BruinSafe





123,171

Violent crimes committed in Los Angeles in 2021

32

Crime rate per 1,000 residents

91%

More dangerous than other US neighborhoods





LA is NOT pedestrian friendly



Crime

High crime rates make certain areas dangerous to walk in. However, not all areas can be avoided, and there is always some level of walking needed.



Car reliant

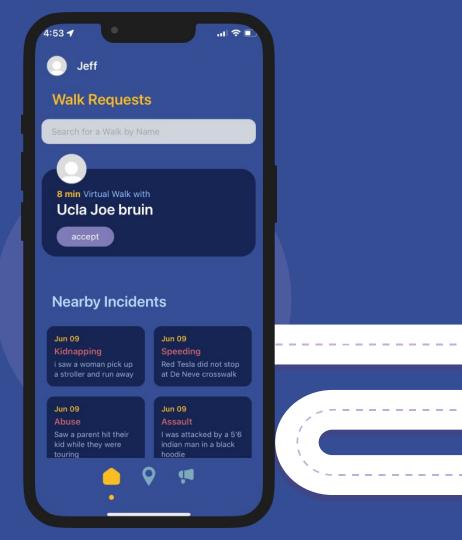
Traveling around Los Angeles requires having a car, meaning pedestrians often face walking under sketchy underpasses and narrow sidewalks.



Our solution: BruinSafe

BruinSafe aims to

- Make walking safer with walk requests
- Alert users of nearby crimes
- Ensure users make it from start to destination smoothly





BruinSafe Features



Crime Report

Users are alerted about nearby crime reports, and are able to report crimes using a simple and easy to use report tab.



Walk Requests

Users can request virtual walks with someone they trust, who can see their location live, making sure users make it to their destination safely.



Built in Navigation

BruinSafe features a built in navigation system, meaning users never have to exit the app or switch applications.



Authenticated Login

BruinSafe authenticates users, adding an extra level of protection and making sure reports are legitimate.







Our Tech Stack



React Native

Frontend



Express

Backend



MongoDB

Database



NodeJS

Backend



Google Maps

API



Socket.io

Room Management





Project Process

1. Brainstorm

We first started with brainstorming different ideas by thinking of various issues in the UCLA community.

4. Implement

The next step was deciding our text stack and how we were going to implement the various features we wanted.

2. Idea

We then decided on building a safety navigation application designed to help Bruins walk around safely.

5. Build and Debug

We began to build the application, debugging along the way to ensure a smooth user experience.

3. Design

We decided on our color scheme, emulating UCLA's colors, and designed the frontend and various pages in Figma.

6. Launch

With the application built and finalized, we are finally ready to present and launch our application to the public!







Difficulties Encountered







Debugging

Testing and debugging was a big challenge as we had to consider a lot of edge cases and ensure that all glitches were fixed. As a safety application, there needs to be a high level of reliability.

Code Conflict

With several people on the team and different coding styles, there was often conflicts in code that had to be resolved. Merge conflicts were also common.

Environment

As with most teams, the group was split between macOS/Windows/Linux users. The use of Expo to develop for IOS led to issues for Windows/Linux users.







BruinSafe Demo





Video Demo







Thank you!

