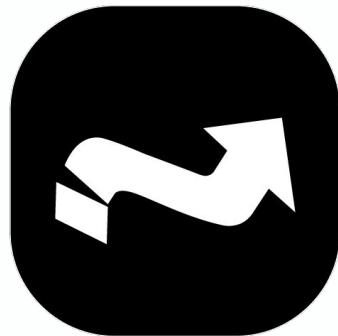




“Step into the Future with Trippr:
Where Saving Money and the
Planet Unite through Unforgettable
Journeys.”

Jae Kim





Trippr

The word "Trippr" is written in a bold, black, sans-serif font. A black arrow points diagonally upwards from the top of the letter "i".

Team
Caffeine

Team 23

Zane Ayris

Michael Gouldstone

Jae Kim

Ethan Lee

Reuben Morris

Joshua Nazareth

Jae Kim

Road Map

2. Problems & solution (2-3min):
Jae will provide an introduction to the topic and explain why we decided to develop this mobile application.

Ethan and Reuben will present the solution we have developed, likely showing some of the key features or components of your mobile application.

3. Product demo (7min):

2



3

1. Introduction, logo & symbol (1-2min):

Jae introduces the team members and explains the symbols used in the app's logo and what the app's symbol signifies.

1



6

5. Project goals & challenges (1-2min):

Josh will discuss what we hoped to achieve with this project. This could include specific objectives or targets we set for ourselves.

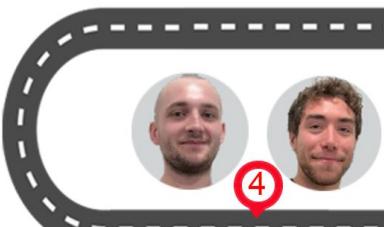


5

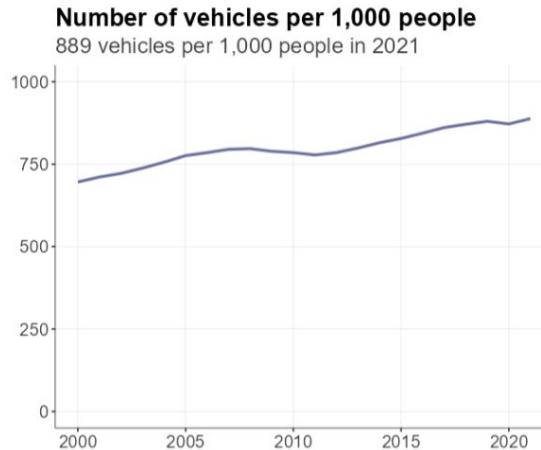
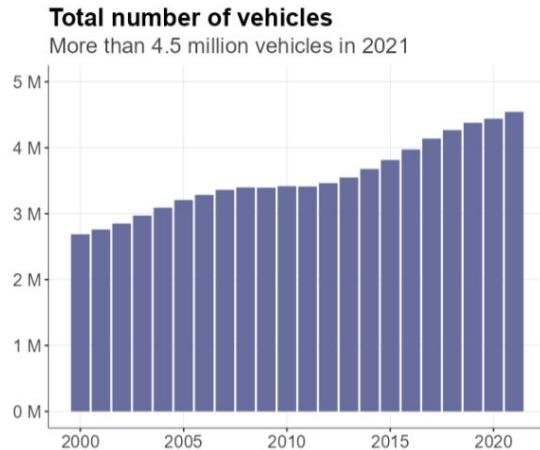
4. Details of solution (5min):

Zane and Michael will go into more detail about how our solution works. This could involve explaining some of the technical aspects or design choices we made.

4



Problem: number of vehicles

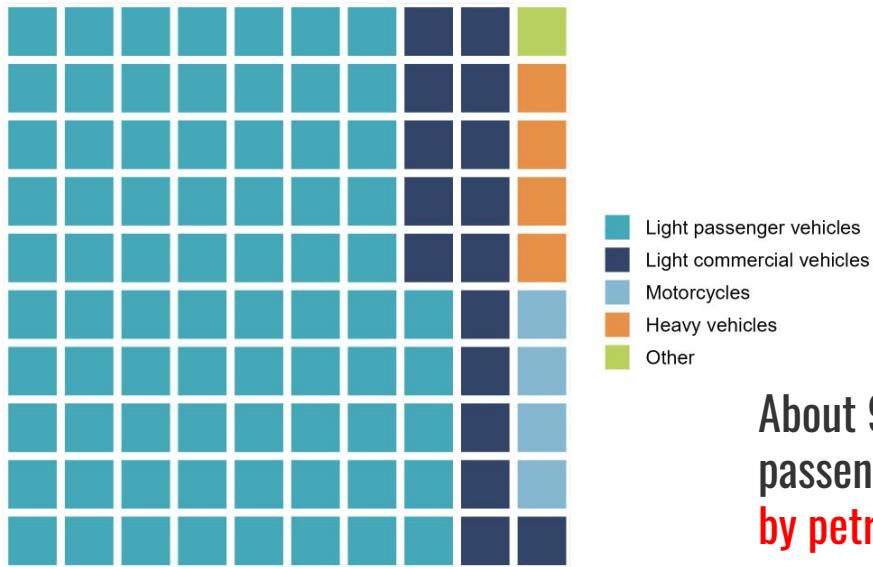


Ministry of Transport
Annual Motor Vehicle Fleet
Statistics (2021)

- New Zealand's motor vehicle fleet has been increasing over the last 10 years with over 4.5 million vehicles in 2021
- That's 889 vehicles per 1,000 people - **one of the highest rates of vehicle ownership in the world.**

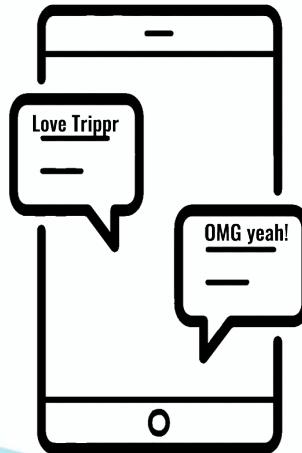
Problem: Petrol consumption

Composition of the 2021 motor vehicle fleet



About 91% of motor vehicles in the 2021 fleet are light passenger and **most light passenger vehicles are fuelled by petrol.**

Trippr, our solution



Real time messaging allowing users to coordinate trips effectively

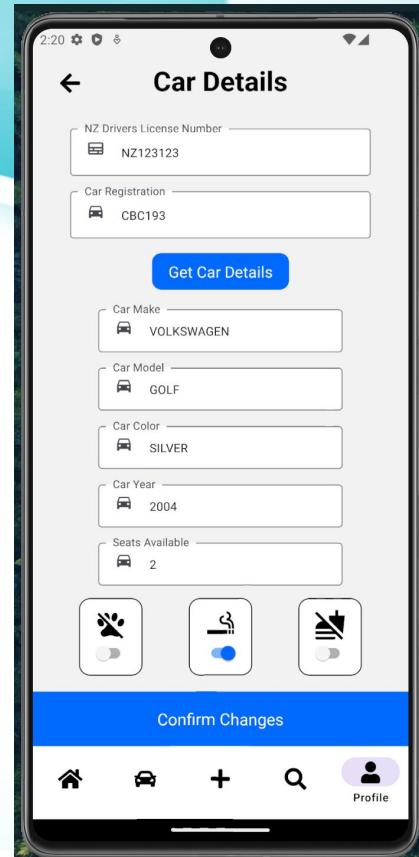
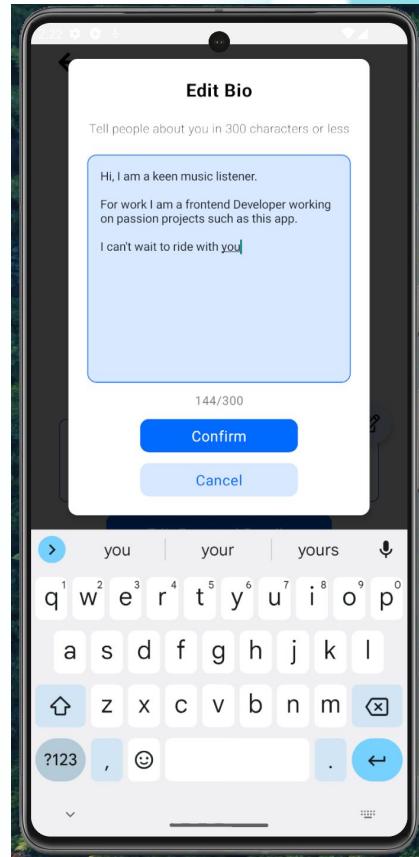
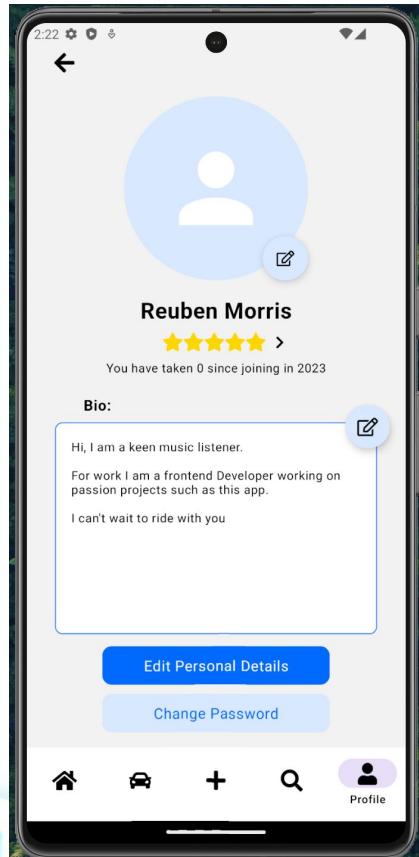
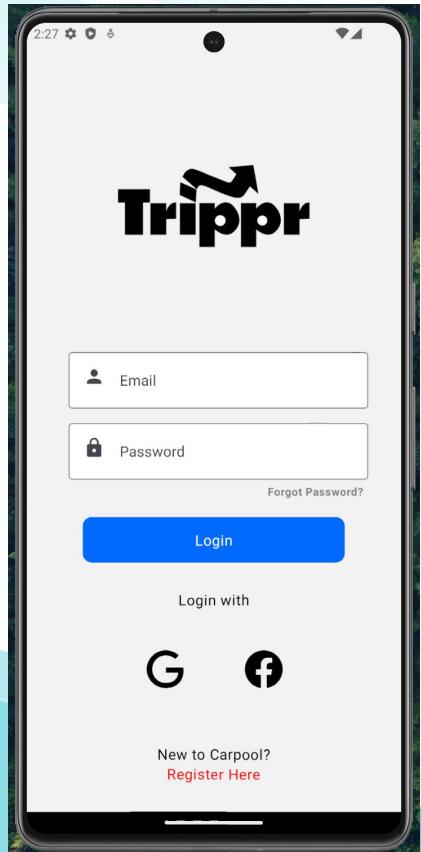
Building trust between drivers and passengers through a rating system and CarJam.

Personalising settings for drivers

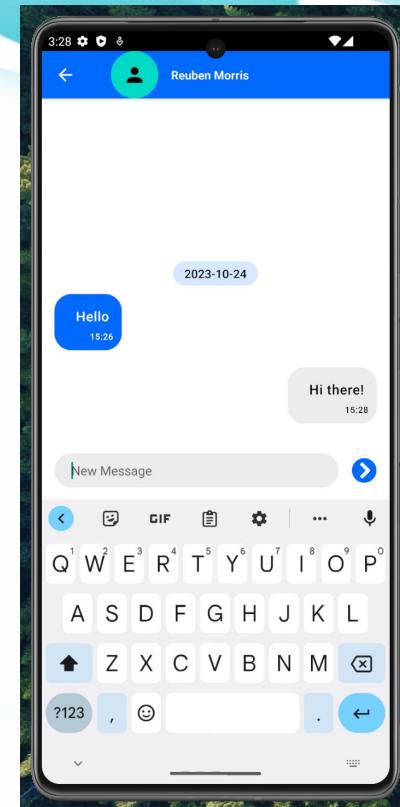
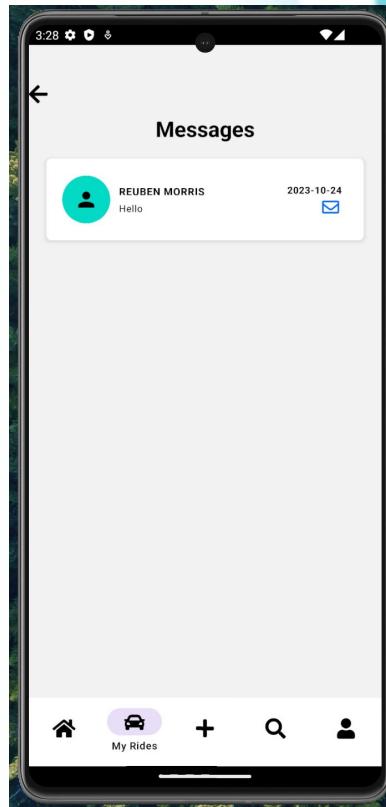
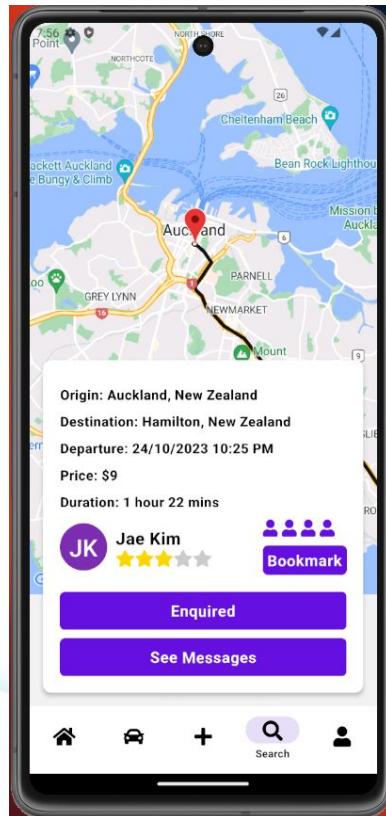
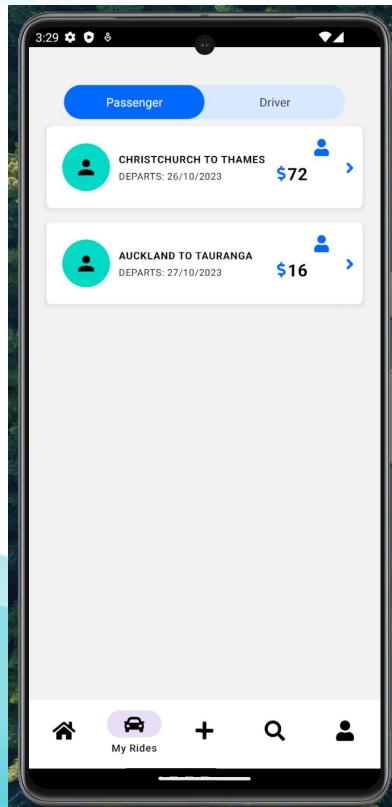
Economical, eco-friendly, and efficient.

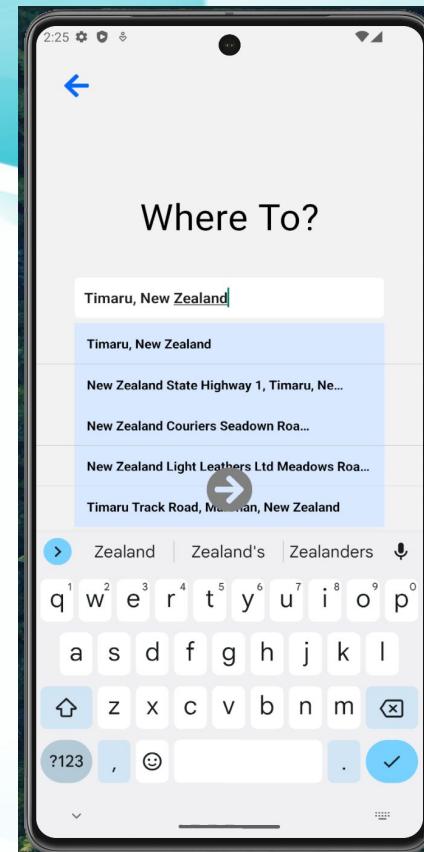
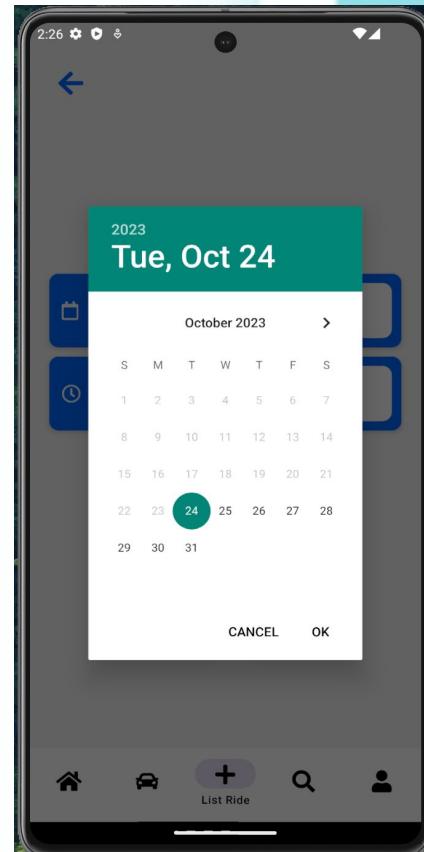
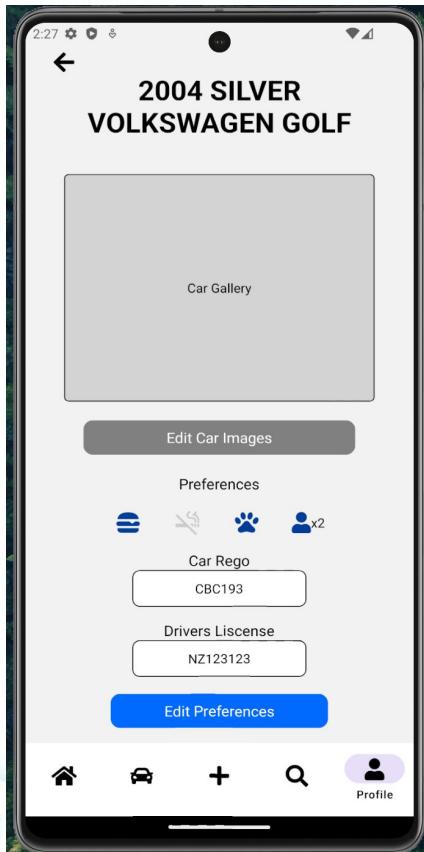
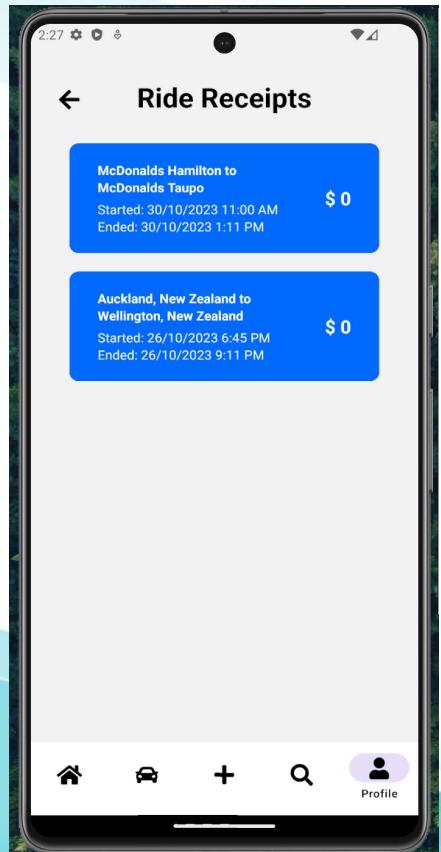
PRODUCT DEMO





Real Time Messaging





Caleb Johnson

Driver



Scenario:

Caleb is driving from Auckland to Wellington to attend his sister's wedding. He doesn't care about the money, but would like some company for the 8 hour drive.

Sophie Tucker

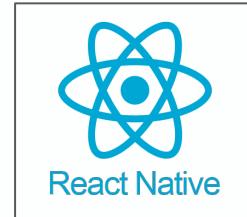
Passenger



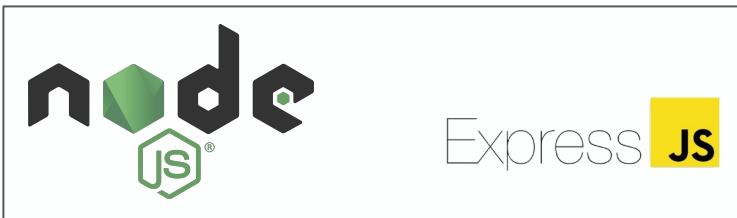
Scenario:

Sophie is a geologist and just spent the week sampling rocks in Rotorua. As a student she is strapped for cash, and is looking for a cheap alternative to get back to Wellington.

Components



- Frontend



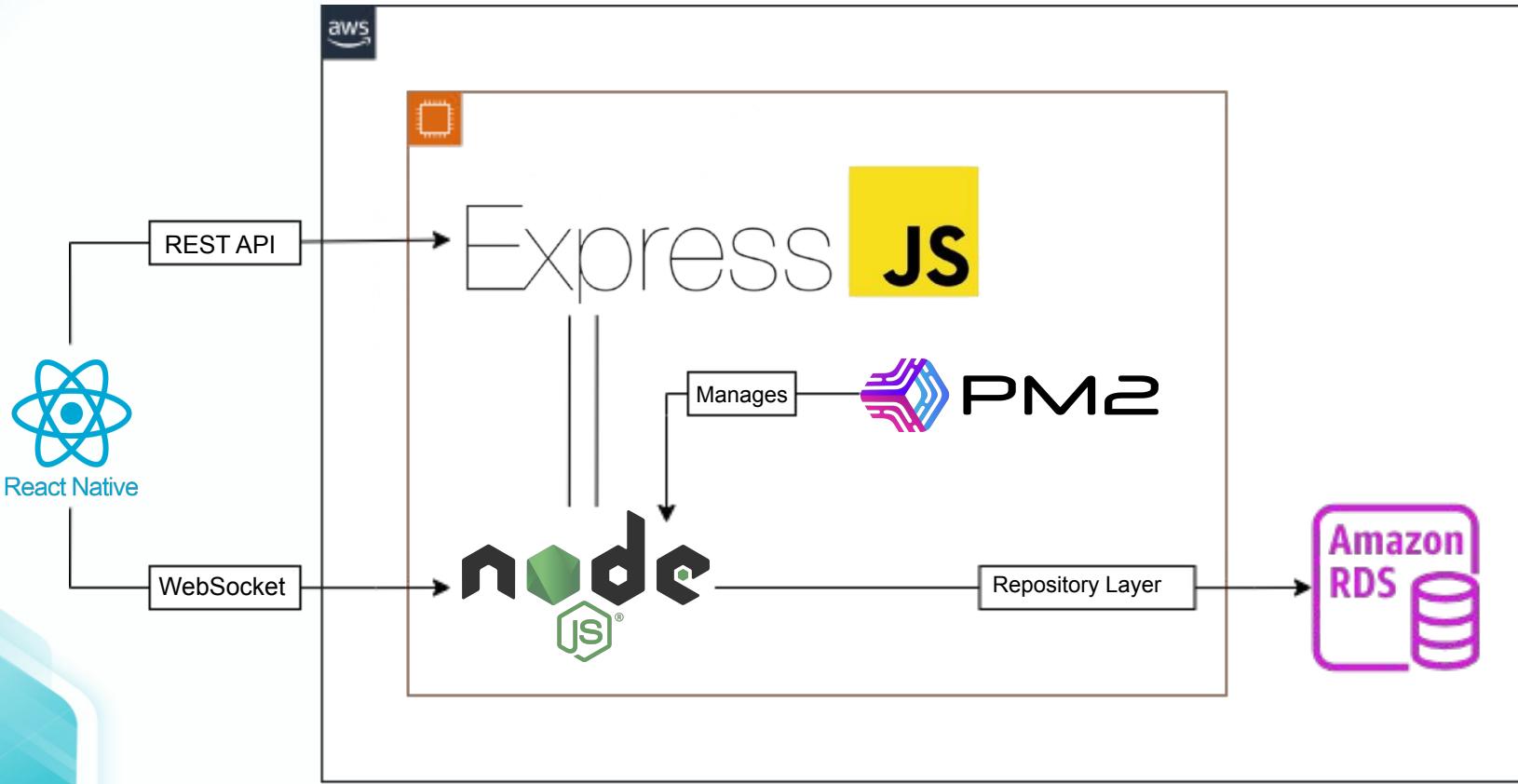
- Backend



Essential Tools

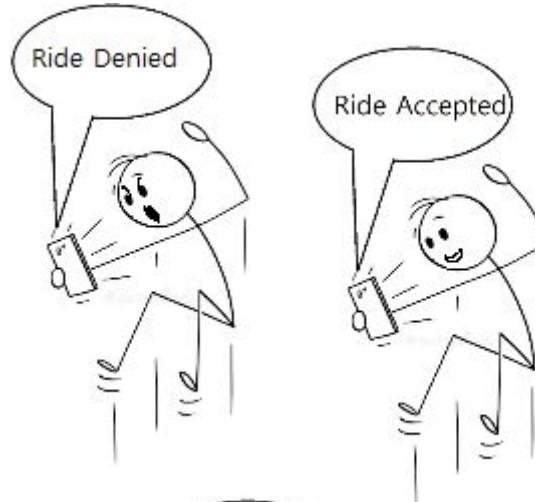
Zane Ayris

Architecture Flow



Websocket

- Active Users
 - Live Messaging
 - Live Updates



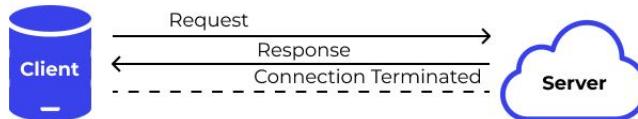
WebSocket Connection



VS



HTTP Connection (RESTFUL API)





Location Services API

- Dynamic Routing
- Dynamic Pricing
- Location Information
- AutoComplete
- Analytics (Trip distance and duration)



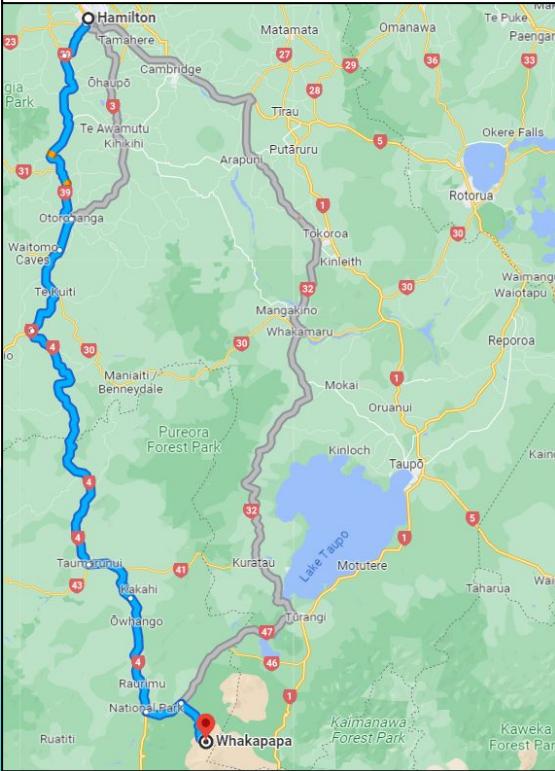
Routes



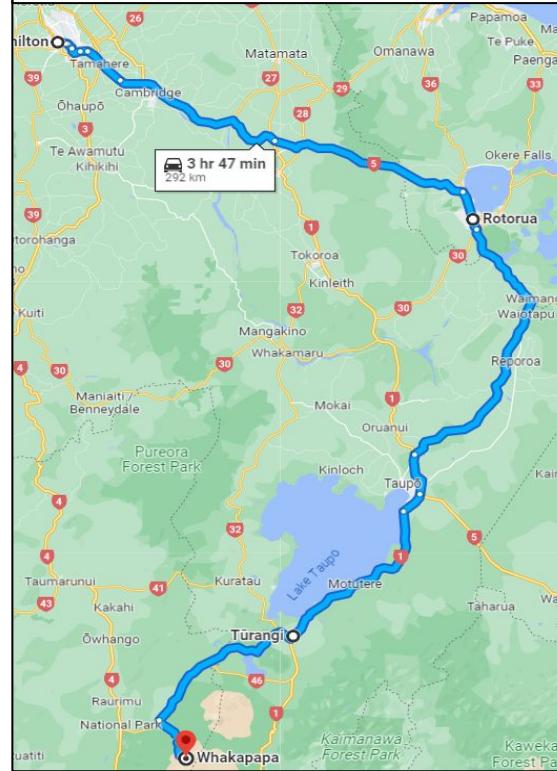
Places

The travelling salesman problem

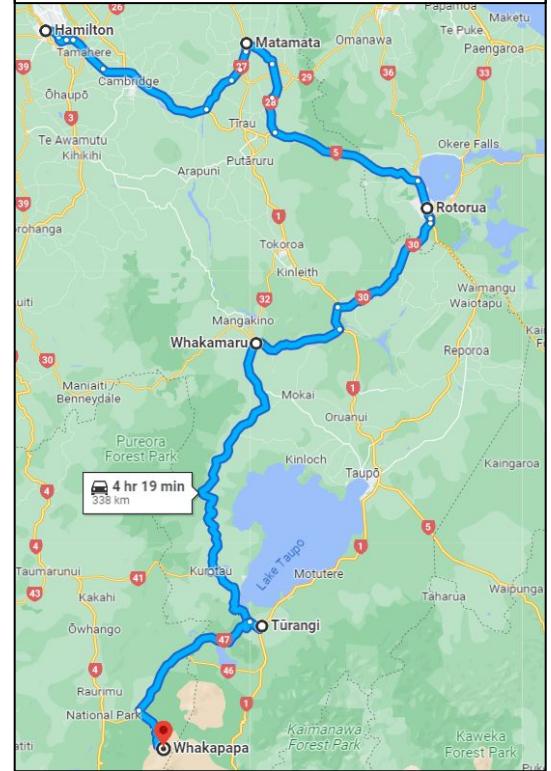
Driver travelling from Hamilton to Mount Ruapehu



Route with 1 passenger



Route with 2 passengers



Project Goals

What we have accomplished

User Friendly
Interface

Location
Services

Security
Measures

User
Engagement

User Friendly Interface



- Intuitive design
- Ease of navigation
- Enhanced user experience

Location Services



- Efficient matching of trips
- Efficient Routing

User Engagement



- In-app messaging feature
- User rating system
- Customisable Biography

Security Measures



- Secure Authentication
- Age Restriction



Challenges and Lessons Learned

Turning Obstacles into Stepping Stones



Technical Challenges & Non-Technical Challenges



Technical Challenges



Dependency Issues

- Encountered significant issues in managing dependencies

Cross-Platform Cohesion

- Faced challenges in synchronizing various platforms

Non- Technical Challenges



Time management & Labour Intensity

- Balancing this project alongside other university assignments
- The project was labour-intensive

Real-World Reflection

- While educational, may not fully reflect the realities and nuances of actual on-the-job experiences
- Realities of achieving the client's desired outcomes

The Future of Trippr



Cryptocurrency



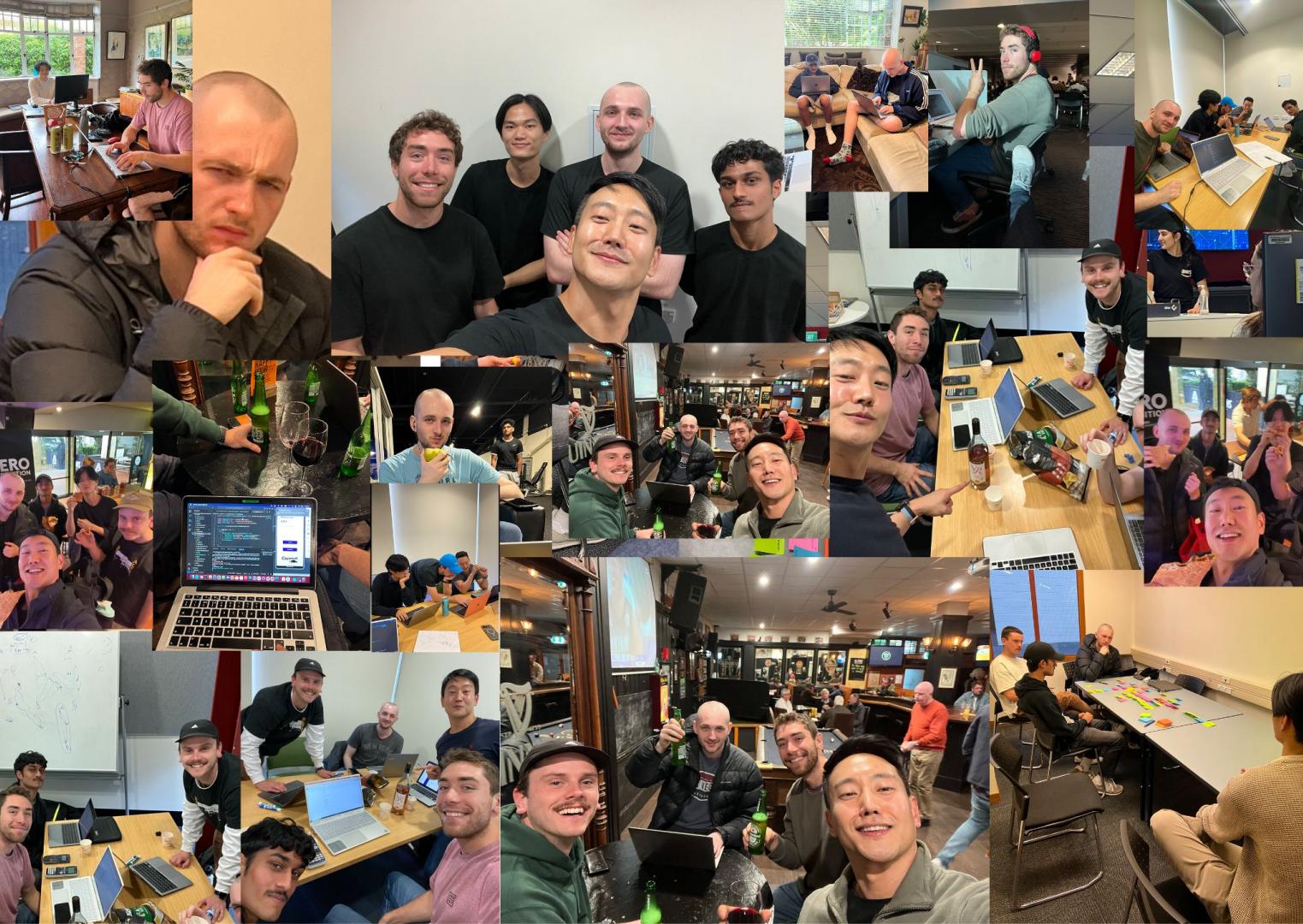
Group Chat Features



Environmental Statistics

Team

Caffeine



Trippr

The future is here



Team **Caffeine**

Q&A

