

O UniGo

Team

- Yash Patel
- Role: Front end, Business Development, Designer



Krupal Patel

Role: Back end, Business
Development, Product Manager



Project background & business need/opportunity

The University of Regina community, including students and faculty, faces challenges with their daily commutes, such as dependence on time-consuming public transportation, unreliability due to weather conditions, and long waiting times during Saskatchewan winters. To address these concerns, we propose the development of a web-based application that facilitates carpooling and ridesharing among the university community. This not only lessens the carbon footprint but also allows the car owner to earn a small amount.



Problem Statement

Current forms of commute to and from university of Regina involve a transportation system which can be time-consuming, unreliable, and cause inadequate delays/cancellations especially during the time of winter months. Use of Taxi service is an expensive alternative, and Private transport is not easily accessible to every student/faculty of the university, and adds to the environmental concerns in the form of increase in carbon footprint.

Our solution is a ride-sharing web-app which can be a platform for reliable, cost-effective, and sustainable form of commute that is catered for the university community.

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Design and Architecture

- Front-end: React, JSX, Bootstrap CSS, HTML
- Back-end: Node.js, MongoDB
- Fare calculation: Algorithm based on distance and time (Base fare & Additional Fare)
- Google Maps API
- AWS EC2 instance used for reliable and scalable hosting
- Modular and extensible design for future enhancements
- User-centric design for intuitive user experience.



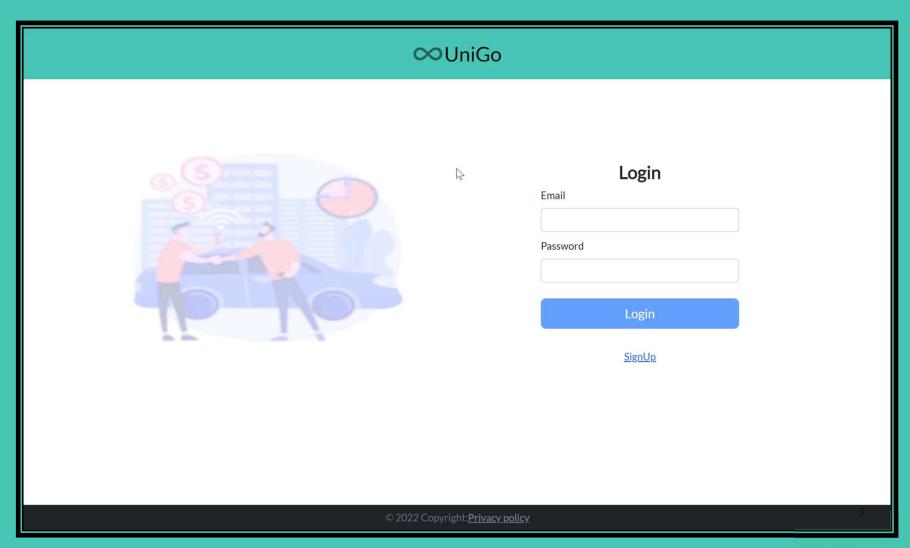
Feature and Functionalities

- Route optimization
- Progressive web app (PWA)
- Ride status feature
- Ride scheduling
- Driver vehicle profile and Passenger count
- Location display
- Ride history
- Admin Dashboard



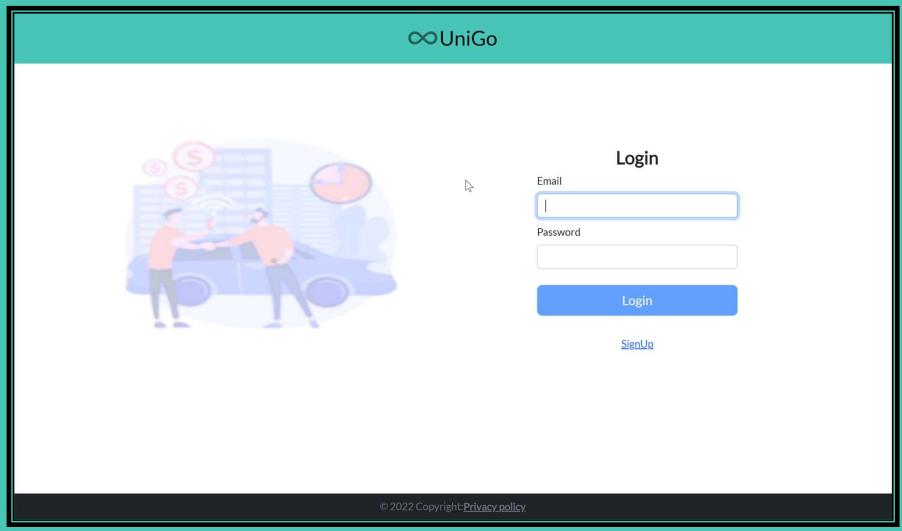








Driver Perspective 1





Rider Perspective ∞UniGo Login Email Password Login <u>SignUp</u>



Driver Perspective 2



Future Work

- Payment system integration
- Chat service for riders & drivers
- Token system for incentives
- Rating system for drivers & riders
- Preferences page for personalized rides (e.g., hygiene and music)



