SPP2: POV and Experience Prototypes

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Problem Domain

For many University of Belize (UB) students, commuting to Belmopan has become increasingly frustrating. Overcrowded buses during peak hours and heavy traffic make traveling stressful, unreliable, and sometimes unsafe. While many private vehicles drive to UB with empty seats, students without cars must rely on overcrowded buses or busitos, often standing for long periods. This creates inefficiency, safety concerns, and added stress for students trying to get to class on time. The purpose of this application is to provide a UB student–only carpooling platform that connects students who need rides with classmates who have available seats. This ensures safer, more affordable, and more reliable transportation while building a stronger UB community.

Previous Interviews

For our first set of interviews, we decided to expand our scope to people outside of the University to see how they'd react to such an application. The results indicated that most people weren't fond of the idea of carpooling with strangers, but we gained some interesting insights that helped narrow down the interview questions. This includes:

- Concern for safety - How do I know I can trust whoever I commute with?
- Affordability - Would this be cheaper than catching the buses?
- Reliability - Can I consistently get a ride?
- Usability - How easy would it be for me to use this app?

With these new insights, we found four new interviewees, all University Students, 2 who commute by bus, 2 who commute by car. 2 out of 4 interviewees decided to stay anonymous.

Initial Point of View

After our first needs finding assessment, we have gained some insights and now have the following points of view:

- People need an alternative way to commute to school, as buses are stressful and crowded
- People usually drive alone and have open passenger seats. Gas is expensive, and car drivers wouldn't mind the extra help.
- People are wary of the idea of travelling with strangers and need to feel safe when driving with others.
- A carpooling app is inherently complicated, and we must find a way to make it as simple and as user-friendly as possible.

Additional Need-Finding Results

Interviewees

Abner Tun - Former University Student who commutes with the Benque Bus

Zack Spain - University Student in IT who carpools with a friend

Anonymous Interviewee #1 - UB student who commutes every day by car

Anonymous Interviewee #2 - UB student who commutes every day by car

Need-Finding Results

Revised Point of View

POV 1 – Safety & Trust

- We met UB students who are open to carpooling but need assurance of safety and trust because they may not fully trust drivers or riders they don't know. It would be game-changing if the app included verified profiles, reviews, and university backing to make people feel safe.

POV 2 – Simplicity & Ease of Use

- We met UB students who feel overwhelmed by complicated apps or logistics and need a simple way to find drivers or riders because complex route-matching could discourage them from using the app. It would be game-changing if the interface were clean, easy, and intuitive so students could match rides in just a few clicks.

POV 3 – Affordability & Communication

- We met UB students who are cost-conscious commuters and need transparent prices and easy communication with drivers/riders because uncertainty about costs and coordination creates frustration. It would be game-changing if the app offered upfront pricing and built-in chat features for smooth coordination.

How Might We Solutions

POV 1 – Safety & Trust

How Might We…

1. Verify that every driver and rider is a legitimate UB student.
2. Create transparent driver and rider profiles without invading privacy?
3. Use ratings and reviews to build a reputation system that feels reliable?
4. Give students peace of mind through real-time GPS tracking during trips?
5. Add a panic button or emergency contact feature that's simple but effective?
6. Should UB itself as a trusted authority in verifying drivers and passengers?

7. Help riders and drivers communicate expectations (music, punctuality, stops) beforehand?
8. Make first-time carpooling with a stranger feel less intimidating?
9. Reward safe and reliable drivers to encourage good behaviour?
10. Allow groups of riders to travel together to increase safety in numbers?
11. Provide insurance or a UB-backed guarantee to reduce risk concerns?
12. Let students pre-select "preferred matches" based on shared interests or class schedules?
13. Educate students on safe carpooling practices to build confidence?

POV 2 – Simplicity & Ease of Use

How might we…

1. Design an interface that feels as easy as ordering food or booking a ride?
2. Show route matches visually on a map instead of long lists?
3. Let students filter carpool matches by schedule, location, and preferences with one tap?
4. Simplify scheduling so recurring trips don't need to be re-entered every day?
5. Provide smart suggestions (e.g., "You and Alex both go from Benque to UB at 8 am")?
6. Keep sign-up and verification quick but secure?
7. Make trust signals (ratings, reviews) clear at a glance?
8. Help new users learn the app in under 2 minutes with an intuitive flow?
9. Reduce clutter by only showing the most relevant carpools to each student?
10. Add reminders and notifications so no one misses their ride?
11. Use colour coding, icons, or progress steps to guide students through booking?
12. Make the app feel friendly and community-oriented instead of transactional?

POV 3 – Affordability & Communication

How might we…

1. Make carpool prices clear and automatically split costs between riders?
2. Display cost savings in a motivating way (e.g., "You've saved $50 this month by carpooling")?
3. Provide upfront pricing before students confirm a ride?

4. Design a simple way to coordinate pickup points without long back-and-forth messaging?
5. Add in-app chat or quick message templates (e.g., “I’m here,” “Running late”)?
6. Integrate group chats when multiple riders share one car?
7. Allow recurring ride agreements with agreed-upon cost-sharing?
8. Provide push notifications to confirm rides and pickup times?
9. Show fuel savings and environmental benefits alongside cost savings?
10. Use receipts or payment history to reduce disputes?

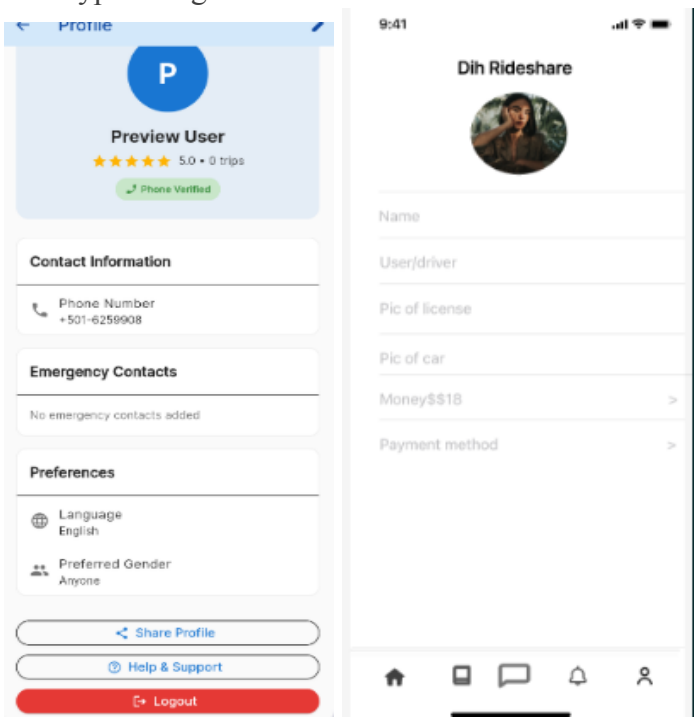
Best HMWs & Their Solutions

POV	HMW…	Solution
Safety and trust are the key barriers to carpooling, as drivers and riders may not fully trust each other.	…Make ratings, reviews, and trust signals easy to understand at a glance?	Have a simple user profile Ui that shows ALL the appropriate information on the user, along with making accounts tied to the UB email.
A simple UI is necessary to make the app easier to use. With all the different routes and logistics, we must find a way to make sure people have an easy time finding an appropriate driver.	…Design an interface that feels as easy as ordering food?	Have users create their routes and let the app infer what drivers and users should be paired up with each other based on similar/overlapping routes.
For an app like this, it’s necessary for prices to be transparent, for it to be easy to communicate with your driver/rider.	…help riders and drivers communicate expectations (music, punctuality, stops) beforehand to avoid conflict?	Have a section on the profile where a driver can detail all their preferences and expectations. And a chat feature.

Experience Prototypes

Prototype 1: Building Trust

Prototype Design:

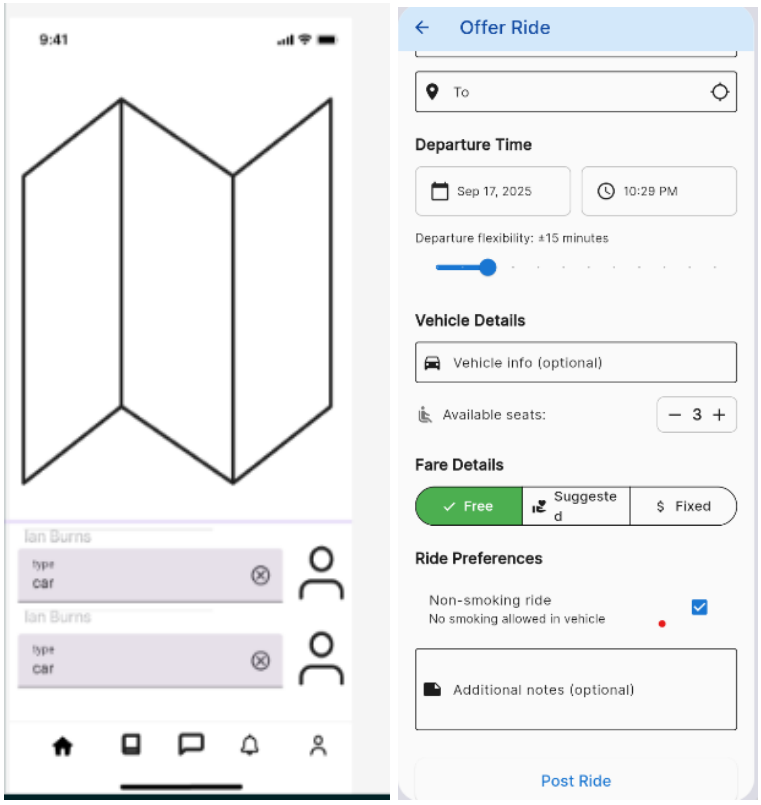


Prototype Findings:

- **Assumption being tested:** Students would feel more comfortable carpooling if they could see verified profiles with pictures and ratings.
- **How it was made:** A user profile screen was designed in Figma, displaying user details, a profile picture, and a rating system.
- **How it was tested:** Students were shown the design and asked to react to how it would impact their trust in riders and drivers.
- **Things that worked:** They appreciated the profile picture and rating, which gave them more confidence in safety.
- **Things that didn't work:** Some students disliked that one version of the design felt too basic and unhelpful.
- **Surprises:** Trust was strongly tied to visual cues like photos and reviews, more than text details.
- **Strengths:** Clear, visual trust-building features.
- **Areas of Improvement:** Expand verification features (e.g., university ID, badges) to increase credibility.
- **Assumption Validity:** The assumption was valid — visible identity and ratings increased trust.

Prototype 2: Easy Ride Booking

Prototype Design:

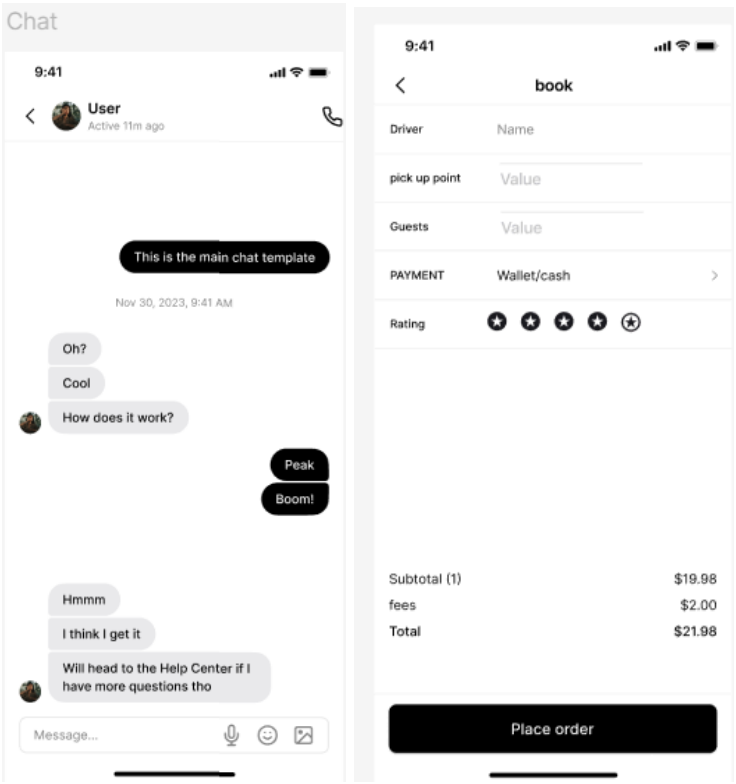


Prototype Findings:

- **Assumption being tested:** A clean, simple interface would encourage students to use the app by making booking or creating rides straightforward.
- **How it was made:** A ride booking flow was created in Figma, featuring a map and a list of available drivers.
- **How it was tested:** Students walked through the interface to see how easily they could request or create a ride.
- **Things that worked:** Students liked the integrated map and the list of drivers below, which made booking easy and intuitive.
- **Things that didn't work:** Some felt the design could be simplified further to reduce steps.
- **Surprises:** Students were especially positive about the ability to create rides easily, not just book them.
- **Strengths:** Smooth ride creation and quick booking with a clear layout.
- **Areas of Improvement:** Add filters for location, time, or driver preferences to enhance usability.
- **Assumption Validity:** The assumption was valid — simplicity improved engagement.

Prototype 3: Communication and Prices

Prototype Design:



Prototype Findings:

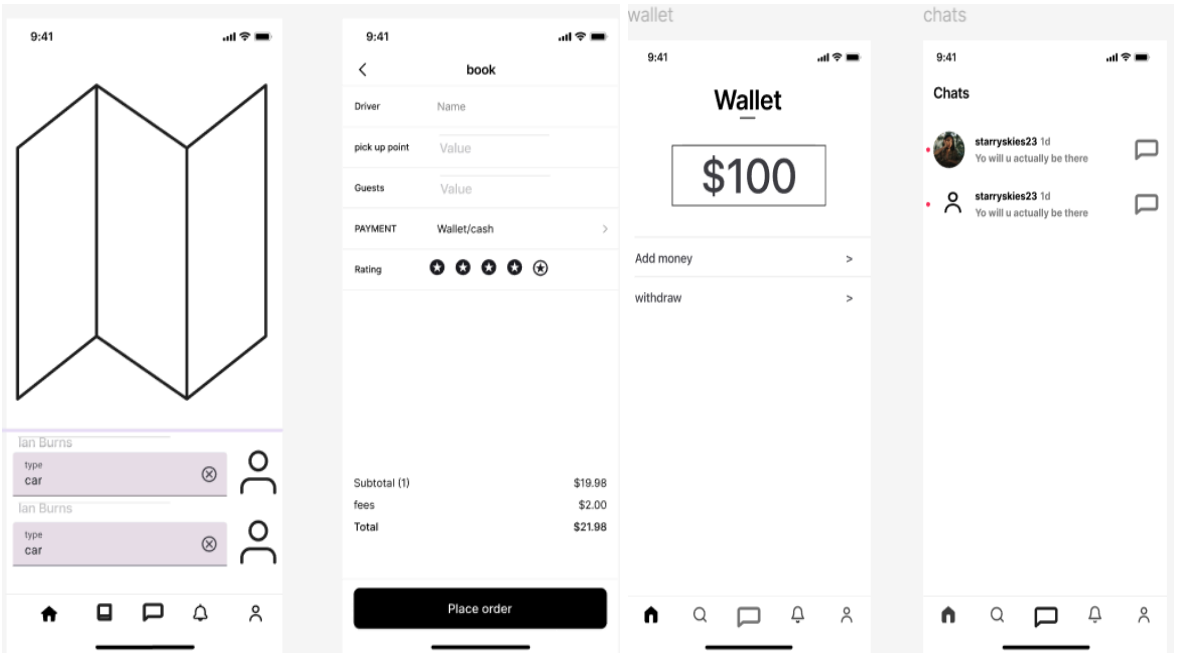
- **Assumption being tested:** Students would prefer clear booking details and upfront costs, supported by a built-in chat for coordination.
- **How it was made:** A booking details and chat interface was designed in Figma, showing ride information and communication options.
- **How it was tested:** Students reviewed how prices and communication were presented during booking.
- **Things that worked:** The chat function was well-received for coordinating directly with drivers or riders.
- **Things that didn't work:** Students disliked that ride prices were only shown during booking instead of up front. Some also noted confusion about ride time visibility.
- **Surprises:** Price transparency mattered more than initially expected; hidden costs reduced trust and willingness to book.
- **Strengths:** Built-in chat and detailed ride info.
- **Areas of Improvement:** Show pricing and time before booking to remove uncertainty.
- **Assumption Validity:** The assumption was partially valid — communication helped, but the lack of upfront pricing created frustration.

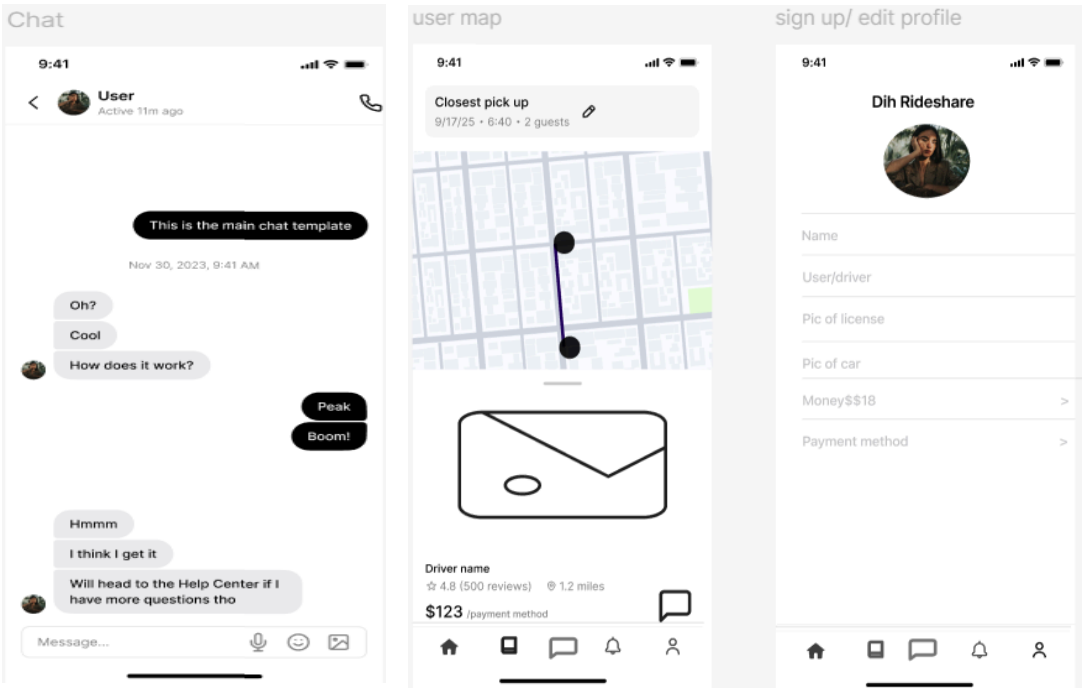
Most Successful Prototype

After testing all three experience prototypes, Prototype 2 (Easy Ride Booking) emerged as the most successful in achieving the desired solution. Students consistently emphasized how important it was for booking or creating a ride to feel simple, quick, and intuitive. Integrating a map alongside available drivers allowed users to visualize options instantly and make confident choices with minimal effort. Compared to the other prototypes, this design directly addressed the most significant barrier to adoption — complicated logistics discouraging use. While trust and price transparency are also important, those features can be layered into the booking experience later. Because it provides a strong, user-friendly foundation and was the most positively received during testing, Prototype 2 offers the best starting point to move forward with the project.

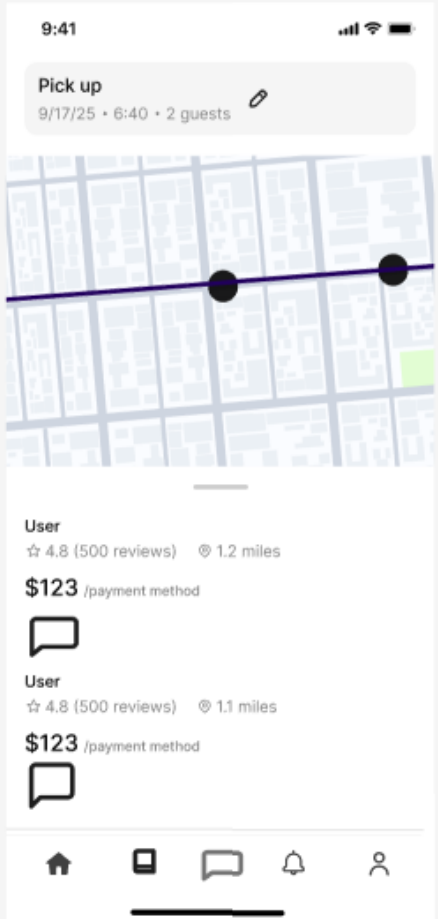
Appendix

Prototypes 1

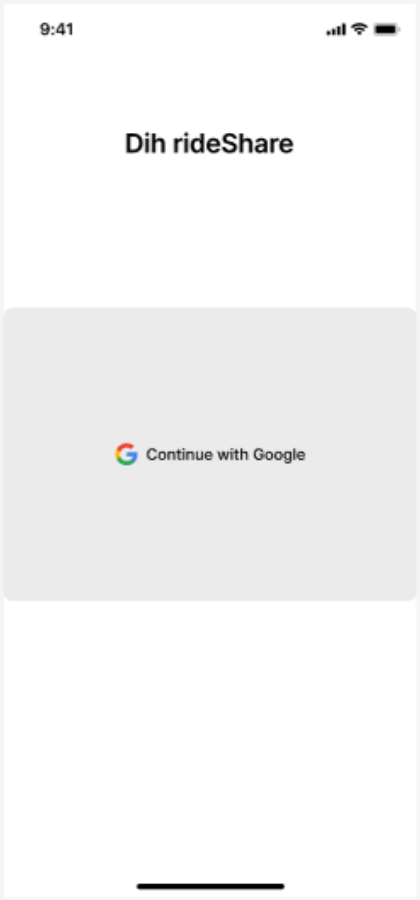




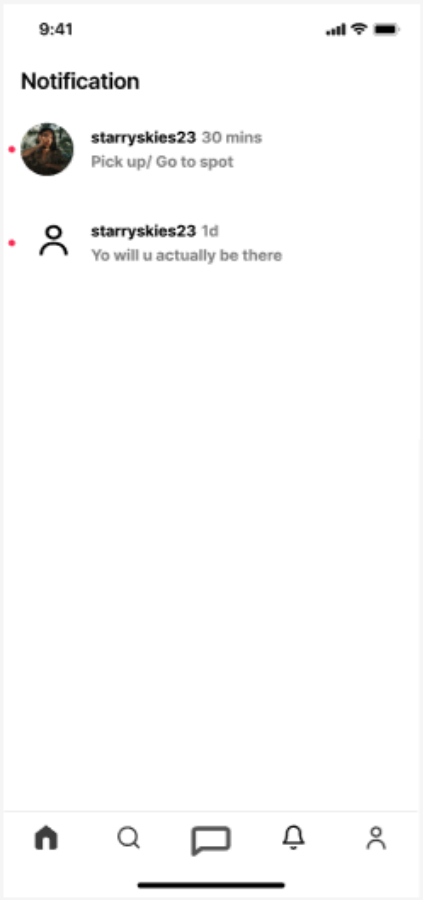
driver map



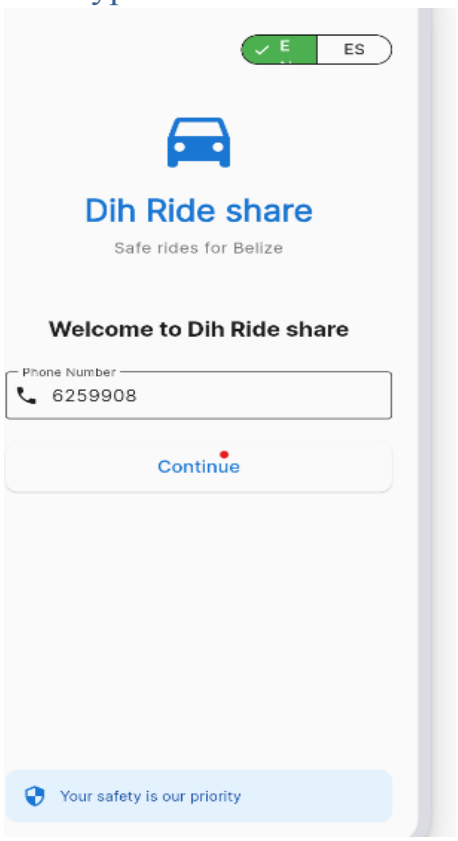
Sign In

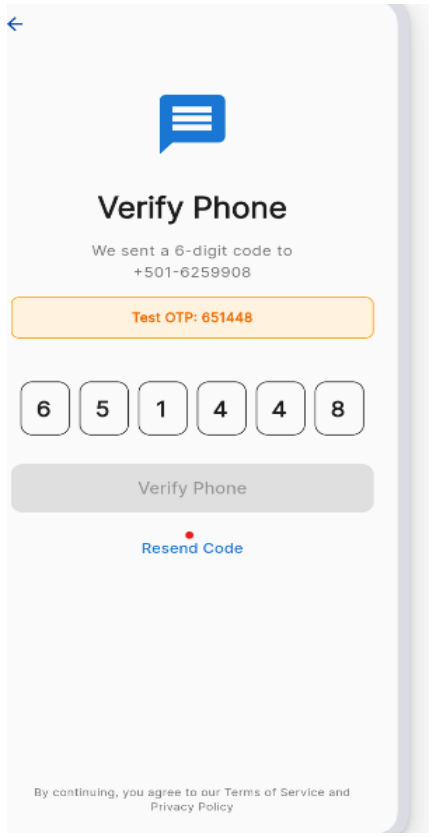


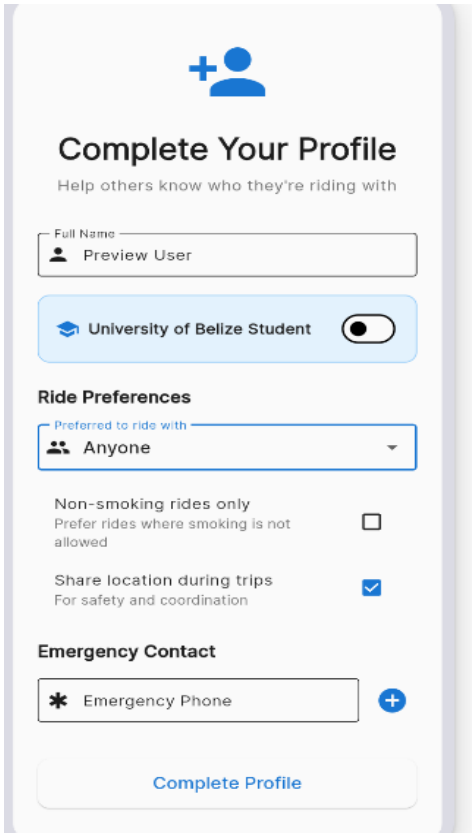
notif

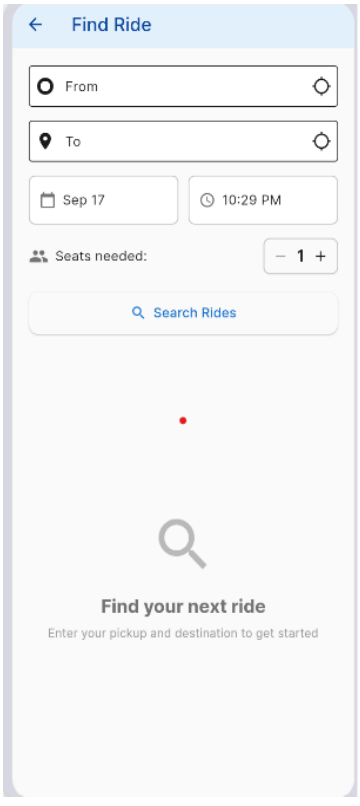


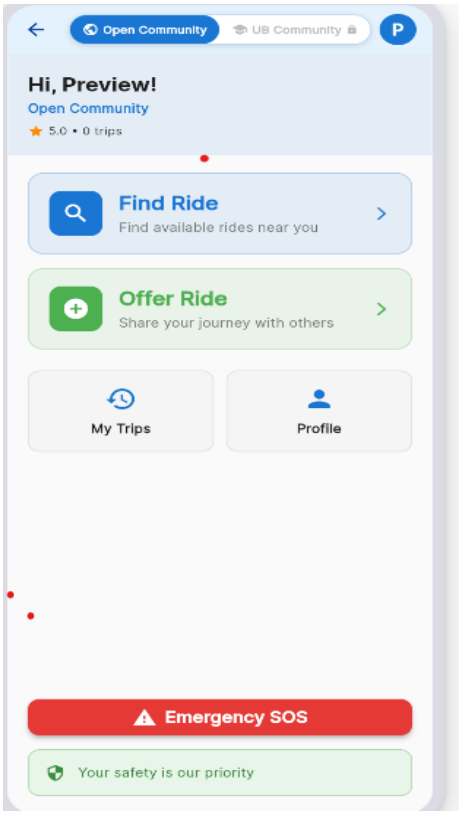
Prototypes 2

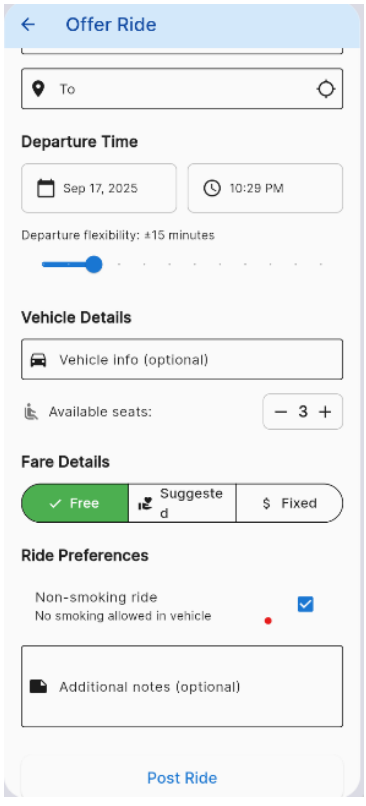


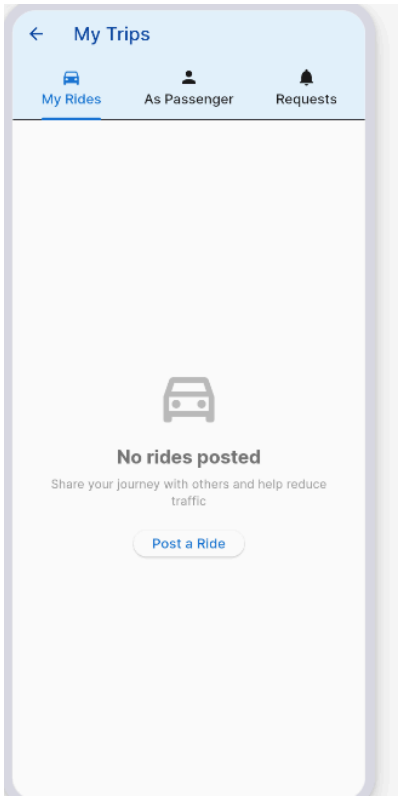








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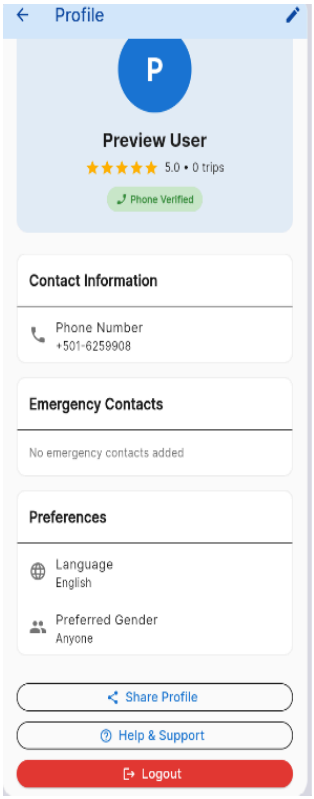
My Rides
As Passenger
Requests
No rides posted
Share your journey with others and help reduce traffic
Post a Ride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Preview User
5.0 • 0 trips
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Emergency Contacts
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Preferences
Language
English
Preferred Gender
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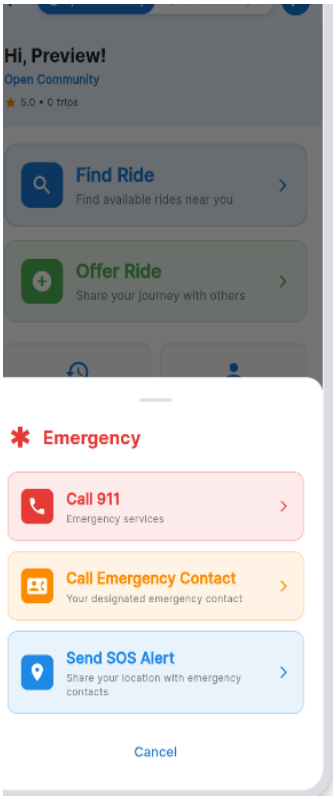
Share Profile
Help & Support
Logout


Hi, Preview!
Open Community
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Find Ride
Find available rides near you
Offer Ride
Share your journey with others
Emergency
Call 911
Emergency services
Call Emergency Contact
Your designated emergency contact
Send SOS Alert
Share your location with emergency contacts
Cancel