Círculo

Safety Starts with Community

First in-person Círculo workshop in Mexico City, 2023

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Introduction

Círculo is a physical safety communication app. It provides a secure way to share locations and check-in while traveling or doing high-risk work. It was designed to strengthen support networks among female journalists in Latin America, but is broadly useful for anyone facing these kinds of threats.

The app complements offline protocols of action established by a group of people, in which each member knows their role in possible high-risk scenarios. Círculo is a protected digital space, outside of normal communication channels where harassment may be happening, and also ensures that high-importance messages and alerts are not lost in other conversations. It also does not require real names, phone numbers, or photos, reducing the secondary risks of using the app itself.
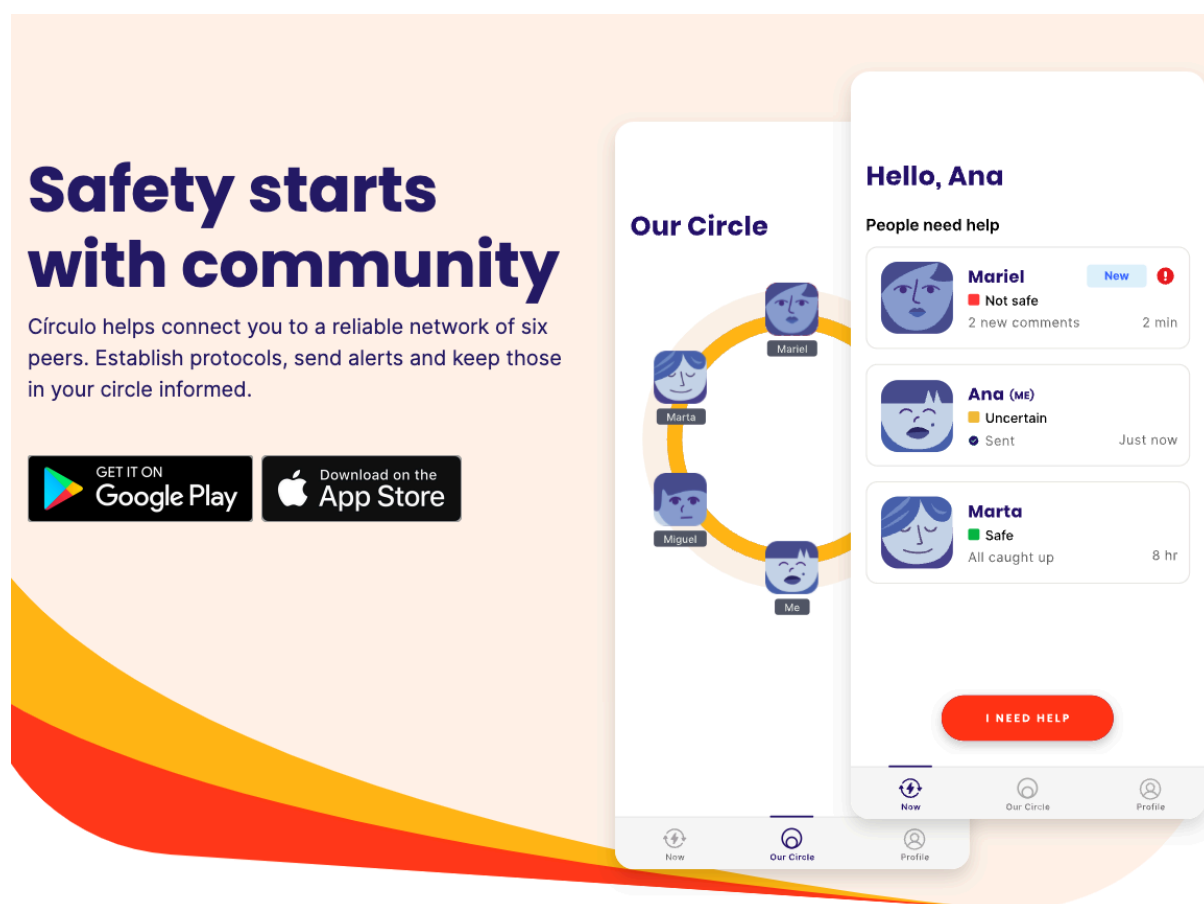
Circulo "Classic" User Interface

Círculo is free and open-source software, available for Android and iOS devices. It is built on the open-source Matrix.org protocol and software, and utilizes the MegaOLM double ratchet encryption based on the Signal protocol. The app relies on secure

infrastructure hosted and maintained by the Guardian Project operations and infrastructure team.

Objectives and New Directions

Círculo has been under development for the last five years, building on an earlier SMS-based app named "Circle of 6". While the core features have been functional and secure from the beginning, an effective user experience for people under duress has always been difficult to get just right. Beginning in 2023, the Círculo team worked to vastly simplify the experience and interactions people have while using the app. This included the removal of open chat functionality, which were framed as 'calls for help' in the previous version. In observing how people used that version of Círculo, we found that it was unclear when to resolve a status chat thread, and when to start a new one. This led often to people attempting to use Círculo as a general purpose messaging app, which it was not designed to be. Further, the most important action, to ask for urgent help, was buried deep in the user interface—at least 4 taps in. We found that people weren't engaged well with the app or each other because of this lack of clarity.

With this understanding, we stepped back to review: *what are the most meaningful interactions around physical safety that we can provide for journalists and human rights defenders from an Android and iPhone?*
Through keeping a focus on this key question, as well as undertaking a number of other important activities to build adoption and momentum, we achieved a significant improvement in usability and awareness of Círculo.

Activities

Addressing Existing Bugs and Vulnerabilities

During the initial phase of our second round of work at Círculo, we compiled a list of iOS and Android bugs that required attention. Additionally, we conducted further testing to identify any new issues that may have arisen due to updates in the Android and iOS platforms since our previous round of work.

- **iOS.** There were 3 bugs identified and were fixed on the Círculo Version 1.0.7 (35).
  - [Persist autogenerate password in local app prefs to enable change password](#)
  - [No contacts show when joining from a link](#)
  - [Some status not displayed until app is killed and re-opened](#)
- **Android.** On Android, there were 4 issues identified and solved.
  - [If no condition is set by the user, remove 'uncertain' from status display](#)
  - [Empty Audio Recording](#)
  - [Consent UI choice changes](#)
  - [Finish feedback "consent" UI popup](#)

New versions of Círculo iOS and Android featuring those changes were released in time for the Usability study with local partners planned for Activity 2.

For this study, we also integrated [Clean Insights](#), an ethical, secure, and private measurement platform to help us identify some patterns of behavior during the testing process. Testing volunteers were fully informed of the measurement feature and learned how to enable it, how long it would stay on, and which specific data we were collecting if they opted to join the study.
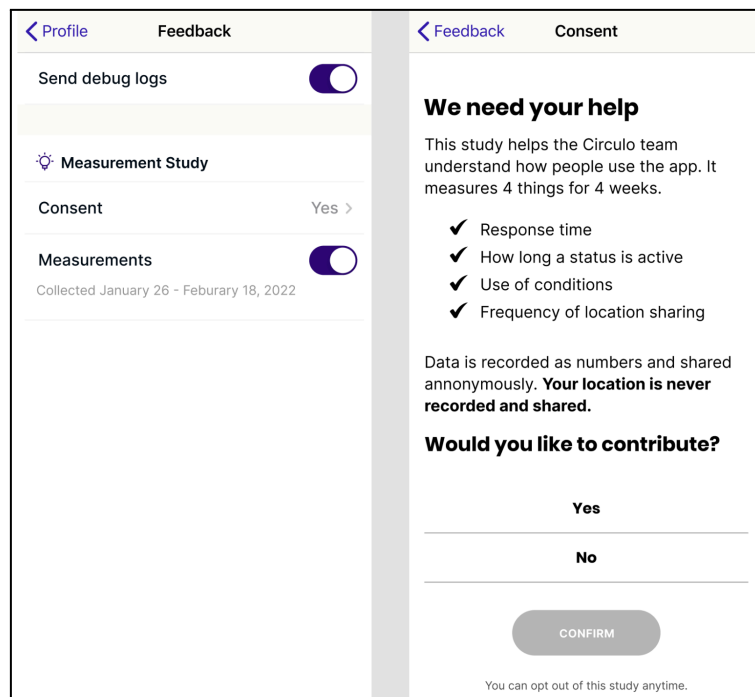
Clean Insights Feature Enabling and Consent form on the Círculo app

Usability Study with Local Partners

To ensure we gathered feedback on existing and potential improvements to the app as early and often as possible, we launched a remote usability study activity. In total, we had 31 participants from 11 different regions participate. About 40 percent of the participants were journalists, while the rest were digital security trainers, activists, teachers, and human rights defenders.

The testing process was divided into three different stages:

Stage 1 - Onboarding: The first week, participants joined an onboarding call where we gave them a brief introduction to the app and guided them through the installation process. Each group chose and set up a trusted communication channel for them to share any issues they encountered during the testing. This also allowed us to provide them with timely assistance and file tickets for new bugs they reported. Their mission that week was to explore the app and test every feature on their own _without_ a user guide and let us know how friendly and intuitive the app felt for each tester.

Accomplishments:

➔ It was amazing to see how much time the testers dedicated to exploring the app once installed, and how excited they got whenever they encountered an issue and were able to report it with screenshots on the group chat, then many others in the group tried to replicate the issue or help their partner fix it.

➔ Thanks to that collaborative spirit, we were able to identify issues related to a specific phone brand, model or OS version, and issues due to human error.

➔ We were able to spot common assumptions and misconceptions about features in the app in real-time because people were posting on the group chats comments about what was being posted in the app by other users.

➔ We generated a detailed list of issues, many of them related to the diversity of local Android device types and versions.

Challenges:

➔ Most of the participants joined the call from the same phones they were to use for testing, so they had to do the installation after the call for that reason.

5 out of the 7 groups were people who knew each other and were good at communicating on the chat we created for the testing.

➔ We discovered and successfully resolved compatibility issues with older Android devices. However, we encountered a persistent problem with one iPhone 8 that was unable to install the app. We are still investigating the issue with iOS.

➔ There were two groups of journalists who did not know each other and special measurements were taken to make sure they felt comfortable sharing information during the testing. One member of our team created those circles and added all the participants to act as a moderator and monitor the activities inside those circles.

Stage 2 - First Review: In the second week, we had a group call to review what they experienced and learned while exploring the app with their group partners. In general, the feedback was positive, and it was nice to see and hear how invested the testers were in making the app better. In the past two rounds of development, we did not have stipends for testers and the difference in the level of commitment and care between paid testers and volunteers has been remarkable.

We also talked about common threats and safety protocols, and we made emphasis on the importance of the human side of each emergency plan and how technology should not be the center of those protocols. With some groups, we also made an analysis of the technological capabilities and limitations that could affect the performance of the app and possible solutions. Finally, participants were asked to do a second round of testing, playing with different scenarios of situations they had encountered in the past or imagined could happen, and then try to solve those issues as a group.

Accomplishments:

➔ After we reviewed safety protocols and the roles trusted people have to play in those protocols the testing pattern shifted. Participants stopped focusing on finding issues and started paying more attention to what other people posted. Now they were looking to reply to those posts with possible solutions.

➔ For most of the testers, it was easy to understand the purpose of the app, and their role in a Circle.

➔ The features in the app made more sense for some of them after we talked about safety protocols and the difference between a chat group and an app dedicated to sharing urgent statuses.

Challenges:

➔ We encountered more issues once testers started using the app with emergency scenarios in mind. Some of those issues can be fixed, but others are related to the cell phone infrastructure in Mexico and the data plans each user had.

➔ We also received reports of issues related to human assumptions and expectations when an emergency happens. These were different depending on the user's locations and backgrounds. The solution to those would be to support establishing strong and clear action protocols when people join a circle. This behavior is something we will encourage during in-person trainings, on the website and in supporting documentation and guides.

➔ There were instances when some people in a group did not get the notifications at the same time as others. They expressed concern because they did not know if the issue was related to the app, or a connectivity problem. We know connectivity limitations are a common factor for users in Mexico and Latin America and those issues have to be considered by Círculo users.

Stage 3 - Survey: In the third week testers received a survey link with a series of questions designed to help us better understand the local context. We also asked them to share their safety protocols, how they were implemented, and who are the kinds of people involved. In that survey, we asked questions about their personal opinions after testing the apps. This included their suggestions to improve existing features or add new ones based on their experiences after testing the app for two weeks.

Accomplishments:

➔ The responses we received from that survey gave us a clear idea of the new features we could add to improve the performance of the app. Fortunately, they aligned with many of the proposed features in our own plans.

➔ It was also clear from those responses that we have feedback from a wide variety of backgrounds, age ranges, and locations, which will have a positive impact on the decisions we make moving forward.

➔ The participants became very committed to this project. We are sure they will help us promote and increase adoption organically in their communities when we do the official release.

Challenges:

➔ We learned from the data provided in the survey that many testers do not have safety protocols in place or strong networks of support even when their jobs are risky.
➔ We also learned that many of them had low-end devices, old versions of Android and iOS, and very little space in their phones' memories which can lead to malfunctions of the app.
➔ Most of them have limited data plans and limited access to Wifi networks. Lack of connectivity during urgent situations when the app is needed the most could make them lose trust or depend on it less.

In summary, coordinating this remote usability testing with support through paid stipends, provided extremely valuable feedback for our design and engineering process. It also helped us build up a new network of interested users and potential grassroots evangelists for the app. Beyond specifics about the app, we learned quite a bit about the context in which the user communities we wish to benefit are living and working within, ensuring that our user stories and characterizations were more accurate and tuned for lived reality.

User Experience Design - Phase 1

Based on the feedback from Activity 2, the team focused on simplifying the Círculo experience to focus on the most essential and novel features of the app. This was to both help differentiate it from other messaging and safety apps. It would also help boost adoption through providing more clarity of its unique purpose and value.

We worked to better define the situations and needs Círculo is meant for. This included developing user stories around different travel situations to help work through typical behaviors. Below is an example of some of the situations we explored:

1. **Planned protest**
   a. "If things get iffy, I'll send an alert, and maybe a photo so people can see what it's like around me."
2. **Spontaneous assignment**

a. "I'm leaving now. My ETA is around 5 pm. If you don't hear from me, call."
   b. "I'm about to walk home."
3. **Surprise checkpoint**
   a. "I start to realize that the police have shown up and are inspecting phones"
   b. "I'm about to cross a border. I want help from my friends in remotely wiping sensitive content from my accounts."
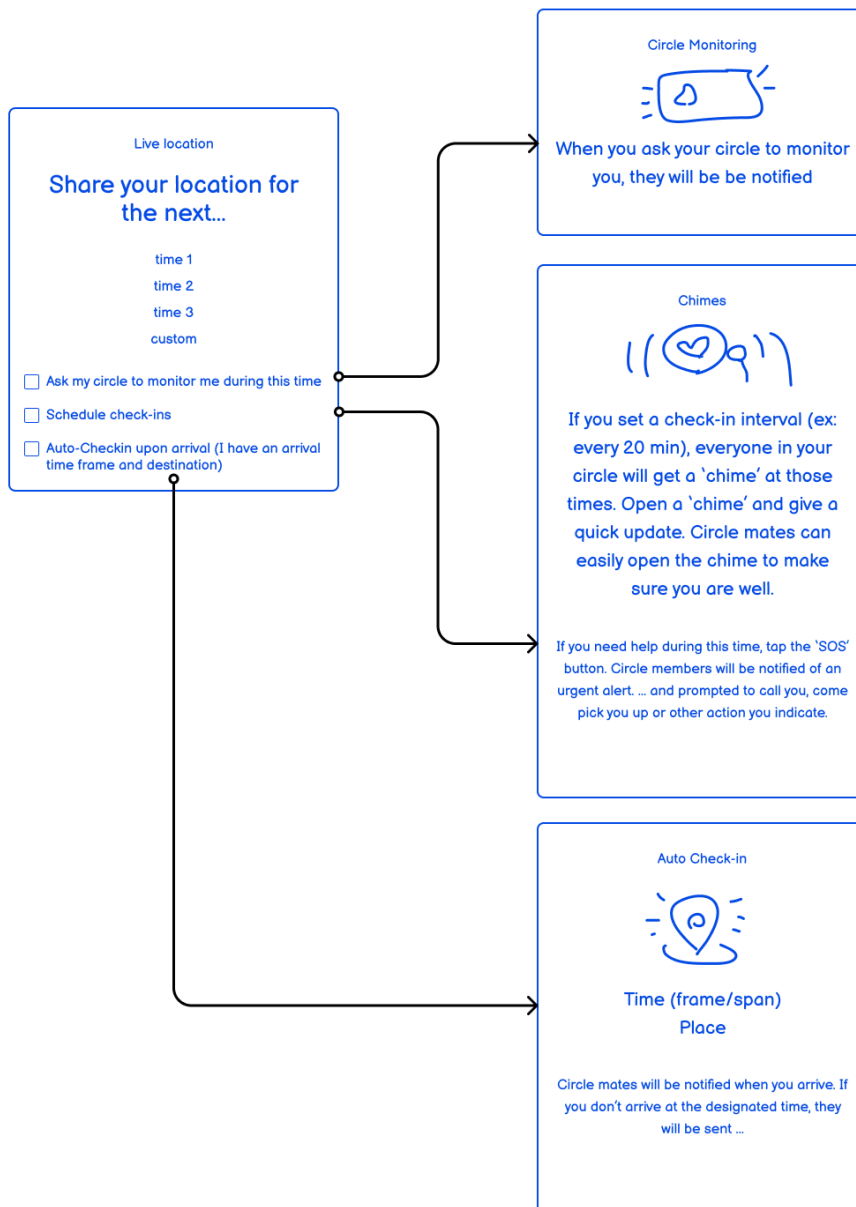4. **Extended trip**
   a. "I check-in every day. I'm sending pictures and can alert my network if I get nervous."
5. **Short term assignment**
   a. "I'm going to do an interview in another village. I'll be there for the next 24 hours."

For each of these, we generated user experience sketches of possible interactions in Círculo. We were specifically looking at the moments when someone would reach out to their safety network for monitoring or help. We also included the behaviors of those responding to and monitoring this outreach action. In our project ticket titled Monitoring User Experience, we walk through an early concept exploration. It considers the experience around live location sharing and explores how Círculo can cultivate more engagement and active attentiveness from the members of a circle when they are monitoring a journalist or human rights defender.

Live location

Share your location for the next...

time 1
time 2
time 3
custom

☐ Ask my circle to monitor me during this time
☐ Schedule check-ins
☐ Auto-Checkin upon arrival (I have an arrival time frame and destination)

Circle Monitoring

When you ask your circle to monitor you, they will be be notified

Chimes

If you set a check-in interval (ex: every 20 min), everyone in your circle will get a 'chime' at those times. Open a 'chime' and give a quick update. Circle mates can easily open the chime to make sure you are well.

If you need help during this time, tap the 'SOS' button. Circle members will be notified of an urgent alert. ... and prompted to call you, come pick you up or other action you indicate.

Auto Check-in

Time (frame/span)
Place

Circle mates will be notified when you arrive. If you don't arrive at the designated time, they will be sent ...

From here, we further developed the user experience and technical spec for an important new feature of Live Location. This would enable a user to share on-going updates of their location automatically without having to continually interact with the app. We both discussed the design and worked through the technical implementation.

We also worked to elevate and improve the experience around sending an urgent alert. Rather than starting an open chat thread to call for help, we made a choice to focus

and limit what users can do. This reduces the cognitive load and stress during a critical moment. This allowed us to provide a stand-out feature that helps ensure a request for help will not be missed. While there already existed an urgent alert feature in Círculo, it was buried several steps deep into the experience. The full evolution of this new feature design was developed and documented diligently by the team.
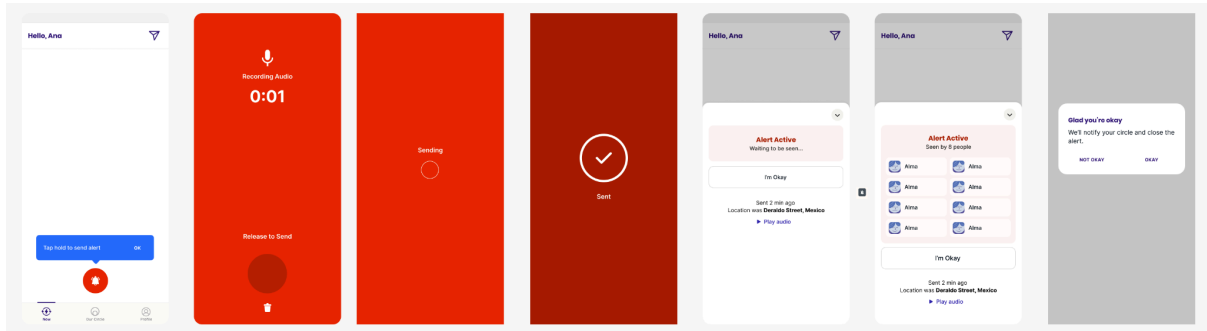
The new and improved urgent alert user experience

By focusing on and simplifying these two key features, Live Location and Urgent Alerts, we improved the design of Círculo to more reflect the essential needs of our users during high risk and stressful situations.

First Feedback Workshop in Mexico City

Participants in the first Círculo feedback workshop in Mexico City

In collaboration with our partners at [Article 19](#), we held an in-person Círculo feedback workshop in Mexico City, in July 2023. In the past, our workshops were closed spaces reserved for female journalists, activists, feminists, and human rights defenders. This time, we decided to send an open invitation using the Article 19 social media accounts, hoping to reach out to new organizations and communities in the region. Participants were requested to fill out a registration form to know in advance the kind of audience

we were expecting and to limit the number of participants according to the venue requirements.

For this workshop, we also had help from MPI CDMX (Mecanismo de Protección Integral de Personas Defensoras de Derechos Humanos y Periodistas de la Ciudad de México), which provides assistance to people who are at risk as a result of the defense or promotion of human rights. This organization posted information about the workshop on their social media after the workshop, which helped us promote the app and increase organic adoption of the app.

MPI CDMX Facebook post about the workshop.

In total, we had 23 participants, most of them journalists. There were also a few feminists and human rights defender organizations present. This was a holistic workshop that included sessions about physical, digital, psychological, and legal safety presented by members of Article 19.

ARTICLE 19's presentation included information about the process to create a safety protocol, a formula to measure the risk of a threat, and steps to establish a monitoring plan.

ARTICLE 19's Facebook post about the workshop

In previous sessions, participants shared sensitive information about the threats they were facing, digital and physical attacks against them and their families, and you could feel the shared concern and fear among the people present.

This time, even though the audience were mostly journalists, the approach and dynamics were designed to allow participants to relax and learn in a fun and interactive way. The participants were still able to share about the different regions they came from and threats they faced, without us expecting them to share sensitive stories about personal experiences. The strategy worked to help more people engage, and to connect with each other more easily.

After the sessions presented by Article 19, participants were introduced to Círculo, our team and the background story of the app. We also shared details on the current features, and the improved designs and features underway.

"Find Me on Círculo" Board Game

After the introduction to the app, we separated the tables to form teams of 5 to 6 people to play the game "Find me on Círculo", which was designed to create awareness about the importance of having safety protocols in place that rely on trusted friends, colleagues, and family instead of technologies. To win the game, the players have to walk through a series of risky scenarios created based on feedback from previous workshops, assign every player a role in the scenario and come up with protocols of action to solve the problem as a team.

Participants playing "Find Me on Círculo".
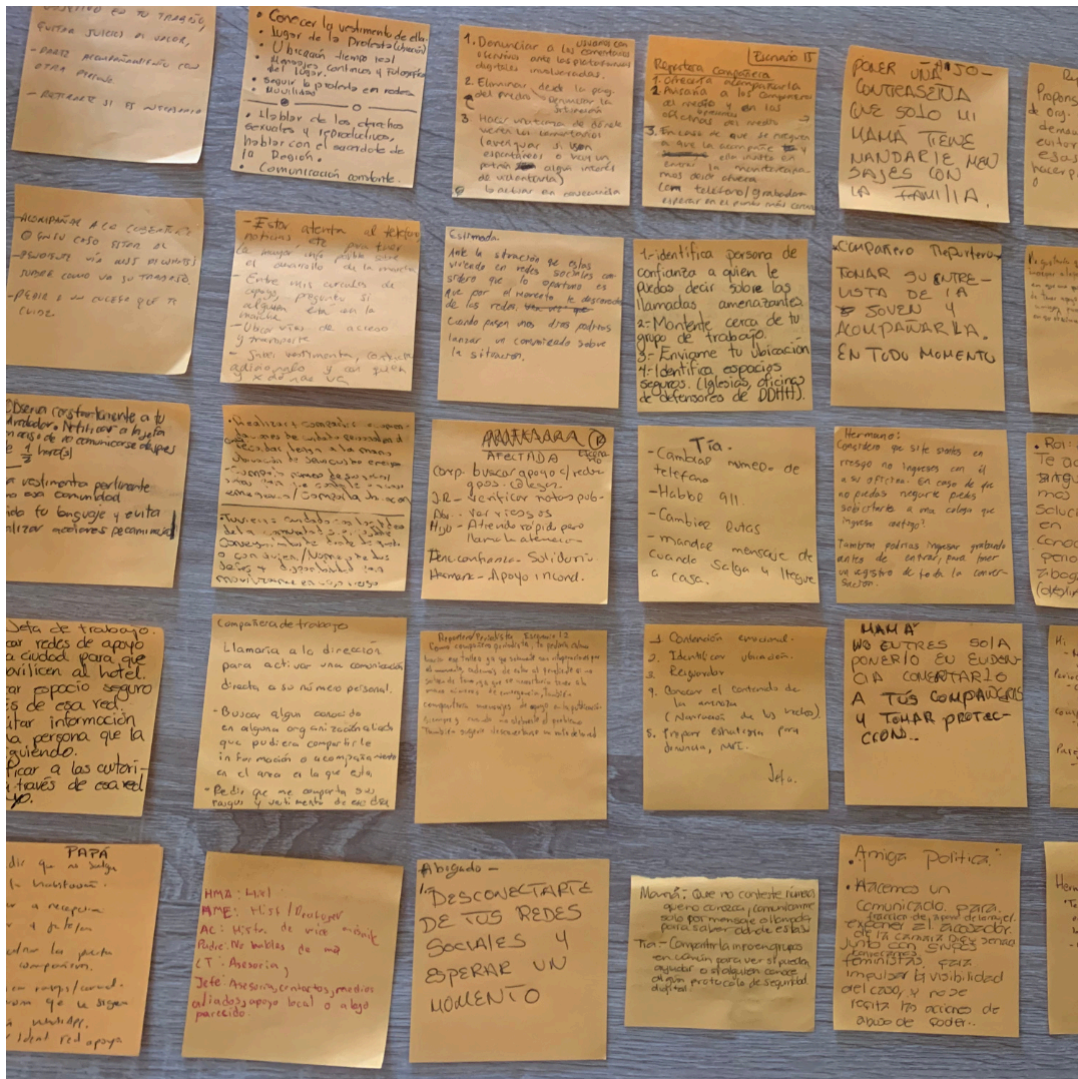
Some solutions participants gave to the scenarios in the game.

Examples of the scenarios in the game and the safety protocols the teams built to solve them.

☐ **Scenario: "A stranger just followed you to your hotel. You share that you're in your room with the door locked, but feel scared, trapped and unsure of what to do."**

Solutions:

The role of the player providing assistance, "Father".

- Do not leave the room, try to calm down
- Tell me your room number and I will call the reception of the hotel and let them know what is happening.
- Block the door with furniture

- Call the local police
- If you are there for work, I will call your boss after calling the reception and the local police to ask for assistance.
- Share with me your live location
- Google nearby HRD organizations and reach out.

The role of the player providing assistance, "Boss".
- Please describe the person that followed you
- I'll reach out to local networks of support to go meet you at the hotel
- I'll find an alternative place for you to stay, and ask trusted local contacts to take you there.
- I'll call the local authorities

☐ **Scenario: "You share that you're covering a politician's press conference. You let your circle know that he just invited you to his office to talk in private. You feel uneasy with the situation."**

Solution:

The role of the player providing assistance, "Brother".
- If you do not feel safe, it is better to decline the interview
- You could also ask if other coworkers covering the story could join you in his office.
- If you decide to go alone let him know you will be video recording the whole time and that you notified your office and family you went in.

The game was so successful that we had many people asking us if they could use it in other digital security workshops. We were of course [happy to provide it](). We also left the laminated sets we used in this workshop with Article 19 to be added as part of the holistic workshops in other regions of Mexico during this project. Working together to build offline safety protocols helped the participants better understand why it is so important to have them in place to prevent and mitigate incidents.

The next step of the workshop was to test the app in the same groups created to play the game. Some people installed the app on their personal devices, while others opted to test it on the test devices we provided.
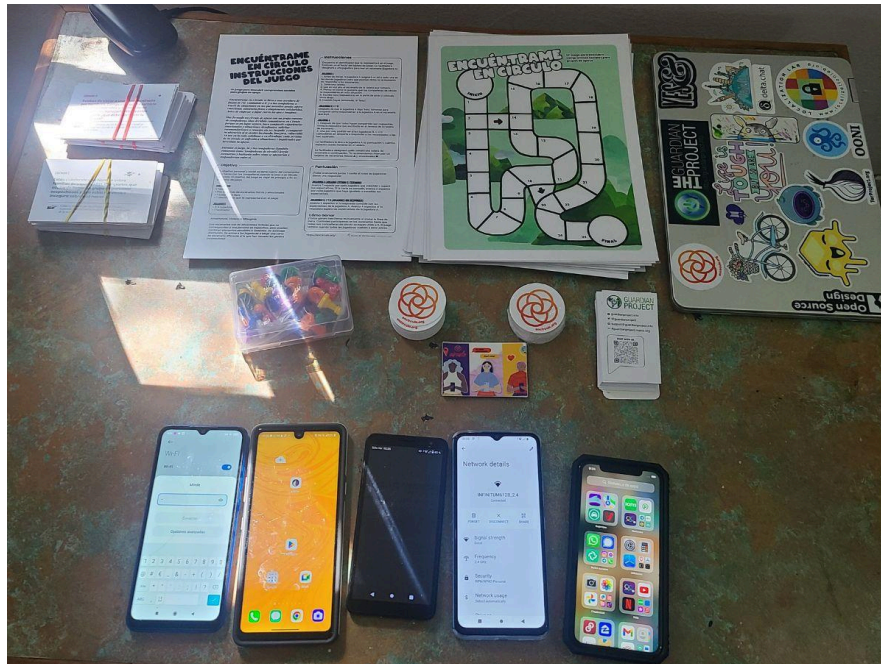
Testing devices and training materials.

From this activity we were able to observe how new users interacted with the app, the assumptions they made, and the parts that were confusing to them. Overall the onboarding and testing sessions were smooth with no bugs or installation issues which was reassuring for our team.

Second round of Development & UX Design

Our work under this activity continued the momentum from the previous design activity, while integrating the new feedback from the in-person workshop.

Based on the new input received, we defined some new characterizations of our user personas, specifically:
- They often move between a connected and disconnected state
- It is often too dangerous to have their phone out in public
- Battery life is a real concern
- Many are concerned about their location being tracked by adversaries
- Spyware is a common tool employed against them, including by the government and drug cartels
- Device inspection or confiscation during protests and at random checkpoints is common

This helped us further tune the previous design work on Live Location and Urgent Alerts, as we moved into the next design and implementation phase. The new designs features two different ways of interacting with a circle:
- Passive (or quietly) with time-bound live location share
- Actively (or loudly) with urgent alerts.

Passive / Live Location

With the new live location feature, users can share their location live with their circle for a set amount of time. Everyone in the circle can see the shared location while the live location is active. *The live location feature is mindful of battery life because it's time-bound and careful with the frequency of location updates.*

The model for use: When traveling, on assignment or out in public in vulnerable environments (or when one anticipates that they may need help), they can turn on live location and set the time period for the respective duration. In the app, users can choose to share location for 15 min, 1 hr, 4 hrs, 8 hrs or for a custom time frame.

How it functions:

- Círculo accesses a user's location during the time the live location is active. It shares it with the members of the circle, providing updates every 15-60 seconds when there is a change.
- When the time for live location ends, the history for that live location session is available to the circle until the person sharing deletes it.
- Receiving live location: It's the responsibility of circle members to monitor someone who is actively sharing their location. When a live location is active, they know where the person is. They can view the location in Círculo or open it in Google or Apple maps to get directions to the current location.

Location Send: What you see when you activate live location

Location Receive: What others see when they activate live location
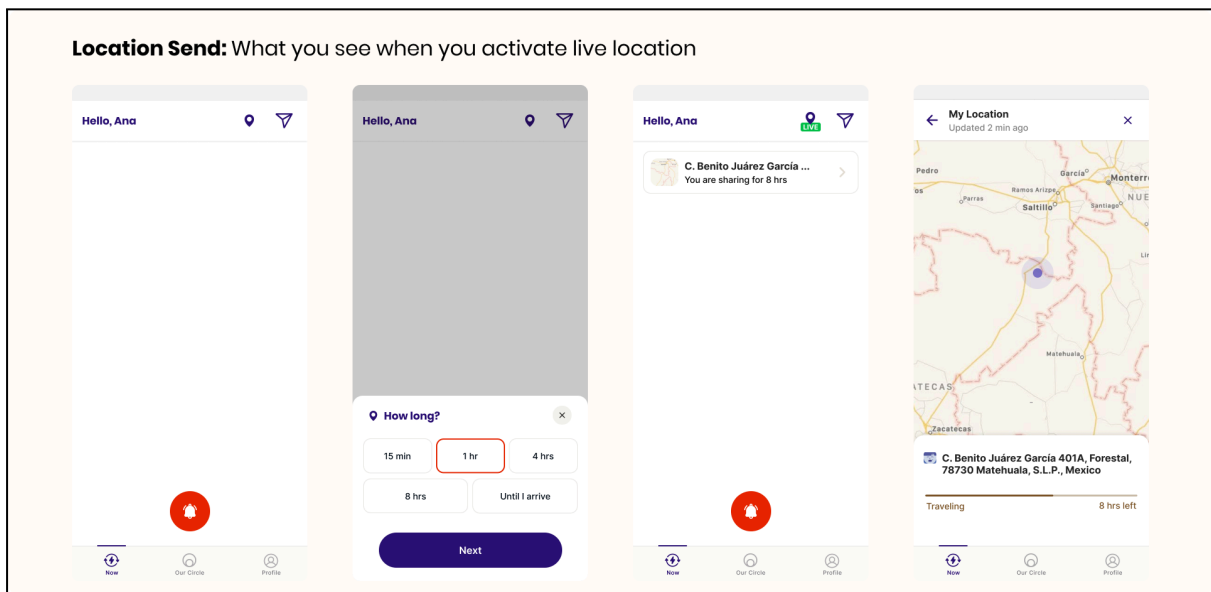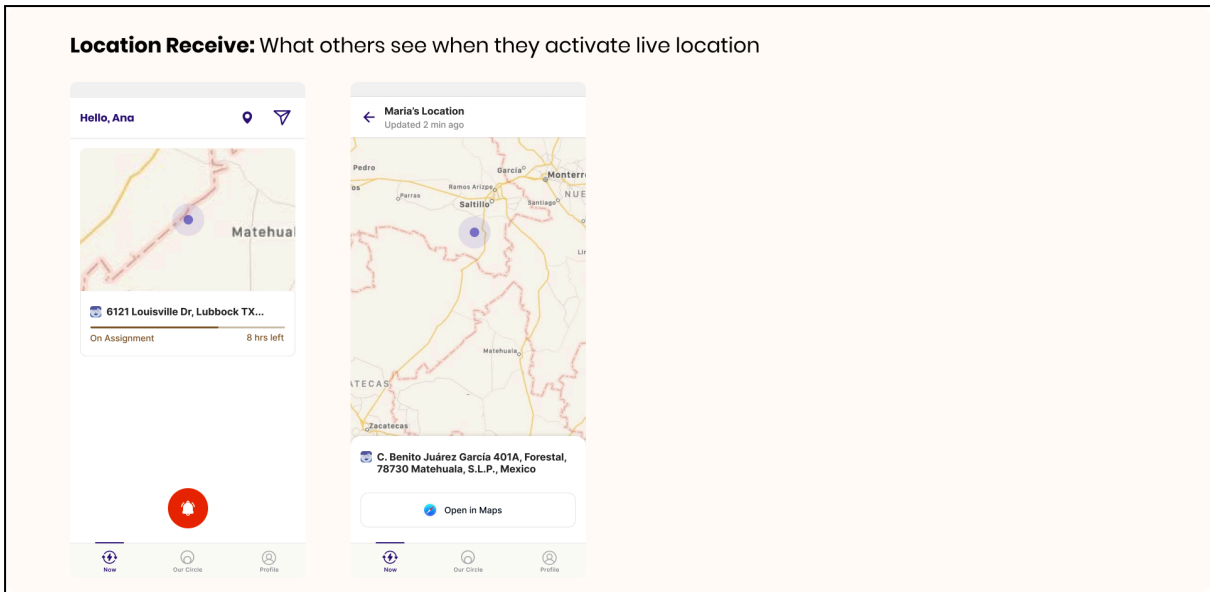
Active / Urgent Alerts

With the alert feature, users can send a 'hard to ignore' notification to get the attention of their circle. This notification is accompanied by a voice message and live location (if enabled by the user).

The model for use: Users can send an alert whenever they want to and are able to. Here are some examples of the times when they may decide to send an alert:

- When traveling and they start to feel uneasy or uncomfortable;
- When they've arrived safely; or
- Simply when they need a quick response from their circle

Alert Send: What you see when you send an alert

Alert Receive: What others see when they see your alert
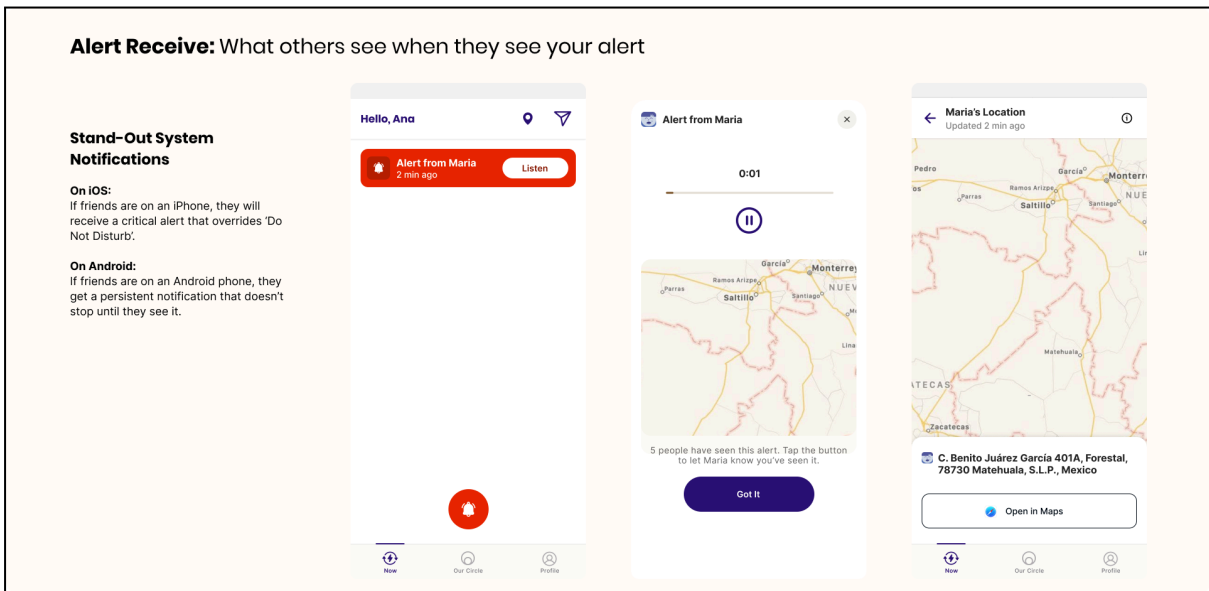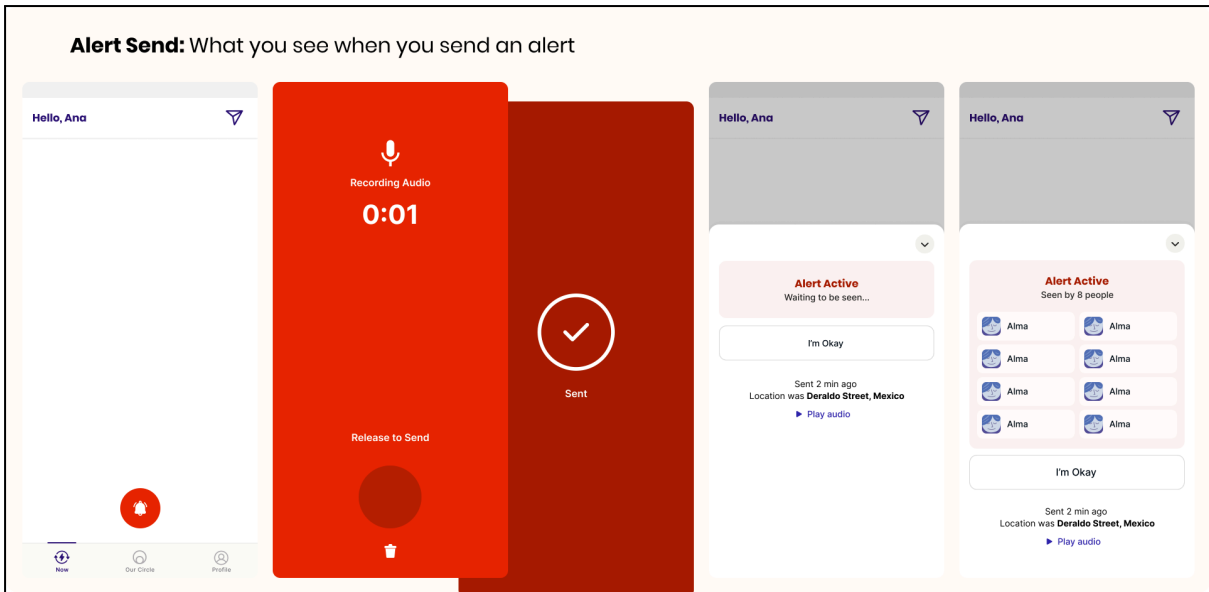
Additional Features & Improvements

In addition to the previous new features, we received additional requests based on real-world situations that people had experienced. This included Remote Wipe and Battery Level Alerts. Under the scope of this program, we sought to implement some basic support for these capabilities.

Remote Wipe

- **The Need:** Detainment and device confiscation are common threats among journalists. In these scenarios, circle members need more control over the information in the app if another person's phone is taken by a bad actor.

- **Implemented Solution:** In this case, any member of the circle can kick the person (who's phone has been taken) out of the circle. Doing so, will wipe all of the contents of alerts, locations, and messages in Círculo from that device.

Battery Level Alerts

- **The Need:** It's common for people to use low-end devices. In the case of a high-risk situation, users should be able to know if the contact at risk is not responding because her/his phone ran out of battery or because the situation escalated and the user is no longer able to respond.
- **Implemented Solution:** On Android, we have implemented an experimental feature to send battery level alert messages to the circle through the group chat, when a person's battery crosses a "low battery threshold" of 10% remaining.

The other items in the proposal were addressed on this round:

- **"Time-Bound" and "Resolved" Live Location Share:**
  - Users can activate the share in a time-bound way, so that they don't have to remember to deactivate it later, helping reduce any potentially negative privacy impact of oversharing
  - The Location share is kept around after it is ended, even if the situation is "resolved" so that members of the circle can know where the person in need of help ended up. Previously, a status would just disappear from the circle when it was resolved or ended, leaving the circle unsure of the outcome.
- **Status "Seen by"**
  - Being able to more clearly know who has seen an alert and who hasn't could influence the established protocols of action, especially in high-risk situations. This feature is important to prevent action protocols to be activated when users forget to update open statuses.

Development Work

In addition to the design and implementation of new features, additional key development and engineering work was accomplished to improve core functionality of

the app.

- **Specification:** Clearly defined, documented and published our Circulo Status Specification for the underlying messaging protocol foundation of the app
  - Status Specification:
- **Display Share Time:** Added ability to display how long the person plans to share their location
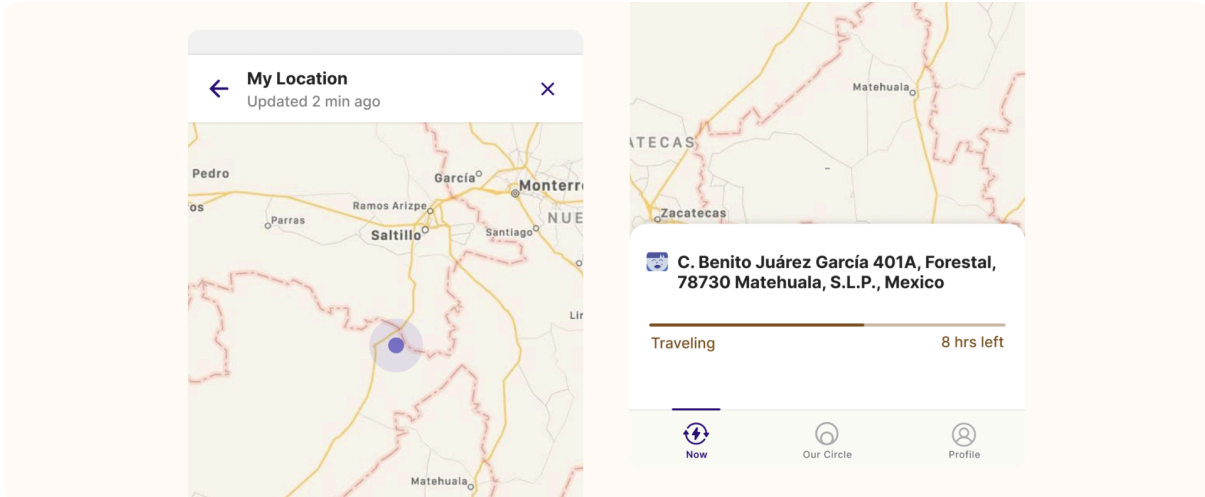
- **Location Display:** Improved map display of person's current location to be more precise and usable
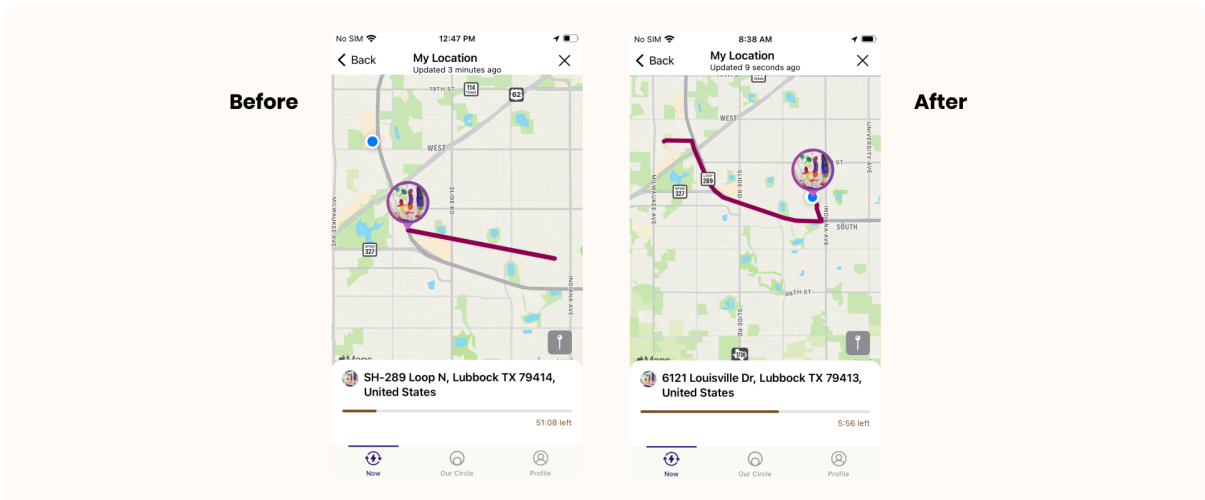
- **Location Latency Fix:** Improved user experience when accessing current location is delayed or not possible
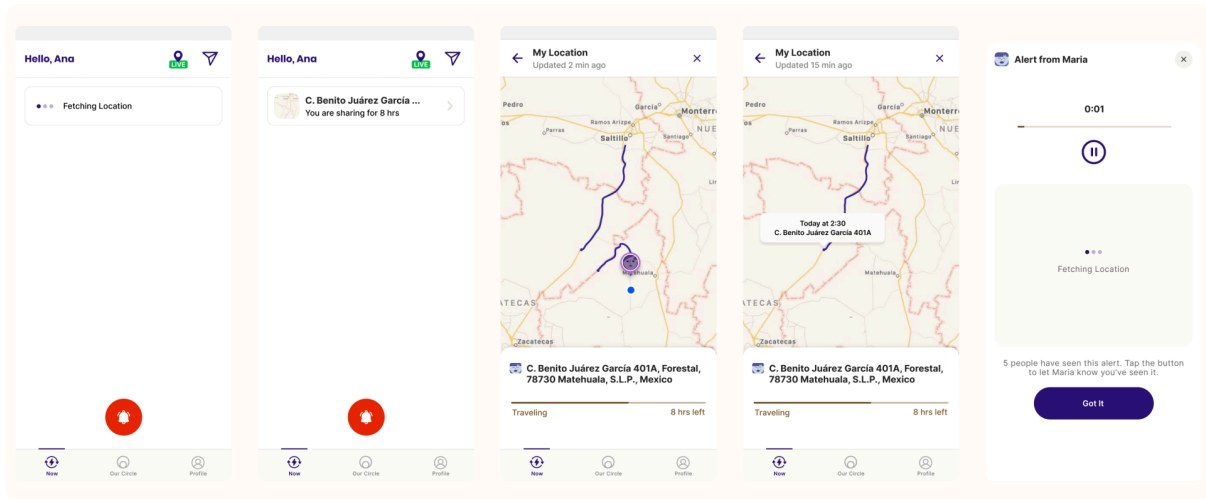
- **Dark Mode:** Improved "Dark Mode" support on iOS to improve accessibility issues
- **Background Push:** For Android devices, we finally implemented actual background push, significantly improving battery life and reliability for receiving alerts
- **Security Audit:** In the Fall of 2024, we engaged in a security audit of iOS and Android apps and source code, as well as our complete server software and hosting infrastructure. Only "Low" and "Medium" issues were found, which have been addressed, or will be addressed in upcoming release. A full security audit report will be publicly released before the end of 2024.

Official deployment and feedback workshop in Mexico City

Participants at the second in-person workshop in Vallarta, Mexico.

The final feedback workshop for this round of development of the Círculo app happened in Puerto Vallarta, Jalisco in the second week of April 2024. This location was chosen because during 2023, ARTICLE 19 documented a total of 561 attacks against the press, representing one attack against journalists or media outlets every 16 hours for the exercise of their work. Among the attacks is the murder of 5 journalists and the disappearance of one, which places Mexico as one of the most lethal countries to practice journalism, behind the occupied territories of Palestine.

The three most documented categories of attacks in 2023 were:

1. Intimidation and harassment
2. The illegitimate use of public power, through stigmatization and judicial harassment
3. The threats both in the physical and digital sphere, with the Mexican State being the main aggressor.

In contrast to all the previous Círculo workshops, we not only had members of the free media present, but also the owners of some local newspapers, TV and radio stations

The workshop included sessions about safety protocols, risk assessment, and gender violence in journalism. Participants were also introduced to [#redrompelemiedo](#), an international organization assisting journalists, human rights defenders, and activists to keep them safe during protests and mobilizations. This organization has deployed a network of physical, technological, and psychological support across the country in collaboration with Article 19, which will stay active until the presidential elections are concluded. The coexistence with journalists revealed the serious scenario of violence that exists in the region, with stories of physical and digital attacks that are normalized due to their recurrence.

The session about the Círculo app included an introduction to the story and organizations behind it, a summary of all previous feedback workshops and deployments, and then a complete description of each feature on the current version. To the participants, the new Live Location feature was the most interesting one. There were many questions about privacy, accuracy, and settings of that feature. We also discussed the different case scenarios in which this feature could play a main role in a safety protocol, while discussing the potential limitations.

The pseudonymity the app offers was a big plus for the local context since there have been many documented cases of device confiscation, spyware and chat group infiltration attacks against journalists in the whole country. Learning that the app does not require a real name, phone number or email for verification was an important aspect that caught their attention.

Find me on Círculo Game

Participants rating the Find Me on Círculo game

As we have done in all the previous Círculo workshops, one of the sessions was dedicated to playing the "Find me on Círculo" board game to teach participants about the importance of support networks and safety protocols in place. Through this game activity, we came to similar conclusions about the safety preparedness of this community. In general, there was a lack of security protocols in place. This was compounded by weakness in the creation and operation of support networks. While there was also understandable fear and distrust of authorities, they were still depended upon in high risk situations.

Co-Design Activity

Another important part of the Círculo workshop was an activity designed to allow participants to provide feedback related to the current design of the alert feature. After the walkthrough of the app, they were asked to help us improve the design of the Urgent Alert button and brainstorm 3 sounds that correlate to emergencies.

On a piece of paper, they were asked to draw 3 icons they would use for the alert button. The most common answers were the megaphone and a police siren, as for sounds, besides the police siren we discovered that every person has a very different idea of what sounds would make them be on alert, it is also important to mention that all the participants that drew a siren or added a siren as one of the sounds that prompt

them to be alert is because of the deeply rooted mistrusts against the police that exists among journalist so it would not be the best choice for the alert feature on the Círculo app.
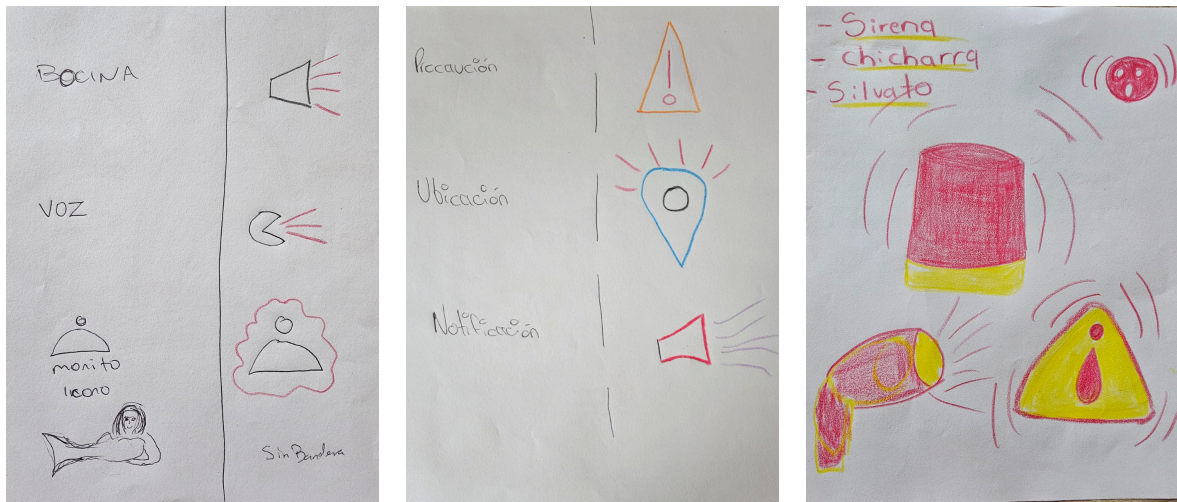
Some of the designs created by the participants

This activity was exciting for the journalists because they got to think about the process that goes behind the creation of an app and how connected it is to the local context, they also were excited to learn that their feedback would play a main role in the design of one of the features of the app because it gave them the sense of ownership and it showed them that they matter and we care.

Finally, all the participants received a Círculo package at the end with a beautifully designed Círculo tote bag, two infographic postcards, 4 stickers featuring Círculo's unique characteristics, and a business card with our contact information.

The Círculo takeaway pack

The co-design activity and takeaway pack were part of our strategy to help participants feel engaged with the project and help us increase adoption organically after the workshop.

Using the feedback from this workshop, the new version of the app features a megaphone as the icon to "shout" an urgent alert.

Inclusion of Círculo in holistic security workshops

This activity started on May 23rd with the first workshop in Aguascalientes and concluded on February 24th with the workshop in Escuchiapa. Below is some of the feedback collected during these events.

Aguascalientes:
- One of the most feasible and necessary applications given the context is as a monitoring tool during risk coverage, such as social protests or electoral coverage.
- Círculo can be a very useful tool to establish secure communication and monitoring networks in coverage related to government work.
- This tool can also be incorporated into protection and reaction protocols within the media or networks of women journalists.

San Juan del Rio:
Female journalists highlighted the importance of having these types of tools while noting that they considered it relevant and useful given their context.

However, as well as the explanation sounded for them, when the app was downloaded a few concerns were pointed out:
- The lack of operation in areas without internet coverage, since they are usually developing their labor in distant communities where cell phone coverage is nonexistent.
- The limitation to one communication circle.
- The 6 people per circle limit does not comply with their security needs.
- The process of sending the alert is not immediate and there are times when the aggression or the context does not allow taking the time to do so.

Escuchiapa:

Círculo generated great interest within the group of human rights defenders and journalists, given that they have solid support networks in the region but had not had contact with civil society organizations that would provide them with tools to facilitate their work. However, they expressed some concerns that could arise from using the app in their specific context:

- The need to have the internet to use the application. Escuinapa, being a very small community, has problems with internet access, and in 2020 ARTICLE 19 reported that only 41% of homes in Sinaloa had internet access. This mainly impacts the monitoring capacity in coverage far from the community and road trips - where journalists and collectives of searching mothers reported having suffered a large number of attacks -; as well as the ability to receive alerts from the people in charge of monitoring.

- The difficulty of sending alerts. The journalists expressed concern given that when they receive possible attacks - arrests or disappearances - they require urgent and simple mechanisms to send alerts without the need to unlock the cell phone, given that this can place them at greater risk.

- They commented on the possibility that the application could show the battery percentage of their network devices.

- The possibility of expanding the capacity of the network, given that 5 people does not seem like a safe number, they consider it important to be able to expand the capacity to react by expanding the circles.

Chiapas:

- Círculo adoption faces particular challenges in the case of Chiapas due to limitations in access to communication technologies. In 2019, the state of Chiapas had a "very high" level of marginality (2.41). Likewise, INEGI (2022) reported that by 2021 only 46.1% of the population in Chiapas had Internet access, being the state with the lowest percentage at a national level. It's the same case regarding the use of cell phones, reporting that only 55.6% of the population of this entity has access to these type of devices.

  The lack of Internet coverage in Chiapas was one of the main concerns of the participants since there were doubts about Círculo's functionality in areas of Chiapas to which they go out to provide coverage and there is no signal.

Journalists also delivered feedback concerning Círculo's limited capacity to generate communication groups.

Summary

In summary, there were many common needs identified from all of these workshops.

- People from two out of the 4 workshops expressed their need to include more than 5 contacts in their Circle, we need to address the fact that even though the user interface only shows 5 users it is possible to add more people to a Circle which can confuse people. We should either show all the users in a Circle or limit the number of users to 6.
- The need for a panic trigger of a way to activate the alert without pulling their phone out of their pockets or bags in public places for safety reasons was expressed in all workshops.
- The need to know the battery levels of each device in a Círculo was shared by one of the female journalist groups at high-risk in the last workshop, they said knowing when someone stopped replying simply because they ran out of battery or because something happened to them could make a difference between life or death.
- The need for a no-internet SMS alert feature came up in all the workshops

While we cannot address all of these issues within the scope of the current plan and funding, these concerns have been logged, ticketed, and integrated into our future timeline of work to be done.

Presentation of the app at international forums to reach out to new communities to increase adoption

Over the last two years, we were able to share our work at RightsCon Costa Rica 2023, FIFAfrica 2023 in Tanzania in 2023, FOSSAsia in Vietnam in April 2024, and Defenders' Days in Sweden 2024.

RightsCon 2023

At RightsCon, Círculo was presented to an in-person audience between 40 and 50 people, the format was a tech demo of 20 minutes. We had 15 minutes to present the app and how it works and 5 minutes to answer questions. During this we got the opportunity to talk about the story behind the app and give a brief description of all its features.

A key focus of our presentation was emphasizing the importance of **support networks**, particularly for individuals at high risk, such as journalists in Mexico and Central America. We reiterated that one of the primary goals of this project is to raise awareness of this need, and we are committed to continuing this advocacy.

Post-Presentation Opportunities

After the session, we were approached by two organizations interested in collaborating with us. Their enthusiasm underscored the potential impact of Círculo and the opportunities for future development and testing:

1. **UCLA School of Law**
   - Michael Karanicolas, Executive Director of the Institute of Technology, Law, and Policy at UCLA, expressed interest in collaboration. He shared that they have funding available to support projects like ours and can provide assistance across various areas, such as:
     - Engaging students in development.
     - Conducting risk assessments.
     - Creating deployment plans.
     - Performing security audits.
   - Contact Info: **karanicolas@law.ucla.edu**
2. **Civil Rights Defenders Team**

- ○ Representatives from the team behind the **Natalia Project** attended the session and shared their long-standing use of **Circle of 6**, as well as their experience with **Círculo**. They were excited to learn that Círculo is an evolution of Circle of 6 and is undergoing further development.
- ○ They offered to test the app with their partners in regions where it hasn't been tested previously and provide valuable feedback. They are eager to transition from Circle of 6 to the updated version of Círculo after learning about its enhanced features.

FIFAfrica 2023

At this event, the Círculo app generated significant interest among participants. We took the opportunity to explain how the app works and highlighted what sets it apart from traditional panic button apps. Círculo represents a unique approach to safety, standing in contrast to the mainstream "techno-solutionism" mindset. Rather than positioning itself as the ultimate solution, Círculo emphasizes the importance of incorporating the app into broader safety protocols. It encourages users to build and maintain strong support networks, particularly for communities and individuals at high risk.

Participants recognized the novelty of this approach and expressed interest in understanding more about how Círculo differs from panic button solutions.

Key Discussion Points

1. **Unique Features of Círculo**
   A recurring question at our presentations surfaced during this session as well:
   "What happens if I need more than one circle of support?"
   - ○ The Matrix protocol underlying the app supports this functionality, and earlier versions of Círculo allowed users to create multiple circles. However, the experience was simplified in the current version to enhance usability.
   - ○ Based on demand, we are open to revisiting this feature and finding a way to accommodate it without compromising user experience.
2. **Training and Localization Needs**
   Some participants emphasized the importance of providing training materials and localized information to raise awareness among new users and help them integrate the app effectively into their daily routines.

Audience Engagement and Outcomes

We addressed all concerns and questions raised during the session to the best of our ability. By the end of the discussion, participants left with a clear understanding of the app's purpose and practical ways to incorporate it into their lives.

The event reinforced the relevance of Círculo's mission to prioritize community-driven safety solutions and underscored the demand for ongoing education and feature enhancements to meet user needs.

FOSSASIA Vietnam, 2024

The Guardian Project Booth at FOSSASIA

This was our first time attending FOSSAsia as representatives of **Guardian Project**, and despite the 26-hour journey, the experience proved to be highly valuable.

Event Overview

The conference primarily attracted a youthful demographic, consisting mainly of college students who were new to the concepts of Open Source Technology. Many shared personal experiences highlighting the growing need for digital literacy and digital security training, making this an ideal audience for our work.

Círculo-Specific Highlights

1. **Engagement with the Open Culture Foundation (OCF)**
   - The OCF team, also present at the conference, showed great interest in the "Find Me on Círculo" board game. This interactive tool is designed to raise awareness about the importance of Safety Protocols in high-risk scenarios. The team eagerly took a game set with them and extended an invitation for us to present our work at CUSCUP (Conference for Open Source Coders, Users & Promoters) in Taipei this August.
   - OCF has emerged as a key player in the region, with strong connections to Taiwan's open-source ecosystem and influence over government use of OSS. They could become a valuable partner for our future work, especially for gaining insights related to North Korea and China.
   - Roger from the Tor Project, another partner of Guardian Project, emphasized OCF's importance as a partner to their efforts, further underscoring the potential benefits of strengthening our relationship with them. Attending CUSCUP 2024 could be a strategic opportunity to deepen this collaboration.

Outcomes

Presenting Círculo at the OCF Office in Taipei

Networking: A few months after the event we were able to visit the OCF offices in Taipei and do a live presentation of Círculo for their team members. It was an interesting exchange of knowledge and experiences about working with isolated communities and in places where the internet is not reliable.

Defenders' Days 2024

The Círculo Session at the Defenders' Days Conference.

In October 2024, we had the privilege of presenting Círculo at the Defenders' Days conference in Sweden, an event hosted by the Civil Rights Defenders team. This was an incredible opportunity to engage with diverse communities and groups of human rights defenders and activists from around the world.

In preparation for the event, we worked with the Localization Lab to localize the app into Russian and Arabic, making it more accessible to a broader range of participants. During the conference, we conducted a two-hour session that included a detailed presentation of the app, a hands-on activity with the "Find Me on Círculo" board game, and live app testing using test devices.

The session received very positive feedback, with most participants choosing to install the app on their personal devices by the end of the workshop.

Additionally, we collaborated with the CRD team to outline a joint deployment plan combining the capabilities of the Círculo app with the Natalia Project device, which is operated by CRD in high-risk regions with trusted partners. Our shared goal is to secure funding for a year-long pilot program involving controlled testing and feedback collection. This initiative aims to integrate the strengths of both tools, creating a more resilient and versatile emergency response system.

Presentation and Publication of Our Final Report

After 18 months of dedicated work, engaging with local partners, and showcasing Círculo at various international forums, the app has undergone significant improvements. Along the way, our team gained valuable insights that will inform and enhance future developments.

We had the privilege of collaborating with teams such as the Accessibility Lab and Datavoros, who generously provided free assessments of Círculo, helping us optimize and promote the app. Additionally, the Accessibility Lab offered training on Digital Inclusivity, which proved to be highly insightful for our development and design teams, further strengthening our approach to creating inclusive and user-friendly solutions.

The Accessibility Lab promoting Círculo at FOSSAsia 2024.

This journey allowed us to find amazing new collaborators like the Civil Rights Defenders, interested in incorporating the app to the set of digital security tools they use with their partners.

Through this final report you are reading, and participation in the Defenders' Day Conference in October 2024, we have shared our efforts, approach, and accomplishments with a broader audience who we hope will benefit. The work on Círculo is more than just "building an app" - it is an approach to deep engagement with a community facing severe threats, both physical and digital. It is also a process through which we learned that the problem we were aiming to address with digital technology was in fact much more of an analog one than we had expected. This helped us understand that the process we used to reveal these challenges, along with activities like our Find Me on Circulo game, were as much of a valuable output from this work, as the app itself.

Future: Sustainability and Ongoing Work

As we move forward, our focus will remain on **promoting the Círculo app** across various digital platforms and at events we attend. For instance, we recently presented Círculo at the **Team CommUNITY Meetups** during the **Digital Rights LATAM** session ([link](#)).

We are actively pursuing **funding opportunities** to:

- Deploy the app in regions where it has not yet been tested.
- Continue providing **ongoing support** for current Círculo users.

The strong interest expressed by **communities, human rights defenders, journalists, and activists** at every event we attended during this round reaffirms the importance and relevance of our work.

Furthermore, the **partnership opportunities** extended by respected organizations such as **UCLA** and **Civil Rights Defenders** have opened doors to exciting new possibilities. These collaborations hold immense potential for expanding the reach and impact of Círculo, enhancing its features, and exploring innovative ways to support high-risk communities globally.

For more information, please visit https://encirculo.org or contact support@guardianproject.info.