

CAMPUS SAFETY

A Campus Safety App

Overview

A collaborative project of CPSC 4379 course.

Description

A mobile app that allows UALR students, faculty, and staff to help the campus police track/monitor safety, vehicles, and any suspicious activity that may be noticed/reported on the campus and the surrounding areas.

Objective

To allow users to report an incident/suspicious activity using the campus safety app.

Understanding the User

- User Research
- Persona
- Scenario Map
- Flow Path

User Research: Summary

I collaborated with a team to research how UALR campus police currently collects incident reports and reports of suspicious activities. Then, we considered what type of users may use the app and how will they interact with it before we, finally, selected our main persona.

User Research: Pain Points

Navigation:

If navigating the form to report an incident isn't clear or intuitive, then it can be frustrating.

Experience:

The current safety alert system does not consistently share real-time data, nor a history of past incidents. How can users become aware of crime targeted areas to avoid or the measures that they may take to help increase their safety?

Persona



Natalie Johnson

UALR Graduate Student

BIO

Natalie is pursuing a graduate program in computer science. To help pay her tuition expenses, she recently accepted a janitorial job on campus at night. She appreciates the student discount that she receives as a faculty member, but her family is concerned about Natalie working on campus at night. Natalie doesn't want to risk becoming the victim of a crime, but she can't afford to let go of her job.

GOALS

- to feel safe on campus & quickly report incidents
- to quickly connect with campus police in case of an emergency
- a way to know of the most crime targeted areas on campus so she may avoid those areas.

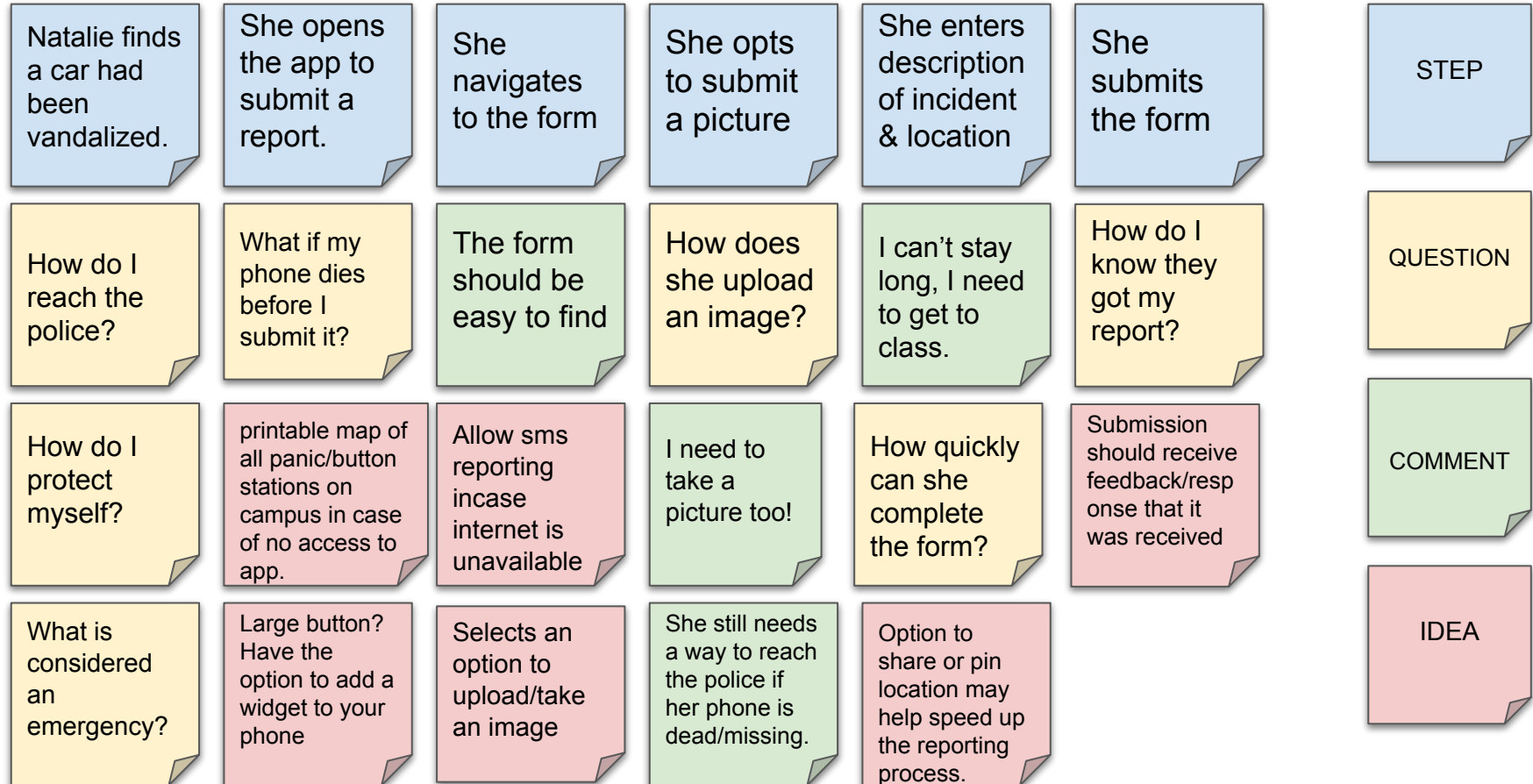
FRUSTRATIONS

- some allies/walkways/stairwells are not well lit.
- sometimes her phone is low on battery. How can she reach the campus police if her phone is dead?
- weapons are not permitted on campus. She worries about how to protect herself on campus in case of an assault.

Natalie Johnson: student

Scenario Map: reporting an incident

Key

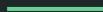


Flow Path

Step	User Actions	System Actions
1	User launches the app	Displays home screen that includes links to campus alerts, emergency contacts, and report an incident. An image of the UALR police department. A short overview of the campus police and their contact info.
2	User selects the report an incident link	Displays a description of completing the following form to report an incident and discloses the consequences of false reports. The form displays fields for the name of the reporter, description of the reporter (student, faculty, staff, visitor, other), date of incident, location of incident, description of the incident, reporter's email, and submit button.
2a	User inputs an invalid response for a field in the form	Notifies the user where they have to correct the form before submitting is allowed.
3	User completes & submits the required fields of the form	Displays a confirmation message that the form was submitted and asks the user if they would add a photo or video of the incident.
4a	User selects to attach a photo or video from their phone's camera app	Attaches photo or video from the app, and displays a confirmation message that the file was successfully attached. If appropriate permissions were not achieved, perform system actions for 4c.
4b	User selects to attach a photo or video from their phone's file	Attaches photo or video from phone memory, and displays a confirmation message that the file was successfully attached. If appropriate permissions were not achieved, perform system actions for 4c.
4c	User selects to not attach a photo or video	Displays a confirmation message that the form was submitted without an attachment and requests the user to save any videos/images to present to campus police when contacted.

Design Flow

- Wireframe
- Prototype
- Usability Study



Wireframe

1. Home screen

UA LITTLE ROCK CAMPUS POLICE

[Report An Incident](#)
[Campus Alerts](#)
[Emergency Contacts](#)

A SAFE & SECURE ENVIRONMENT

A short overview of the UALR police department...Menandri reprimique comprehensam in eum, ad vide ridens evertitur has. Odio tation id eos, diam alia labore nam no. Te inermis civibus principes has. Sint dicta iusto mel at, agam nonumes est at. Sint dicta iusto mel at.

EMERGENCY CONTACT

In an emergency, please call 911 or 501-916-3400, or use the blue light emergency campus phone network. For non-emergencies, call 501-916-5304.

ADDRESS:
123 Plaza Ln
Little Rock, AR 72204

2. Report form

UA LITTLE ROCK CAMPUS POLICE

[Report An Incident](#)
[Campus Alerts](#)
[Emergency Contacts](#)

REPORT AN INCIDENT

Statement & description of completing the incident form goes here...Menandri reprimique comprehensam in eum, ad vide ridens evertitur has. Odio tation id eos, diam alia labore nam no. Te inermis civibus principes has. Sint dicta iusto mel at, agam nonumes est at. Sint dicta iusto mel at.

Statement disclosing the consequences of false reports goes here...menandri reprimique comprehensam in eum, ad vide ridens evertitur has. Odio tation id eos, diam alia labore nam no. Te inermis civibus principes has. Sint dicta iusto mel at, agam nonumes est at.

* Indicates required fields.

DATE OF INCIDENT *
MM/DD/YYYY

LOCATION OF INCIDENT *

DESCRIBE WHAT HAPPENED *

2a. Report Form & Camera

UA LITTLE ROCK CAMPUS POLICE

[Report An Incident](#)
[Campus Alerts](#)
[Emergency Contacts](#)

WHICH DESCRIBES YOU? CHECK ALL THAT APPLY.

☒ Student

UALR Campus Police would like to access the camera to upload camera footage and photos of the incident.

[Don't Allow](#) [Ok](#)


YOUR EMAIL
njohnson19@ualr.edu

SUBMIT

3. Confirmation Message

UA LITTLE ROCK CAMPUS POLICE

[Report An Incident](#)
[Campus Alerts](#)
[Emergency Contacts](#)



Your report has been submitted.

Statement advising to user to save any additional information, videos/images, to present to the campus police when contacted goes here.

Contact
University Police
2801 S. University Avenue
Little Rock, AR 72204
501-916-3400
publicsafety@ualr.edu
[More contact information](#)

Campus Security
Your safety is our highest priority. View the

Moving from the flow path steps to wireframing helped to understand how users would navigate through the form.

Prototype

View the Campus Safety prototype.

2. Report form

UNIVERSITY OF ALABAMA
CAMPUS POLICE

Report An Incident
Campus Alerts
Emergency Contacts

REPORT AN INCIDENT

If you witnessed another user involved in any kind of accident or incident on campus, you are encouraged to call the police to report the incident. Anyone who deliberately makes any false accusations may be prosecuted under Alabama State Law.

Photos may be submitted anonymously, but we will be unable to ask follow-up questions for contact information is provided.

COMPLETE A REPORT

Contact

University Police
2000 S University Avenue
Crisler Hall, AH 1204
400-400-4000
404-924-2000
404-924-2000

Campus Security
Your safety is our highest priority. View the Campus Security & Fire Safety Report.

UNIVERSITY OF ALABAMA

Report Form Step1

CONTACT INFO

CANCEL

YOUR NAME

YOUR EMAIL

WHICH DESCRIBES YOU CHECK ALL THAT APPLY

☐ Student
☐ Faculty
☐ Staff
☐ Visitor
☐ Other

BACK

NEXT

Report Form Step2

INCIDENT INFO

CANCEL

DATE OF INCIDENT *

LOCATION OF INCIDENT *

DESCRIBE WHAT HAPPENED *

BACK

NEXT

Report Form Step3

IMAGE & VIDEO

CANCEL

Would you like to attach a photo or video of the incident?

Attach From Camera

Attach From File

Don't Attach

BACK

SUBMIT

Report Form Step...

IMAGE & VIDEO

CANCEL

Your video/image has been uploaded.

Remove Upload

Replace Image/Video

BACK

SUBMIT

Report Form Step...

IMAGE & VIDEO

CANCEL

Your upload has been removed. Would you like to attach a photo or video of the incident?

Attach From Camera

Attach From File

Don't Attach

BACK

SUBMIT

Report Form Step...

IMAGE & VIDEO

CANCEL

Your video/image has been uploaded.

Remove Upload

Replace Image/Video

BACK

SUBMIT

4c. Confirmation ...

UNIVERSITY OF ALABAMA
CAMPUS POLICE

Report An Incident
Campus Alerts
Emergency Contacts

✓

Your report has been submitted.

No image or video attached. If you have additional evidence regarding this incident, please email it to provide to campus police upon request.

Contact

University Police
2000 S University Avenue
Crisler Hall, AH 1204
400-400-4000
404-924-2000
404-924-2000

Campus Security
Your safety is our highest priority. View the Campus Security & Fire Safety Report.

4a and 4b. Confir...

UNIVERSITY OF ALABAMA
CAMPUS POLICE

Report An Incident
Campus Alerts
Emergency Contacts

✓

Your report has been submitted.

Image or video successfully attached. If you have any additional evidence regarding this incident, please email it to provide to campus police upon request.

Contact

University Police
2000 S University Avenue
Crisler Hall, AH 1204
400-400-4000
404-924-2000
404-924-2000

Campus Security
Your safety is our highest priority. View the Campus Security & Fire Safety Report.

Report Form Step...

CONTACT INFO

CANCEL

YOUR NAME

YOUR EMAIL

WHICH DESCRIBES YOU CHECK ALL THAT APPLY

☐ Student
☐ Faculty
☐ Staff
☐ Visitor
☐ Other

BACK

NEXT

Report Form Step...

CONTACT INFO

CANCEL

YOUR NAME

YOUR EMAIL

WHICH DESCRIBES YOU CHECK ALL THAT APPLY

☐ Student
☐ Faculty
☐ Staff
☐ Visitor
☐ Other

BACK

NEXT

Report Form Step...

INCIDENT INFO

CANCEL

DATE OF INCIDENT *

LOCATION OF INCIDENT *

DESCRIBE WHAT HAPPENED *

BACK

NEXT

Report Form Step...

INCIDENT INFO

CANCEL

DATE OF INCIDENT *

LOCATION OF INCIDENT *

DESCRIBE WHAT HAPPENED *

BACK

NEXT

Report Form Step...

INCIDENT INFO

CANCEL

DATE OF INCIDENT * Required

LOCATION OF INCIDENT * Required

DESCRIBE WHAT HAPPENED * Required

BACK

NEXT

Report Form Step...

INCIDENT INFO

CANCEL

DATE OF INCIDENT *

LOCATION OF INCIDENT *

DESCRIBE WHAT HAPPENED *

BACK

NEXT

Report Form Step...

INCIDENT INFO

CANCEL

DATE OF INCIDENT *

LOCATION OF INCIDENT *

DESCRIBE WHAT HAPPENED *

BACK

NEXT

Report Form Step...

INCIDENT INFO

CANCEL

DATE OF INCIDENT *

LOCATION OF INCIDENT *

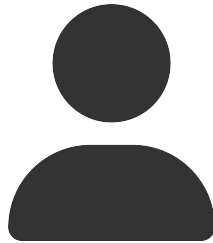
DESCRIBE WHAT HAPPENED *

BACK

NEXT

User Study: Parameters

Each team member completed a test session. We logged our results in a Google sheet, [User Test Record](#). Some of us video recorded our users, then logged our observations on the spreadsheet.



Participants
4



Study Type
Moderated

User Testing Analysis

Positive Findings

All of our users said that the prototype was easy to follow and straightforward.

Negative Findings

After users selected to attach an image, they would hesitate to understand what to do when the prototype directed them to a page that gives an option to remove their upload or replace the image. Each user clicked on the *Replace Image* button several times before finally selecting the *submit* button. One user responded that he was expecting the app to automatically open an image gallery so he could select an image to upload.

Improvements

One user suggested that we create a process that allows him to select an image to upload and to show that the image is “uploading” to the app. Going forward, I think creating a step that allows users to select an image to upload would make the form process more efficient and intuitive.

Also, some users were surprised that they could not type text into the field boxes and they quickly clicked through the form fields (some clicked without taking time to read the field descriptions). I think implementing a touchpad overlay whenever a field box is clicked may help make the experience feel real (as it would on a phone) and encourage the users to read each field description as they navigate through the form.