

Oilert

Vehicle Maintenance Tracking

2025 Make-IT-Wright Hackathon | Team Twizzy Tech

Team Members:

Wyatt Sellers

Madison Sellers

Subiksha Vaidhyanathan

Makaela Bennett



What is Oilert?

- Vehicle Maintenance Tracking App
 - Log mileage easily
 - Track oil changes
 - Receive maintenance reminders
 - Version control for your car's service history
 - Helps maintain reliable service records





Problem Statement

Why does this matter?

- Increase vehicle life
 - Reduces life-cycle CO(2) emissions throughout the supply chain [1]
 - Lessen cost of ownership by up to 50% for every four years extended [2]
- Many vehicle owners change oil too early or too late, leading to unnecessary expenses or engine damage [3]
- Traditional maintenance tracking is manual and unreliable
- No secure, verifiable way to prove a car's maintenance history when selling it

Solution

Key Features

- Add & track multiple vehicles
- Log gas fill-ups & calculate mpg
- Set reminders for maintenance (oil changes, tire rotations, etc)
- View detailed maintenance history



Layout of Oilert -

1. Loading

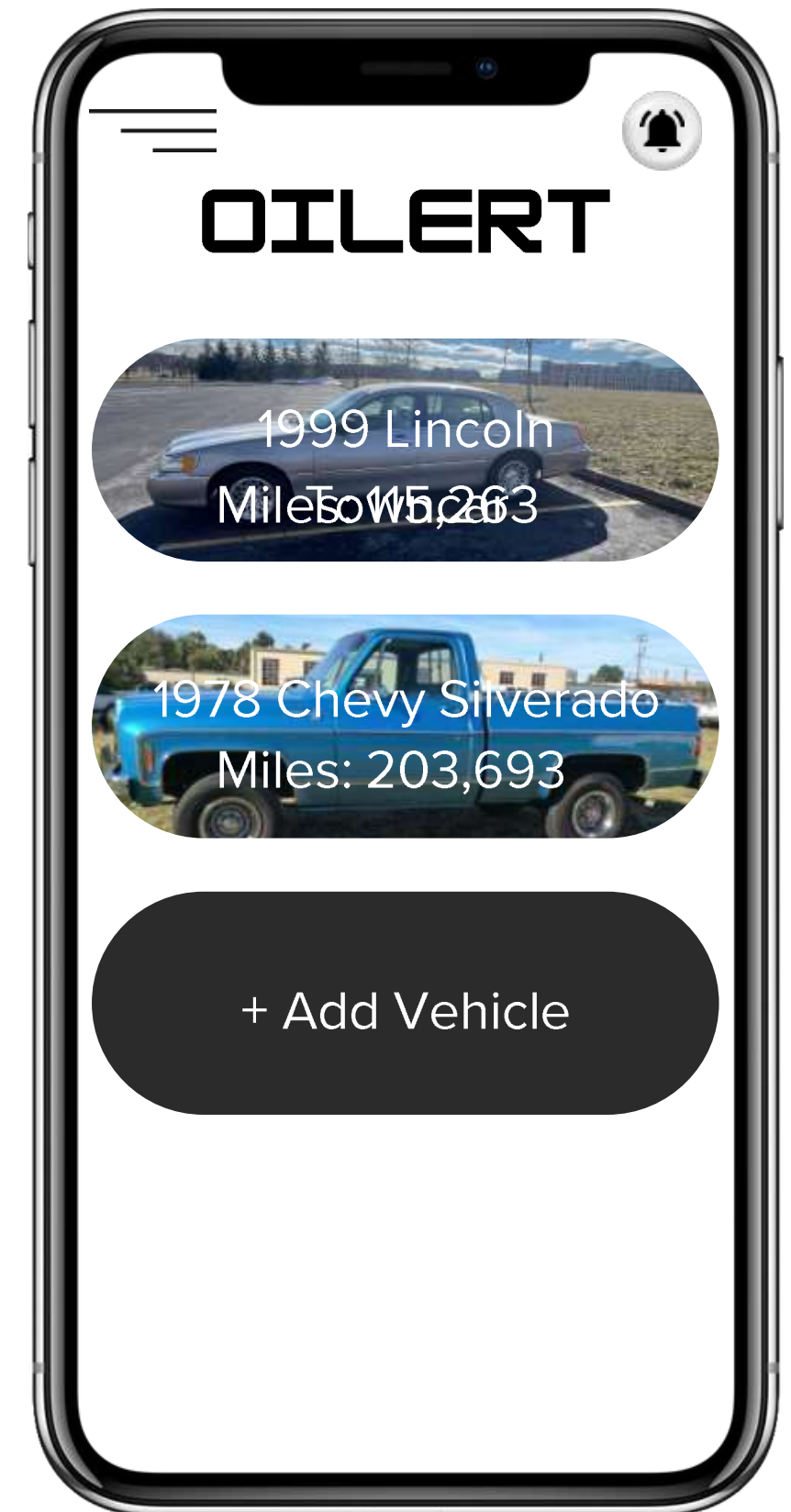
- Create an account
- Account login



The loading screen features the 'TWIZZY TECH' logo in a bold, black, sans-serif font. Below the logo is a 'Logi' label above a horizontal line. Underneath the line are two input fields: 'Username:' and 'Password:'. At the bottom is a dark blue rounded rectangle button with the text 'Create' in white.

2. Main

- Settings: Menu
 - Account
 - Language
 - Dark/Light Mode
- Notifications
- Vehicle Profiles: Dropdown



The main screen displays the 'OILERT' logo at the top. Below the logo are two vehicle profile cards. The first card shows a silver car with the text '1999 Lincoln' and 'Miles: 15,263'. The second card shows a blue truck with the text '1978 Chevy Silverado' and 'Miles: 203,693'. At the bottom is a dark blue rounded rectangle button with the text '+ Add Vehicle' in white.

Layout of Oilert -

3. Add Vehicle

Menu

+ Add Photo

Miles

:

Oil

Changed:

Transmission Fluid

+

Coolant

+

Submi

4. Vehicle Profile

OILERT

1999 Lincoln

+ Towncar Filled Fuel

+ Tank Changed Oil

1978 Chevy Silverado

Miles: 203,693

+ Add Vehicle

Layout of Oilert -

5. Filled Fuel Tank

Menu



1999 Lincoln

Miles

Gas

Date: m/d/y

Submi

Challenges & Lessons

Challenges We Faced:

- Time constraints: building a functional app in 24 hours was difficult
- Initial miscommunication on project scope
- Debugging and implementing database interactions
- Wyatt got sick

What We Learned:

- Clear communication is key in team projects
- Breaking down tasks makes development more manageable
- A well-planned architecture is crucial for future scalability
- Wyatt should stay healthy

Future Development

Where We Want to Take Oilert:

- Expanded Maintenance Tracking
 - Monitor oil changes, filter replacements, coolant levels, and more
 - Based on real usage data and manufacturer guidelines
- Predictive Service Alerts
 - Use historical data to anticipate maintenance needs
 - Similar to calculating miles per gallon
- Cloud Integration
 - Multi-device access
 - Automatic data backup
- Industry Adoption
 - Scalable solution for automotive businesses and fleet management



Conclusion and Q&A

Recap:

- Oilert solves real-world vehicle maintenance tracking issues
- We built a strong foundation for future development
- With more time, we aim to turn this into a fully functional, industry-grade app

Any questions?



Sources

1. <https://www.sciencedirect.com/science/article/abs/pii/S0959652618330683>
2. <https://deepblue.lib.umich.edu/bitstream/handle/2027.42/192062/CSS04-01.pdf?sequence=1&isAllowed=y>
3. <https://www.firestonecompleteautocare.com/blog/oil-change/what-happens-if-you-dont-change-your-oil/>