORMING

HOW MIGHT WE

Our “how might we” turns our problem statement into a question that can be solved. From our brainstorming and background research, we crafted a “how might we” statement based on what solutions best answered the needs and wants of our users: How might we create an application for live events that keeps track of logistics so attendees can feel safe, stress-free, and focus on immersing themselves in the experience?

FEATURES

We determined that the essential features necessary to be featured in Agora must include:

- Scheduling/itinerary screen
- Groups screen
- Safety information

- Health and well-being support
- Customizable event screens
- Location services

EXECUTION

INFORMATION ARCHITECTURE

Once we had decided on the features we felt were most important, we created the information architecture. This helped us map out which information would go where and understand how each feature would be connected.

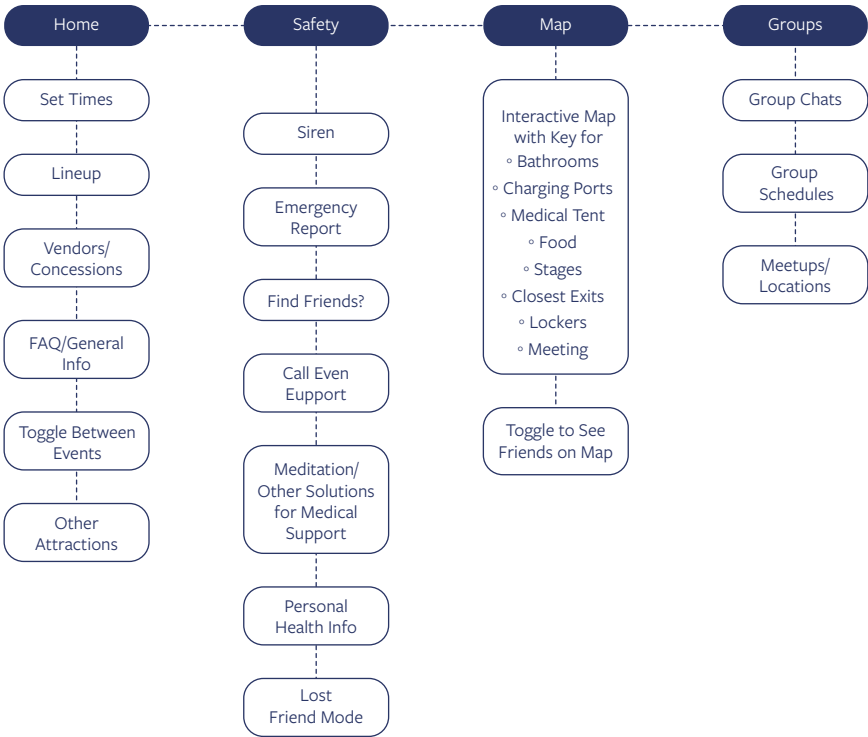


Figure 4 Information architecture

SKETCHING

Finishing the site map allowed us to start our initial sketches that include our main features. The sketches below display our design thinking strategies in our screens.

WIREFRAMES

Finishing the site map allowed us to start our initial sketches, including our main features. The sketches below display our design thinking strategies on our screens.

DESIGN GUIDELINE

TYPOGRAPHY

Switzer is sans-serif, inspired by 90s magazine typography with a new twist (Dafont, 2022). This font is readable, familiar, and not too complex, allowing it to be legible and suitable for a user interface easily.

Switzer Semibold

Switzer Medium

Switzer Regular

Figure 5 Switzer family

COLOR PALETTE

These colors are strategically chosen to evoke a positive emotion. Additionally, bright colors are often represented at music festivals, one of the live-scale events we target.

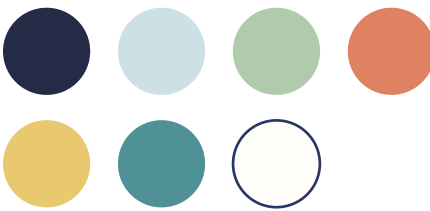


Figure 6 Color palette

ICONOGRAPHY AND ILLUSTRATIONS

Icons are used throughout Agora to speak the user's language and increase usability. They are designed to be simple and adhere to our style guidelines. The illustrations

used in the prototype will represent features. The map is drawn to mimic the Outside Lands map, which we used as our theoretical live event a user would attend using Agora. The illustrations of people are used as visual cues for users. These illustrations are subject to change depending on what type of event the user is attending.



Figure 7 Illustrations

RESULTS - HIGH FIDELITY SCREENS

LINEUP AND SCHEDULE

The lineup and schedule pages are an interactive way to see who is performing, when, and what friends are planning to go. Each artist has an about page so attendees can learn about the performer. They additionally see set details, what type of music each artist is, and explore external information about them (Figure 8.1-8.3).

HOME

Users can access information about each event they attend from the home page. This is where they can navigate to see schedules, vendors, activities, tips and tricks, FAQs, etc. (Figure 9).

VENDORS

Attendees can browse a list of vendors to see what food or drink options suit them, then locate them on a map (Figure 10).

MAP

An interactive and searchable map where users can find everything they are looking for and more (Figure 11).

SAFETY

A section of the app is dedicated to live event safety. Here, users can play a siren for times of distress, file a report for help, access medical resources, notify friends when lost, explore a mindfulness guide, and have quick access to emergency help lines (Figure 12.1-12.5).

FAQS

A fast and easy way to get answers to frequently asked questions (Figure 13).

GROUPS

A way for users to interact with friends in their groups, plan meetups and view each other's schedules. New or returning users can intuitively create or join groups for each event they attend (Figure 14.1-14.6)

REFLECTION

Looking back at this senior project, we are very proud. Despite the ups and downs we experienced, we became a stronger team in the end and genuinely cared about the design outcome of our project. The IRB was the most challenging part of the project because the approval process took a very long time. However, it was worth it because Cal Poly now protects our research. While conducting our background research and sending out our first survey, it was very humbling to receive around 60 responses. We were very excited about how much data we could use to influence our design choices.

Implementing our background in user experience design from prior internships and clubs at Cal Poly helped us structure how we want to begin our research, designing, and user testing. This senior project was an excellent opportunity for both of us to

grow as junior user experience designers and hopefully will help us with our careers in the future. Although we still created a thorough prototype, some limitations disrupted us from getting as much done as we wanted in our timeline.

One limitation that we had time with was completing the IRB because it took a lot more time than we thought. On that note, the quarter needed to be longer—we wish we could have done it over a year or two quarters to maximize the amount of quality work produced. Lastly, meeting with professionals in the live event industry to gather their feedback on Agora would be beneficial. We have a meeting with an event coordinator at BottleRock, a music festival in Napa, CA, to have her provide constructive insight.



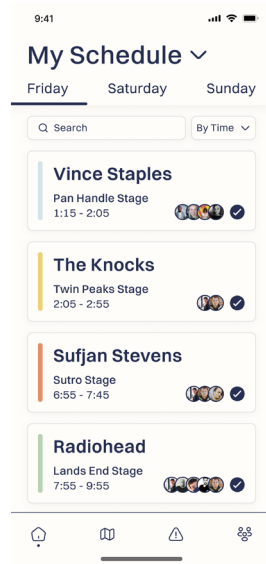
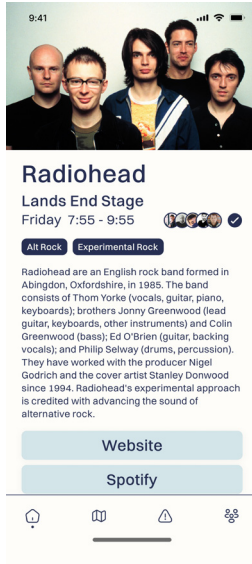
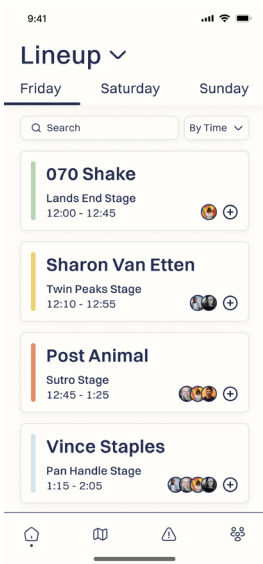


Figure 8.1-8.3 Lineup and schedule screens

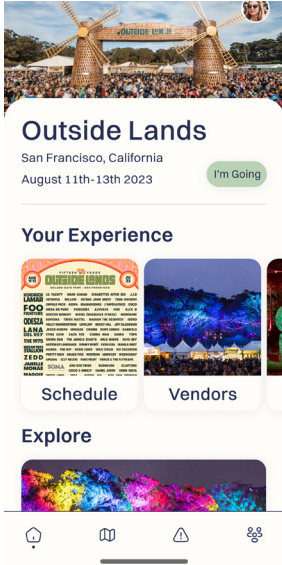


Figure 9 Home screen

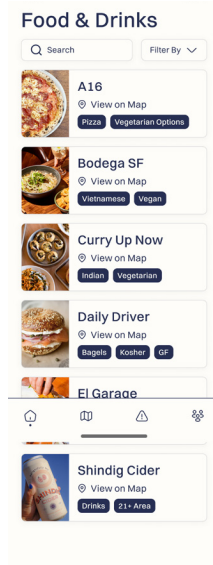


Figure 10 Vendor screen

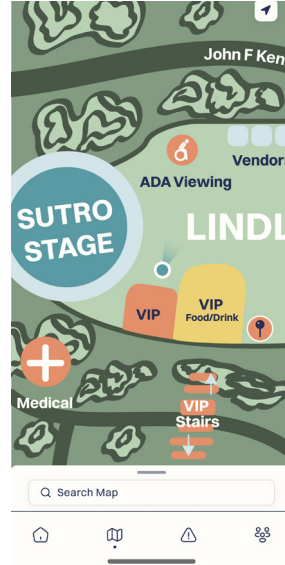


Figure 11 Map Screen

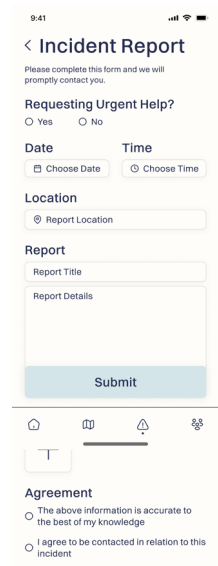
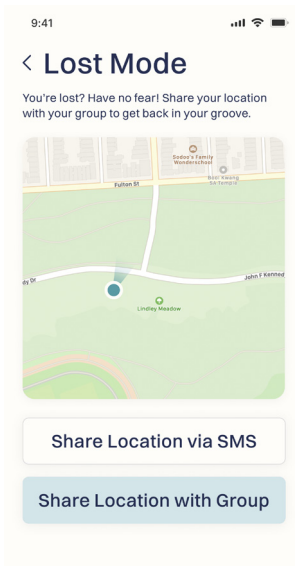
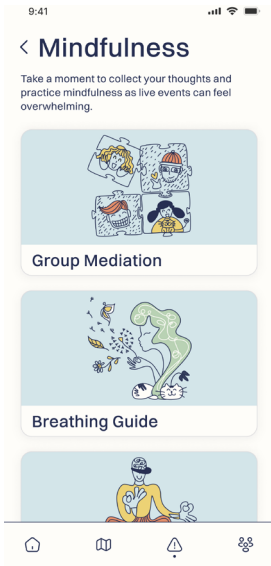


Figure 12.1-12.3 Safety screens

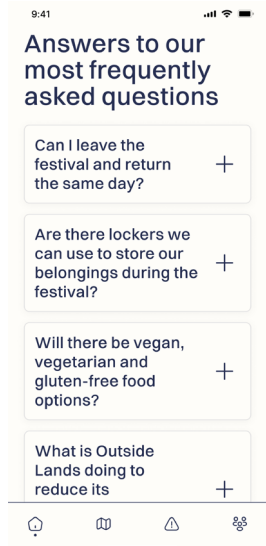
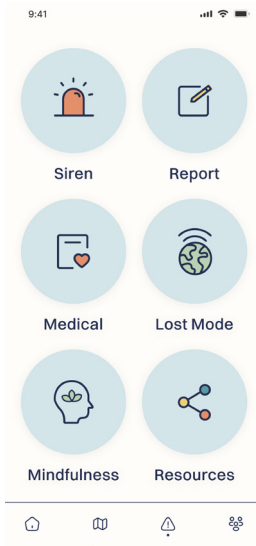


Figure 12.4-12.5 Safety screens

Figure 13 FAQ screen

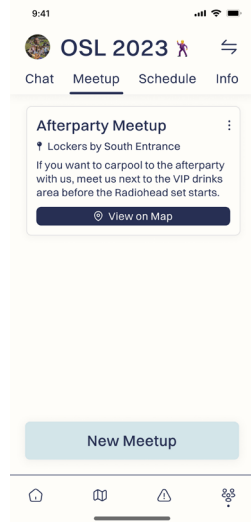
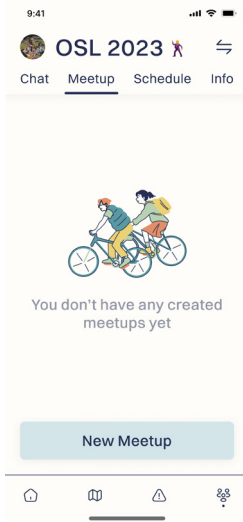
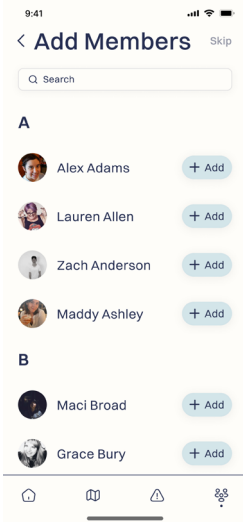
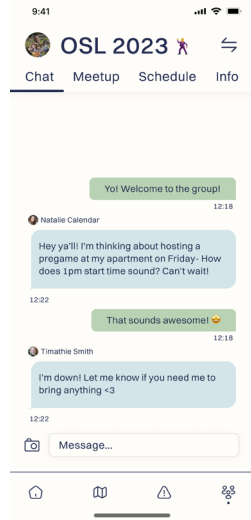
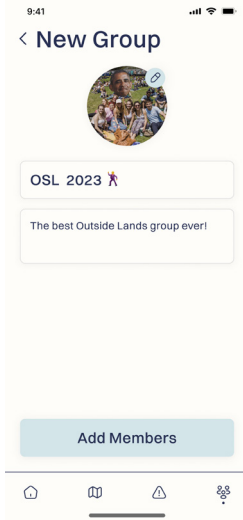
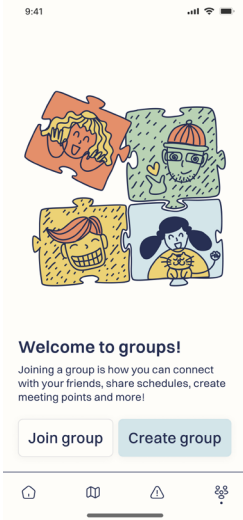


Figure 14.1-14.6 Group screens

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ABOUT THE AUTHORS



Lexi Berryhill

Lexi Berryhill graduated in Spring of 2023 from California Polytechnic State University, San Luis Obispo with a degree in Graphic Communication, with a concentration in User Experience/User Interface. Her passion for creating and improving experiences for others led her to a career in product design. Learning from friends' stories from music festivals, conferences, and concerts, they found ways to improve scheduling, way-finding, and access to safety resources in their app: Agora.

Taylor Leslie graduated in Spring of 2023 from California Polytechnic State University, San Luis Obispo where she obtained a bachelor of science in Graphic Communication with a concentration in User Experience/User Interface. She works as a freelance photographer and the founder of Taylor Leslie Photography. Her mission is to learn while allowing her creativity to flourish, seeking adventure through new experiences, and being responsible for quality work and a way of life.



Taylor Leslie



