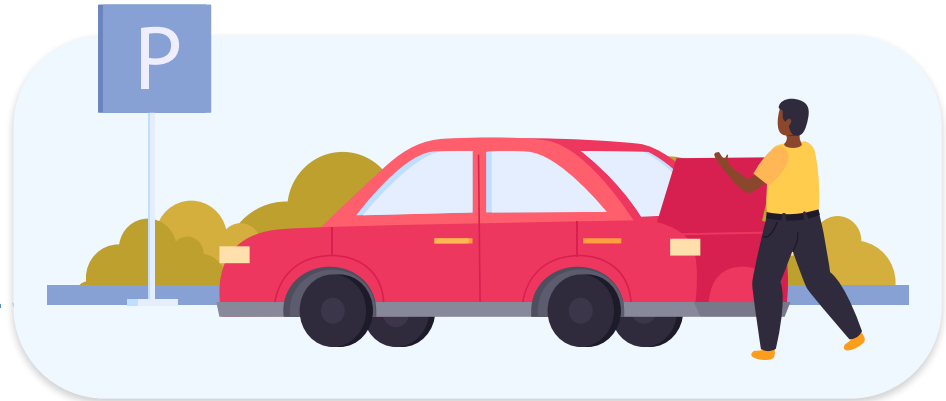# Campus Parking Finder

Sully Harrer, Carys Gardner, Donna Sansarsaikhan, Xander DuBois

The problem

The CU parking website is outdated, difficult to navigate, and confusing. The map itself does not provide data on how full parking lots are, nor does it support pay-to-park areas. Additionally, there are often times when users may need to park for just a couple of minutes, but with no information on where the parking enforcement are, they risk getting a ticket.
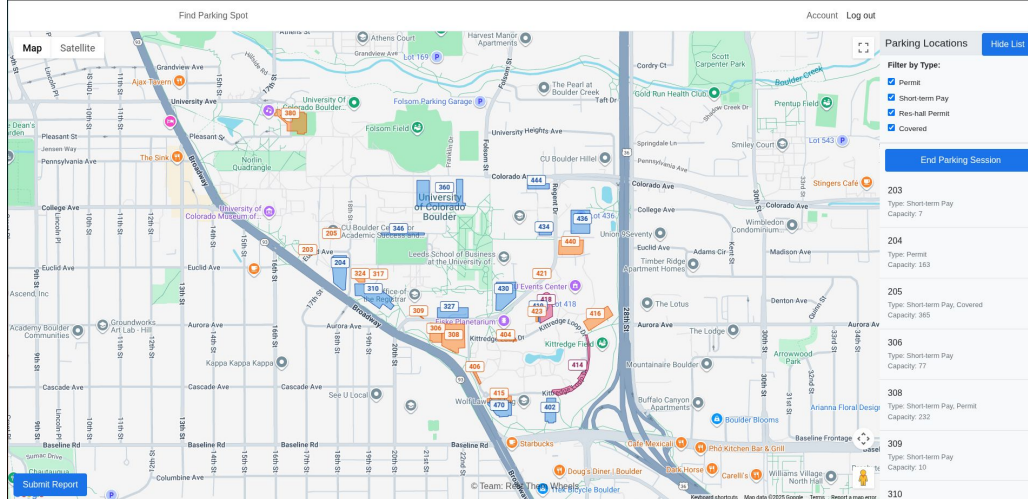
Who's it for?

➔ CU students
➔ CU staff and faculty
➔ CU visitors
➔ YOU!

Our solution

A real-time, user-reported map displaying available parking spots on campus. Users can navigate an interactive campus map to view parking availability, report parking spots, and log parking service sightings. Authentication is required to post reports and contribute to the community.
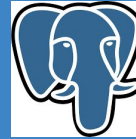
Tools used

Github
★★★★★
Repository/Version control

Github Project Board
★★★★★
Project management and tracking tool

Postgre SQL
★★★★★
Database management system
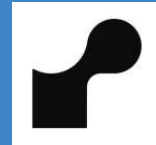
VSCode
★★★★★
Code editor

Excalidraw
★★★★★
Software used to create wireframes and diagrams

JS, CSS HBS, HTML
★★★★★
Languages/templating we used for our code

Render
★★★★★
PaaS used to deploy the app
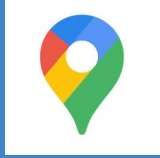
Docker
★★★★★
Containers for testing and development

Tools used

Google Maps API
★★★★★

Map API used to display parking lots

Mocha and Chai
★★★★★

How we tested our project

Node.js
★★★★★

Language we used for server-side programming

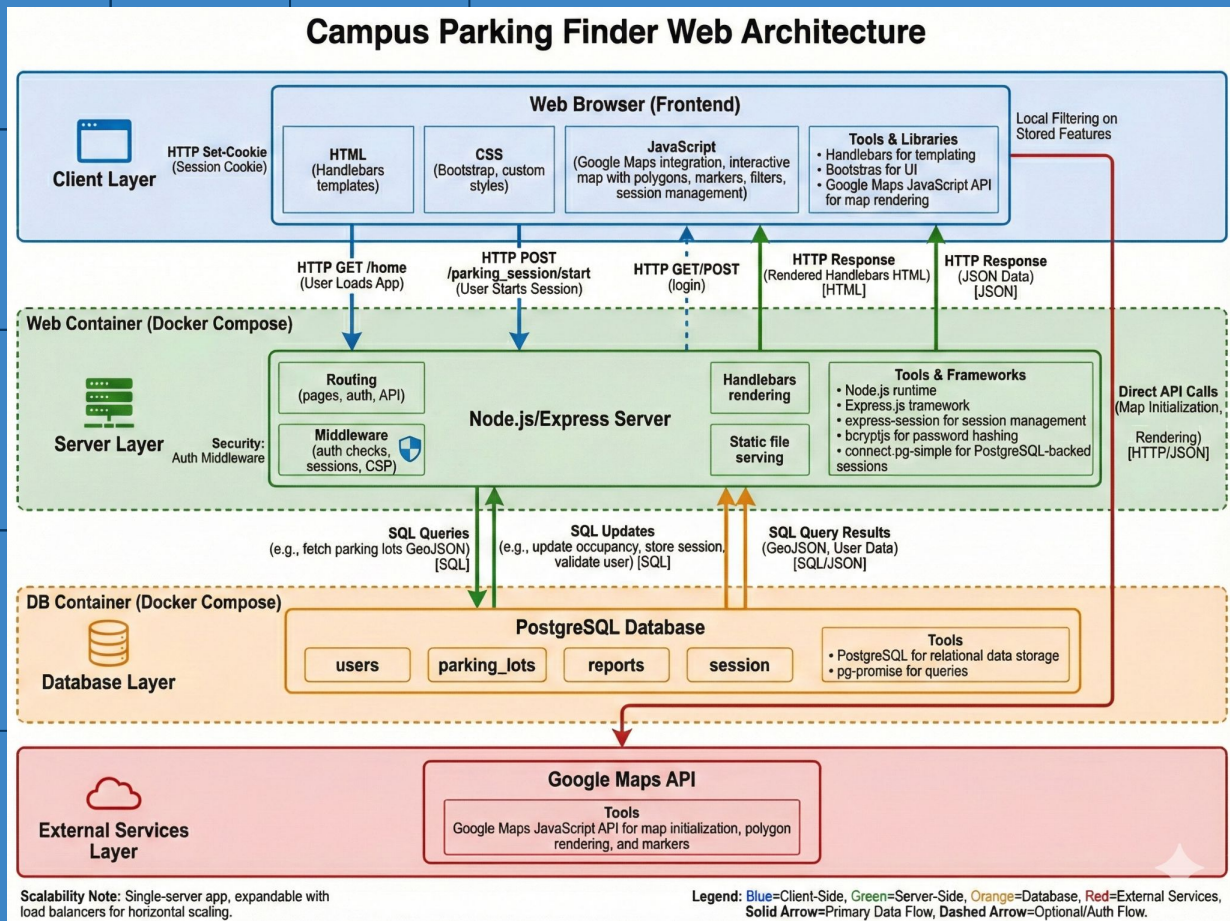## Express
★★★★★

Framework we used for Node.js

Bootstrap
★★★★★

CSS framework

Agile
★★★★★

Our methodology for the project

Architecture Diagram

Campus Parking Finder Web Architecture
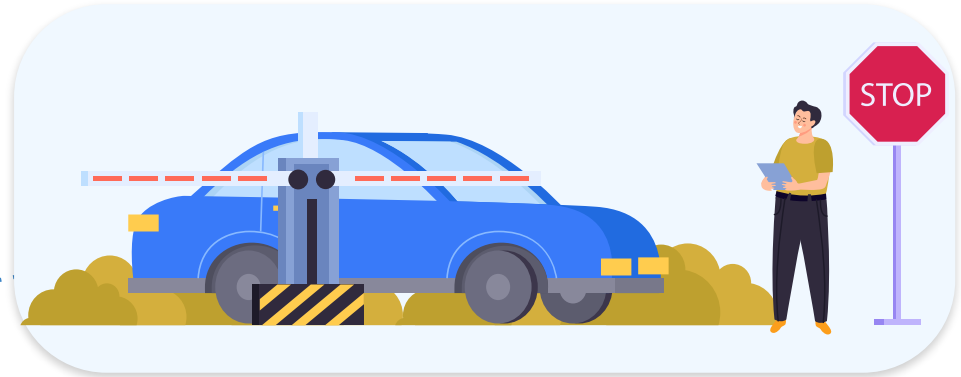
Note: this image was created using Gemini Nano Banana Pro. All information within the diagram has been verified.
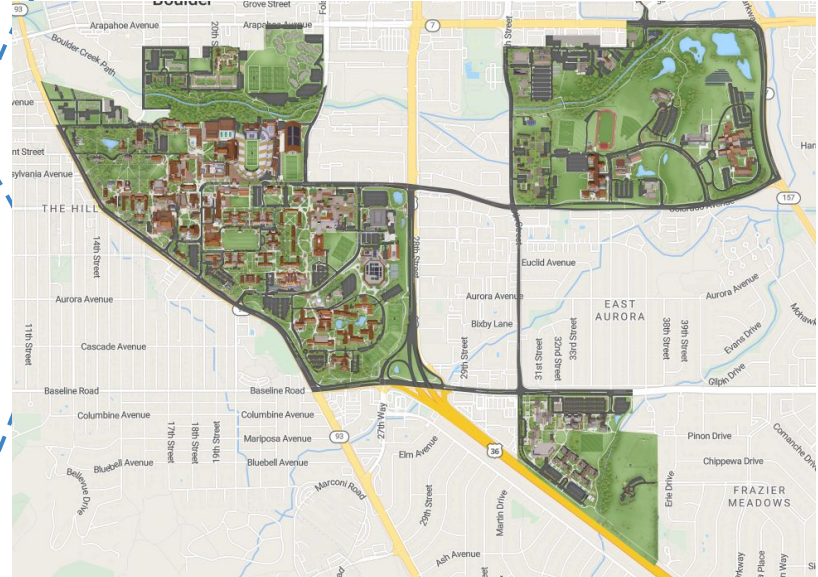
Road blocks

1. Teammates getting sick
2. Database issues with Render
3. Git merge/version control issues
4. Time constraint
5. API access & usage
6. Creating an intuitive layout
7. Communication/leadership

Future Scope/Enhancements

➔ Allow users to pay for parking through the app
➔ Allow parking service sightings to be placed anywhere on the map
➔ A way for users to see recent reports like a timeline on the side of the page
➔ OAuth
➔ A more detailed and visually distinct campus map, much like the CU campus map website (right)
➔ Require email verification to create an account

X

demo

Thanks!

Questions?

Resources

- [Github logo](#)
- [Postgres logo](#)
- [VScode logo](#)
- [Excalidraw logo](#)
- [HTML5 logo](#)
- [Hbs logo](#)
- [CSS logo](#)
- [Render logo](#)
- [Docker logo](#)

- [Google Maps logo](#)
- [Mocha/chai logos](#)
- [Node js logo](#)
- [Bootstrap logo](#)
- [Agile logo](#)
- [Express logo](#)
- [CU Campus Map](#)
- [Theme and car vectors](#)