

# Panther Pick-Up Application

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## Abstract

Drunk and distracted driving is a problem that is very prevalent in college communities. To combat this, we have created prototypes for an application called Panther Pickup, an app that is intended to prevent drunk and distracted driving in the Chapman community and is a renovated version of Public Safety's Safe Ride. Through feedback from both Chapman students and Public Safety, we added specific functionalities to ensure the safety of both student passengers and drivers, a wider range of service, and easier accessibility through a user-friendly interface. We are submitting a formal proposal of our application to the Chapman IT department.

## Background

The grand challenge of distracted and drunk driving continues to be a prominent issue in today's society.

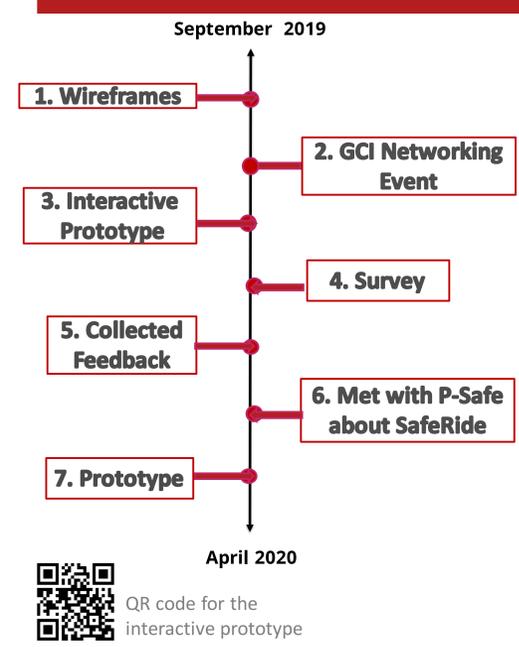
- One third of annual automobile fatality rates are alcohol related (Light et al. 2017).
- This accounts for more than 12,000 deaths in America annually (Johnson 2016), including 4,700 Americans under the age of 21 (Padon et al. 2016).
- A College Life study found that over 65% of the college students surveyed had engaged in driving after drinking at least once (Caldiera 2017).

With reference to these statistics, there have been attempts to decrease these statistics with other applications or handheld devices. When brainstorming ideas to better these premade applications, we ran into knowledge gaps such as how to make the application more user friendly, and privacy and safety regulations. Therefore, we thought that if we can make an app more useful and more suited for a college audience it can directly benefit our community and help towards combating this grand challenge in our local community.

## Acknowledgments

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  - Previous Members:
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    - Jeremy Tang
    - Ethan Maniss
  - Public Safety Officers:
    - Alfonso Rodriguez
    - Michael Kelley

## Our Approach



1. **Wireframes:** These basic wire frames/ prototype for building our application enabled us to get a concrete idea of the specific functions of our app how users navigated the app, the overall functionality, and more.
2. **GCI Networking Event:** Team members attended a GCI Networking Event and conversed with a member of Chapman IT about possible implementation into the CU mobile app.
3. **Interactive Prototype:** Used the software Marvel to make an interactive prototype, where one can click through the application as if it were developed
4. **Survey:** We conducted an online Google survey with a total of 15 questions and a link to our initial interactive prototype.
5. **Collected Feedback:** We collected over 70 responses with suggestions on safety measure like background screenings, choosing your driver, and how to spread awareness of the app.
6. **Met with Public Safety about SafeRide:** Talked about the Safe Ride program, process of signing up as a driver, and other logistics of how the program works.
7. **Updated Prototype:** With the combination of the survey results from Chapman students and help from Public Safety we created a more user-friendly app aimed towards the needs of Chapman students and the community.

## Conclusion

Through research on drunk and distracted driving, application use and functionality, feedback from Chapman students, Public Safety, and encouragement from Chapman IT, we have successfully developed Panther Pick-Up. This application provides a direct positive impact on the Chapman community. Given that drunk and distracted driving are prevalent in college communities, our app works towards keeping students safe by offering them the ability to receive rides through a safe program. As developers, our team has put the safety of our students and drivers as top priority by implementing background checks for drivers, allowing the rider to chose their driver, and an emergency button on the interface during the duration of the ride. Panther-Pick Up now has a wider service range than Safe-Ride, shorter wait times, as well as it provides more job opportunities for students with all types of schedules. Our team has also emphasized targeting our demographic by creating our app to have a very familiar and user-friendly interface.

## Results

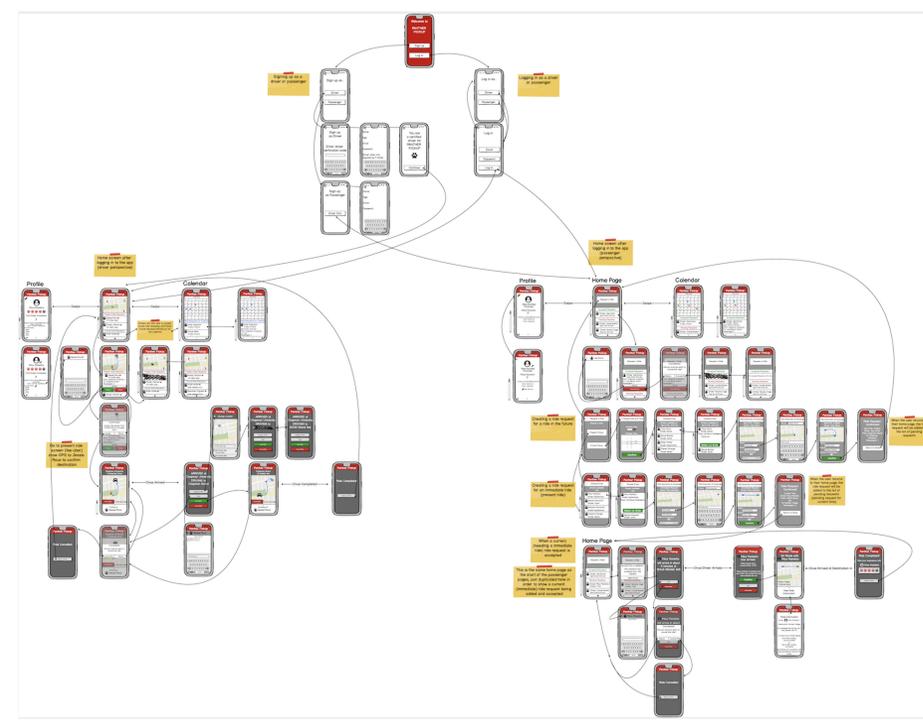


Figure 1. The figure shows the overview of our wireframe we created this semester

### Key Features:

- Drivers:**
- Drivers **can** edit their profile
  - Drives **can** accept and decline immediate future ride requests
  - Drivers **can** view their calendar for future rides
  - Drivers **must** be background checked
  - Drivers **must** receive a specialized verification code from Public Safety to create an account
- Passengers:**
- Passengers **can** edit their profile
  - Passengers **can** request rides **immediately** or in the **future**
  - Passengers **can** view their calendar for future rides
  - Passengers **must** have their requests accepted by drivers
  - Passengers **can** report drivers to Public Safety if there is a problem

Scan the QR code or click the link to view the entire wireframe



[https://drive.google.com/file/d/1\\_HRBYoNA0WqdfvzWuDJ4wnUuT9A2vqrl/view?usp=sharing](https://drive.google.com/file/d/1_HRBYoNA0WqdfvzWuDJ4wnUuT9A2vqrl/view?usp=sharing)

## Where to Next?

Our team would like to continue working on our project. Since we had a few setbacks with our timeline due to moving online, we have the hopes of working more on our application in the upcoming fall. Our team wants to take our completed prototype to Chapman IT to meet with them in regard to how we can move forward with the creating our prototype into a useable app. We hope that by teaming up with Chapman IT in the future not only can we begin to create the actual app but also integrate it into the Chapman community down the road.

## References

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