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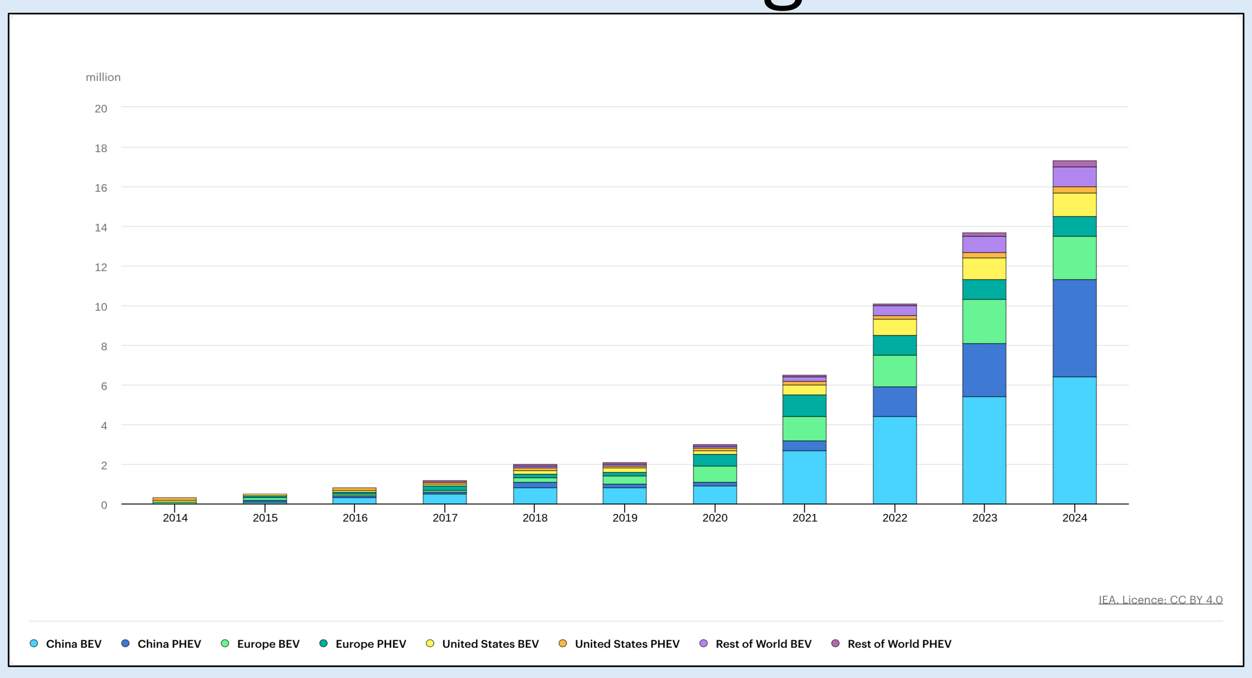
Designing for Simplicity: Lessons from a Minimalist EV Charging App

Toni Garcês, João Pedro Taveira, Larissa Montefusco, Cindy P. Guzman, Lucas Pereira, Hugo Morais

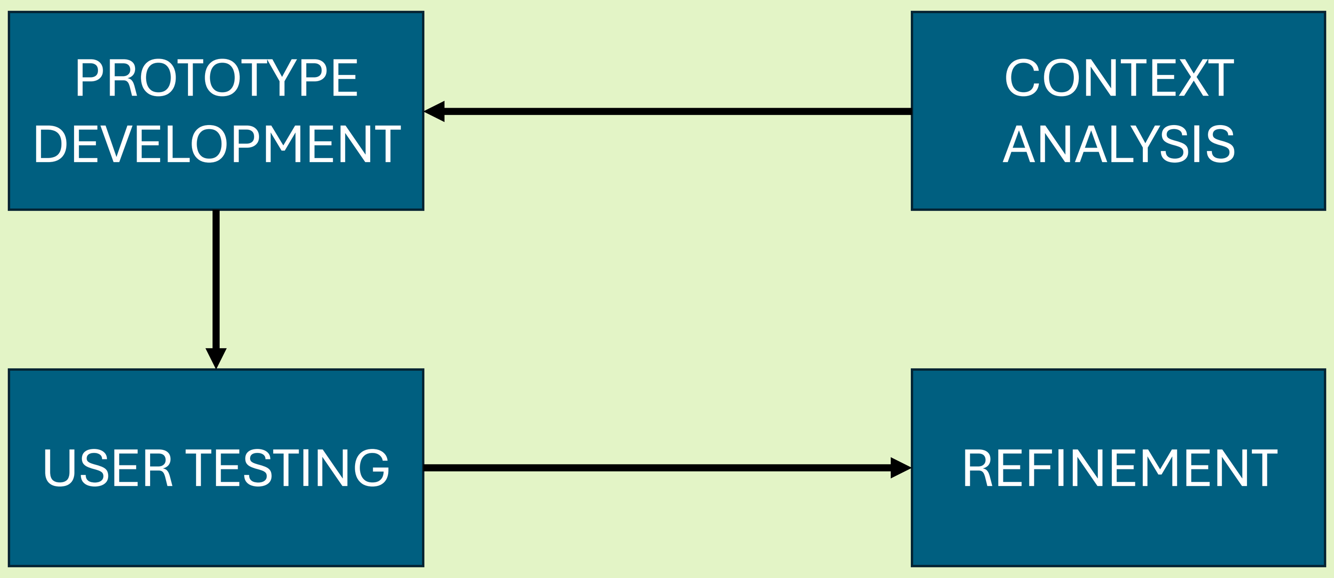
INESC-ID, Instituto Superior Técnico, ITI/LARSyS, University of Madeira

1. Introduction

- EV adoption is **accelerating**, over 17 million sold in 2024 and 20 million expected in 2025.
- This growth calls for **simple, intuitive tools** to manage everyday charging needs [2].
- **How to balance** real user needs with research environment goals?



2. Methodology

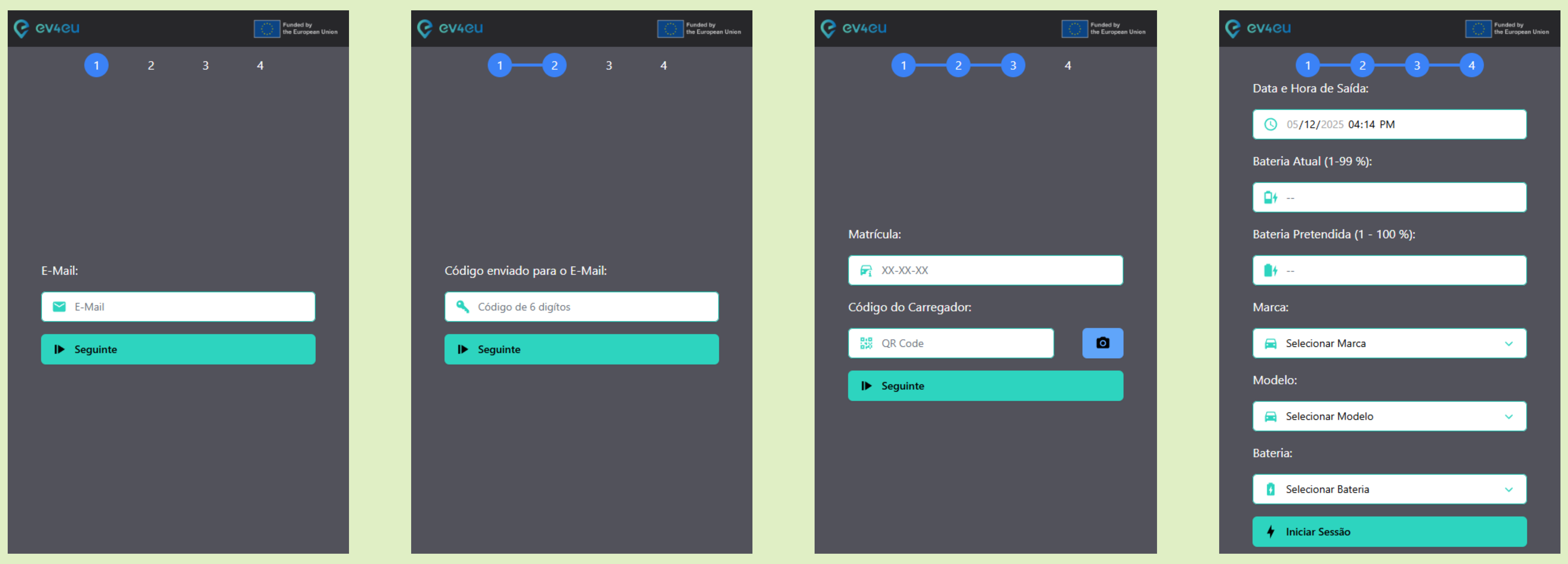


- **Iterative development** combining prototyping, context analysis, testing, and refinement
- Evaluated through **think-aloud sessions** involving diverse user profiles
- Focused on **interface simplicity** while integrating discussing essential features

3. Results

"Do I need to fill this every time?" – User A

1st Iteration



2nd Iteration

"The graph makes charging easy to follow." – User A

- User tests revealed **repetitive flows**, unclear displays, and missing personalization.
- Feedback led to adding an account system, a tool to manage vehicles and clearer visual during charging sessions.
- **Small sample of tests, big impact,** early feedback resolved almost all the usability issues.

4. Conclusions

✓ Minimalism ≠ less features

✓ Continuous **user engagement** is critical

✓ Small tests can yield **high-impact insights**

5. References & Contact

[1] IEA, Global EV Outlook 2025

[2] Stillwater et al., Mobile App Support for EV Drivers (HCI Int. 2013)

Contact: 2081620@student.uma.pt

6. Acknowledgements

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