Help-seeking Game for Undergraduates

Soapbox

BHCI CAPSTONE REPORT

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SPECIAL THANKS TO

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Executive Summary

Executive Summary

Soapbox is a four-player role-playing game game that gives undergraduate students a safe and fun way to practice asking for help and giving advice.

Soapbox was designed for Geoff Kaufman, a professor and researcher in the Human-Computer Interaction Institute at Carnegie Mellon University, who presented the challenge to create a help-seeking game for undergraduates. Our team designed Soapbox based on extensive user research of Carnegie Mellon undergraduate students, the kinds of problems they have, and how they seek help for those problems. We continued to incorporate player feedback into our design through many rounds of prototyping and playtesting, finally delivering a role-playing game designed to be run by a facilitator, for future research by our client.

Overview:

How a game about role-playing aids students to seek and provide help

Overview

How can we design a game to help undergraduates seek and provide help with navigating social/academic challenges?

Project Goal. The goal of our designed game, Soapbox, is to use role-playing different characters, cooperation, and practice to increase students' comfort when confronting challenges and asking for help. By placing users in the shoes of another student going through a specific problem, the game empowers students to break down their internal stigma against seeking help.

Why Role-playing? During our visioning and ideation process, we realized that our ideas were touching on various stages of the help-seeking process. To increase the effectiveness of our game, we honed in on a specific stage of the help-seeking process: choosing to seek help. Our goal evolved into helping students become more comfortable when confronting the internal stigma against asking for help, as through our research, we found that the internal shame of needing and asking for help is the greatest barrier to seeking it.

We chose role-playing as a medium of gameplay because it forces students to step into the shoes of another person dealing with a specific problem. By transforming one's self to feel brave enough to enter a situation, students practice confronting their emotions and seeking help in various situations. In addition, by embodying assigned characters, we create a safe place for the players to express vulnerability and emotions by distancing themselves from the action of sharing and asking for help. Through role-playing and reacting to difficult prompts, players will gain exposure to seeking and providing help, which will allow them to feel comfortable and willing to do so.

Soapbox Game Preview

Soapbox Game Preview

Soapbox focuses on **common challenges** that are part of a CMU undergraduate student's college experience, such as roommate problems or balancing academics and job-seeking. Ultimately the goal of our project was to look at the needs of students in a set of common scenarios, and figure out how a game, in whatever shape or form, can be used to help them find help.

Soapbox consists of both digital components across multiple devices, as the players receive their character cards through their phones--which are connected to the game network--and scenarios and instructions are shown or projected on a shared screen. There are four rounds of the game, each a different but common scenario that CMU students face. Players are given **a character to role-play in each round**. The characters include a lead (the student with the problem), their parent, friend, and a wildcard character. There are three timed acts in each round: an opening scene, main act, and closing scene. After the closing scene, players award each other for memorable moments in the previous round using the given tokens.

Our team strived to create scenarios that would resonate with college students, therefore making it easier for playtesters to act those scenarios out. We also intentionally added an "Award the Moment" portion to the game in order to give players practice with **positive and empathetic thinking** and **practical problem solving**, creating **actionable solutions** that they can use when confronted with similar situations in real life.

Research

Research

Through user-centered research methods, our team discovered four key insights that drove our game design.

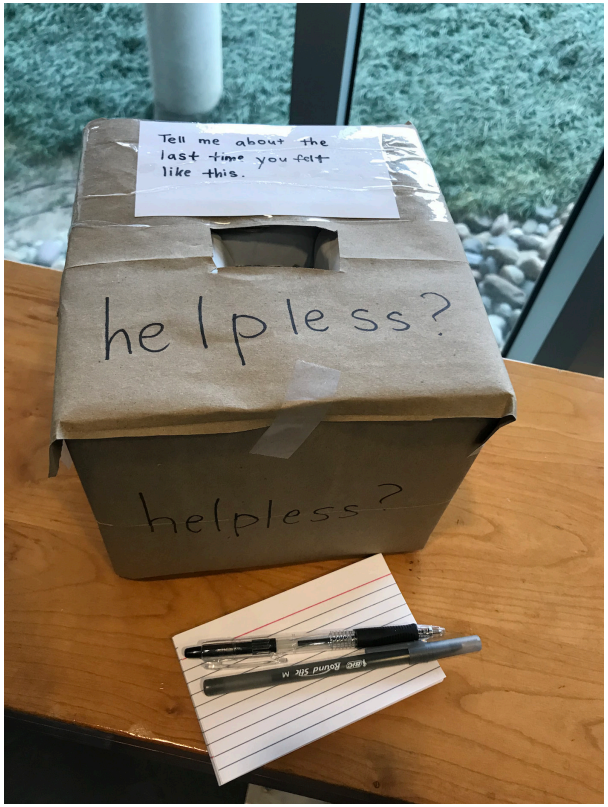
Our team delved into user research to inform our design of a player-centered game to help undergraduates to seek help. We identified three main subjects areas where our project overlapped: **game design, the psychology of help-seeking, and the specific context of CMU undergraduates.** Through discussions with our client and reviewing game design literature, we were confident that a game can be loosely defined as a playful interaction towards a goal (the first area), and focused our primary research on identifying the problems that CMU undergraduates need help with and how they seek help for those problems (the second and third areas). This research directly informed our later visioning and prototyping process to create our final role-playing game.

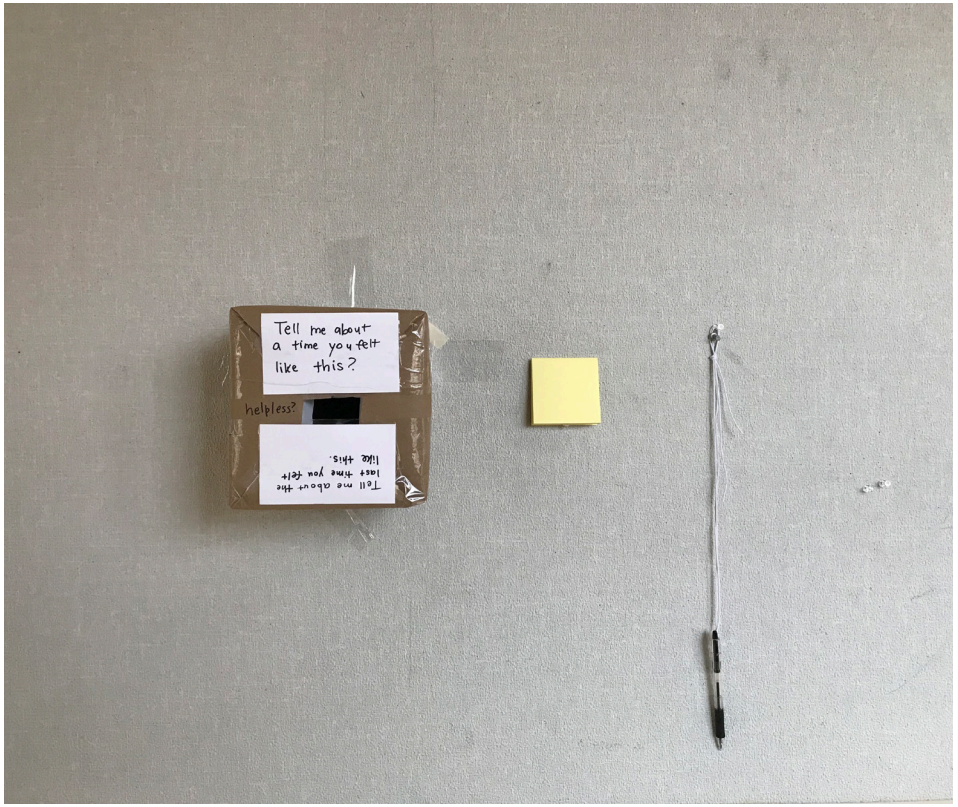
The team brainstorms and narrows in on specific research focus areas and goals.

Research Goals and Methods

Goals	Methods				
	SURVEY	EXPERIENCE SAMPLING	PUBLIC DATA COLLECTION	INTERVIEW	LITERATURE REVIEW
Barriers to Help-Seeking Understand who or what prevents CMU undergraduates from seeking help.	☆	☆		☆	☆
Common Mental/Social Challenges Discover the primary challenges and questions that CMU undergraduates have, and that we could help through our game.	☆	☆	☆	☆	
Help-Seeking Examine what existing help-seeking methods exist at CMU, what CMU undergrads use, and how effective they are.	☆			☆	☆
Motivation Understand why students seek help and what motivates them to ask questions and give advice.		☆			☆

Research Goals and Methods





The anonymous public data collection boxes, placed in several popular student hangout places around campus. We were surprised by the number and intensity of the responses, which ranged from struggling with class to dealing with sexual assault and suicidal thoughts.

Research Goals and Methods

SURVEY

2 questions:

1. When was the last time you helped another student and how outside of school?

2. When was the last time you sought help and how outside of school?

50 responses

PUBLIC DATA COLLECTION

Cardboard box covered in brown paper

Writing on box: “helpless? Tell me about the last time you felt like this.”

Index cards, sticky notes, and pens provided for answers

Distributed in four popular student gathering places: Margaret Morrison, Hunt Library, UC Brown Chairs, and Gates Tazza

EXPERIENCE SAMPLING

10 participants

Required responses 3 times a day for 1 week

Share high point of moment, low point of moment, and current mood

INTERVIEWS

5 interviews of different stakeholders

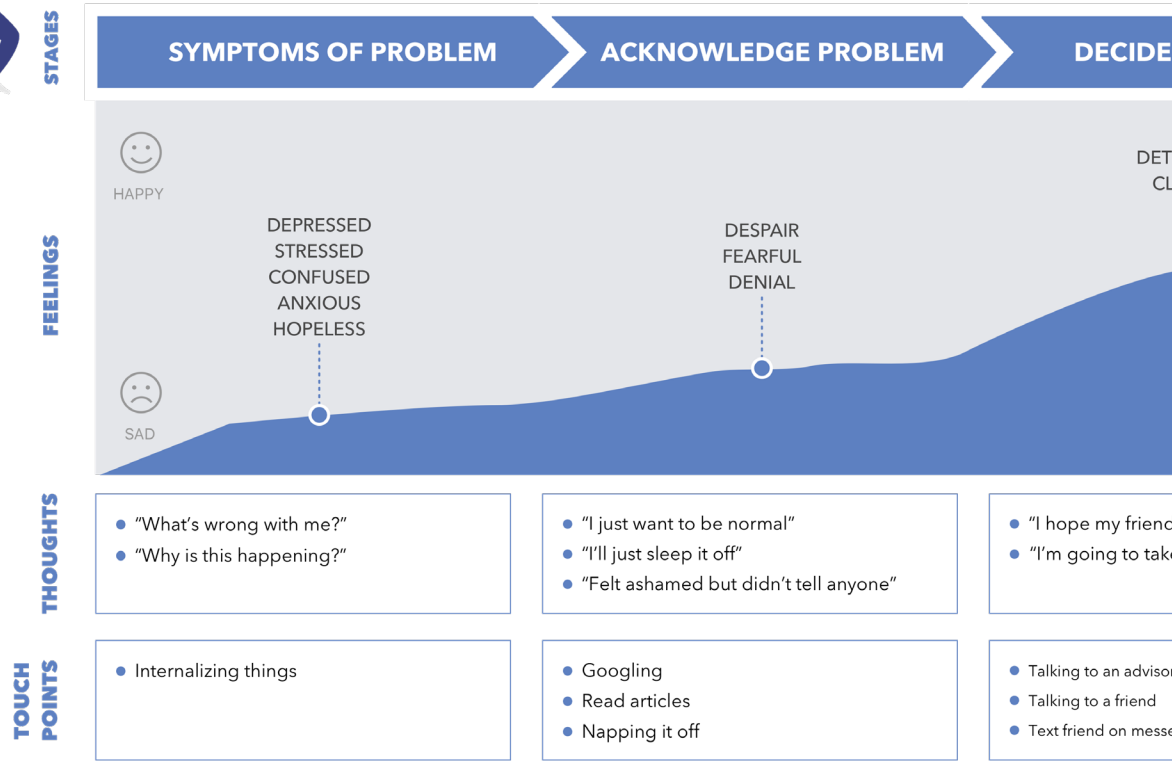
2 undergraduates, 1 Counseling and Psychological Services staff member, 1 Title IX Office staff member, and 1 academic advisor

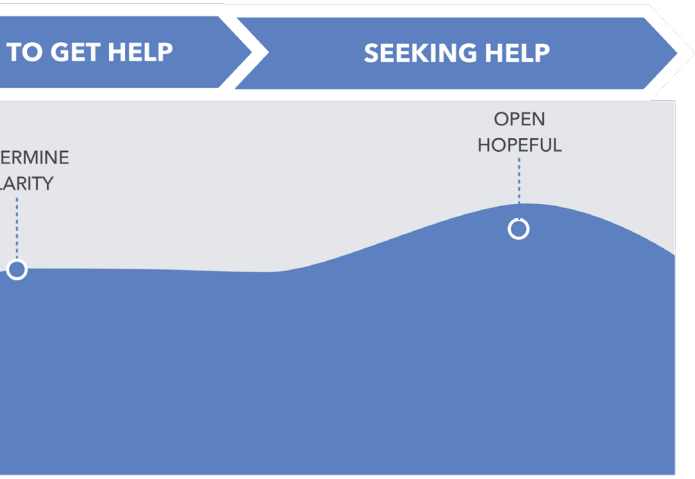
LITERATURE REVIEW

Over 40 papers, reports, and other literature

Research Synthesis

The user journey map chronicles a CMU student's journey through the help-seeking process, based on findings from all research methods. Most quotes under "thinking" are taken directly from our research.





- I will listen"
- e steps to fix this problem"

- "I hope my friend will listen"
- "I'm going to take steps to fix this problem"

- enger

- Being redirected/connected to resources
- Seek help from paster
- Talk to friend on phone for an hour

NOT FIND HELP

- Helpless
- Discouraging

- "Why don't they acknowledge my problem"
- "I hope my friend would be more objective"

- Seek specialized help
- Talked to mom and read helpful books

FIND HELP

- Comforted
- Empathized

- "At least I can vent to this box"

- Seek specialized help
- Talked to mom and read helpful books

NOT BENEFITTING FROM HELP

- Disappointed
- Frustrated

- "Who would understand me"
- "I wish I could get a new theraphist"

- Give up temporarily
- Suicidal thoughts

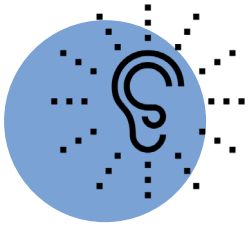
BENEFITTING FROM HELP

- Hopeful
- Relief

- "I like how level headed they are"
- "Having their physical presence is enough"

- Socializing
- Finding a method that works for you
- More motivated to help others

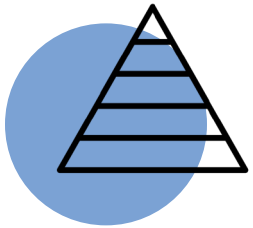
Research Insight 1



Listening & genuinely being heard is enough to de-escalate emotional hardships.

We learned from our research that students most commonly seek out people they trust to share their struggles, and that having a safe place to share their feelings is enough to make them feel better. Students seek acknowledgement and support rather than answers. Based on this insight, we sought to create a sense of empathy and community through our game design, which is supported by secondary research that supports games' unique abilities to create community. In Soapbox students not only practice sharing their struggles, but also practice actively listening to each other in order to provide better help.

Research Insight 2

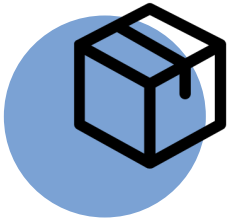


Even though self-actualization practices are most effective in help-seeking, students resort to physiological practices.

Our team found through synthesis of our findings from anonymous surveys and interviews, clusters of similar methods students use to de-stress such as eating, sleeping, or exercising. However, through interviews with CMU's Counseling and Psychological Services and reading literature on help-seeking, we learned that self-reflection and discussion are more effective for dealing with one's challenges.

One way of framing these findings is through Maslow's Hierarchy of Needs, which theorizes that an individual's physiological needs like eating and sleeping must be taken care of before self-actualization like self-reflection. This insight informed our design to create a game that is immediately satisfying for players but also provides lasting support through self-reflection. Soapbox also encourages open discussion and confrontation of one's problems, rather than avoidance through sleeping or eating.

Research Insight 3



Tangible representations of anonymity prompt people share more serious challenges than through traceable means.

The public data collection in the form of physical and anonymous answers through an enclosed box revealed more honest and personal responses relating to serious experiences like sexual assault, mental health, and intense academic anxiety. We were surprised to discover the stark contrast in responses collected from our physical ‘safe’ box compared to other digital, identifiable means such as the survey (which while anonymous, was still possibly traceable). This confirmed the importance of our work in helping students with such serious experiences, and drove our design of a game where players could not be themselves, to encourage openness and vulnerability. This insight also suggests that for future development, our client’s team could anonymously collect additional scenarios for Soapbox, and then use that to improve the breadth and relatability of the role-play scenarios.

Research Insight 4

Students are driven to seek help not for an underlying problem, but for the emotional turmoil that arises from that problem.

We organized our findings from our research into an affinity diagram, clustering together common issues and help-seeking methods of CMU undergraduates. We were surprised by the amount of emotional problems such as anxiety, depression, and even suicidal thoughts. And related to insight 3, we found that students' favored help-seeking methods and ways of providing help--listening and talking through their problems--provided immediate emotional relief, while rarely addressing the underlying problem.

From these findings, we concluded that students are driven to seek help when when their emotional state becomes unbearable, and because of that, the help they find treats their emotional state but not the underlying problem. The design of Soapbox takes this into account by asking players to practice sharing their emotional response to a problem first, but also having them practice asking for and considering help for the problem itself.

Visioning

Visioning

By generating a richness of ideas, we explored different concepts before arriving at a role-playing card game.

Following the research phase, the team jumped into various design thinking exercises to generate concrete ideas within the possible design space. Some exercises we used were **Yes And, Sketching, Crazy 8s, and storyboarding**. Through the Visioning phase, we were able to generate a broad range of ideas, test an initial lo-fi prototype, and then pivot our project to a role-playing card game that better addressed our goal.

Broad Ideation

The exercises Yes And, Sketching, and Crazy 8s were carried out individually, as a team, and with our client. Some prompts we designed and used to guide our thinking included —

- Design a game that will allow people to **stop procrastinating**
- Design a game that allows **struggling sophomores** feel that they have help.
- Design a hybrid game that **mitigates social stigma/shame i**n sharing problems.
- Design a game that makes people feel **cathartic**.
- Design a hybrid game that allows people to **share their deepest issues**.
- Design a game that helps **lighten the burden** of problems.

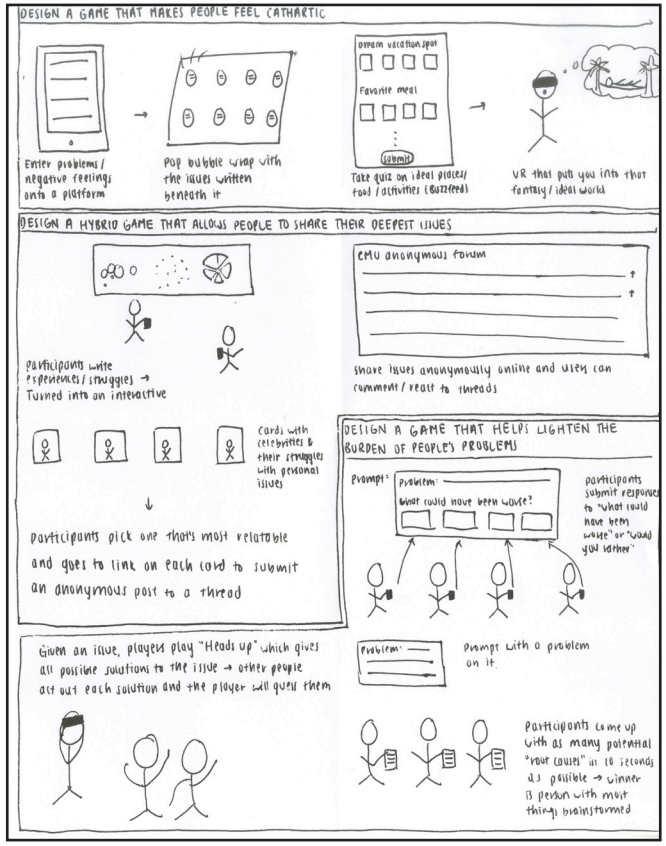
Broad Ideation

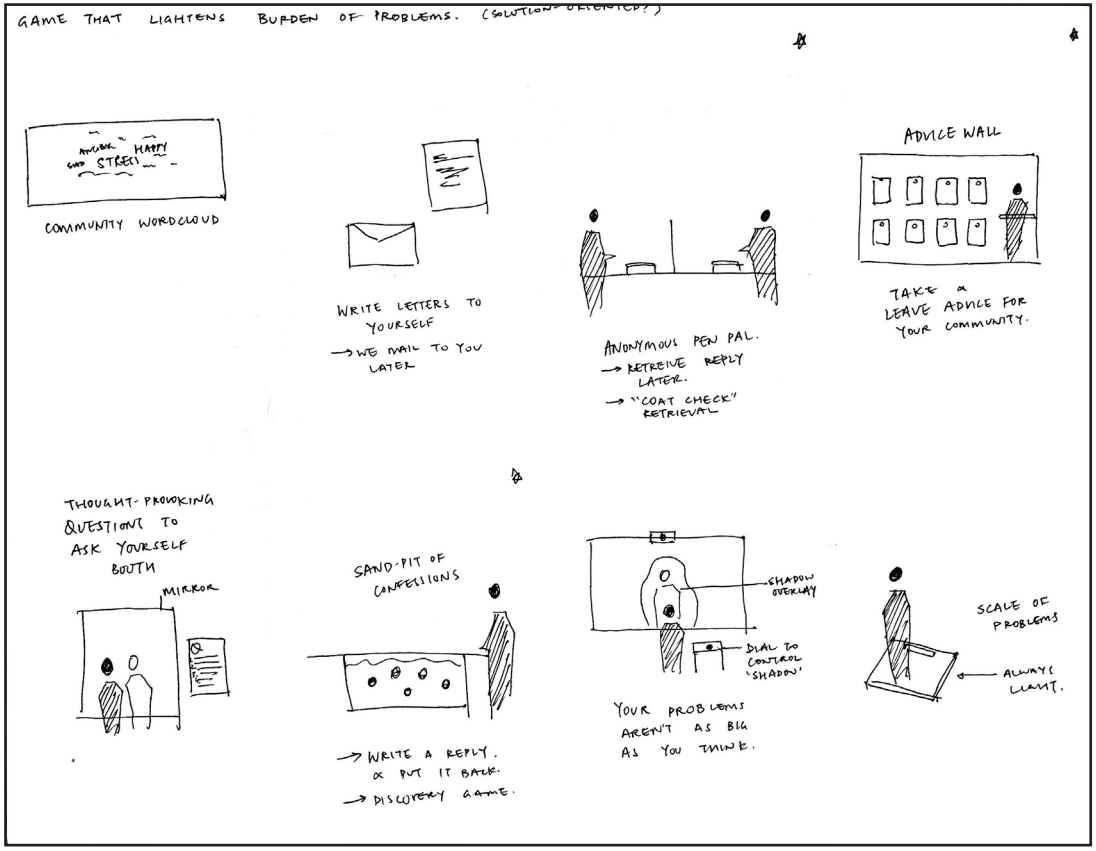
As we began ideating, the team moved away from ideas that were less game-like.

From these exercises, we developed wild and wacky scenarios where sophomores wear an audio device through which they can share their problems with and connect to other sophomores, and somehow also ended up with a mentorship program, advice from fictional characters, and an end-of-year party. Other ideas included the use of a public data visualization, augmented reality, and mobile games. We quickly **eliminated the analog-only solutions** as we were mostly interested in developing a hybrid game.

Following a discussion with our client of what his definition of “game” was, the team **set aside ideas that were less game-like** as many were more so products, services, art installations, or other interventions.

Broad Ideation





Sketches from Crazy 8s

Broad Ideation

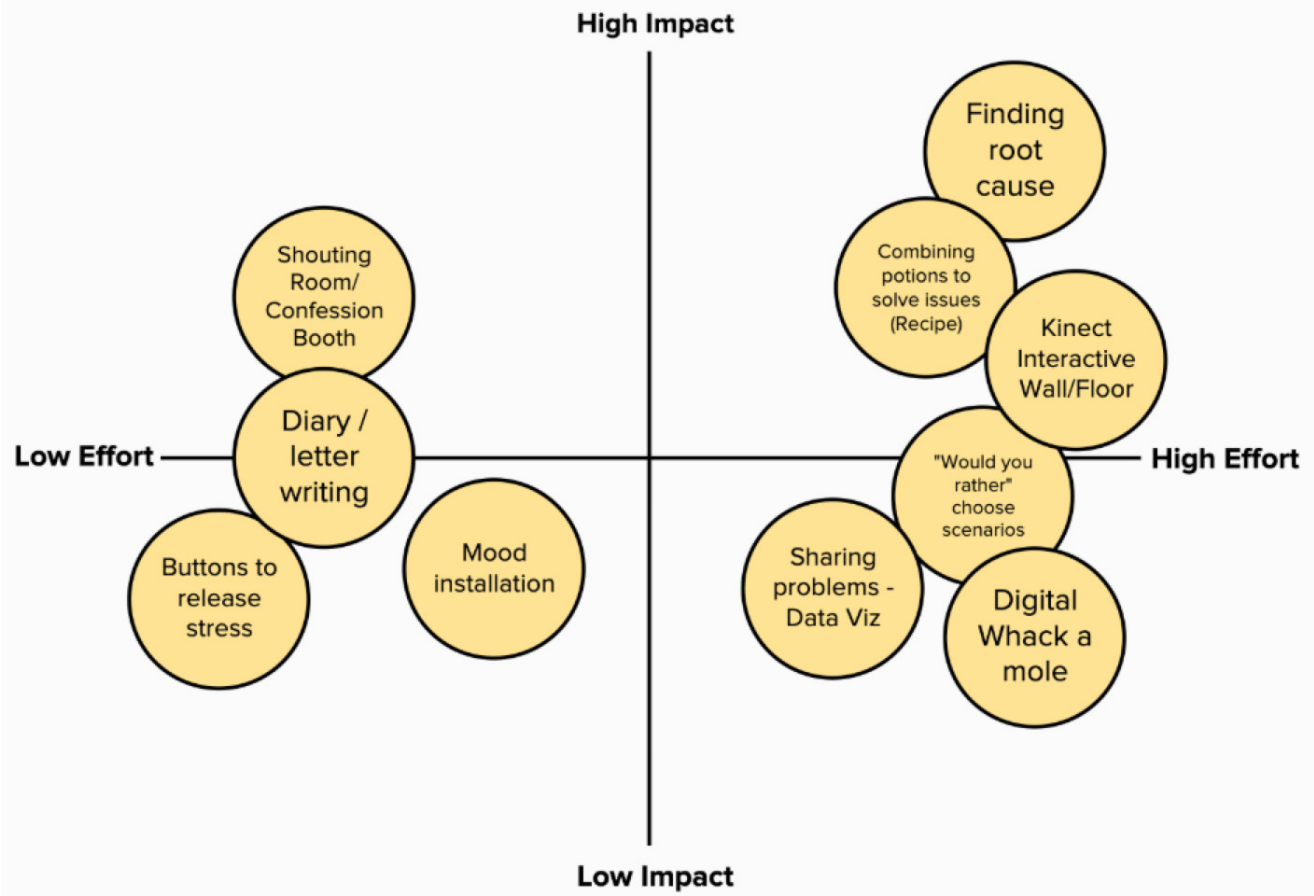
Sketches from Crazy 8s

Scoping Down

A 2x2 matrix was used to identify the level of impact our game would have, against the effort needed to build it.

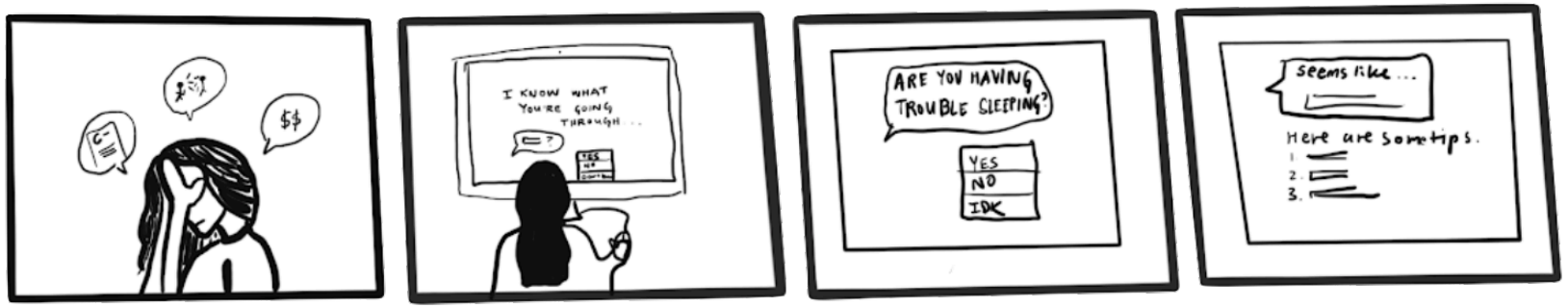
To scope down from our wide variety of initial ideas, we plotted our favorite game concepts onto a 2x2 matrix to measure the **level of game's impact on its players against the effort needed by the team to build the game.** We kept most of the concepts vague to leave room for ideation and interpretation within each one. From this matrix, we narrowed down to 3 concepts: "Finding root cause" of emotions or challenges through a game, "Combining potions to solve problems," and "Sharing problems through a data visualization." We developed multiple storyboards for each concept, and then narrowed down to one key storyboard for each idea.

2x2 Matrix



2x2 Matrix

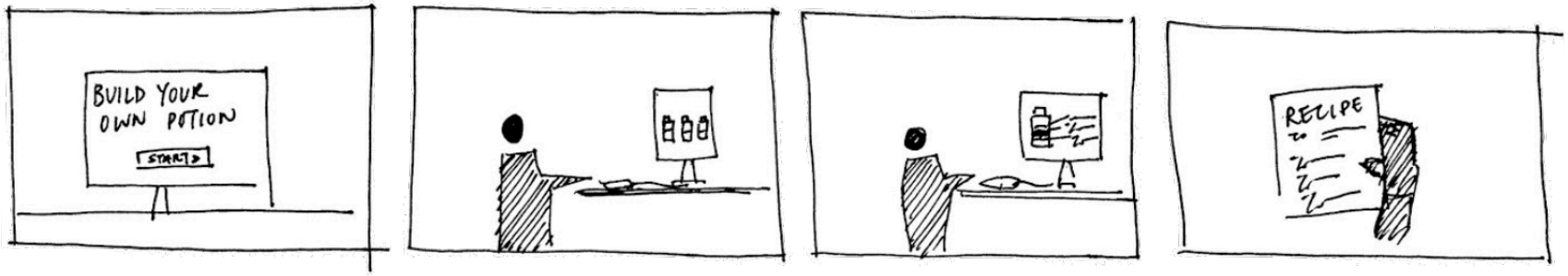
1. Finding Root Cause



Root Cause Storyboard

Inspired by games like Akinator and 20 Questions, students are tasked to answer a series of questions to create a better picture of their mood, thoughts, wants, etc. in relation to a problem or emotional state that they are struggling with. By teasing out these thoughts, the game may help students reveal the root cause of their problem or emotions.

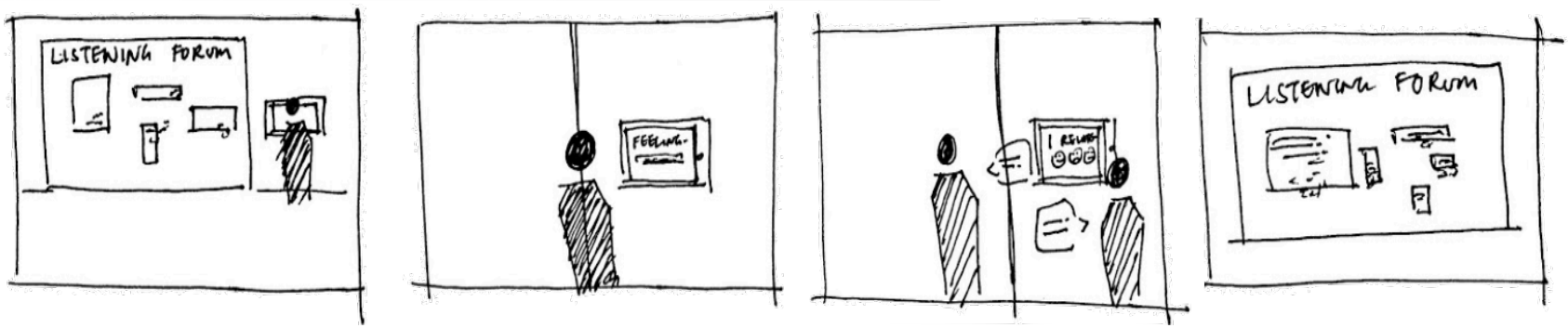
2. Potion-Making



Potion-Making Storyboard

Inspired by a CMU research study under Professor Dan Lockton, we designed a game where students can use “ingredients” representing attitudes, thoughts, or behaviors to create a potion that magically solves a problem they are facing. The game would help students see their problems differently, as well as feel empowered by exploring their community’s potion collection for similar and different problems.

3. Data Visualization



Data Viz Storyboard

This public data visualization displays anonymous responses to the question “What’s something you’ve been struggling with?” The goal of this intervention is to allow students to feel more connected to the campus community by becoming aware of common challenges around their community, and to support their peers facing those challenges.

Initial Lo-Fi Prototype: Potion-Making Game

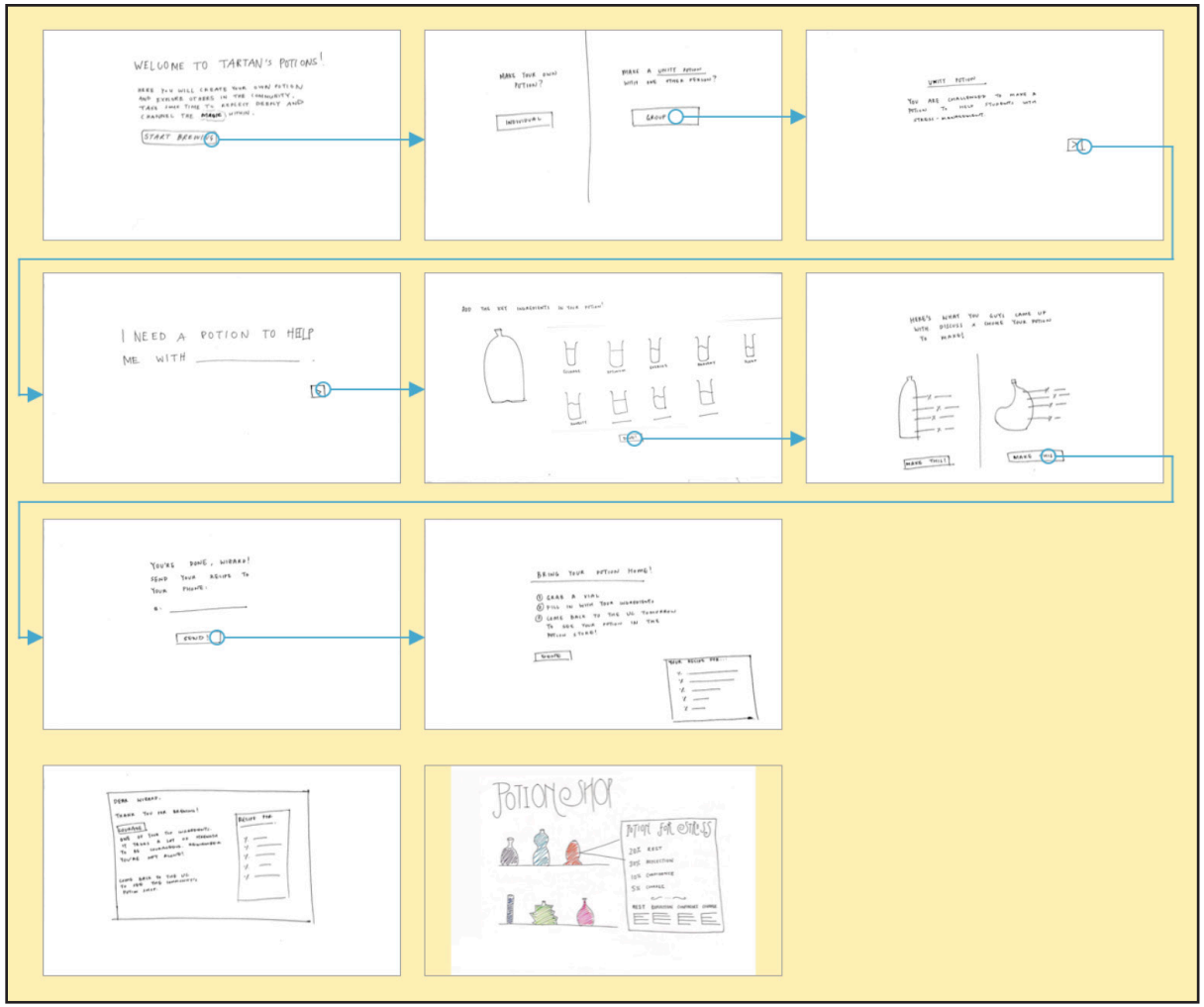
How can creating your own potion reveal and deepen understanding of students' personal issues?

Both our team and our client liked the hybrid and fantastical concept of potion-making, so that was the first lo-fi prototype we explored. In this game, we asked, how can creating your own potion reveal and deepen understanding of students' personal problems?

The hybrid experience allows students to make a problem-solving potion and deepens their understanding of their problem through physical artifacts of a vial and recipe. Along with the potion-making activity, students receive a take-home recipe to remind them of their solution to their problem, as well as encouragement to revisit the "potion Shop" display that reveals common problems in the community and approaches to those problems. There are both individual and multiplayer experiences: one in a more personal and private setting, and one where groups can converse about general, student body problems. Pictured are wireframes of the user flow and key features of the digital recipe and community potion shop.

Initial Lo-Fi Prototype: Potion-Making Game

After gathering feedback from our peers, clients, and advisors, we realized that the potion-making game attempted to **tackle all parts of the help-seeking process we identified in our research phase, but without sufficient depth.** In the next phase of our visioning process, we deepened our solution by pivoting to address a more specific problem area to increase our direct impact on students.



User Flow and Key Features of Potion-Making Game

Project Pivot

The most common barrier to students deciding to seek help is internal stigma.

After revisiting the user journey map we created in our research phase, we chose to focus on a specific stage of the help-seeking process: the "deciding to get help" phase. From reviewing relevant literature and going back to our primary research results, we found that the most common barrier to seeking help is the internal stigma against asking for help. In order for students to decide to get help and move to the next phase of the help-seeking process, they must learn help-seeking skills and coping mechanisms. Therefore, we redefined our project goal to **increasing student's sense of comfort when confronting their internal stigma through role-playing.**

As explained in the Project Overview section, role-playing is an appropriate game mechanic for overcoming internal stigma for a variety of reasons:

1. Role-playing helps the player **distance** themself from the act of asking for help by doing so as a fictional character in a fictional scenario.
2. A role-playing game **intermixes** the seriousness of asking for help with the inherent silliness of acting as a made-up character. Any awkwardness the player feels of asking for help is masked by the awkwardness of role-playing, and with the two intermixed, the player can attribute the awkwardness to the game and feel more empowered to seek help after playing.
3. Through role-playing, players **take on the perspective of someone asking for help**. By stepping into the shoes of someone with a similar problem who's brave enough to share their problems and ask for help, players can continue to see things from that perspective after the game.

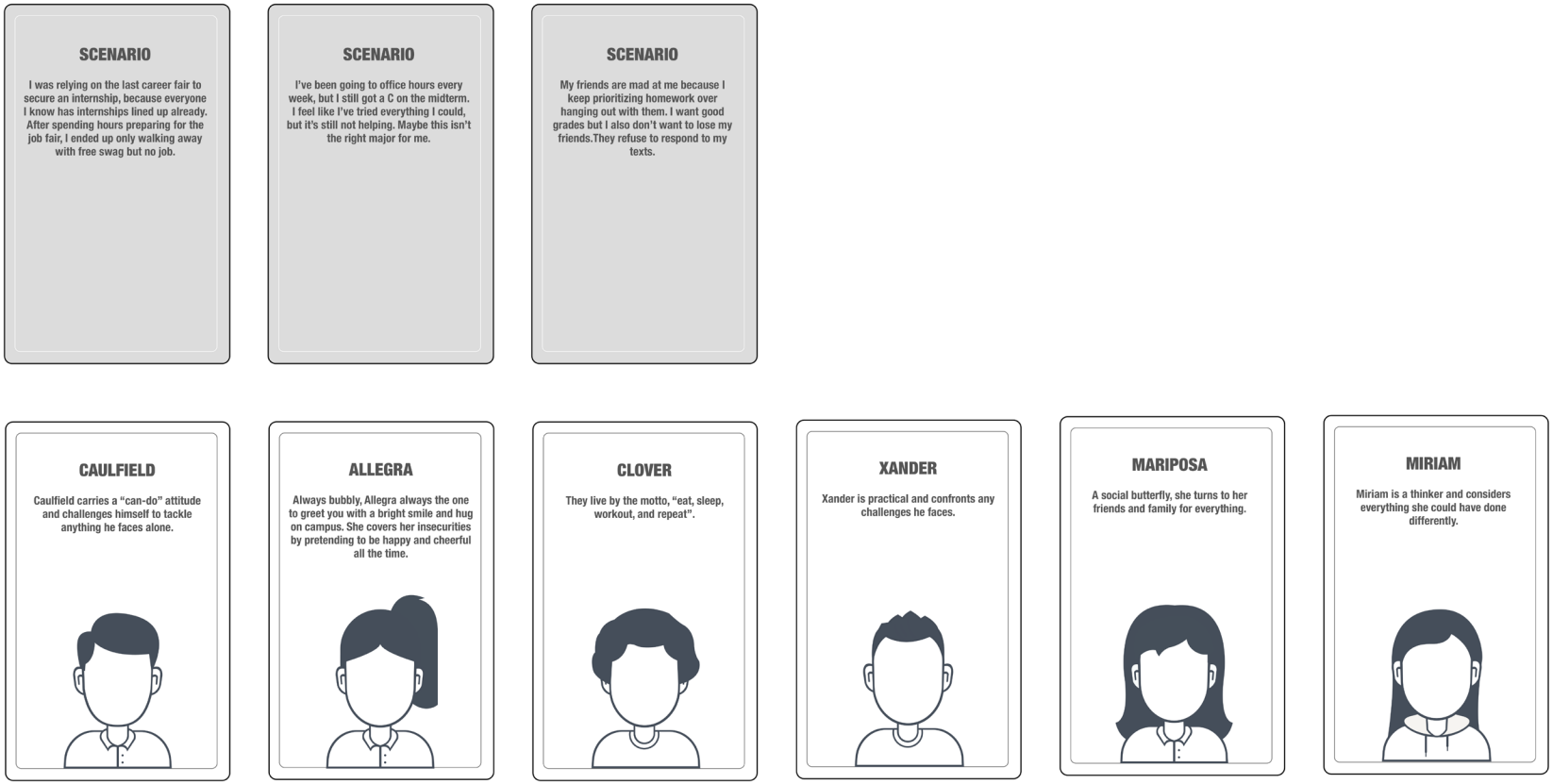
Lo-Fi Prototype: Role-playing Card Game

Role-playing allows players to express vulnerability and overcome weaknesses in a safe environment.

Using our preliminary research and our client's feedback, we designed a role-playing party card game. We chose role-playing because these games ask players to express vulnerability and find ways to overcome their weaknesses in a safe environment through practiced interactions. We sought to transform this performative game play into one that also **builds up player knowledge of their coping abilities and possible solutions to future dilemmas**, with learning help-seeking goals, not winning by role-playing, as the primary goal.

Our initial lo-fi design asks players to be vulnerable and interact with others, while they also gain knowledge and skills to bring to real life problems.

Lo-Fi Prototype: Role-playing Card Game

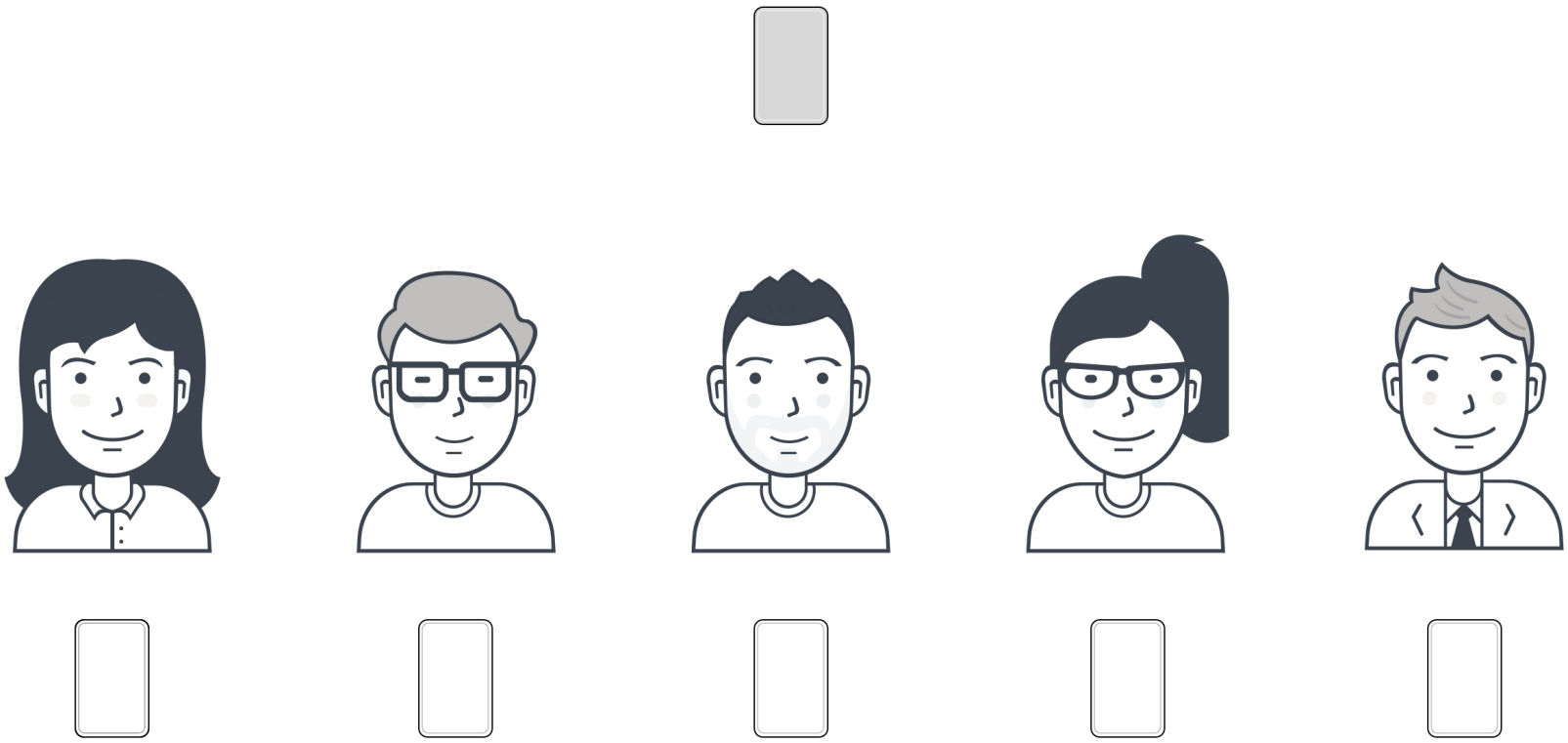


Role-playing game scenario and character cards

How to Play the Game

1. Each player draws a character card.
2. The team draws a scenario card.
3. Each player creates and enacts a solution to the scenario according to the character card they draw.
4. After all players act out their solution, players decide which one “wins”
5. Players put character cards back to character deck and shuffle the deck.
6. Repeat steps 1-5 for next round

How to Play the Game



Refer to Step 5 on page 38: Role-playing game set-up

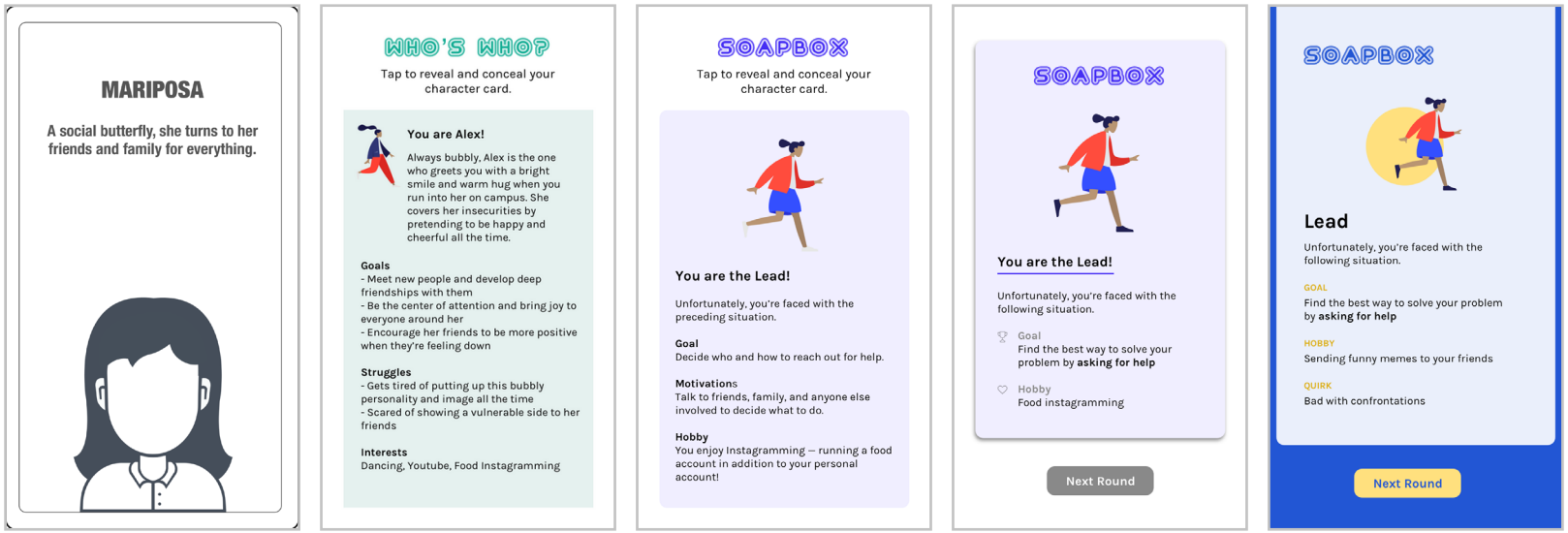
Playtesting & Iteration

5
PROTOTYPES

14
PLAYTESTS

50
PLAYERS

Evolution of Character Card Design



Above: Changes to the design of the character card in each prototype of Soapbox.

Playtesting

Starting with our initial lo-fi design, our team began an iterative cycle of playtesting and prototyping. After each round of playtests, we incorporated our observations on the game design and feedback from players to improve Soapbox to provide a better player experience and to facilitate help-seeking practice in accordance with our goal. The major changes we made to Soapbox through the iteration process include:

- Revising **character cards** to include more personality and hobbies, so that the characters are distinct from the players and encourage safe distancing.
- Defining the **roles and relationships** of the characters, to give players a guideline on how to interact with each other.
- Providing more **game structure** to support inexperienced players, thereby making Soapbox a safer space for players uncomfortable with role-playing.
- Designing participants to role-play through a set of **increasingly stressful scenarios,** thereby slowly encouraging them to become more honest and vulnerable without scaring off shyer players.
- Adding a **“be yourself” round** for students to practice asking for help and sharing their emotions as themselves, and to provide an opportunity for personal reflection and the creation of concrete takeaways from the game.

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Playtest 6
04/04/2019
CMU Senior Design Studio

45

Playtest 7
04/04/2019
CMU Senior Design Studio

Playtesting Insights

The most important lesson we learned through playtesting is that players enjoyed the game most when they got to interact with and support each other. To that end, we significantly changed the design of Soapbox from a one-player-at-a-time, competitive game, to a **collaborative** game where the goal is to create an **enjoyable experience** rather than to win. Not only does this design follow the fun players had in our initial prototypes, but it better reinforces our goal of helping players overcome barriers in help-seeking by providing a supportive and empathetic atmosphere. For example, by asking players to **award each other tokens for memorable moments,** the game tacitly encourages players to commit to role-play and share their emotions honestly, as we observed through playtesting that those actions are more likely to create memorable moments.

While we've presented the key design changes that lead to our final design in this section, it's also important to keep in mind that **playtesting and iteration is a continuous process**. Even in our final round of playtesting with our final design, we noted design problems and challenges that could be addressed in a subsequent iteration. We'll go over the changes we still want to make to Soapbox in the Roadmap section of this report, and we will pass on all our notes and design plans to our client so that he can continue to refine the game.

Soapbox Game Walkthrough

Soapbox Game Walkthrough

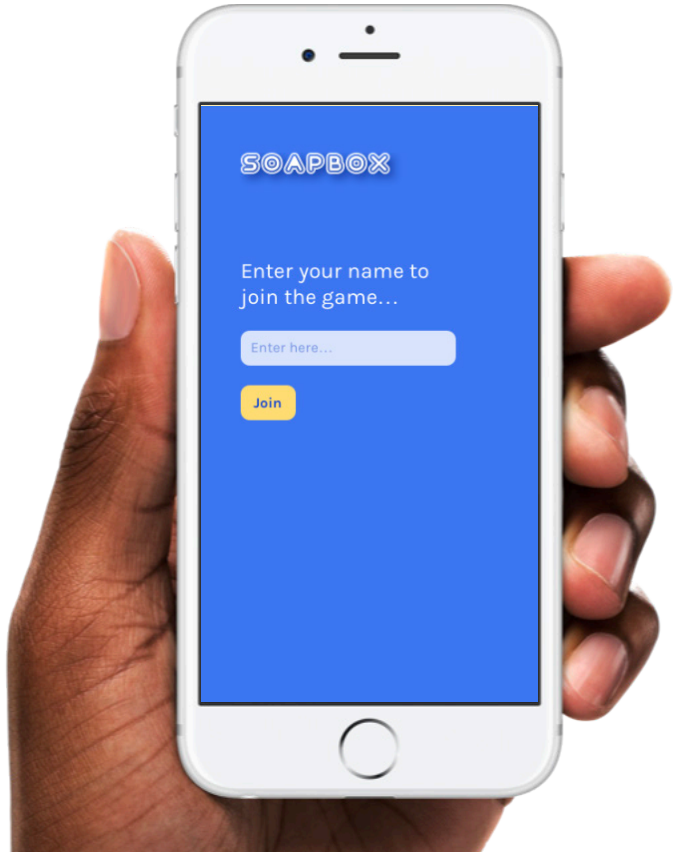
Soapbox is a collaborative role-playing game that allows players to practice seeking help in college-specific situations.

In this game, players act out how they'd react to various challenges while embodying assigned character traits and goals. This allows players to get experience with seeking help as well as giving advice to those who need help. Soapbox requires 4 players, 1 facilitator, a shared screen (on a digital screen or a projector), 4 mobile phones for the players, and an open space for the players to stand and interact with each other. The 4 players should be at least lightly acquainted with each other.

The facilitator will guide the players through each round and control the digital projector, which will display important game prompts. A detailed facilitator manual can be found in the Appendix. There are 4 rounds as well as a post-game debrief session.

Soapbox Game Walkthrough

Soapbox starts with each player joining the game by entering their names on their phones, which are shown on the projected screen.



Soapbox Game Walkthrough

Next, the facilitator walks the players through how the game works.

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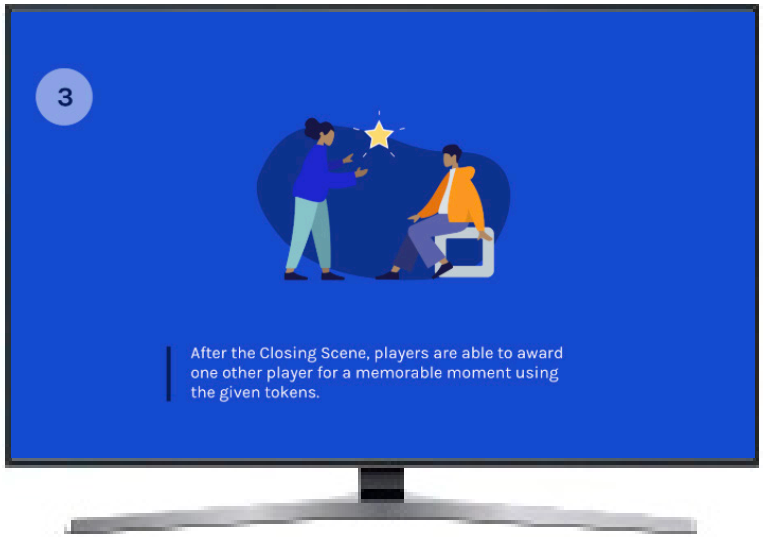
Soapbox Game Walkthrough

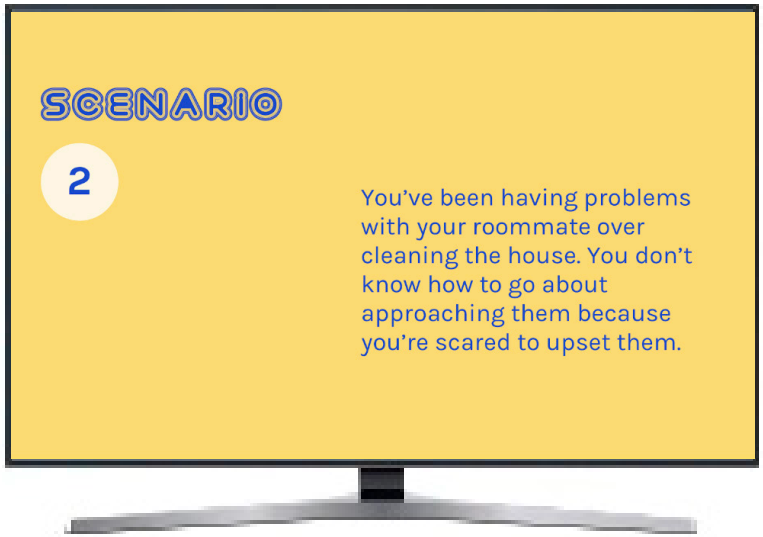


Next, the facilitator walks the players through how the game works.

Soapbox Game Walkthrough

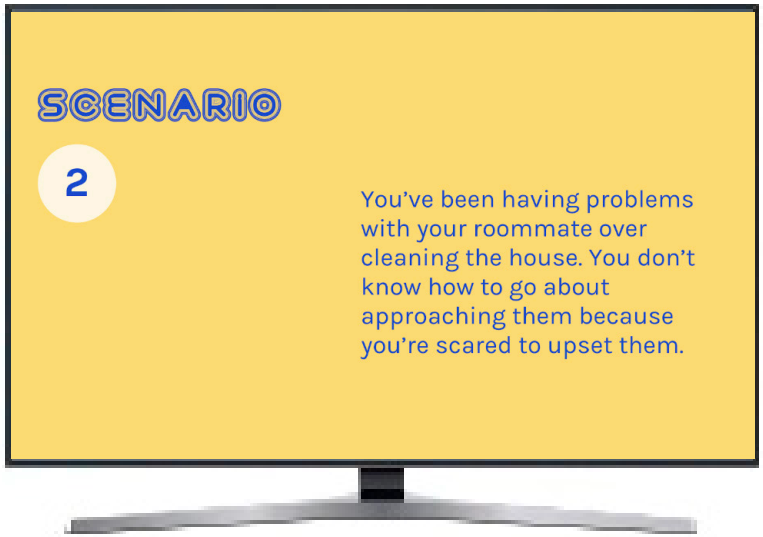
For rounds 1 to 3, players are each given a character card on their phone screens, in which they will embody the goals, traits, and quirks associated with the characters when reacting to the given group scenario. All 4 players are assigned characters relevant to the scenario, and each player will get a turn at playing the lead. Among the four players, there is a lead, who is the one faced with the scenario and is thus conversing with the other players to seek help and advice. There is also the lead's parent, friend, and a wildcard character specific to the scenario.

Soapbox Game Walkthrough

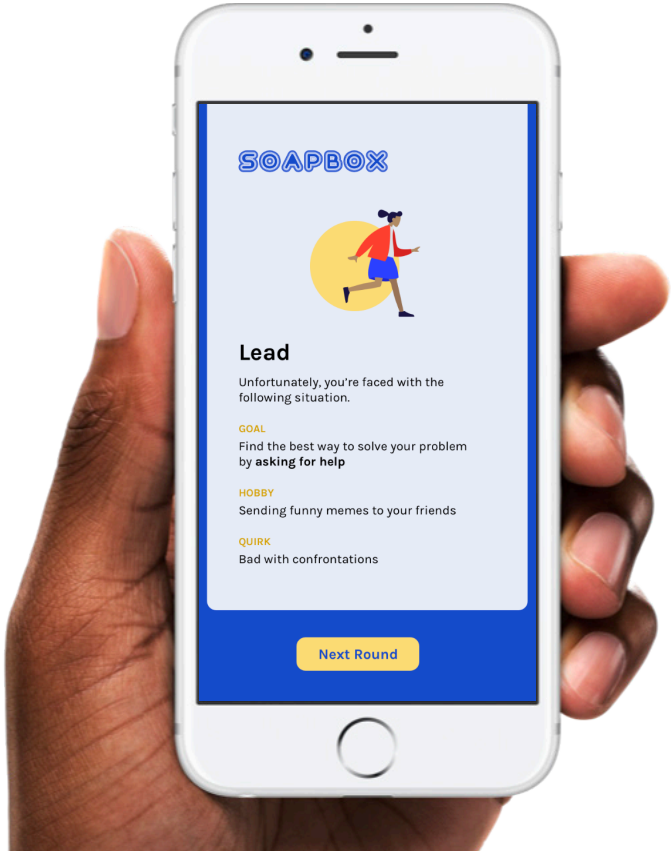


The scenarios increase in level of emotional intensity to allow players to get more comfortable with each other and with role-playing as the game goes on. The first round, where the lead's phone screen cracks, is intentionally designed as an "icebreaker" for the players. We'll be walking through Round 2 to demonstrate how the Soapbox works, but you can find the scenarios and character cards for all other rounds in the Appendix.

Soapbox Game Walkthrough

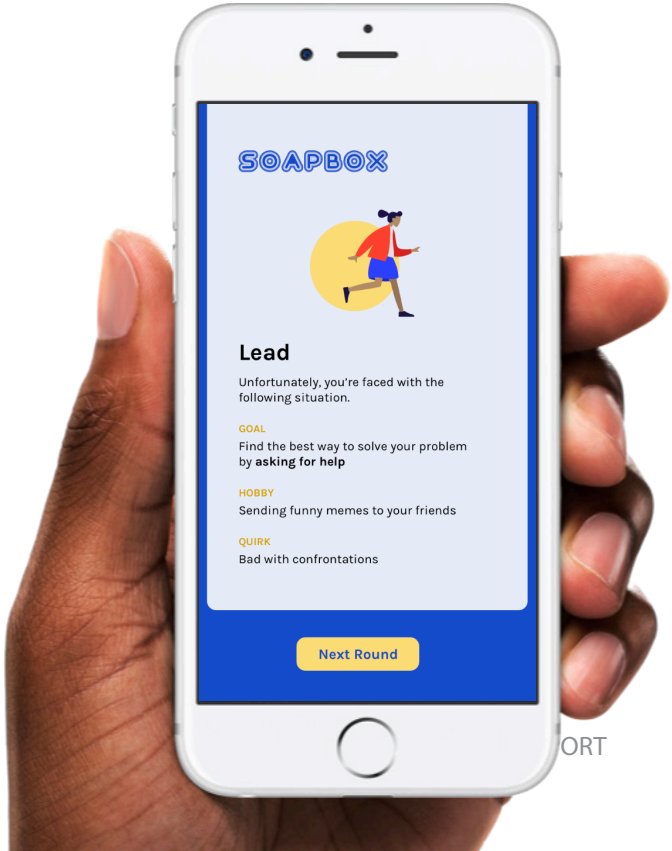


The players' character cards for Round 2 are as follows. Each card has specific roles, goals, hobbies and traits for the players to embody and build into their role-playing. The wildcard character in this scenario is a mutual friend who is friends with both the lead and the roommate in the scenario.



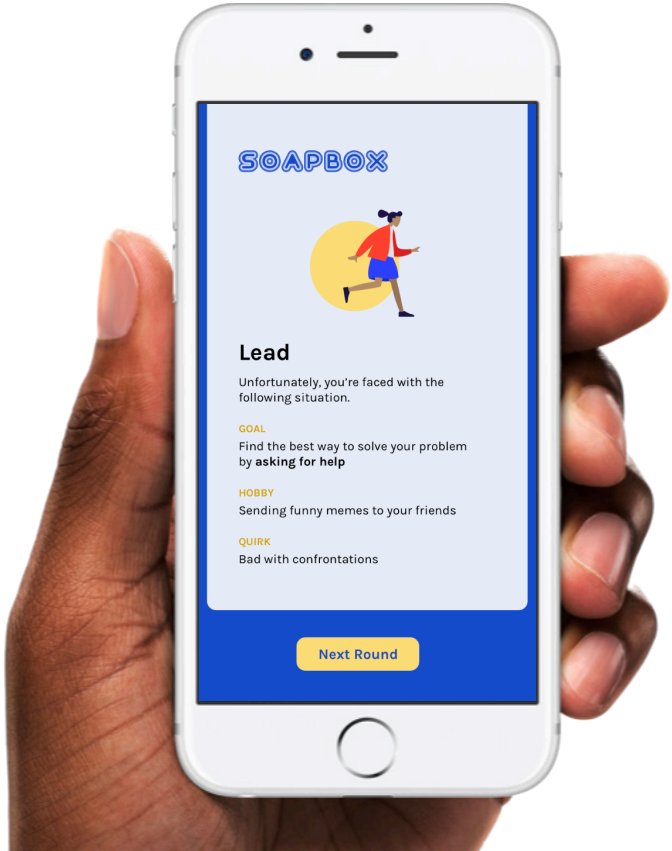
Soapbox Game Walkthrough

The role-playing starts with an opening scene, in which the lead has 30 seconds to answer the following three questions – 1) Rephrase the scenario in your own words, 2) Answer "How do I feel?" out loud, and 3) Ask the group, "What should I do?" From our research and playtests, we found that having the lead ask "What should I do?" is important as it allows the players to experience the physical act of asking for help.

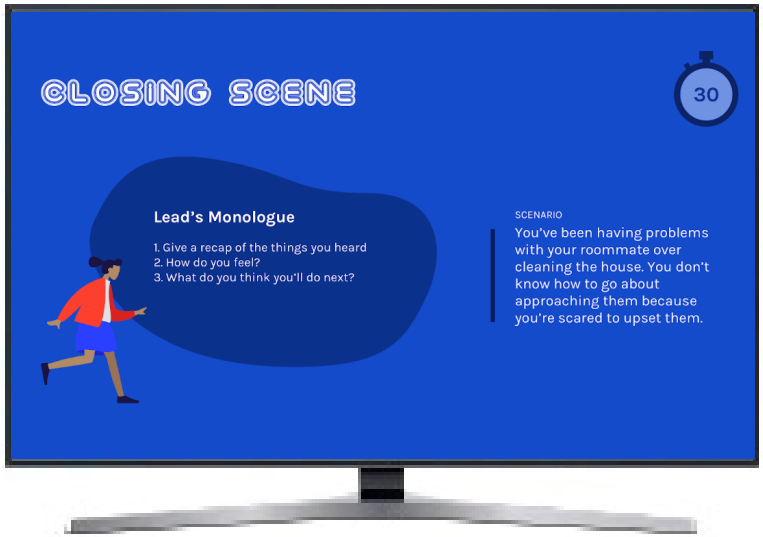


Soapbox Game Walkthrough

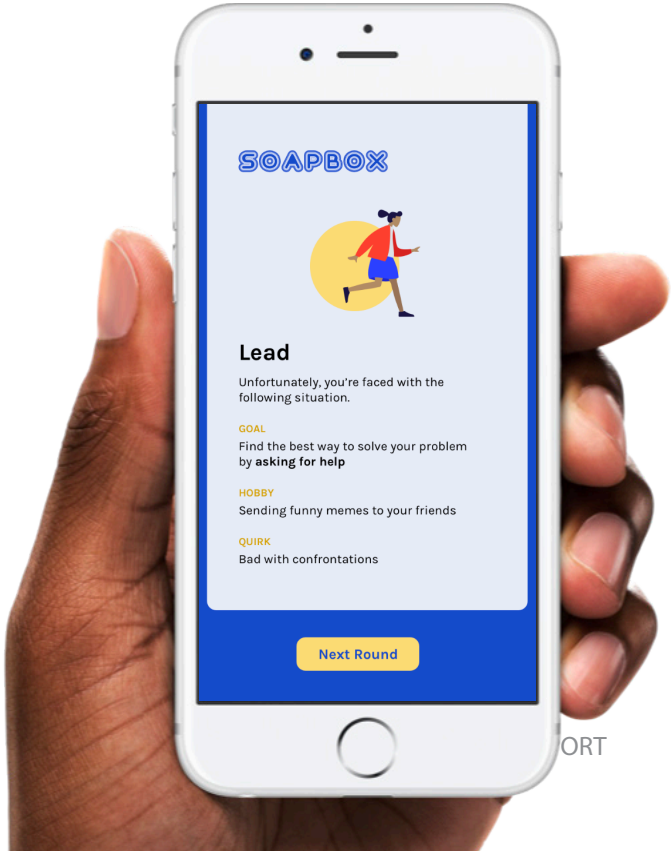
Next, the players move on to the main act, which is an open-ended group dialogue where the players continue the scene in their assigned roles. This is where the players can really add in the quirks and hobbies on their character cards into their role-playing to create a light-hearted and safe space.



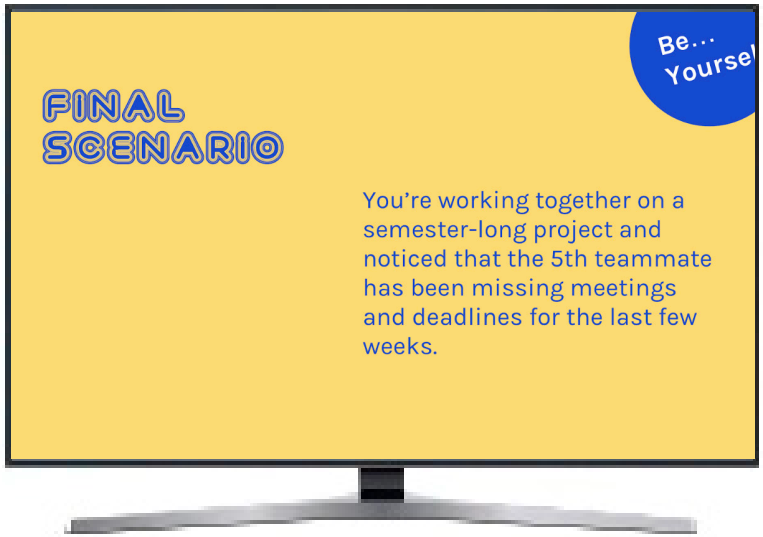
Soapbox Game Walkthrough



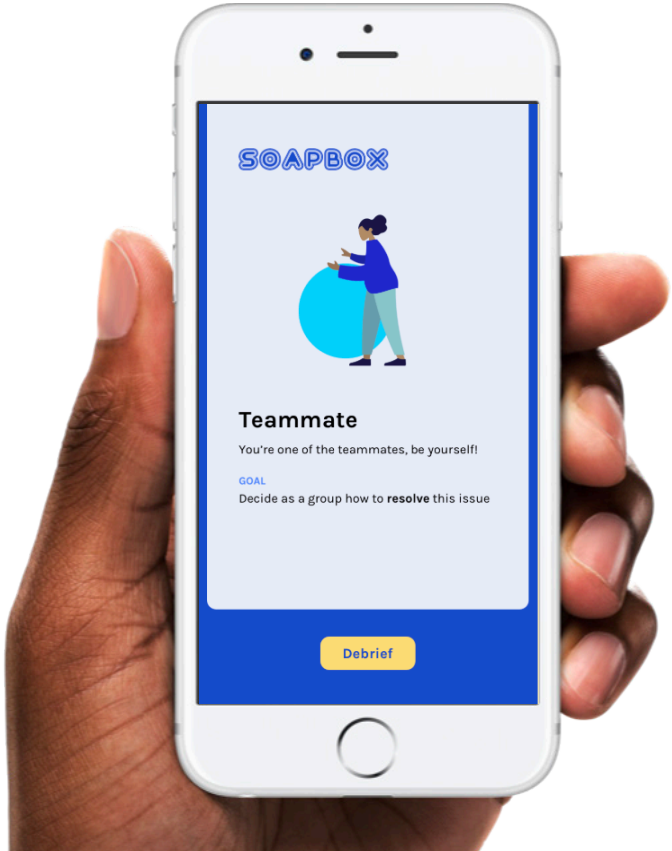
The last scene in each round is the closing scene, in which the lead answers – 1) Give a recap of the things you heard, 2) How do you feel?, 3) What do you think you'll do next?



Soapbox Game Walkthrough



During the last round, which is slightly different from the first three rounds, players are assigned only the broad role of "Lead" or "Teammate" and are encouraged to be themselves by adding in their own goals, hobbies, and quirks. By encouraging players add in their own personalities and interests into this role-playing round, we hope that this round will prompt players to take what they've practiced in the past three rounds into their actual lives. The "be yourself" round allows the players to be taken outside of a complete "game" context and step into a situation more similar to their personal lives. For this round, there is one lead and three teammates.



Soapbox Game Walkthrough

After all four rounds, there is a post-game debrief session in which players respond to the following questions – 1) When was a moment you stepped outside of your comfort zone?, 2) If you had to add your own scenario to the game, what would you add? The debrief session serves two purposes. First, our client can collect more opinions and thoughts from the players for research purposes to understand the game's efficacy and collect new scenarios for future development. Second, players can reflect on the game and have some concrete takeaways from the game.

Throughout the game, the facilitator guides the players through each round, making sure that they address all prompts and questions, and resolving any confusion. The facilitator also observes the players to look for changes in body language, word choice, and increase in vulnerability or willingness to seek help.

Game Design

Soapbox was designed based on our client's goals and research insights. We identified from our research the need to break down barriers to help-seeking, as we found that CMU undergraduates are often faced with challenges or struggles, yet don't seek help from others due to internal stigma against asking for help. Based on ou research, we designed our game to be a safe space to practice seeking help. We used character cards and graphics (the graphics were made using the open source *Humaaans* Sketch library by Pablo Stanley) to create relatable and engaging roles for the players, and chose vibrant colors to create a positive and fun experience.

Deliverables to Client

Our team has created two versions of Soapbox that will be handed off to our client. We first designed a high fidelity prototype of Soapbox, which is hosted on InVision, that contains the final user interface and user experience design, including all animations and interactions. However, some key features of Soapbox: including joining the game network, syncing the individual phone screens to the digital TV screen, and displaying a functioning timer— were not included in the hosted prototype. Thus, we are also delivering an implemented version with these key features, coded in Javascript using the node.js library.

Soapbox Roadmap

Roadmap: Four Phases

DELIVERABLES

- Fully designed InVision prototype with ideal user experience
- Partially implemented working prototype with player name entry, timer feature, and real-time screen sync between TV and mobile devices (local server)
- Game Content: Limited to 4 designed scenarios and characters used for a general undergraduate audience.
- Game instructions passed off to researchers — manual for game facilitation and methods of qualitative analysis

IMPLEMENTATION

- All design features and animation implemented, responsive to real-time user input
- Automated collection of user scenarios

ADVANCED FEATURES

- Smart, adaptive digital/ audio facilitator
- Game shortcuts, where advanced users can skip ahead

CONTEXT-SPECIFIC

- Context-aware system through increased user input — the team sees Soapbox having the potential to be highly customizable to different audiences and contexts. With user input available for scenarios and characters, a smaller demographic can use this framework to tackle specific issues in their community. E.g. Used in a freshmen dorm, post CAPS activity, exit interviews for seniors, etc.

Team Reflection

Creating Soapbox was a long, intensive process for our team, and we learned many things along the way. We are still **surprised by the amount and intensity of responses to our anonymous public data collection boxes,** which not only convinced us of the importance of our game but also suggests possible future directions for our clients' research and design of Soapbox that incorporate similar anonymous responses. **Our research process was key to the design** of our game, as was testing and feedback, since that informed our pivot to a role-playing game to overcome the barrier of internal stigma against help-seeking. Speaking of which, an important takeaway from this project is that **pivoting a project's design is not just okay but encouraged,** especially if one can identify the problem and pivot early in the design process.

We learned that **user research is an ongoing process**, as we continued background research as well as playtesting throughout the pivot and design process to ensure that our project was on the right track and to incorporate existing design paradigms into our game (the "Award the Moment" is one example of such a paradigm that we discovered and incorporated late in the design process). Relatedly, **playtesting is key to game development**, and thankfully the design of our game allowed for frequent rapid playtests to get immediate feedback and iterate on our design.

Finally, one of the biggest challenges we faced is **defining and measuring success**, faced with the qualitative goal of giving players practice at seeking help, and the always-nebulous design goal of making a game "fun." However, our client has been delighted by our progress and playtest results throughout the design process and with the final game. By our last playtests, our players consistently said that they had fun and several playtesters wished that they could **play again**. With that in mind, our team is happy to say that we believe that Soapbox has been a success, and we hope that our client continues to develop it for research and beyond.

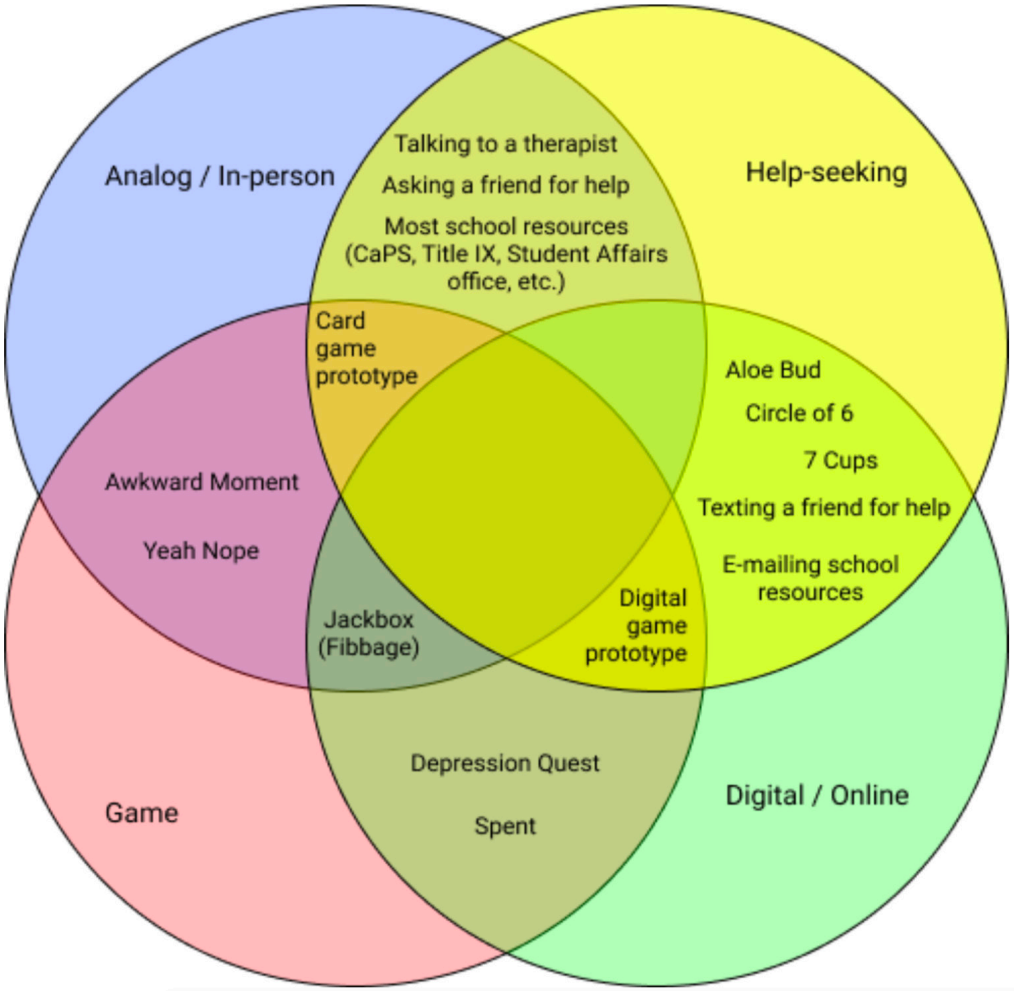
Appendix

Appendix A: Stakeholder Map

During our research process, we drafted a **stakeholder map** to show everyone who might care about a student undergoing a personal chal- lenge, as well as the resources they might reach out to when seeking help. However, based on our primary research we determined that this map would vary widely between students, and ultimately decided that it wasn't useful to our design process.

Appendix B: Competitive Analysis

As part of our research process, we conducted a **competitive analysis of of games and help-seeking methods across analog and digital mediums.** From this we identified a gap for a hybrid (digital and analog) method of help-seeking or a help-seeking game. We designed Soapbox to fit into the gap formed by the overlap of all four areas, as a digitally-mediated in-person help-seeking game.



Appendix B: Competitive Analysis

One of the ways we synthesized our research findings is through the creation of an affinity diagram that groups together related findings. This is just a glimpse of our much larger affinity diagram, which informed our research insights as well as our design of relatable scenarios for players.

Appendix C: Facilitator Manual

SETTING UP

You will need:

- 4 players
- An open area for players to stand and interact with each other
- A TV screen, projector, or other shared screen that all 4 players can see
- One mobile device for each player
- 16 tokens, 4 for each player
- ** We used stickers, which players liked very well (especially gold stars), but you can use any physical tokens from poker chips to colored pieces of paper.

Once you have Soapbox up and running, either through Git or Invision, it's time to start the game. Here is a sample script you might follow when acting as the facilitator for the game. In the script that follows, italics are what you, the facilitator, says. Normal text are actions you take or notes for running the game.

Appendix C: Sample Facilitator Script

GETTING STARTED

"Hey everyone, and welcome to Soapbox! This game does require you to stand and interact with each other, so please stand up."
Players will want to sit and draw away from each other. Standing next to each other encourages them to be more active and interact with each other.

"Please [enter the IP address on the screen / follow the link I sent to you] to join the game. Let me know when you've joined the game."

Once everyone is on the "What's on the screen?" phone screen, advance through the next screens until you reach the "Objective" screen. Read the objective aloud to the players:
"Soapbox is a cooperative role-playing game where you seek and provide help as different characters. The goal is to create as many memorable moments as possible!"

Advance to the first instructions screen and read it aloud:
"In each scenario, players are given a character to role-play. They include a lead- the person facing the scenario, their parent, their friend, and a wildcard character specific to each scenario. There are four scenarios in the game. Each player will get a turn playing each role."

Appendix C: Sample Facilitator Script

GETTING STARTED

Advance to the second instruction screen and read it aloud:
"There are three timed acts in each round. The Opening Scene, which is 30 seconds long; the Main Act, which is at most three minutes long; and the Closing Scene, which is 30 seconds long."

Advance to the third instruction screen and read it aloud:
"After the Closing Scene, each player will award another a token for a memorable moment in the previous scenario. We will be using these as tokens. Pass out four tokens to each player."

"Are there any questions?"

After answering any questions:
"Okay, let's get started!"

Advance to the next screen.

Appendix C: Sample Facilitator Script

ROUND 1

"Round one! Check your phone to reveal your role."
You may need to instruct your players to tap the button that says "Round One" to reveal their character card.

"Everyone, take a minute to read your character card."

After the players have had some time to read their role and are looking at the screen, advance to the "What's your role?" screen.

"Okay everyone, what's your role? Let's introduce ourselves. Who is the Lead, the one faced with the scenario?"
The player with the Lead role should introduce themself.
"Who is the parent, supporting their child from afar?"
The player with the Parent role should introduce themself.
"Who is the friend, another supportive resource providing helpful advice?"
The player with the Friend role should introduce themself.
"Who is the Wildcard in this round, and who are you?"
The player with the Apple Store Employee role should introduce themself as "I'm an Apple Store Employee."

Appendix C: Sample Facilitator Script

ROUND 1

Advance to the next slide.
"Everyone ready to play?"

At the players' confirmation (you may need to give them some extra time to review their characters):
"3! What's your role?"
Advance to the next slide.
"2! Get into character!"
Advance to the next slide.
"1! Act and be believable!"
Advance to the next slide.
"Let's go!"

Appendix C: Sample Facilitator Script

ROUND 1

Advance to the scenario screen. Read the scenario aloud:
"Scenario one: You're running late to a meeting when your phone falls out of your pocket and the screen shatters."

Advance to the "Opening Scene" screen.
"Lead, you have thirty seconds to rephrase the scenario in your own words, answer "how do I feel?" out loud, and then ask the group, "what should I do?" Go!"

If the Lead doesn't answer all the questions on the screen--for example, if they don't say how they feel--prompt them to do so.
"How does this make you feel?"

"Great. Now let's move into the main act."

Advance to the Main Act screen
"It's a group dialogue! Converse in your roles to help the Lead."

Appendix C: Sample Facilitator Script

ROUND 1

Players should all get a chance to speak. If they don't, encourage them to do so ***(Parent, what do you think?)*** and give them enough time to talk.
If they reach a natural stopping place in the scene once everyone has spoken, regardless of whether the timer has run out, advance to the next screen. However, if the scene continues past the three- minute timer, encourage them to wrap it up.

"And scene! Time for the Lead's closing monologue. Lead, give a recap of the things you heard. How do you feel? And what do you think you'll do next?"
As in the Opening Scene, prompt the Lead to answer any questions that they don't, and give them enough time to do so.

Advance to the "Award the Moment Slide."
"Okay, that's it for Scenario one! Now it's time to award the moment. Each player, award one other player a token for a memorable moment. What was it?"
Make sure that each player gives one other player a token and says why they're giving it to them.

"All right. Time for round two."
[The sample script ends here, but our deliverables include a complete script for the whole game.]

Appendix D: InVision Prototypes

All scenarios and character cards for each round can be found here:

Player 1: https://invis.io/3RRMX1UGXTV

Player 2: https://invis.io/HKRMX21RM9X

Player 3: https://invis.io/CDRMX26KQMY

Player 4: https://invis.io/EZRMX2ERNS3

TV Projector: https://invis.io/MXRMX1DGFD5

Our Team