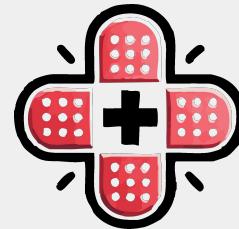


# RELIEF HUB



## Quick Service First Aid Items at Entertainment Venues

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# Introduction

## MISSION STATEMENT

Our mission is to **enhance safety** and **reduce urgent medical incidents** by creating a system for **easy access to rapid assistance**, to ensure a more safe and enjoyable experience for all entertainment venue goers.



# Why We Chose this Topic

- Young people are going to festivals, raves, and sporting events, but aren't **well prepared in handling potential incidents or injuries**
- Long lines and crowds at entertainment venues **hinder the response time of getting medical aid**

(There is currently not an efficient system to get quick medical aid at entertainment venues.)



# Problem Statement/HMW

How might we create a more efficient  
system for receiving medical aid at  
entertainment events?



# Research

# Online Research/Evidence

1. Worldwide, nearly **70,000 people suffered significant injury and 232 people died** at approximately 300 outdoor music concerts held over a 10-year period
  - Legs were the most commonly injured body part (**34.6%**).
  - Injuries to their mouth/lips/teeth were reported by **17.7%** of respondents.
  - Dental injuries, accounting for **4.6%** of all reported injuries
  
2. Between 2012 and 2019, more than **800 injuries were reported at baseball games**, and those are just the **officially reported injuries from the 4 different MLB ballparks (out of 30)**
  - Around **60% of festival goers** said they consumed either drugs or alcohol



1. Around **60% of festival goers said they consumed either drugs or alcohol**
2. Since 2006 there have been **at least 43 confirmed drug overdose deaths** in southern California
3. From laboratory testing, **6 out of every 10 fentanyl pills are laced with a lethal dose** that can kill an individual.

# Field Observations

- Look in **large traffic areas**
  - Outdoor places: **festival grounds and parks**
  - Indoor areas: Ralphs and pharmacies
- Commercialized spaces where individuals would like to have **quick service kiosk next to customer service tables**
- **Little data on public areas** such as festivals and entertainment venues regarding implementation of any type of kiosk system.

## Main Observations:

- Went to Petco Park, as it is a sports venue, but can be used as a concert venue as well
- Found areas that contained **high foot traffic** and planned to place our kiosk within those locations. (restrooms, resting areas, playgrounds, etc)



Figure 1: Water station at park



Figure 2: pharmacy kiosk located next to service counter



Figure 3, 4: Images of Petco Park, potential locations for kiosk

# Stage 2 Affinity Mapping



## Insight Summary

- **Exhaustion and hydration** are common
- There are staff and medical tents for assistance, but often takes **too long** to get help due to crowds and lines
- Most people know basic first aid, but are **not always aware** of all first aid services at events
- Features that users would like to see:
  - Instructions on how to use items (videos, visuals)
  - Call for emergency assistance
  - Basic first aid items
  - Images and descriptions of items
  - Search bar to find items fast

# Personas - Main Stakeholder

## KEVIN NGUYEN

PROFILE	
Gender	: Male
Age	: 22
Education	: Bachelor's degree
Occupation	: Student at UCLA
Location	: Los Angeles, CA



**“**  
I just want to have fun, be with my friends, and keep the party going —nothing should slow me down.”

### BIOGRAPHY

Kevin is a social, outgoing 22-year-old who thrives on adventure and living in the moment. Based in Southern California, he has a busy schedule that balances school, fitness, and a social life filled with partying and gaming. He regularly attends music festivals, where he loves to meet new people, dance, and experience the thrill of the rave scene. His routine includes waking up, attending school, hitting the gym, then spending the evening either gaming or hanging out with friends at clubs. The cycle repeats, keeping him in a fast-paced, high-energy lifestyle.

### MOTIVATIONS

Convenience	<div style="width: 50%;"></div>
Endurance	<div style="width: 10%;"></div>
Fun	<div style="width: 80%;"></div>
Confidence	<div style="width: 20%;"></div>
Spontaneity	<div style="width: 60%;"></div>
Connections	<div style="width: 10%;"></div>

### GOALS

- Quick Recovery (to keep partying)
- Convenience (with no effort or planning ahead)
- Minimal Disruption (to avoid missing out on fun)

### FRUSTRATIONS

- Lack of Immediate Access (to find basic essentials)
- Health Risks (dealing with dehydration, etc.)
- Increased Anxiety or Stress (not knowing who to turn to)

### PERSONALITY

Extrovert

Thinking

Judging

Sensing

Feeling

Perceiving

Intuition

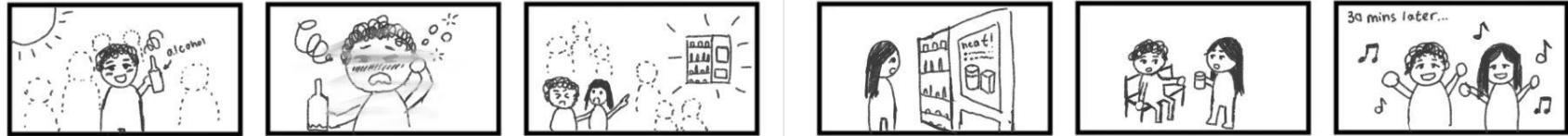
### TECHNOLOGY

Social Media Savvy	<div style="width: 80%;"></div>
Music Streaming	<div style="width: 60%;"></div>
Event Apps	<div style="width: 70%;"></div>

### BRANDS



# Highlighted Storyboard



## Context

On a hot summer's day Kevin arrives at festival after pre-gaming with friends.

## Problem

Kevin feels dizzy from dehydration

## Solution

His friend Tiffany notices, and finds a kiosk nearby to get him help. She inputs Kevin's symptoms and gets electrolytes for him and tells him to rest.

## Resolution

After some rest, Kevin is back to dancing.



# Design

# Environment

Less crowded areas



Backed  
up  
against  
a wall

Next to  
outlets

By exits/entryways



Location will be at stadiums and other entertainment venues

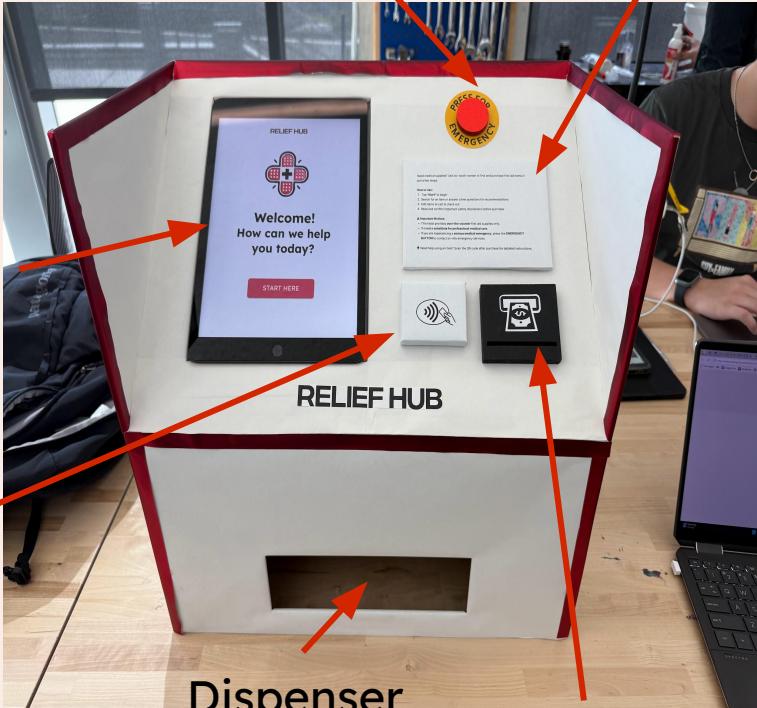
# Physical Kiosk Design



# Key Features

Interactive screen

Tap to pay



Emergency button

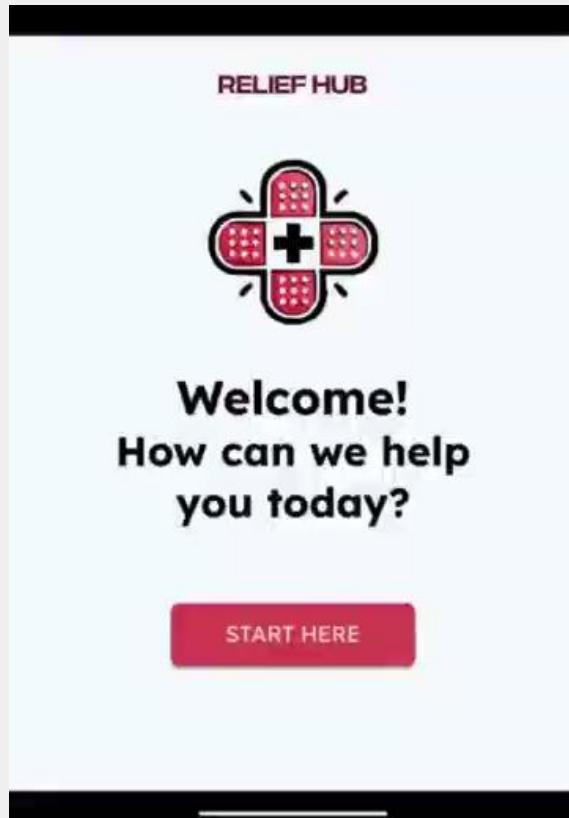
Instructions  
for use

Cash payment



# Prototype Demo

[Link to our prototype](#)



# User Interactions

- Search
- Questionnaire

Users can choose to search for a specific item or take a short questionnaire of their symptoms in order to receive proper care

RELIEF HUB



Search for Item!

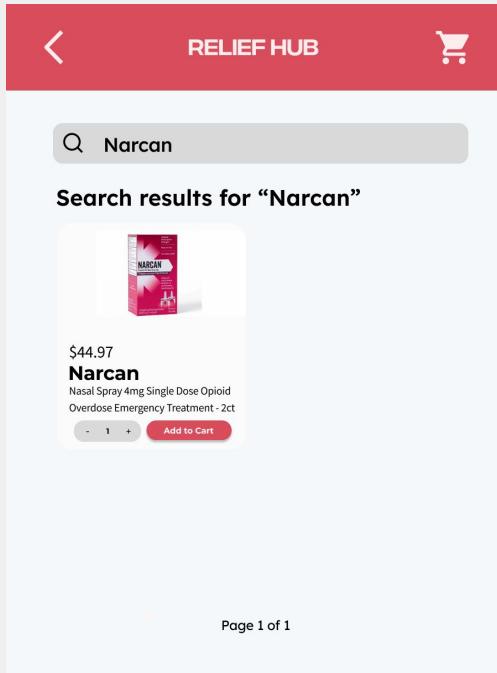
Search

OR

Not sure what you need?

Take Questionnaire

# Search



RELIEF HUB Cart

Search results for “Narcan”

 \$44.97

**Narcan**  
Nasal Spray 4mg Single Dose Opioid Overdose Emergency Treatment - 2ct

- 1 + Add to Cart

Page 1 of 1

Search results from searching specific item; users can add item directly to cart or click the item for more info



RELIEF HUB Cart

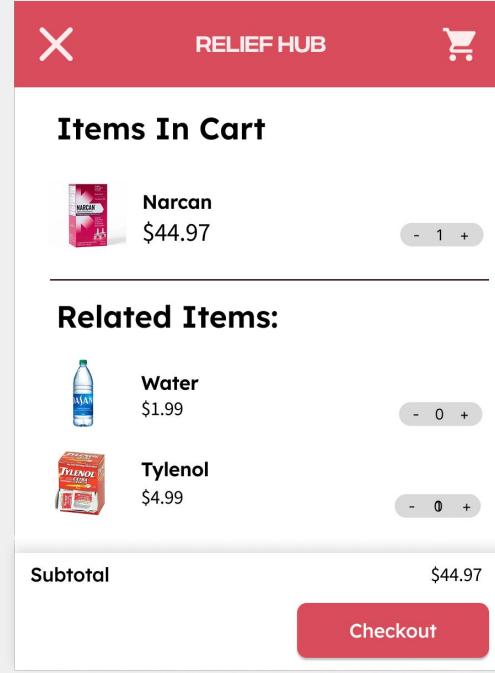
 \$44.97

**Narcan**

**Active Ingredient:** Naloxone Hydrochloride  
**Usages:** Opioid overdose  
**Dosage:** 1 nasal spray

- 1 + Add to Cart

Item info page, shows dosage, active ingredient, and usage. Users can add item to cart from here



RELIEF HUB Cart

**Items In Cart**

 **Narcan** \$44.97 - 1 +

---

**Related Items:**

 **Water** \$1.99 - 0 +

 **Tylenol** \$4.99 - 0 +

**Subtotal** \$44.97

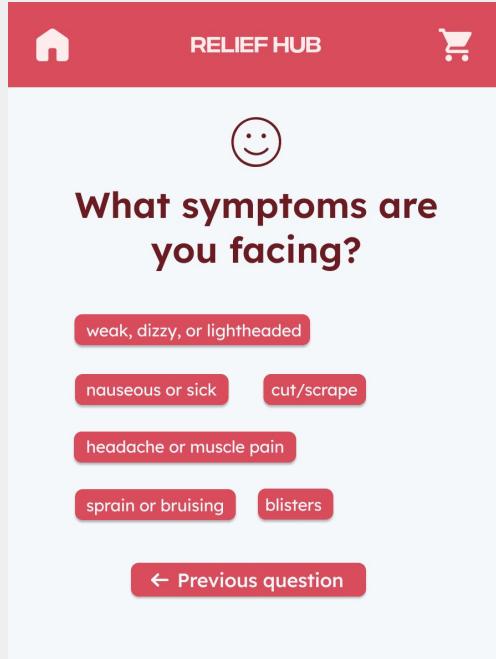
Checkout

Cart page, with selected item and other related items

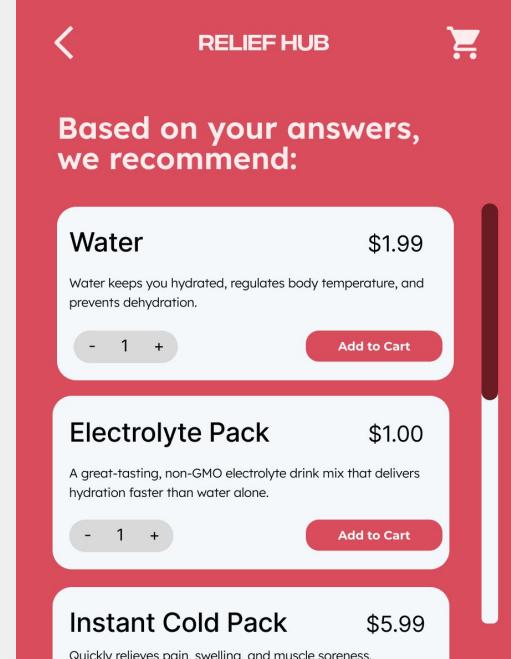
# Questionnaire



Responsiveness question,  
determines severity of injury



General symptom checker,  
users select what symptoms  
they are feeling

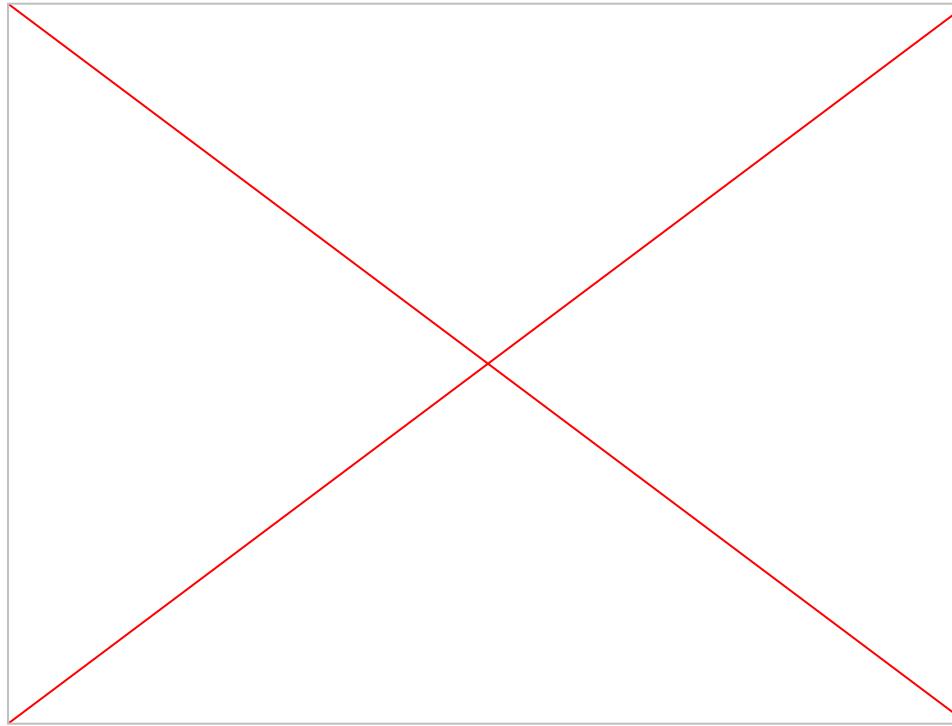


Product recommendations at  
end of questionnaire, can either  
add items directly to cart or tap  
the card to learn more about  
the item



# User Testing

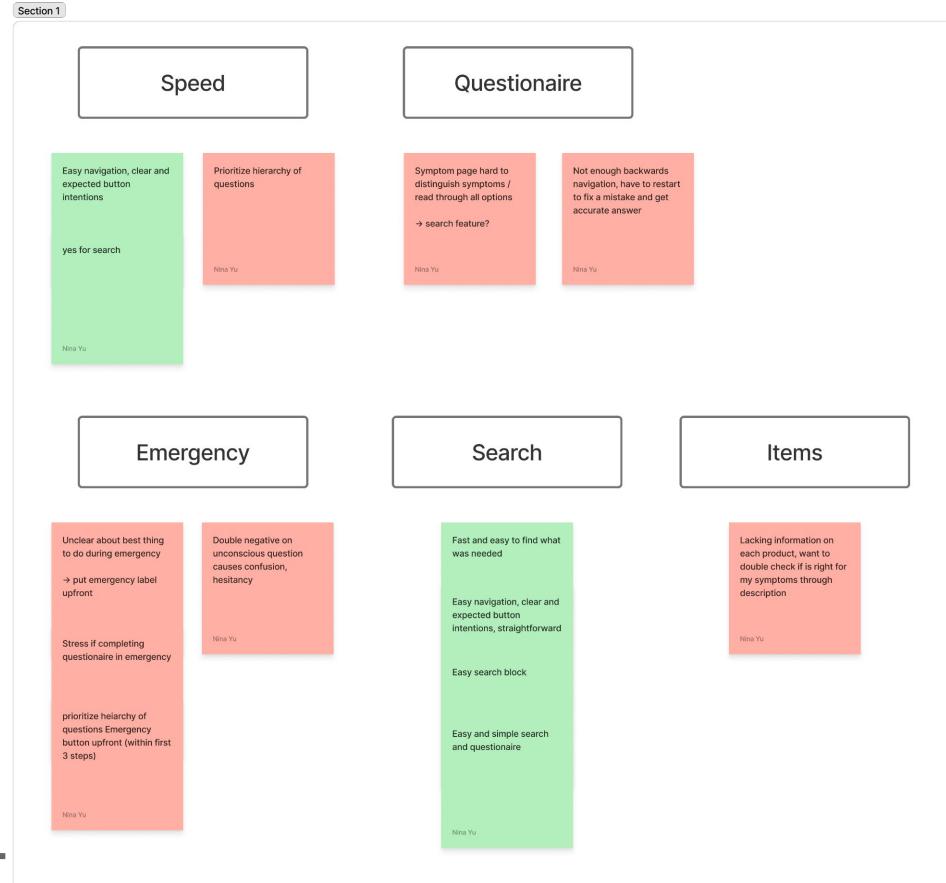
# User Test Interview Video



(It's a little quiet. Our apologies)

# Affinity Map Stage 6 Insights

- **Search feature was quick and easy** to use
- **Double negative wording** on questionnaire questions led to confusions
- Unclear of what to do in emergency
- **Questionnaire may be too long and stressful for emergency**
- Symptoms page was **hard to read** and distinguish
- Insufficient information for items



## Next Steps/Recommendations

- Rework **hierarchy/order of questions**
  - The symptoms page is too specific making it **hard to distinguish symptoms**, we will fix on next potential stage
  - Fix **double negative issues** on the unconscious question
  - Present a **quicker and more straightforward way to determine an emergency**
  - **Apply more background information** for item descriptions
  - Implement **more items to search and be prescribed for**
  - **Do more user testing iterations**
  - **Create higher fidelity for both physical and digital prototypes**
-



# Conclusion

# Acknowledgements

Thank you to all our interviewees/user testers in all phases.

Thank you to our TAs/IAs, **Nel, Imogen, and Yuntian**

Thank you to our Professor, **Dr. Bryan Rill**

**Yay team :D**

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Email: mil049@ucsd.edu



# Process/ Appendix

# Digital Kiosk Stages

# Process: Styleguide

**Typefaces**

<u>Primary</u>	<u>Size</u>
Montserrat Bold	40
Lexend Deca Bold	35
Lexend Deca	35

**Secondary**

Source Sans Pro	15
-----------------	----

**Buttons**

Button	16
Button	Selected

**Color Palette**

#000000	#001544	#6B1C22	#D94C5C	#FFEDEE	#FBF5F5
---------	---------	---------	---------	---------	---------

**Icons**

Button Example	Item Example
Add to Cart	
	\$1.23
Item Search Example	Bandages
Q Search	description
	- 1 + Add to Cart

**Logo:**

The logo section displays four variations of the Relief Hub logo. It includes two versions of the logo (Version 1 and Version 2) in red and black, each with a white cross in the center. Below these are two more variations, one in dark red and one in dark blue, also featuring the red and black design with a white cross.

A grid of six logo examples showing the logo in various colors (dark red, dark blue, white, black) against different backgrounds (black, white, dark red, dark blue) and with the text "RELIEF HUB" below it.

# Process: Mood Board

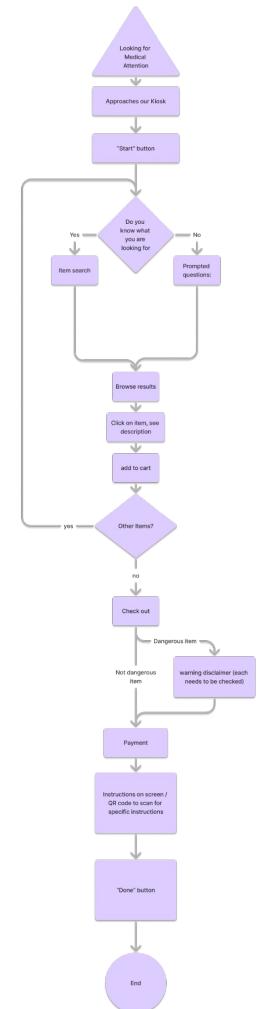
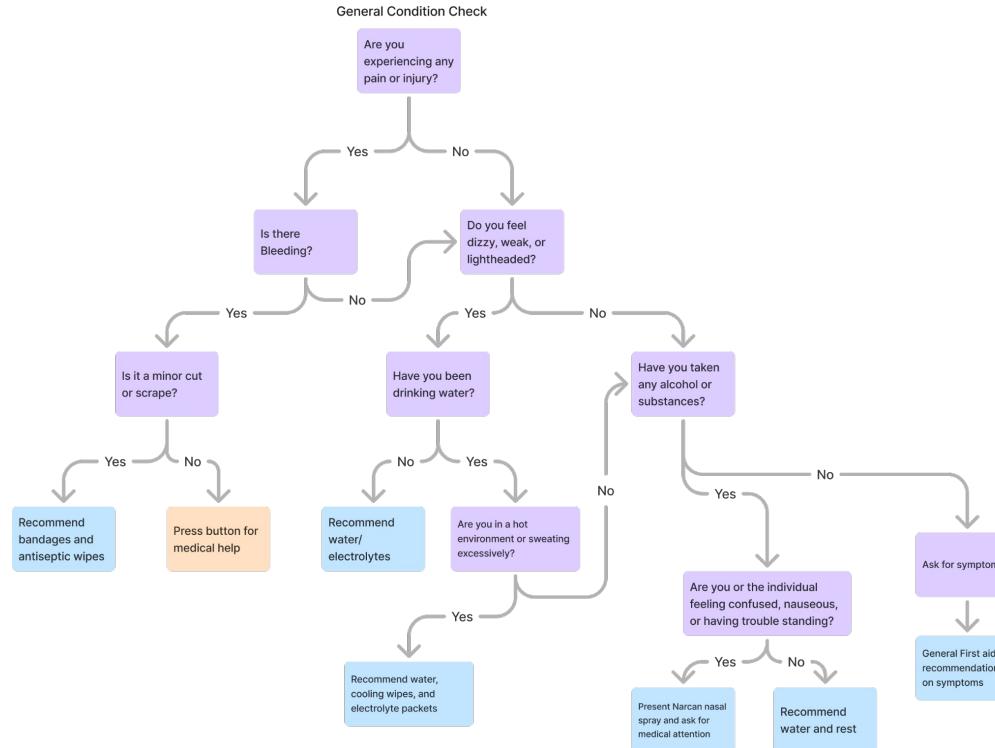


1. Efficient
  - A streak of red light trails symbolizing speed and seamless function.
  - A modern red interface with smooth UX flow.
  - A sleek, structured composition with strong geometric lines.
2. Essential
  - A red minimalist survival kit with key items (without clear branding).
  - A glowing red cross symbol subtly blended into the background.
  - A festival scene with a red hue, implying a need for essentials.
3. Reliable
  - A strong red bridge or a solid red pillar, representing trust.
  - A red lock or shield icon, symbolizing security.
  - Hands gripping firmly, evoking stability and reliability.
4. Relieving
  - A soft red glow fading into darkness, symbolizing comfort.
  - Red silk fabric flowing gently, evoking ease and relief.
  - A person relaxing under warm red light, implying reassurance.
5. Safety
  - A bright red safety cone or warning sign.
  - A bold red circular icon, representing protection.
  - A smooth, rounded red design, evoking a secure environment.
6. Responsive
  - A red ripple effect from a touchpoint, symbolizing reaction.
  - Red light beams activating when someone moves.
  - A glowing red fingerprint scan, representing interaction.
7. Simple
  - A red and white geometric shape composition (minimalist style).
  - A single red dot on a clean white background, symbolizing clarity.
  - A smooth red surface with soft lighting, evoking ease of use.
8. Clean
  - A red-tinted water drop on glass, symbolizing purity.
  - A sterile red environment with soft highlights.
  - A soft gradient of red and white, evoking hygiene and clarity.
9. Urgency
  - A red flashing siren in motion blur.
  - A countdown timer in red neon, symbolizing urgency.
  - A dynamic red motion blur effect, showing fast response.
10. Reassuring
  - A warm red sunrise over a calm landscape.
  - A subtle red glow illuminating a soft texture.
  - Two hands meeting in a red-lit space, symbolizing trust.

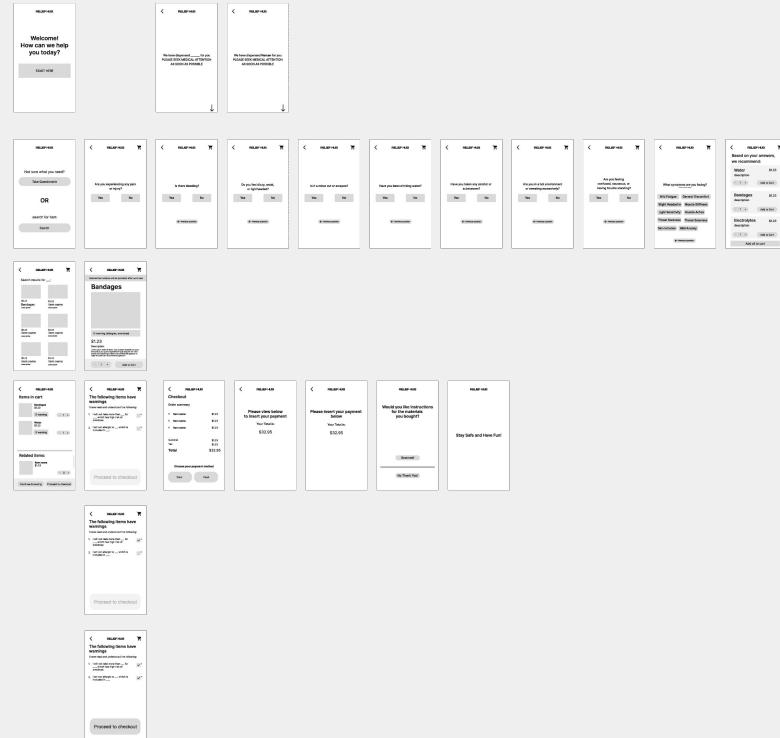
adj:

- efficient
- essential
- reliable
- relieving
- safety
- responsive
- simple
- clean
- urgency
- reassuring

# Process: User Flows

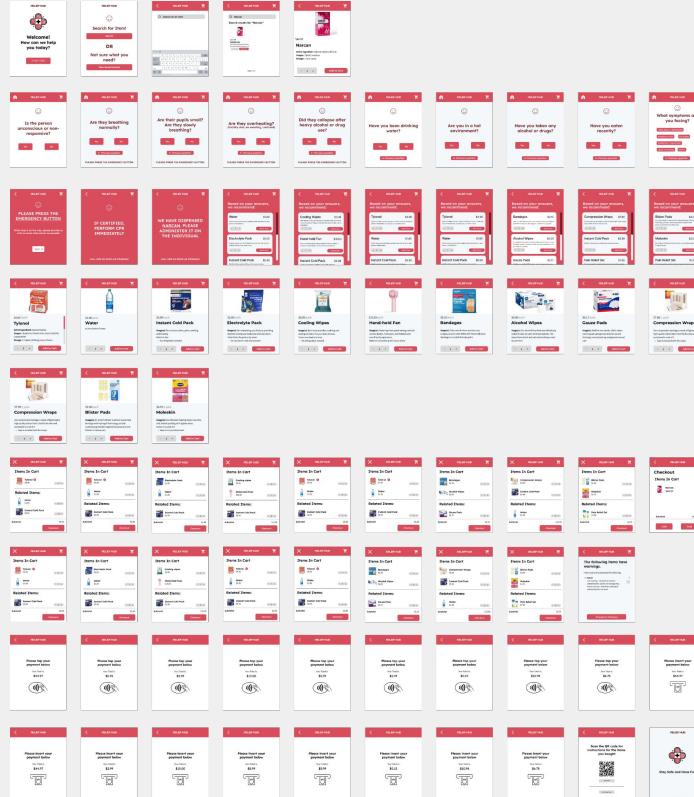


# Process: Low-fi prototype



[Link to our low fidelity prototype](#)

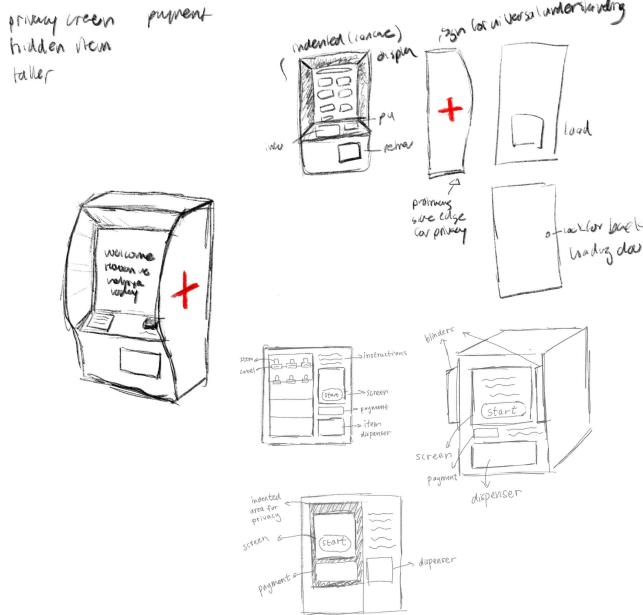
# Process: High-fi prototype



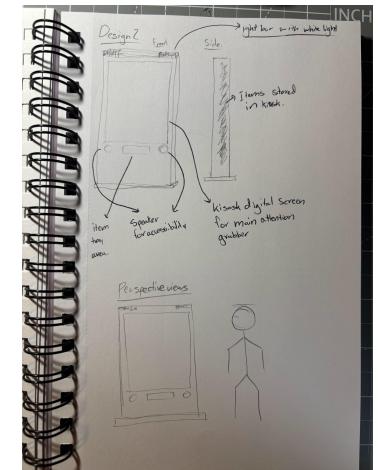
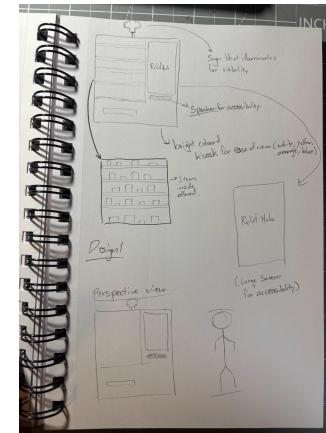
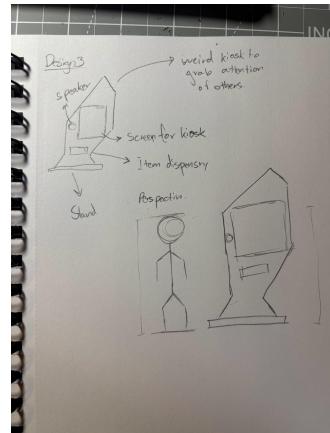
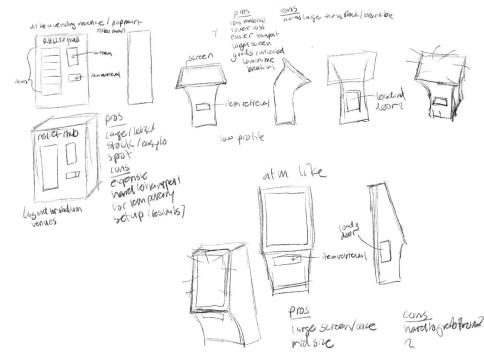
[Link to our high fidelity prototype](#)

# Physical Kiosk Stages

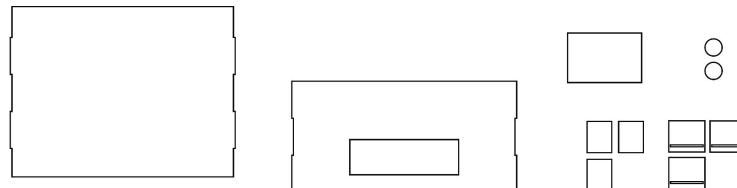
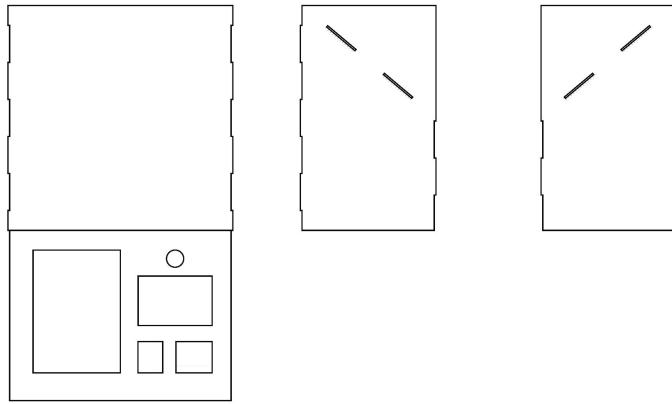
# Process: Kiosk Sketches



We explored through many designs...



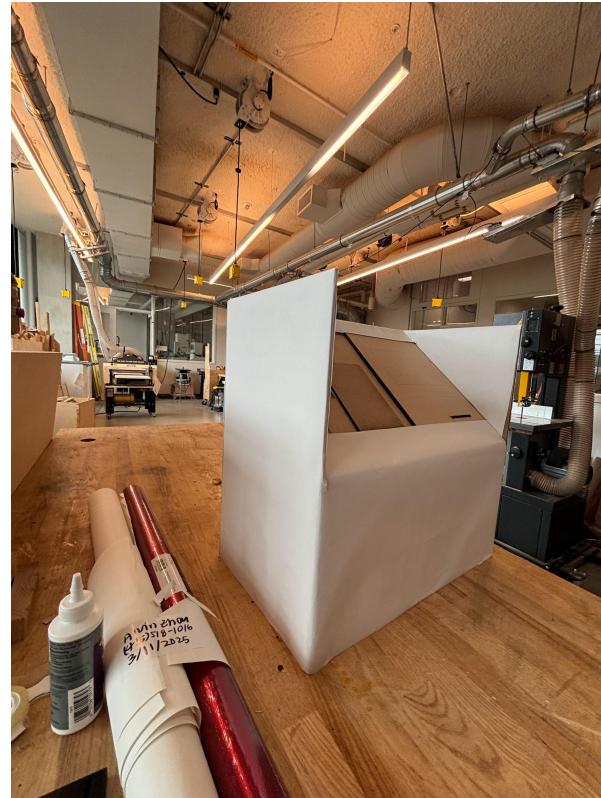
# Process: Inkscape Design



# Process:First/Second Prototype



# Process: Main Kiosk Build



# Process: Main Kiosk Build



# Final Build Kiosk



# Initial Ideas

**PopMart Kiosk:** For people that know what to get, and just want to purchase that eliminates the constant line). Convenient and faster, and exclusive items

**Concert connection kiosk:** Users can vote on questions presented on the main screen of the stage

**Mobile Catalog:** Where people would purchase products

**Makerspace machine capacity kiosk:** Sign up for time slots for machines (Connected to phones)

**Bus stations, trolley platforms:** Arrival times, service delays, tracking of current busses / trolleys

**Kiosk for Disabled individuals:** built for the convenience of disabled individuals to guide them or inform them of services and assistance in high traffic areas. touchscreen and voice activated system for navigation on elevator routes, wheelchair friendly paths, and nearby assisted services. assistance button: once the button is called for or pressed, it can be the request for wheelchair repair, mobility ad, or others. Sign language interpreter and text to speech translator. Emergency Assistance, as once activated, it calls for medical help or a support team.

**Hospital Check-in Kiosk:** At hospitals, where you can check in rather than go to the counter (Especially for emergency rooms, Estimated time for appointment). Brief summary of what their symptoms are. Connected on the phone

**Restaurant menu Kiosk:** Where individuals are able to order and check out from a tablet. Similar to olive garden

**Hotel Kiosk:** For Check-in and check-out. Keys would be placed where after check-in, you receive your card. Same thing with when you check out

**Airport navigation:** Offer directions to gates, lounges, food spots with estimated wait times. Input questions like “where to find \_\_\_” and directions, or directions to help desk

**Shopping malls:** Virtual try-ons, reduces changing room lines. Private / semi private blenders

**Quick Fix hub:** placed in high traffic areas (malls, campus). a kiosk that provides quick essentials like a phone charging station, emergency essentials like bandaids, or pain relievers. Quick Directions and digital help, like a map, or directions to go somewhere also with temporary wifi access.

# Research

Question: **What are some disadvantages of using a Kiosk compared to face to face interactions?**

Article:<https://www.investopedia.com/terms/k/kiosk.asp#:~:text=brand%20and%20product.-,Disadvantages,kept%20in%20good%20working%20order.>

1. These kiosks sometimes may be difficult to operate for those who are not tech-savvy or because they're not kept in good working order. This may increase visitors' frustration with (and anger at) the brand.
2. It can often have technical glitches and malfunctions
  - a. Which can frustrate customers

(The main issue is that customers get frustrated because they interact with a machine that runs on an algorithm instead of a human that can respond to different interactional scenarios.)

Question: **Can there be a Kiosk designed for individuals who need to be admitted to the ER?**

Thoughts: I feel like there is a way for patients to do so, however, how does each patient get determined? (AI? Human?) Not only that, but the ER has many individuals going in and out, so people will get pushed back because of their symptoms.

Article:<https://savience.com/2024/10/25/royal-victoria-regional-health-centre-blazing-a-trail-in-patient-centred-ed-solutions/>

1. Quick Check-ins: Patients complete the kiosk check-in process in just 2-3 minutes, receiving a printed ticket with a call number to maintain privacy.
2. Reduced Registration Workload: The majority of patients are matching with the EMR (Meditech Expanse), significantly reducing the registration team's workload.
3. A ticket is printed for each patient, featuring a randomly generated call number for privacy and clear instructions to direct them to the correct location within the ED. This helps minimize confusion and enhances patient flow.

How it affected the Emergency Department

1. Efficiency & Reduced Wait Times: Automated check-ins streamline patient flow, allowing clinicians to prioritize critical cases.
2. Enhanced Patient Experience: Clear instructions, privacy protection, and effective wayfinding help reduce stress and confusion.
3. Optimized Staff Workflow: Real-time dashboards and integrated patient pathways support effective patient management.

Article: <https://pmc.ncbi.nlm.nih.gov/articles/PMC9898217/>

1. However, there is little research into whether kiosks have widespread effectiveness. After all, there are many parameters by which we can define improvement—including measures such as waiting times, usability, and pre-triage time.
2. The applicability of these devices to high-urgency patients is questionable since they require more immediate care.
3. Overall, high levels of disagreements between algorithms and nurses may lead to antagonism from ED staff who feel as though kiosks are determining patients' presentations to be more urgent than they are, potentially wasting hospital resources.

(This is Interesting, there is a potential for a waste of resources from the classification of the emergency from the algorithms. It can potentially lead to more confusion for admittance and others can fake injuries to get in earlier)

Article:<https://www.npr.org/sections/health-shots/2022/08/03/1114925272/music-festival-overdoses>

1. Bonnaroo (music festival) doesn't seem to have much trouble sneaking pills and powders past security. And those drugs can be laced with fentanyl
2. This must be the place by Ingela Travers handed out nasal spray versions of medication for drug users.
3. Naloxone (previously banned by many festivals) because it minimized the negative effects of drug use, but can't stop it altogether
4. Overdose deaths continue to climb in the U.S Drug fatalities topped 100,000 nationwide
5. An item called DanceSafe - offers drug checking and public health education at nightclubs and venues
6. Nonprofit sets up a tent with a machine that screens for fentanyl

(It's nice to see that organizations are trying to limit overdose within a squished environment like festivals. I find it interesting that all festival places do not do screen tests on anything brought in because of dangerous drugs. I believe that with our kiosk it can become a much safer environment for individuals to gain access to medical attention for accidents they have been in)

# Additional Research

## Pros and Cons of self-service kiosks Article: [www.lamasatech.com](http://www.lamasatech.com)

### General Statistics

1. 67% who have used self-service checkouts say they're convenient
2. Especially liked by millennials, ¼ actively wanting to use self-service at checkout
3. 53% of shoppers want at least one staff member overseeing kiosks for frustrations with the tech

### Pros

1. Reduced waiting times (40% decrease in wait times)
2. If already know what they're looking for, customers can complete process faster on kiosk than if talking with employee
3. If kiosk ordering available, 30% prefer it versus cashier
4. Increased revenue
5. Less staff = lower operating costs
6. Increased efficiency, serve more customers with less expenses
7. Flexible uses (e.g. display advertisement while being able to be used for info like navigation, etc)
8. Improved customer experience
9. 66% of consumers prefer self-service over employee because faster, less stressful

### Cons

1. Customer frustration
2. Millennials and younger are usually comfortable with tech, but older customers...
3. 43% of shoppers likely need help from store staff when using kiosk
4. Common issues with tech in general (E.g. "unexpected item in the bagging area")
5. Lack of human interaction (less emotional/personal connections to brand)
6. Might diverge customers to other brands
7. 82% of consumers want more human interactions from brands
8. Human interactions enables possibility for upsell
9. 42% of customers bought more after good customer service experience
10. Downtime (maintenance)
11. Overuse (wear and tear), system errors, vandalism
12. Can generate income + cost of repairs

**Thoughts:** Kiosks are better for situations where the customer already knows what they want / need to find, where the reputation of the brand (of the location) doesn't play much into the decision of purchasing (e.g. probably not good for specific brand clothing stores). Best for places where efficiency is valued over personalized service. Definitely need a balance between kiosks and employees (for troubleshooting, personalized assistance)

### U.S. Self Service Kiosks Market

This report provides a comprehensive analysis of the self-service kiosks industry in the United States. The study aims to define the market, analyze it by application and end-user industry, estimate revenues, identify market drivers and restraints, profile major players, and examine current regulations. The report excludes ATMs and vending machines from its scope.

### Different types of kiosks

1. Checkin: widely used in airports, hotels, and hospitals
2. Checkout: used in retail for self-checkout purposes
3. Ticketing: public transportation and entertainment sectors
4. Self-ordering: fast food restaurants and cafeterias
5. Financial services: banking, bill payments, money transfers
6. Bill payment: pay utility bills and other services

In industries such as hospitality & entertainment, financial services, medical/healthcare, retail, food service, travel, transportation, and more

### Market drivers

1. Enhanced consumer experience in quick-service restaurants and retail segments
2. Increased revenue and reduced operating costs
3. Growth of smart city kiosks
4. Rising demand for contactless payment

### Statistics

1. Around 60% of festival goers said they consumed either drugs or alcohol
2. Since 2006 there have been at least 43 confirmed drug overdose deaths in southern California
3. The most common drug is ecstasy, the powder cocaine (26.1%), LSD (15.3%), and ketamine (8.5%)
4. Many drugs are classified as party drugs that can contain depressants, stimulants, and hallucinogens to feel euphoric or high
5. From laboratory testing, 6 out of every 10 fentanyl pills are laced with a lethal dose that can kill an individual.

## Article: [Boston to distribute Narcan via vending machines, kiosks to prevent opioid overdoses](#)

### Key Points:

1. Kiosks/vending machines are cost efficient ways to increase access to life saving care/destigmatize harm reduction
2. Can also be applied to other types of medical care/public health items – pregnancy tests, PPE, socks

**Thoughts:** shows some need for medical kiosks to increase access. Doesn't really talk about the waiting/efficiency aspect, but medical kiosks can be used to increase access in a variety of ways.

## Article: [How Digital Mall Mapping Platforms are Expanding the Omnichannel Shopping Experience for Retail Centers](#)

### Key Points:

1. Can improve the wayfinding experience of shoppers (better information)
2. Improves the in-person experience of shoppers so they don't have to be lost/waste time

**Thoughts:** not directly related to our exact concept, but demonstrates how accessible information can improve a user experience and prevent/remedy accidents (being lost or injured)

# Existing Competitor Analysis

## Other Brands:

1. **Portable charger rental kiosks**
  - a. ChargerGoGo
    - i. Provides fast-charging power banks for people to rent on the go
    - ii. Convenient because people don't have to sit and wait for their phone to charge
    - iii. Usually located in areas with a lot of foot traffic such as malls, casinos, etc.
2. **Vending Machines**
  - a. Provides food and drinks for individuals for a charge
3. **Pharmacy Kiosk**
  - a. HealthSpot Kiosk
    - i. Provides: Over-the-counter medications, first aid kits, and hygiene products.
4. **Lighting Towers for charging**
  - a. Provide cords/outlets
  - b. Throughout Geisel and WongAvery
5. **Charging Lockers**
  - a. charge up to 4 hours, lock with a 4-digit PIN. lighting and Type-C cables and one outlet
  - b. Geisel 1 and 2, Wong Avery near entrance
6. **COVID vending machines**
  - a. Rapid antigen test kits, masks, PCR test kits
7. **DanceSafe**
  - a. A nonprofit organization that specializes in going to festivals to test harmful drugs when people get screened
8. **Wellness Vending Machines**

## What others offer:

1. Typical vending machines offer **quick** snacks and beverages for a **small charge**, for individuals to take a short break, walk, and get back on track. (**minimized distraction**)
2. Pharmacy Kiosks such as the Healthspot kiosk are placed specifically **only for medical use** for pills, aid kits other personal products
3. Charging stations typically offer cables and outlets for free, rent a power bank

## What others lack:

1. **multi-functionality** (charging station/goods/etc) all compartmentalized
2. **Categorical products** that cater specifically to everyday emergencies
3. Lacks the **ability to provide emergency assistance** for any kiosk, therefore adding to limited human-based technological interaction

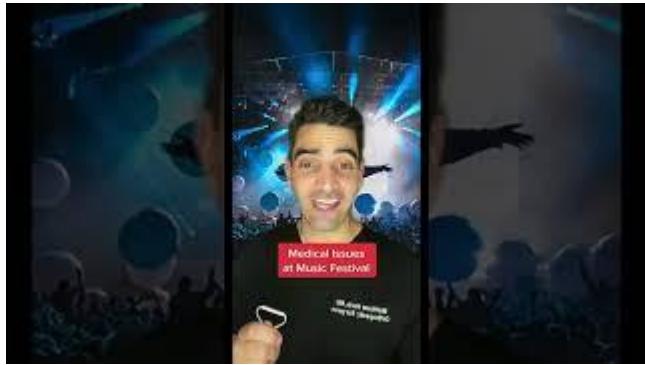
# Potential Contacts/communities

1. **San Diego Wellness Center**
  - a. This is a potential community as individuals within the center are exposed to different scenarios that may be able to give insight into hidden information that we may not know.
2. **Club/Nightclub managers**
  - a. These managers have the closest encounters with individuals overdosing or having illegal substances, they may provide valuable insight into specific items that can be utilized within clubs
3. **Festival coordinators**
  - a. Festival coordinators can be placed similarly to nightclub managers as they are the ones who coordinate the events and place security based on the number of people. Although they do not personally witness it, they have statistics of injured individuals per each event.
4. **Basic Needs Hub**
  - a. Our kiosks can be expanded to entertainment venues and everywhere else in the world. With the basic needs hub, our kiosk can prescribe and dispense the best options for food, water, and other necessities.
5. **G(eneral) Store**
  - a. The general store on campus is known to be a safe space that could cater to students' needs through various products and support. While we believe that our kiosk can be placed in this store for various purposes, we believe that the store representatives can best assess students' needs.
6. **On campus Students**
  - a. We placed campus students as a potential contact because we believe that they have needs that are to be met, however because of the surrounding environment and the school, they are not able to. We wish to ask about their situation and also common issues that arise where they do not have the resources to solve it.
7. **Off-campus students**
  - a. We believe that off-campus students have valuable insight into their basic needs because they live off-campus and are not dependent on the resources provided by the campus. From how they pay for their food to their shelter, everything is determined by their surroundings and how they can access them.
8. **General public**
  - a. The general public is a very vague topic, however, we would like to contact anyone in the public because we believe that everyone suffers from some type of lack of essential resources like bandages or directions at one point in their life. By bringing it to the general public, we may be able to gain a better understanding of each city
9. **Intramural Sports clubs**
  - a. By tennis/basketball courts/fields
10. **MTS representatives**
11. **Hands-on Engineering students**
12. **DIB users**
13. **Ravers/clubbers**
14. **Partygoers**
15. **Huge Sports Fans (Football, basketball, baseball)**





Look how busy it is!!!



# Field Observations

As a group, we decided to check both online and in-person for potential kiosk locations and ideas that can generate a solid idea for our project (Figures 1-3)

We decided to look in large traffic areas including outdoor places like festival grounds and parks. To indoor areas such as a Ralphs and pharmacies

From our research and observations, we witnessed a trend in commercialized spaces where individuals would like to have concept of a quick service kiosk next a series of customer service tables

However, there was little data on public areas such as festivals and entertainment venues regarding implementation of any type of kiosk system.



Figure 1



Figure 2



Figure 3

# Field Observations Part 2

## **In Site Interview Observations:**

All of our interviewees attended entertainment events such as festivals or amusement parks regularly. Our interviewees stated that the idea for a kiosk that can aid injuries and prevent injuries from happening would be interesting especially within festival premises. Most interviewees emphasized the need for clear and simple information on how to use products offered by our kiosk.

## **Main Observations:**

After narrowing down our idea to entertainment venues, we started looking specifically for areas within ball parks, festivals, clubs, and other concerts. (Figures 1-4) We found area's that contained high traffic and planned to place our kiosk within those locations. (restrooms, resting areas, playgrounds, etc) Then we started to really dive deep to understand areas that people could potentially need immediate access to our kiosk (stairs, trash cans, restrooms, etc)



Figure 1



Figure 2



Figure 3



Figure 4

# Interview Insights #1

Interviewee: Olivia Sun

**1. How often do you attend entertainment events like sports games, festivals, or visits to amusement parks?**  
once every two months

**2. How often do you face minor injury or feel unwell while at an event? What happened and how did you handle it?**  
never

**3. How would you describe, given the corporation's resources, its assistance towards your needs when attending these venues**  
not sure what resources are there, but if smtg were to happen, people around would be able to call attention to personnel, adequate amounts of staff

**4. What is your level/familiarity with basic first aid?**  
pretty familiar, cpr certified

**5. When attending entertainment events, do you bring a first aid kit or supplies with you?**  
no

**6. If a self-service kiosk were available for first aid needs, what products or services would you expect it to offer?**  
aed kit, wounds kit (bandaids neosporin, gauze)

**7. Would you expect the kiosk to provide information on how to use certain products? If so, how should that information be presented?**  
yes, instructions should be available to users in case they aren't familiar. information should be presented in images/visuals



# Interview Insights #2

Interviewee: Tracy Vu

## **How often do you attend entertainment events like sports games, festivals, or visits to amusement parks?**

When it comes to attending entertainment events, my habits have changed over the years. I never really go to sports games since I'm not a die-hard fan of any sport that would make me want to spend money on tickets. For festivals, I used to attend more frequently during my freshman and sophomore years of college, but now I only go once or twice a year or if there's an artist I really enjoy performing. Similarly, my visits to amusement parks have decreased as I've gotten older.

## **How often do you face minor injury or feel unwell while at an event? What happened and how did you handle it?**

I always prepare for long days by taking supplements and Emergen-C, plus making sure I stay hydrated to avoid any issues. I also carry a pill pack that includes Tums, Tylenol, Lactaid, Pepto Bismol, and Liquid IV/Emergen-C in case I don't feel well during the event. To make sure I don't overheat, I have a portable fan and baby wipes.

## **How would you describe, given the corporation's resources, its assistance towards your needs when attending these venues**

It can be challenging at these events primarily due to the large crowds, which makes getting immediate help difficult. While there are plenty of volunteers and assistance tents available, factors like distance and weather can affect how quickly you can access help when needed.

## **What is your level/familiarity with basic first aid?**

For first aid knowledge, I'm familiar with the basics but not specifically aware of how to access first aid services at events.

## **When attending entertainment events, do you bring a first aid kit or supplies with you?**

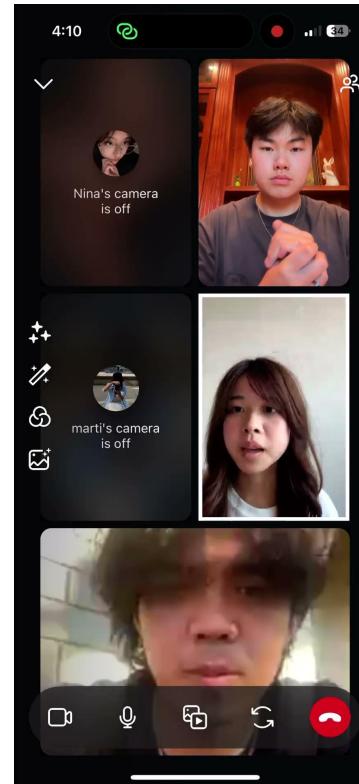
I always make sure to bring my own supplements and necessary medications.

## **If a self-service kiosk were available for first aid needs, what products or services would you expect it to offer?**

I would expect it to provide essential features like maps showing medical tent locations, an emergency assistance call function, and access to various resources.

## **Would you expect the kiosk to provide information on how to use certain products? If so, how should that information be presented?**

For instructions on using products, video demonstrations would be most effective since people typically don't have the time or mental capacity to read detailed instructions during an event.



# Interview Insights #3

Interviewee: Norman Lee

**How often do you attend entertainment events like sports games, festivals, or visits to amusement parks?**

I would say every couple of months, but maybe more if there are DJs or artists that I really like

**How often do you face minor injury or feel unwell while at an event? What happened and how did you handle it?**

I've never really faced injury or felt unwell, but I have had friends who did. In those cases, I just try to support them and get them whatever they need.

**How would you describe, given the corporation's resources, its assistance towards your needs when attending these venues**

I'd say it's pretty good because there's usually medical tents close by. It's easy to get in and out and the staff are pretty nice. However, sometimes the lines can get long.

**What is your level/familiarity with basic first aid?**

Not well, I'm not really familiar with it.

**When attending entertainment events, do you bring a first aid kit or supplies with you?**

Sort of, but it's usually something small like bandaids that I always keep on me because they don't take up much space.

**If a self-service kiosk were available for first aid needs, what products or services would you expect it to offer?**

Water, maybe gauze and bandages, ice packs

**Would you expect the kiosk to provide information on how to use certain products? If so, how should that information be presented?**

Yes I think it should. Maybe have a little pamphlet with instructions on it or integrate the instructions into the kiosk.



# Interview Insights #4

Interviewee: Christine Hayoung Lee

**How often do you attend entertainment events like sports games, festivals, or visits to amusement parks?**

Once every few months. Raves and festivals. She visits amusement parks once a year, typically during Spring or Summer.

**How often do you face minor injury or feel unwell while at an event? What happened and how did you handle it?**

She never feels too unwell but feels dehydrated and her feet usually hurt. Lack of water stations and you can't even bring your water – she resorts to purchasing water that was way too expensive. Her feet hurt and are sore from standing too long, but she just ignores it and continues to enjoy the festival. Sometimes when she goes to the front or middle of raves, the crowd gets congested – making it extremely hot, and difficult to breathe and move. She sometimes sees other people fainting or falling to the ground because they are dehydrated or exhausted amidst the crowd.

**How would you describe, given the corporation's resources, its assistance towards your needs when attending these venues**

The staff tries to assist our needs water-wise, but even then, it gets hard to pass water to everyone. There tend to be a couple of water fountains. But people still have to wait a long time before getting water because the lines are unorganized. Everything is non-regulated – they don't care much about the safety of individuals. There are not that many security or active staff ensuring that people are responsibly taking drugs or alcohol.

**What is your level/familiarity with basic first aid?**

She took a class during her senior year in high school about CPR, but her basic first aid level is low. She knows about the background information, such as chest compressions and AEDs.

**When attending entertainment events, do you bring a first aid kit or supplies with you?**

No, not at all, you can not bring a lot of stuff, and it doesn't come into mind when preparing.

**If a self-service kiosk were available for first aid needs, what products or services would you expect it to offer?**

Bandages, Gauze, Water, Disinfectants, tape, gloves, and masks. It is also also important to include a handbook about basic first aid.

**Would you expect the kiosk to provide information on how to use certain products? If so, how should that information be presented?**

Yes, because people might misuse the products and individuals might not know what they can or cannot do. There should be an image of the products (similar to apps on an iPhone). People can press which product they would like to know more about. There should also be a search bar where people can search for their symptoms, and the program can help identify which products can be helpful. Another feature should be a "call for help" to alert a staff member, or a "911" button.



# Interview Insights #5

Interviewee: Dalton Chase Davidson

**How often do you attend entertainment events like sports games, festivals, or visits to amusement parks?**

At least one music festival a year, multiple sporting events: football, basketball, and swimming

**How often do you face minor injury or feel unwell during an event?** What happened and how did you handle it?

Feeling overwhelmed (not a lot), for music festivals, felt some sense of overwhelming

**How would you describe, given the corporation's resources, its assistance towards your needs when attending these venues**

Pretty good job. Music festivals can do better. (good medium)

**What is your level/familiarity with basic first aid?**

First and cpr certified, a pretty good amount (somewhere between beginner and intermediate)

**When attending entertainment events, do you bring a first aid kit or supplies?**

Yes he has

**If a self-service kiosk were available for first aid needs, what products or services would you expect it to offer?**

Bandages, gauze, narcan sprays, (music festivals), ibuprofen, cotton pads, (tourniquet).

**Would you expect the kiosk to provide information on how to use certain products? If so, how should that information be presented?**

Either verbally, to perform the aid while listening to it, or it be printed with whatever products that are printed.



# Transcription Document

Interview Transcriptions: <https://tinyurl.com/yk8muwc4>

# Personas - Main Stakeholder

## KEVIN NGUYEN

### PROFILE

Gender : Male  
Age : 22  
Education : Bachelor's degree  
Occupation : Student at UCLA  
Location : Los Angeles, CA



“

I just want to have fun, be with my friends, and keep the party going —nothing should slow me down.”

### BIOGRAPHY

Kevin is a social, outgoing 22-year-old who thrives on adventure and living in the moment. Based in Southern California, he has a busy schedule that balances school, fitness, and a social life filled with partying and gaming. He regularly attends music festivals, where he loves to meet new people, dance, and experience the thrill of the rave scene. His routine includes waking up, attending school, hitting the gym, then spending the evening either gaming or hanging out with friends at clubs. The cycle repeats, keeping him in a fast-paced, high-energy lifestyle.

### MOTIVATIONS

Convenience  
Endurance  
Fun  
Confidence  
Spontaneity  
Connections

### GOALS

- Quick Recovery (to keep partying)
- Convenience (with no effort or planning ahead)
- Minimal Disruption (to avoid missing out on fun)

### FRUSTRATIONS

- Lack of Immediate Access (to find basic essentials)
- Health Risks (dealing with dehydration, etc.)
- Increased Anxiety or Stress (not knowing who to turn to)

### PERSONALITY

Introvert Extrovert  
Thinking Feeling  
Judging Perceiving  
Sensing Intuition

### TECHNOLOGY

Social Media Savvy  
Music Streaming  
Event Apps

### BRANDS

 Spotify  
 INSOMNIAC  
 ticketmaster

# Second Stakeholder

## TIFFANY TRAN

### PROFILE

Gender : Female  
Age : 22  
Education : Bachelor's degree  
Occupation : EMT Student  
Location : San Jose, CA



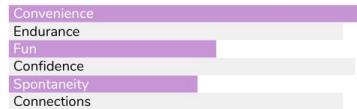
“

You can have fun and stay safe  
—it's all about being prepared  
and looking out for each other.”

### BIOGRAPHY

Tiffany Tran is a 22-year-old EMT student from Northern California who balances her studies with a love for music festivals. Outgoing yet reserved, she enjoys raves but prefers a responsible kind of fun. As the "mom friend" of her group, she looks out for others, making sure everyone stays safe and hydrated. However, she often faces peer pressure to party harder and struggles with venue bag limits that prevent her from carrying essential first-aid items. Despite these challenges, Tiffany stays true to her values, aiming to enjoy festivals while keeping herself and her friends safe.

### MOTIVATIONS



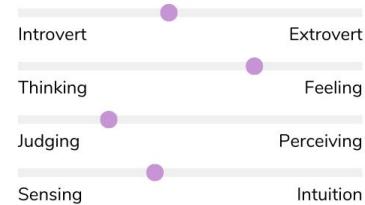
### GOALS

- Becoming an EMT (dedicated to her studies)
- Safe & Fun Festivals (she loves music festivals but aim to stay safe)
- Group Mom (naturally takes on the mom role, ensuring everyone is safe)

### FRUSTRATIONS

- Venue Bag Limits (wants to bring essentials but is restricted)
- Peer Pressure (friends are more outgoing and tend to party hard)
- Fun and Responsible(struggles to enjoy herself while looking out for others)

### PERSONALITY



### TECHNOLOGY



### BRANDS



# Second Stakeholder

## LAWRENCE TREVOR

### PROFILE

Gender : Male  
Age : 28  
Education : Bachelor's degree  
Occupation : Standard Office Job  
Location : Jacksonville, Florida



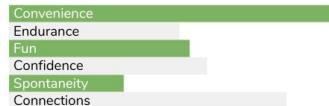
“

It's all about the win—on the field and in my wallet. If the Jaguars are up, I'm up!"

### BIOGRAPHY

Lawrence Trevor is a 28-year-old passionate Jacksonville Jaguars fan from Jacksonville, Florida. He's a confident and loud sports enthusiast who thrives on the excitement of football, especially when it comes to placing bets on his team. Every day, Lawrence starts by checking player lineups and follows the game closely, hoping for a big win that will bring him financial rewards. His ultimate goal is to meet his idol, Trevor Lawrence, on the field one day. Despite the ups and downs of sports betting, his love for the Jaguars never fades, and he's determined to make it big in the world of sports gambling.

### MOTIVATIONS



### GOALS

- Jaguar Victory (their success not only brings him pride, but money)
- Sport Bet Wins (his passion is paired with his love for betting)
- Meeting his Idol (Trevor Lawrence, his ultimate dream)

### FRUSTRATIONS

- Heavy Drinker (affecting his overall health and focus on his goals)
- Easily Injured (finds himself with cuts from moving too much)
- Overexertion (being highly active and loud at stadiums pushing his body limits)

### PERSONALITY



### TECHNOLOGY



### BRANDS



# All Storyboards

Scenario 1



## Context

Tiffany is the only one who knows first aid in her group. She stays alert at the festival, bringing some medical supplies for preparation.

## Problem

Her friend gets hurt, and Tiffany didn't bring bandaids.

## Solution

Tiffany takes her friend to a nearby kiosk to quickly get a bandaid. The tutorials show her exactly what to do.

## Resolution

Tiffany can now have fun herself. She's no longer the only one to know what to do, and doesn't have to carry so many medical supplies with her.

Scenario 2



## Context

On a hot summer's day Kevin arrives at festival after pre-gaming with friends.

## Problem

Kevin feels dizzy from dehydration

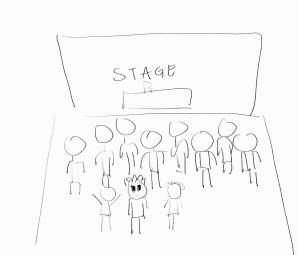
## Solution

His friend Tiffany notices, and finds a kiosk nearby to get him help. She inputs Kevin's symptoms and gets electrolytes for him and tells him to rest.

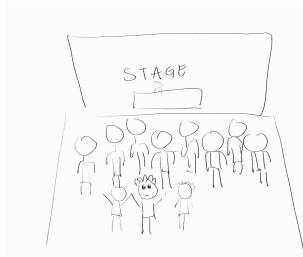
## Resolution

After some rest, Kevin is back to dancing.

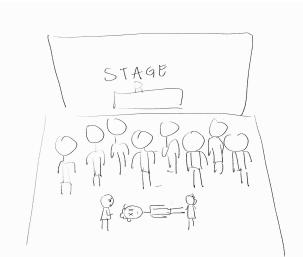
## Scenario 3



Kevin is at a rave with his friends



Kevin starts feeling unwell, but continues dancing



All of a sudden, he passes out. His friends are worried.



He is taken to a kiosk on the side where he rests and gets some aid.

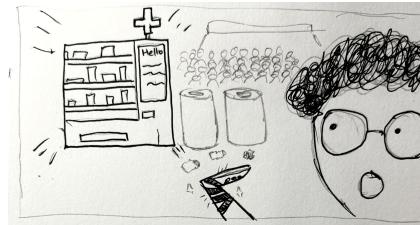
## Scenario 4



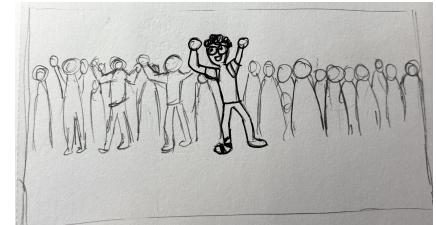
Kevin is dancing happily in a rave while being carefree



As he was jumping, he tripped over someone's foot and sprained his ankle



He sees that there is a line for the first aid tent, but then a self serving kiosk caught his eye and taught him how to fix his ankle



Afterwards, Kevin happily goes back and continues to party!

## Scenario 5



Lawrence is at a football game by himself. It's a very exciting game and he's gotten very into it, cheering and expressing himself loudly



In a moment of frustration, he accidentally hits his leg into the seat in front of his and cuts his knee open



Lawrence leaves his seat to go to the bathroom, but as soon as he gets to the concourse, he sees a first aid kiosk with bandaids and he uses that instead



Lawrence returns to his seat faster with a proper cover for his wound and is able to enjoy the rest of the game

Scenarios	Context	Problem	Solution	Resolution
Scenario 1: Tiffany	At a crowded festival, Tiffany enjoys the music but stays aware of her surroundings, ensuring her friends are hydrated and safe. With limited bag space, she could only pack some essentials like medication and hydration supplements.	She often feels responsible for her friends, making it hard to balance fun with staying safe. When someone feels unwell, she only has quick access to the limited items she packed. It is time consuming and stressful to find medical help in large, chaotic venues, as she doesn't know the locations of the few medical tents at the festival.	She looks around and spots one of the many self-service first aid kiosks at the festival. There she can get hydration aids, over-the-counter meds, and access to an emergency assistance button in the case of a emergency situation. It also includes video tutorials on first aid basics, so that anyone in her group can help without searching for medical tents.	Now, she can enjoy the festival without the constant stress of being the only medic and supply carriers in her friend group. The kiosk allows her to ensure everyone's safety, allowing the entire group to have fun in a responsible way.
Scenario 2: Kevin	Kevin arrives at a music festival after pre-gaming with his friends, dancing non-stop in the hot weather under the sun without drinking much water.	He has a low alcohol tolerance but is careless about his drinking. As he's partying he starts feeling dizzy and lightheaded but ignores it because he doesn't recognize dehydration symptoms, and decides to sit down for a bit.	Tiffany notices, and sees a first-aid kiosk nearby. She enters Kevin's symptoms and watches a quick video on heat exhaustion and what to do next. Grabbing a electrolyte packet, she gives it to Kevin and tells him to take a break to cool down before rejoining the festival.	Instead of ruining his day by passing out Kevin recovers quickly and safely continues enjoying the festival. The kiosk provided him with emergency hydration, and next steps, allowing him to keep partying without severe medical consequences.
Scenario 3: Kevin	Kevin is at his second rave this week. He was just at one in LA two days ago, and now he's attending another one here in SD. He's here with a couple of his friends, all of whom are very enthusiastic about raves.	Kevin starts to feel a bit unwell an hour in. However, he continues vibing with his friends because he doesn't want to cause any inconveniences. All of a sudden, he passes out on the ground and everyone around him is worried. He was able to regain consciousness after 20 seconds.	His friends immediately bring him to the side where there are some empty benches and a self service kiosk. They got some water to rehydrate him and stayed there for a while in case they needed to press the emergency assistance button. After 30 minutes, he was able to go back in and have fun.	This kiosk was able to provide quick assistance and relief for Kevin. He didn't have to leave the venue and was able to resume after getting what he needed. If his symptoms continued getting worse, there was also emergency help available.
Scenario 4: Kevin	Kevin loves to attend raves and he is often careless about his actions. He shares drinks and drugs with his other rave-goers, and loves to be in the moment. His excitement overcrowds his judgement as he jumps up and down in excitement during the rave.	As he continues to bounce up and down he accidentally landed on someone's foot. A sheer pain erupts in his left ankle as he stops and checks it out. However he is unable to look as other ravers continue to jump and push him around. He slowly trudges out of the crowds, but struggles to find a medical tent to aid his injury	Then a bright kiosk caught his eye as a first aid sign beams brightly towards his direction. He slowly walks over and realizes that the kiosk provides ankle wraps, splints, and creams, as well as other first aid supplies! Not only so, the prices to purchase them is cheaper than other healthcare tents. Quickly Kevin fills in the symptoms of his issue and gets detailed instructions to how he is able to fix his ankle.	Now, Kevin is able to go back, barely missing the rave and he is able to enjoy the live music with his buddies. he knows now to take it easier when partying and also that he can rely on the bright kiosk to help aid any other injuries.
Scenario 5: Lawrence	Lawrence is at a football game by himself. It's a very exciting game and he's gotten very into it, cheering and expressing himself loudly	in a moment of frustration, he accidentally hits his leg into the seat in front of his and cuts his knee open	Lawrence leaves his seat to go to the bathroom, but as soon as he gets to the concourse, he sees a first air kiosk with bandaids and he uses that instead	Lawrence returns to his seat faster with a proper cover for his wound and is able to enjoy the rest of the game

# Miscellaneous Documents

[Link to our Team Meeting Documents](#)

**Past Stage:**

- [Stage 3 Slides](#)