Care Corner

Connect yourself with people who care.

Feasibility Presentation

CS 410 Fall 2020

Team Copper

Casey Carpenter, Thorrell Turner, Ernest Webb, Tremain Young, Olayinka Adegun, and Kyle Grissom

Table of Contents

Meet the Team

Olayinka Adegun

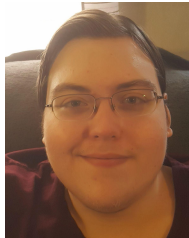Casey Carpenter

Kyle Grissom

Thorrell Turner

Ernest Webb

Tremain Young

The Facts

Suicide

- Globally, there is a suicide every 40 seconds. [10]
- In 2018, 10.7 million American adults seriously thought about suicide, 3.3 million made a plan, and 1.4 million attempted suicide. [11]

Drug Addiction

- Almost 21 million Americans have at least one addiction, yet only 10% of them receive treatment. [13]
- Drug overdose deaths have more than tripled since 1990. [13]

Sexual Assault & Domestic Violence

- In a national study of college women who had experienced rape or attempted rape, only 5% reported the incident to law enforcement, citing that they did not want others to know, feared hostility from the police, feared reprisal from the assailant, or did not know how to report. [16]
- 1 in 3 women have been a victim of either an attempted or completed rape in her lifetime. [17]
- About 25% of women experience intimate partner violence over their lifetimes, however, it is thought that 50% of domestic violence assaults go unreported. [18]

Several studies have found an association between greater availability of mental health care and reduced rates of suicide. [12]

How Important is Time: The Houston Study

- Interviewed 153 survivors of nearly-lethal suicide attemps, aged 13-34.
- Asked, *"How much time passed between the time you decided to complete suicide and when you actually attempted suicide?"*
- 24% said less than 5 minutes
- 24% said 5-19 minutes
- 23% said 20 minutes to 1 hour
- 16% said 2-8 hours
- 13% said 1 or more days.[14]

Time is critical. Help needs to be immediate and easily accessible.

What does this all mean?

- Time is limited
- These issues affect everyone
- Too many people never reach out for help


SEXUAL ASSAULT: survivor stats

As of 1998, an estimated **17.7 MILLION** women in the US had been victims of attempted or completed rape.

90% of adult rape victims are **FEMALE**

Only **344 out of every 1000** sexual assaults are reported to the police. That means about **2 in 3 go unreported.**

Females ages 16-19 are **4x more likely** than the general population to be victims of rape, attempted rape or sexual assault.

EVERY **98** SECONDS an American is **SEXUALLY ASSUALTED**

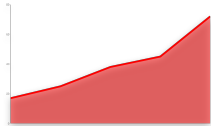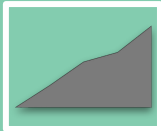Source: Rape, Abuse & Incest National Network
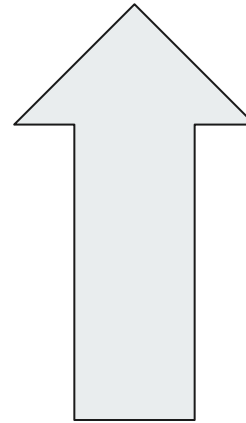
Availability of mental health care
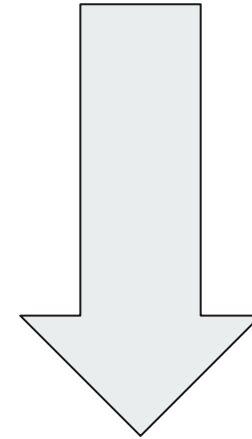
Rates of suicide

Drug overdose deaths have more than **tripled** since **1990**. [13]

Problem Statement

Users who are going through a traumatic situation have to search and find the resources they need to help them, often taking a lot of time and confusion deciding what resources are right for their situation which can lead to unneeded frustration or giving up.

Problem Characteristics

- The process of finding a support service and establishing a connection can take a long time.
- Those who have been through a traumatic event may not be in the right state-of-mind to actively research what type of help is best for their situation.
- Different searches have to be made in order to find national and local help.
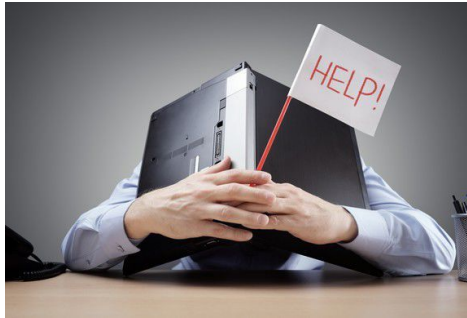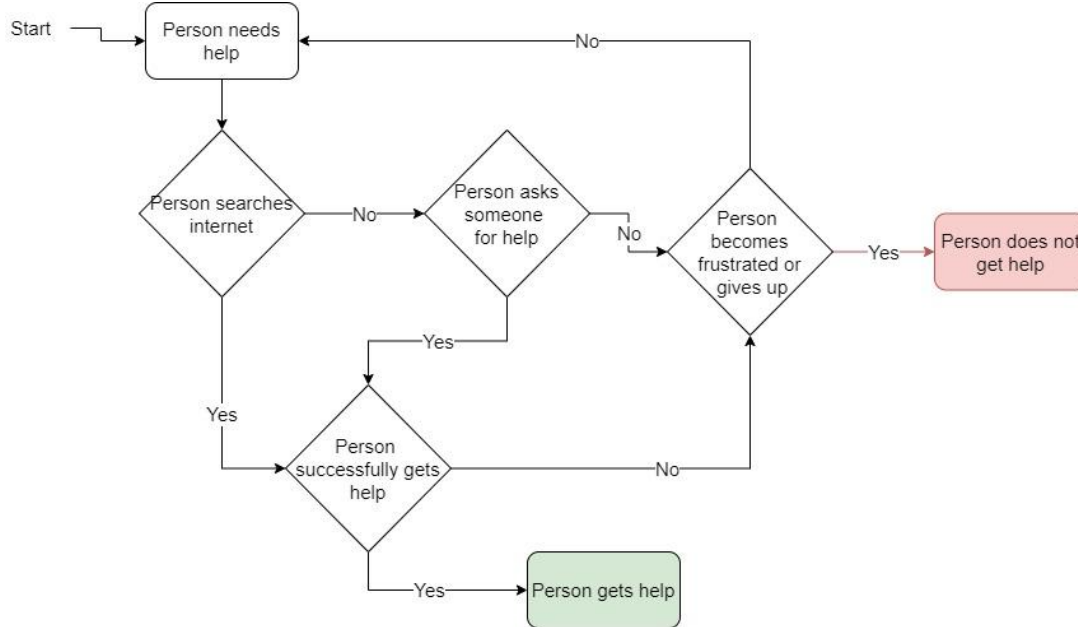
What/Who is affected

This app is targeted towards victims of:

- Sexual Abuse
- Domestic Violence
- LGBTQ+ Abuse
- Suicide
- Substance Abuse
- Teen Dating Abuse
- Friends/Family who know someone dealing with the above
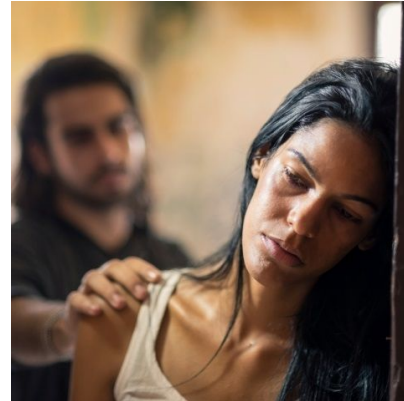
Current Process Flow

- Help could be for self or for loved one
- Can lead to a cycle of not finding help, only exiting when person gets frustrated and gives up.

Solution Statement

Our solution is a mobile application, readily available on an user's device, with the capabilities to quickly direct the user to the resources they may need. These resources will be support hotlines, websites, and shelters or aid nearby.

To make accessing the information easier for users there will be speech recognition or SMS chat to bring the users to the resources they need, or the can use the simple UI to manually select/find the resources needed.

This is necessary for saving users crucial time and making accessibility to help quicker and easier for users.

Help is Here for You

Domestic Violence

Sexual Assault

Substance Abuse

Suicidal Thoughts

# Solution Characteristics

- Quick Navigation
    a. Topics in the app are organized by category
    b. Speech recognition feature
    c. SMS chat box
- Location-Based Aid
    a. Clickable addresses to nearby locations that provide help (redirects to Google Maps)
- Anonymous
    a. Name of the app and design will be particular as to not give away contents of the app to protect users
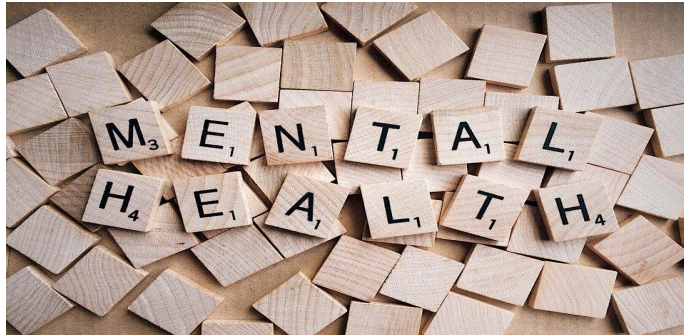
Solution Process Flow
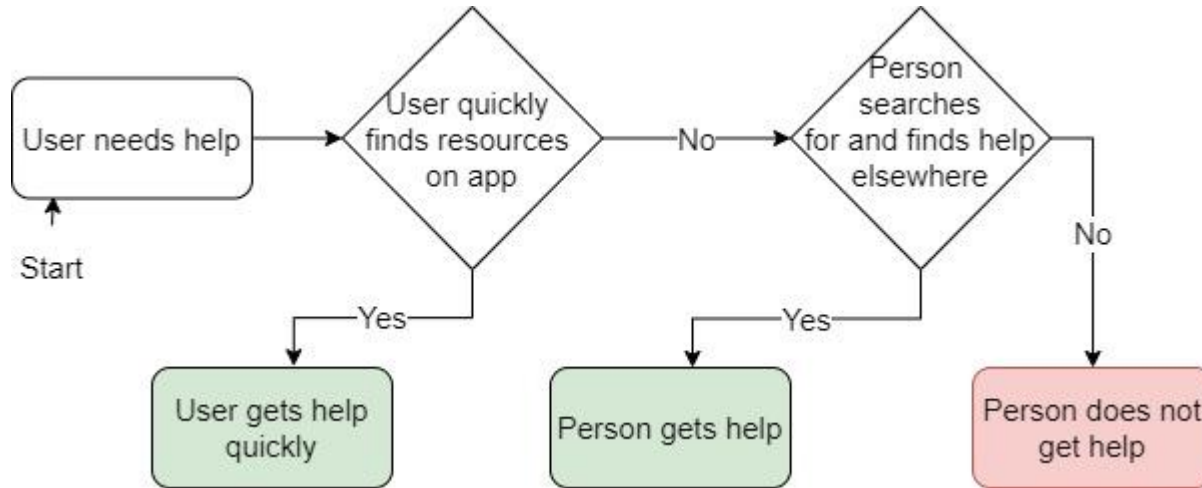
- User may not be able to quickly find the resources on the app if the app is not user friendly or if we do not offer the help they are searching for.
- Transition from User to Person is to highlight the app is no longer in use.

What Our Solution Will Not Do

- Not hosting a hotline, simply connecting the users to the resources that are out there for them.
- This application is not a device to be used in the case of physical life-threatening emergencies, but rather for specific mental health emergencies.
- This application will provide resources for many situations as well as a few resources that are all inclusive, but inevitably there will be some cases that are not accounted for.

Major Functional Component Diagram

Twilio API

User

Android
Application

Uses
application on
Mobile Device

Using Location Data, this API will find the closest available help and display it to the user

Google Maps
API

Fetches data from
Google searches to
store in database

MySQL
Database

Data
Scraping

Retrieves data from
database to display
to user
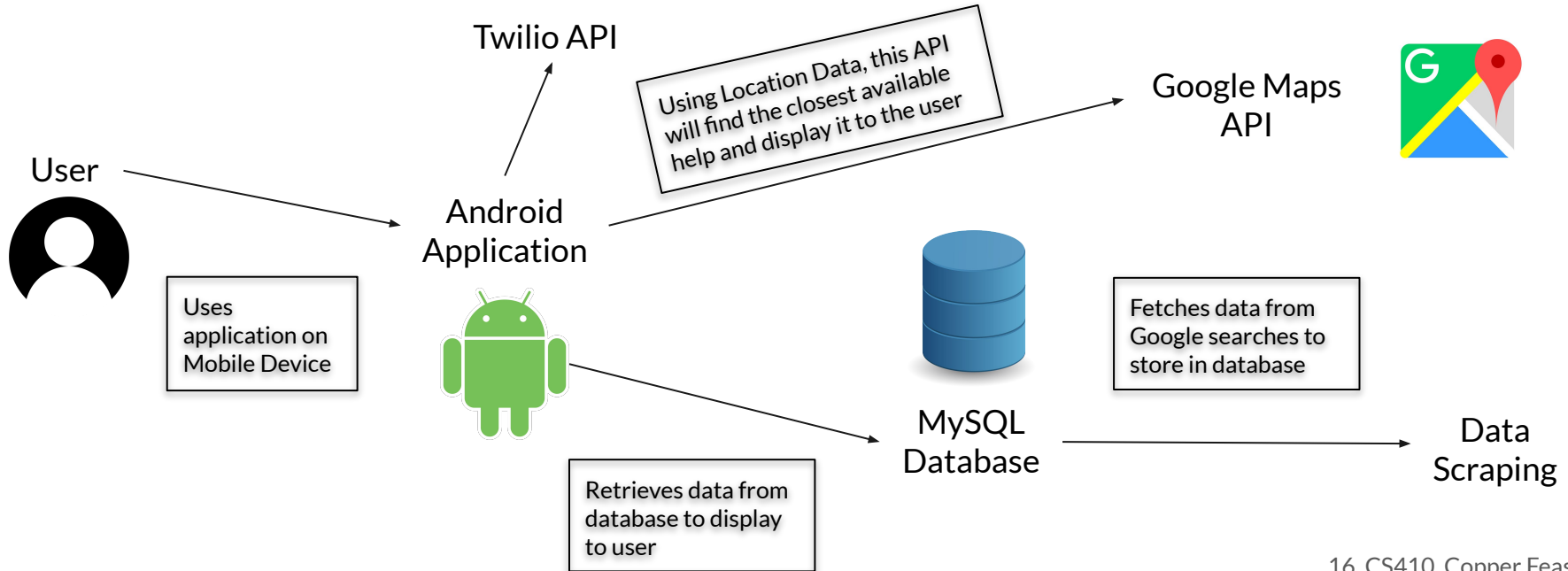
Component(or Feature or?) Details

- <u>SMS</u> will be used to bring the user directly <u>to</u> the <u>information</u> they are seeking <u>by</u> using their <u>text</u>. This will be done by <u><>.</u>
- <u>Speech Recognition</u> will be used to bring the user directly <u>to</u> the <u>information</u> they are seeking <u>by</u> using their <u>words</u> . This will be done by <u><></u>.
- <u>Geofencing</u> will be used to locate <u>nearby shelters</u> <u>and safe places</u>. This will be done by <u><></u>.

I am considering removing a lot of this information and making it more into speaker notes then only leaving the bold parts on the slide, what do you guys think? Obviously <> is the part that still needs to be filled in.

Customer Risk Mitigation

Probability

Impact	Rare	Unlikely	Possible	Likely	Almost Certain
Very High	**T2**	**T1**			
High	**C2**				
Medium				**C1**	
Low					
Very Low					

Customer Risks:
- C1 - Not enabling location data on phone and being unable to access certain features.
- C2 - No internet access available

Mitigation:
- C1 - The app will check if user has Location enabled and if not, will ask them to enable it with a pop-up box when using the app.
- C2 - Certain information on app will not require internet access to use

Technical Risk Mitigation

Probability

Impact	Rare	Unlikely	Possible	Likely	Almost Certain
Very High	T2	T1			
High	C2				
Medium				C1	
Low					
Very Low					

Technical Risks:
- T1 - Database could be wiped in a cyber attack.
- T2 - Database information is maliciously edited in cyber attack.

Mitigation:
- T1 - Database is backed up on a regular basis.
- T2 - Database will be encrypted and access will be limited by IP Address

Market Assessment

Copper Team		Care Corner	Suicide Safety Plan	Aspire News	Seeking Shelter
Designed for	Victims	✅	✅	✅	✅
	Those Assisting Victims	✅	❌	✅	✅
GPS Locates Local:	Shelters	✅	❌	❌	✅
	Councelors/Clinics	✅	✅	❌	❌
	Phone/email contact	✅	✅	❌	✅
Non-local Counselor/Resources contact offered via	Phone	✅	✅	✅	❌
	SMS	✅	❌	❌	❌
	Email	✅	❌	✅	❌
	Websites	✅	❌	✅	❌

The benefits to the customer base will be the inclusion of an SMS system to guide the user in getting the help they need as well as offering everything the competition does, but all in one application.

Conclusion

Care Corner is a resource tool set to bridge the gap between trauma victims and their available resources.

- ❖ Key Characteristics
  - ➢ Reliable
  - ➢ Efficient
- ❖ Utilizes
  - ➢ Speech recognition
  - ➢ SMS chatbox

Questions?

References

"About 211." 211.Org, www.211.org/pages/about. (1)

"List of Hotlines." Please Live, Davo Productions, 15 Jan. 2020, www.pleaselive.org/hotlines/. (2)

Amin. "Step by Step Guide on Scraping Data from a Website and Saving It to a Database." How PC Rules My Life, 13 Dec. 2017, howpcrules.com/step-by-step-guide-on-scraping-data-from-a-website-and-saving-it-to-a-database/. (3)

Miles, Stephanie. "5 On-Demand Apps for Emergency Services." Street Fight, 1 Apr. 2016, streetfightmag.com/2016/04/01/5-on-demand-apps-for-emergency-services/. (4)

Self-Care for Friends and Family. (n.d.). Retrieved September 27, 2020, from https://www.rainn.org/articles/self-care-friends-and-family. (5)

Staff, Psyche Central. "Common Hotline Phone Numbers." Psych Central, 6 Mar. 2019, psychcentral.com/lib/common-hotline-phone-numbers/. (6)

2.

References

Tips for Talking with Survivors of Sexual Assault. (n.d.). Retrieved September 27, 2020, from
https://www.rainn.org/articles/tips-talking-survivors-sexual-assault. (7)

Questions & Answers on Sponsorship(2019). Alcoholics Anonymous World Services, Inc.
https://www.aa.org/assets/en_US/p-15_Q&AonSpon.pdf. (8)

Jain, A. (2019, April 09). Database Hacking & Its Prevention. Retrieved October 07, 2020, from
https://thecybersecurityplace.com/database-hacking-its-prevention/ (9)

Suicide Statistics and Facts." SAVE, save.org/about-suicide/suicide-facts/. (10)

Preventing Suicide |Violence Prevention|Injury Center|CDC." Centers for Disease Control and Prevention, Centers for
Disease Control and Prevention, 21 Apr. 2020, www.cdc.gov/violenceprevention/suicide/fastfact.html. (11)

The Relationship Between Mental Health Care Access and Suicide." RAND Corporation,
www.rand.org/research/gun-policy/analysis/essays/mental-health-access-and-suicide.html.) (12)

References

Addiction Statistics - Facts on Drug and Alcohol Use." Addiction Center, 18 Sept. 2020, www.addictioncenter.com/addiction/addiction-statistics/. (13)

Duration of Suicidal Crises." Means Matter, 7 Mar. 2017, www.hsph.harvard.edu/means-matter/means-matter/duration/. (14)

Renninson, Callie. "Rape and Sexual Assault: Reporting to Police and Medical Attention." Bureau of Justice Statistics (15)

Why Don't They Tell?" Nctsn.org. (16)

What Is Sexual Abuse?" Hope Alliance, www.hopealliancetx.org/sexual-assault-statistics/. (17)

50 Obstacles to Leaving." The Hotline, www.thehotline.org/resources/50-obstacles-to-leaving/. (18)

"Find Support." Aspergillosis Patients and Carers, 29 May 2020, aspergillosis.org/find-support/. (19)

"Support Groups." MHA Screening - Mental Health America, screening.mhanational.org/content/support-groups. (20)

Basler AG. "Sales and Support: Basler." Basler AG, 7 Oct. 2020, www.baslerweb.com/en/sales-support/. (21)

211.Org, www.211.org/pages/about.

ines." Please Live, Davo Productions, 15 Jan. 2020

by Step Guide on Scraping Data from a Website and Saving It to a Database." How PC Rules My Life, 13 Dec. 2017, howpcrules.com/step-by-step-guide-on-scraping-data-from-a-website-and-saving-it-to-a-database/.

4. Miles, Stephanie. "5 On-Demand Apps for Emergency Services." Street Fight, 1 Apr. 2016, streetfightmag.com/2016/04/01/5-on-demand-apps-for-emergency-services/.

5. Self-Care for Friends and Family. (n.d.). Retrieved September 27, 2020, from https://www.rainn.org/articles/self-care-friends-and-family.

6. Staff, Psyche Central. "Common Hotline Phone Numbers." Psych Central, 6 Mar. 2019, psychcentral.com/lib/common-hotline-phone-numbers/.

7. Tips for Talking with Survivors of Sexual Assault. (n.d.). Retrieved September 27, 2020, from https://www.rainn.org/articles/tips-talking-survivors-sexual-assault.

8. Questions & Answers on Sponsorship(2019). Alcoholics Anonymous World Services, Inc. https://www.aa.org/assets/en_US/p-15_Q&AonSpon.pdf.

9. Jain, A. (2019, April 09). Database Hacking & Its Prevention. Retrieved October 07, 2020, from https://thecybersecurityplace.com/database-hacking-its-prevention/

- Title (Fix)
- TOC (Fix once presentation is complete)
- The Team (Good)
- Background (Done)
- Problem Statement (Fix/Create)
- Problem Characteristics (Fix/Create)
- Who is affected (Create)
- Current Process Flow (Good/Look over)
- Solution Statement (Done)
- Solution Characteristics (Done)
- Solution Process Flow (Good/Look over)
- Major Functional Component Diagram (Done)
- What our solution will not do (Done)
- Risks: Matrix (Done)
- Risks: Mitigation (Done)
- Market Assessment (Done)
- Conclusion (Create)
- References (Good once pictures are removed)

TO DO!!!