**Lab 1 – Product Description**

Kyle Grissom

Old Dominion University

CS410

Professor Ajay Gupta

December 7, 2020

Version 1 - Draft

**Table of Contents**

[1](#_heading=h.30j0zll) Introduction 3

[2](#_heading=h.3znysh7) Care Corner Product Description 4

[2.1](#_heading=h.2et92p0) Key Product Features and Capabilities 4

[2.2](#_heading=h.tyjcwt) Major Components (Hardware/Software) 5

[3](#_heading=h.3dy6vkm) Identification of Case Study 6

[5](#_heading=h.lnxbz9) Glossary 6

[6](#_heading=h.1ksv4uv) References 7

**List of Figures**

**List of Tables**

# 

# 1. Introduction

Far too often women feel unsafe and uncomfortable when they are in situations where they are alone and they often live with a constant fear of being attacked. To make matters worse, when women are attacked they often are unsure how to go about getting help and how to begin getting better. There is more that can be done to help improve the current situation women find themselves in.

Women often do not feel comfortable walking alone at night, this is a fear members of the opposite sex do not often share. They arm themselves with defensive weapons from mace, tasers, or even car keys between their knuckles to feel prepared for a possible threat. Occasionally on dates they sometimes cannot be upfront with a man in fear of upsetting him and him possibly reacting in a criminal way.

In an attack or a potential attack a woman can be restricted in her options for help, she can fight, she can run, she can scream for help, no restriction on these yet when it comes to her wanting to alert trusted friends and or family she is met with resistance. Police/emergency services are an option but more and more people are becoming more and more hesitant to reach out to them. It must become easier to send an alert to trusted friends and family, and quickly begin recording video and sound.

After an attack too many women are unsure what to call what they have gone through. Women can also be hesitant to report the crime they have been a victim because of four things; confusion, lack of evidence, being afraid of judgement, and not knowing who or how to share their experience. Making evidence collection easier and well as education would make an improvement over all four of those.

There is currently no application available to women to work towards all of these issues just addressed. Care Corner fills this void by offering a platform that has features for getting out of uncomfortable situations, easily and quickly alerting trusted friends and family members, quickly recording audio and video, as well as offering educational resources on how to get help, where to get help, and what the reporting process is like.

# Product Description

Care Corner is a platform that works to make women less uncomfortable, as no mobile application can stop a criminal in his tracks. It aims to do this by offering resources, educational material, a journal, a mombot, a panic button, and a fake phone call feature. The app works to reduce likelihood of sexual assault, reduce severity of situations, and make recovery resources more accessible. A potential predator could be deterred by our fake phone call feature reducing likelihood, alerted friends and family could quickly respond to the situation leading towards a hopefully less severe situation, and educational material and resources make help one click away rather than time wasted trying to find resources on your own which may or may not be helpful.

## 2. 1 Key Product Features and Capabilities

The Armed Journey Mode will share information about a trip with trusted friends and family including: user scripted messages to inform recipient of trip information, the users location, and the users destination. The user will be able to decide if they share all of that information or only specific information. They will be able to quickly share this alert of information because time is of the greatest essence in these situations. Inside of this feature the user will be able to activate the panic button to quickly begin recording audio and video.

The Fake Phone Call will allow the user to activate a fake call to their phone so that they can excuse themselves from a situation when needed. These fake calls can be programmed to occur at specific times, appear to come from a specific person, and to be able to say a key phrase to the fake call to activate the panic button.

The Panic Button will be for in the case of an emergency to quickly message preselected contacts, share GPS location with preselected contacts, offer a phone number of or a connection to 911 or campus police. It will also begin recording video and audio, GPS location, and a timestamp of the button activation.

The Mombot will allow the user to verbalize their plans and receive helpful mom-like feedback/advice as well as remind the user of the option to schedule a Fake Call or start an Armed Journey.

The journal will offer a secure journal/diary to use as they like and possibly aid in recovery.

The resources and education section will allow the user to quickly and easily access resources from a national level or a local level through the use of geofencing. Reading will be material from government or official documents to trusted blogs or national hotlines. Geofenced resources will be shelters, nonprofits, counselors, and campus police. Websites offered will be from government websites as well as trusted non-profit organizations and the likes. The user will also be offered educational material to inform them of what the reporting process is like as the more comfortable they are with the process the more likely they may be to report.

## 2.2 Major Components (Hardware/Software)

Care Corner has the following hardware requirements: a file server, a web server, a cloud based database server likely Amazon Web Services, as well as an android or iOS phone with connection. These are all fairly standard; the slightly unique aspect here is the need to backup important and sensitive information that could potentially be used as evidence of a crime.

Care Corner has the following software requirements: Web Programming on HTML, CSS, JS, and PHP; Operating Systems on Windows, Linux, Android, and iOS; Github for collaborative development and software version control; Build Manager of Grade; Workflow of Gitlab. All are fairly standard for cross development and team work. The Database should be MySQL on Amazon Web Services.

The MFCD shows that the chatbot, GUI, and GeoFencing work directly with the Web Server, the Web Server works with the Database, the Database works with the Web Scraper, Accounts, and Resources. Finally it shows the User accounts work with the GUI and the database. The User Accounts can be broken down into many different nodes, profiles, recording, resources, notifications, fake call, journal, panic button, and reporting system. There will be lots of software to be developed, algorithms for our features and our resource gathering/updating, as well as the interface.

# 3. Identification of Case Study

The main target of our product are women, though Care Corner can be used by anyone. Women are the group which are most likely to face the problems which will go hand in hand that women are more likely to seek a solution to the problems we address but these situations are not only experienced by women. The group Care Corner will make the largest positive impact on are women. In the future Care Corner could easily be tailored to also make a significant positive impact on teens and preteens as well, really any youth that has a compatible device and can effectively use the application.

# 5. Glossary

**Amazon Web Services (AWS)**: Cloud computing platform provided by Amazon.

**Android**:Mobile operating system primarily developed by Google.

**API:** Application Programming Interface.

**Client-server**: Computer system where a central server provides data to a number of networked workstations.

**Cloud Based Database Server**:Virtual infrastructurethat performs application and information-processing storage.

**Data Retention**: The continued storage of an organization’s data for compliance or business reasons.

**File Server**:Controls access to separately stored files.

**Geofencing**:Using GPS to create a virtual geographic boundary.

**GitHub**: Web-based collaboration platform for software developers.

**GPS:** Global positioning system

**GUI**: Graphical user interface.

**iOS**:Mobile operating system developed by Apple.

**Major Functional Component Diagram (MFCD)**: diagram that shows the high level structural relationships between the components of a system.

# 6. References

1. Care Corner, Team Copper, https://www.cs.odu.edu/~410copper/