

The contents:

PROBLEM SOLUTION TECHNICAL APPROACH KEY INSIGHTS EDUCATIONAL COMPONENT

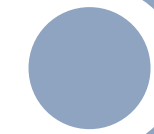


The Eco-Tracker



ABBY, SHEEMA,
RENITA, PARMIN &
OLIVIA

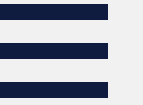
Next Slide



WHERE INNOVATION
MEETS OPPORTUNITY.

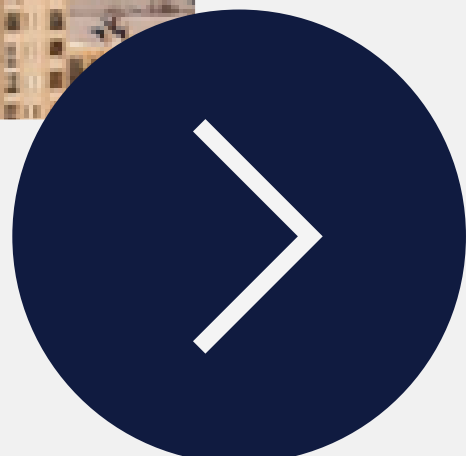


The Problem: Air Pollution



Almost 9 out of 10 people who live in urban areas worldwide are affected by air pollution.

- Urban air pollution is significantly impacted by transport-related emissions, especially from fossil fuel-powered vehicles.
- Many people lack the tools or awareness to make eco-conscious travel decisions.
- Air quality is often overlooked in daily trip planning, despite its serious health implications.



Our Innovative Solution

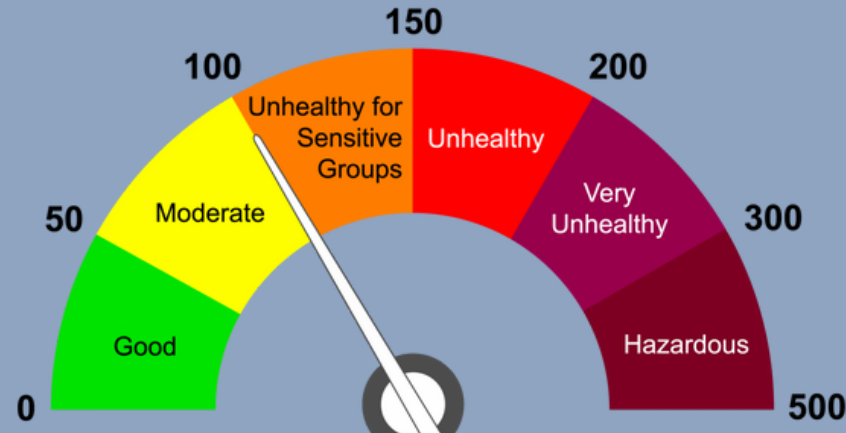


Our website provides multiple features such as...

Multiple Transport Options



Air quality Index and alerts



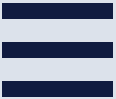
Chatbot



Real Time Environmental Data



Technical solution

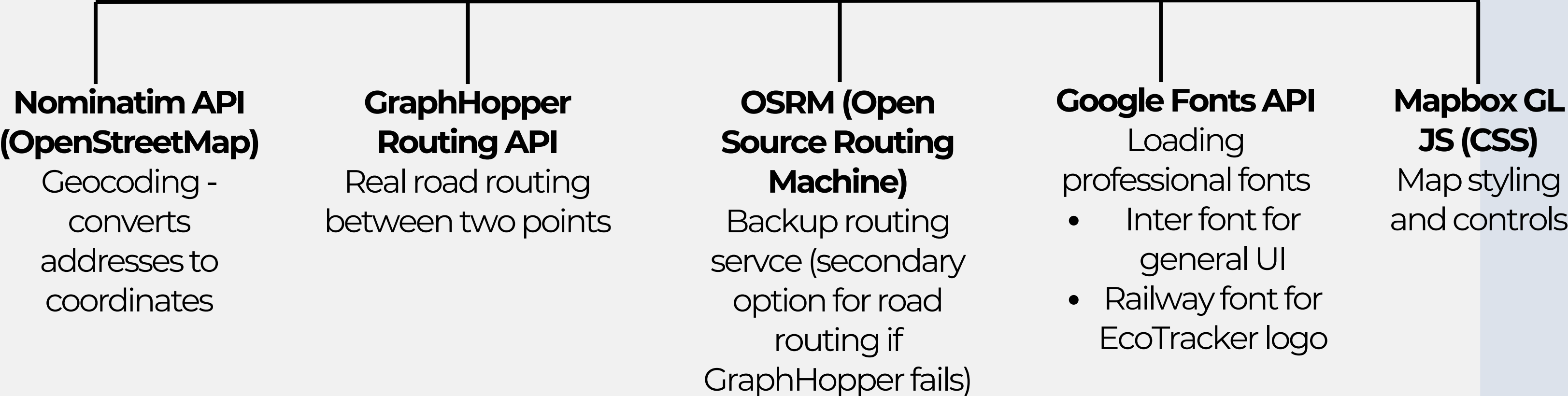


Combining real-time data sources to provide smart, health-focused transport recommendations

- Our coding language was **React**
- **Design** - Twitter bootstrap UI
- **Q developer** to come up with solutions

Simulated Air Quality data

- AQI calculations based on location
- Uses predefined city data with variations



Key Insights From Data

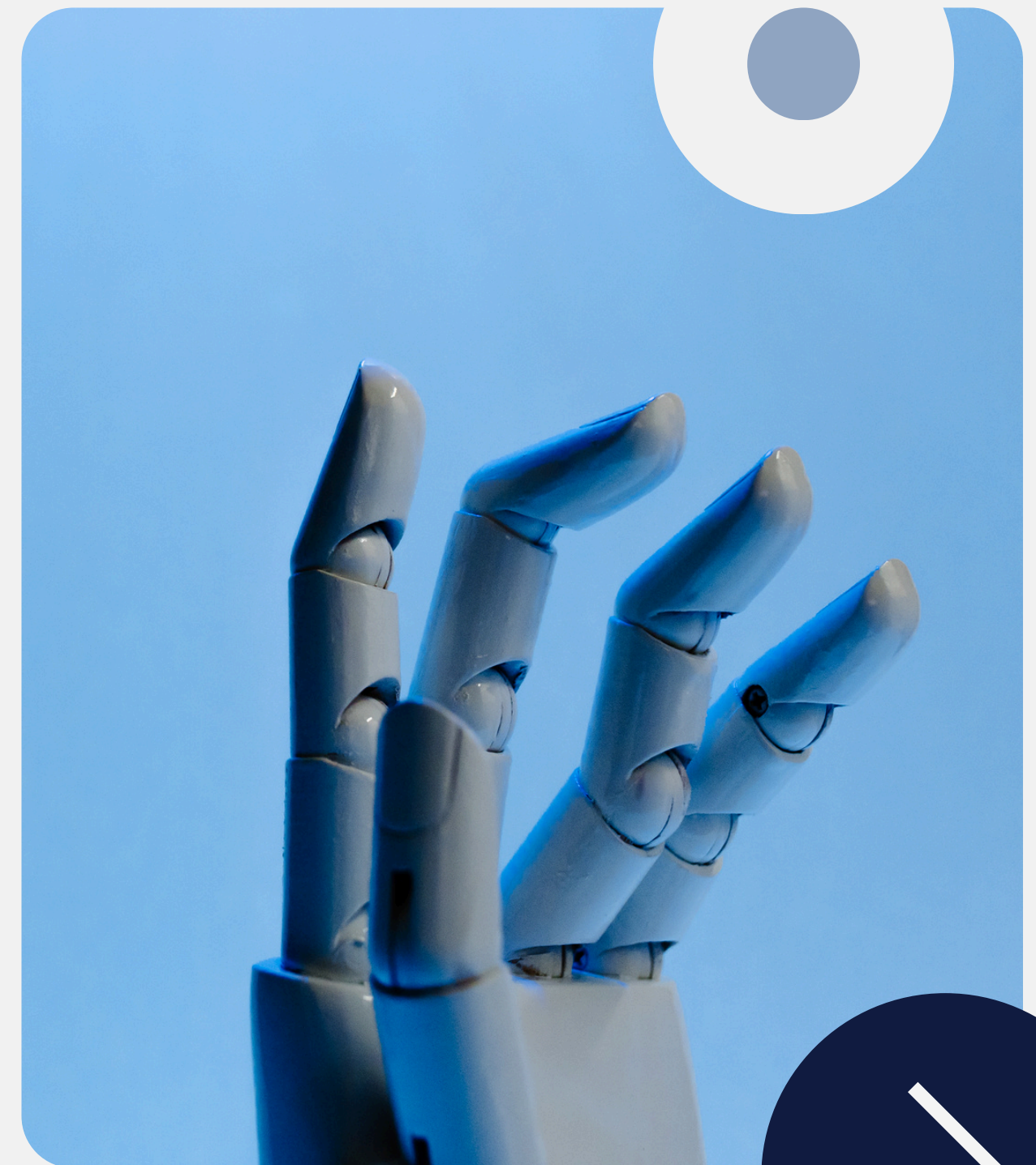
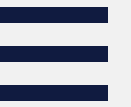
- Transport contributes around 24% of global CO₂ emissions.

Source: International Energy Agency (IEA), 2023

Road vehicles alone account for nearly 75% of this total.

Urban traffic congestion increases pollution exposure by up to 80% during peak hours compared to off-peak times.

Source: World Health Organization (WHO), 2022



Educational Component

- Recommends greener travel (walk, bike, bus, train)
- Shows carbon emissions for each transport mode
- Alerts users when air quality is unsafe
- Offers tips like wearing masks or avoiding peak pollution times
- Chatbot answers fixed questions to support eco learning

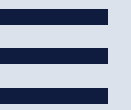
Statistics

From a long-term university study tracking students 5 years after a climate course:

- One course = 3.54 tonnes CO₂ saved per person per year
- 40% of that came from greener transport choices
- 91% believed climate change will seriously affect future generations

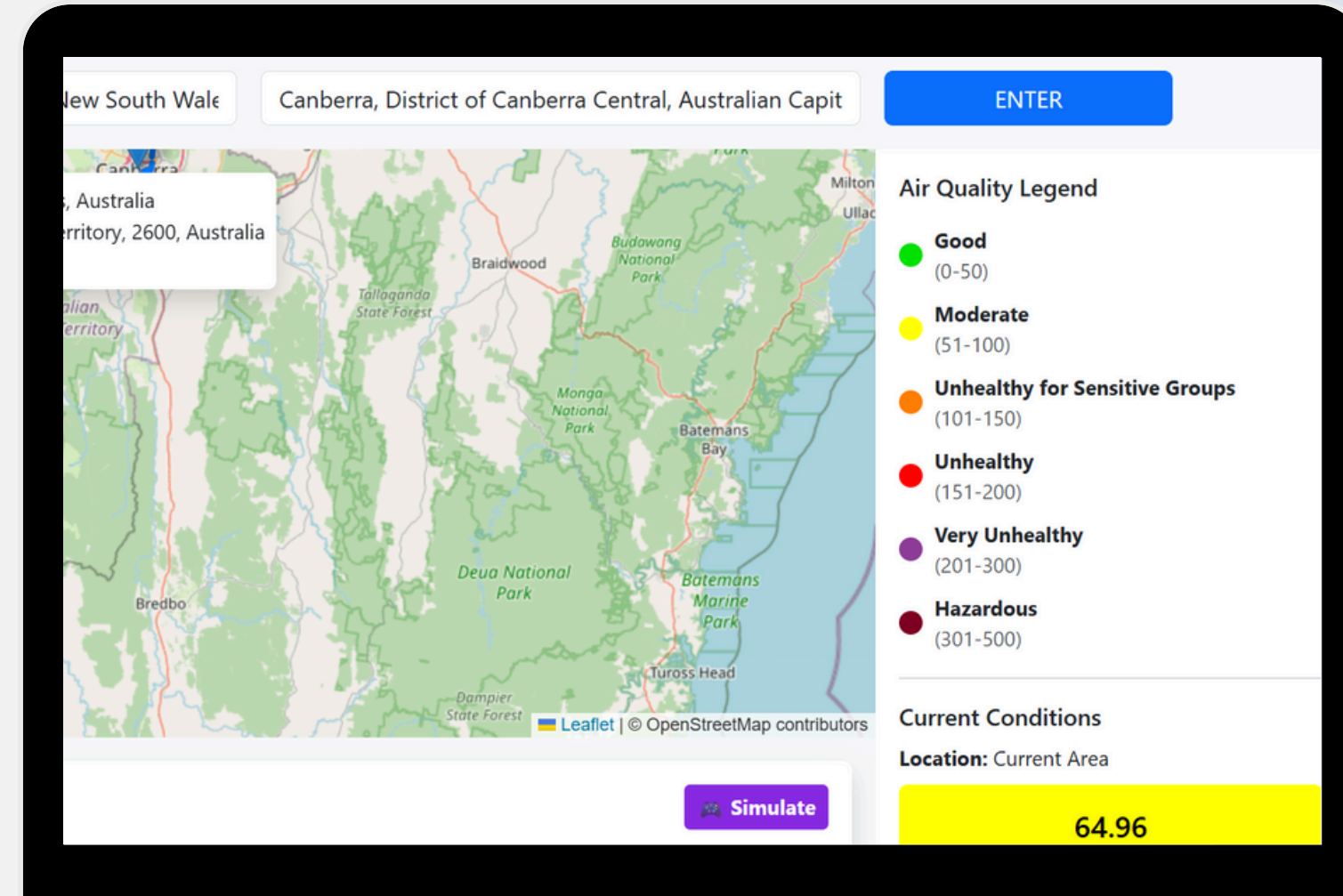
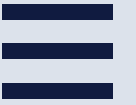
Cordero EC, Centeno D, Todd AM (2020)

The role of climate change education on individual lifetime carbon emissions. PLoS ONE 15(2)



So What ?

- Most people don't realise how much their transport choices contribute to these issues.
- Eco-Tracker makes the environmental impact of travel visible and easy to understand.
- It helps users make better decisions without adding complexity to their routine.



Demo



Q&A

5 MINUTE SESSION





Thank you

