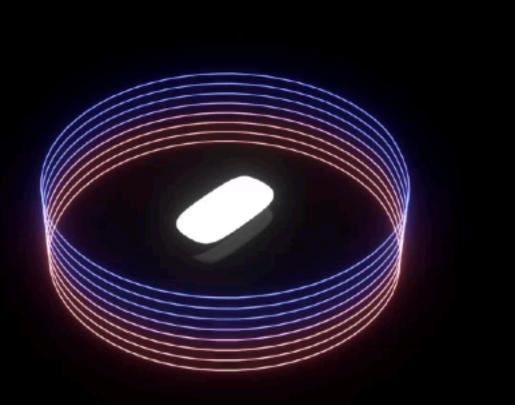
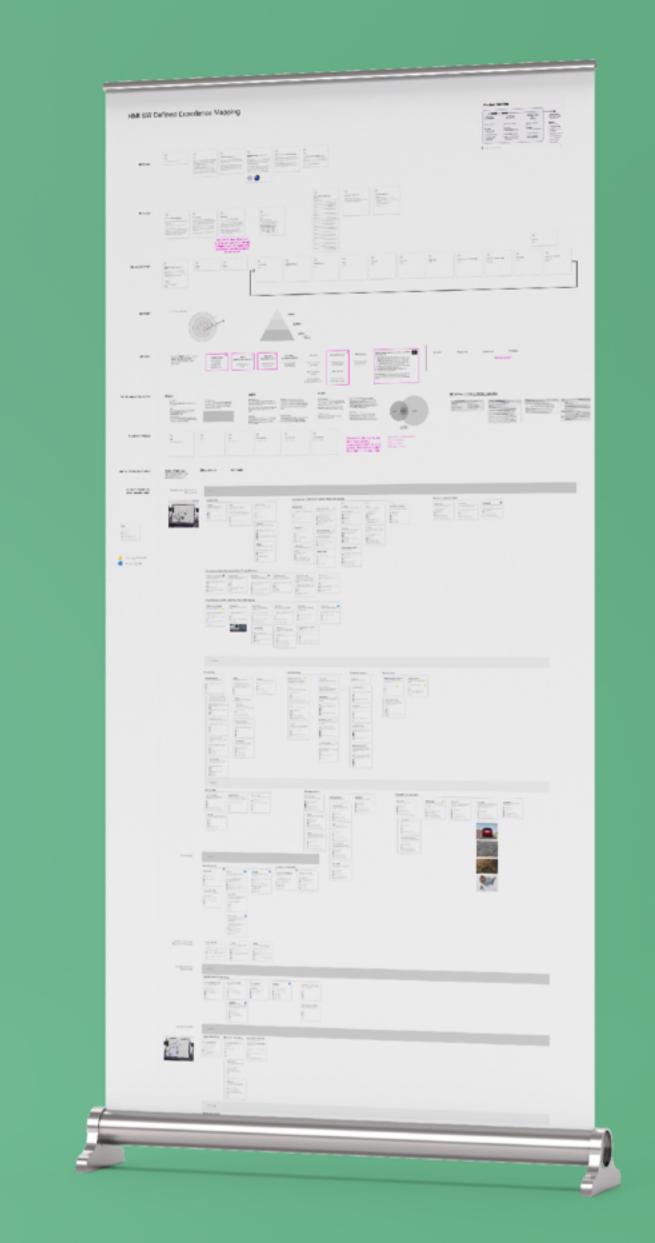
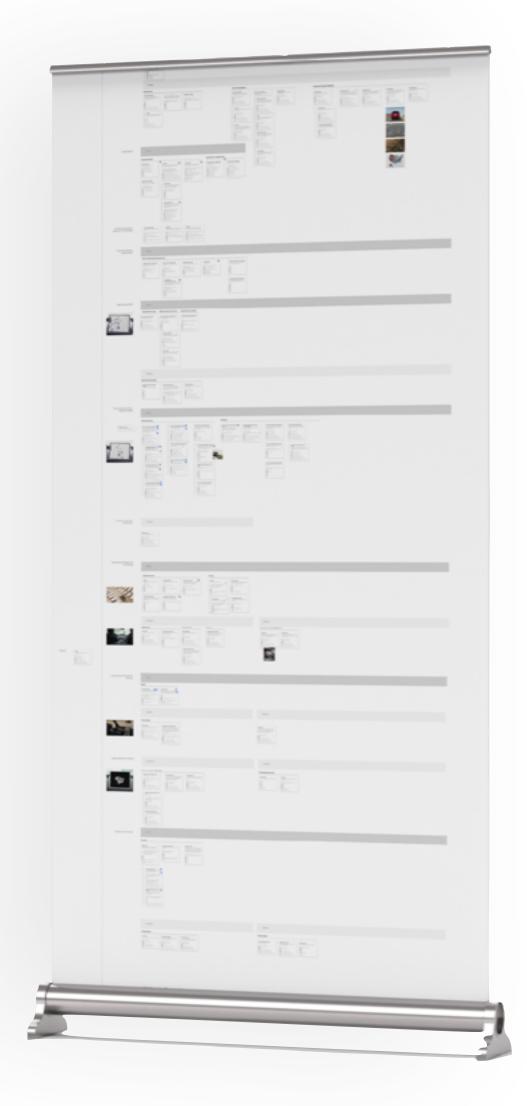
[] +1 415 683 6861 Mario Delgado Elysian $\bowtie \underline{m@mario.design}$

Appendix: Case Studies | Ghost HMI











Design elevates Ghost's system beyond mere utility, crafting experiences that feel profoundly human. Every expression, movement, and interaction should convey authenticity, creating a seamless blend of emotional depth and technical precision.

Potential lane change

- 🗸 Blinker Light
- 🗱 Blinker Light

Suggestion merge/lane change



Without a route or set navigation Ghost will provide suggestions for direction based on past routes.

- · Lane change request message
- * Drive path options shown on screen
 - · User selects drive path
- 4 Instructional request low
- ⊕ Low Seat/body haptics tapped
- ♣ Vehicle follows selected drive path
- 🗸 Blinker Light
- 🗱 Blinker Light

atc.

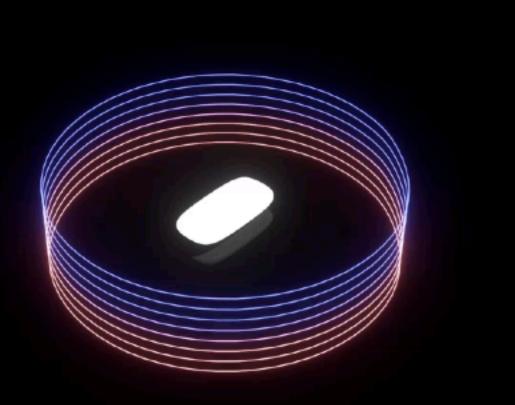
r or

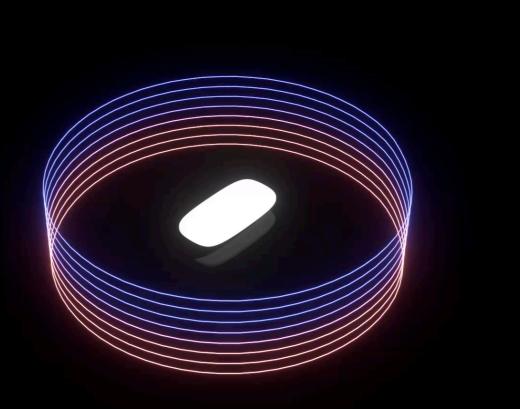
Lane Change Complete

Lane change completed

to (Steady road viz:







Safety-Critical User Journeys

To create a detailed user journey, I led indepth team discussions to identify and analyze the many touch points that shape the driving experience.

By breaking the journey into stages—such as discovery, engagement, and post-use—we mapped key actions, emotions, and pain points, ensuring a holistic understanding of user needs.

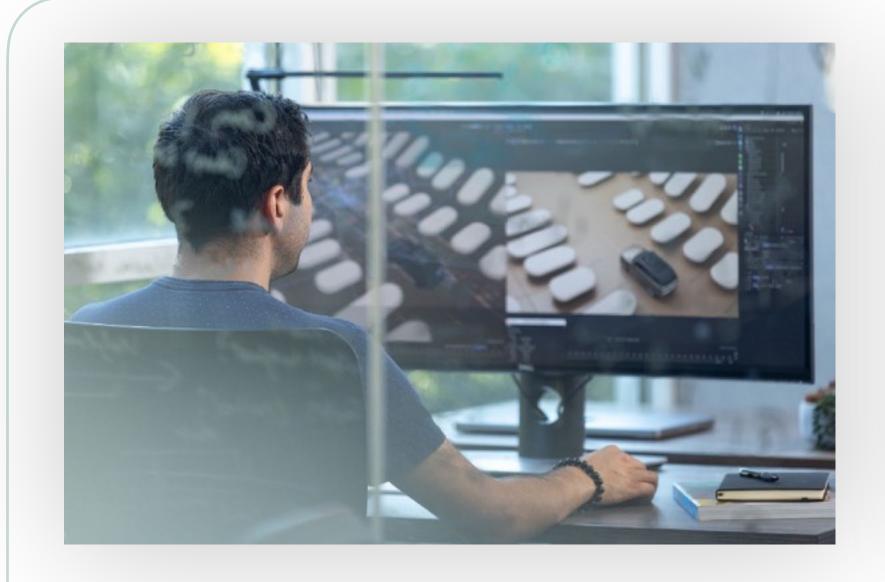
Each touchpoint was aligned with our core values of safety and comfort. We examined how users interact with safety features and how design elements like ergonomic seating or intuitive controls enhance their experience.

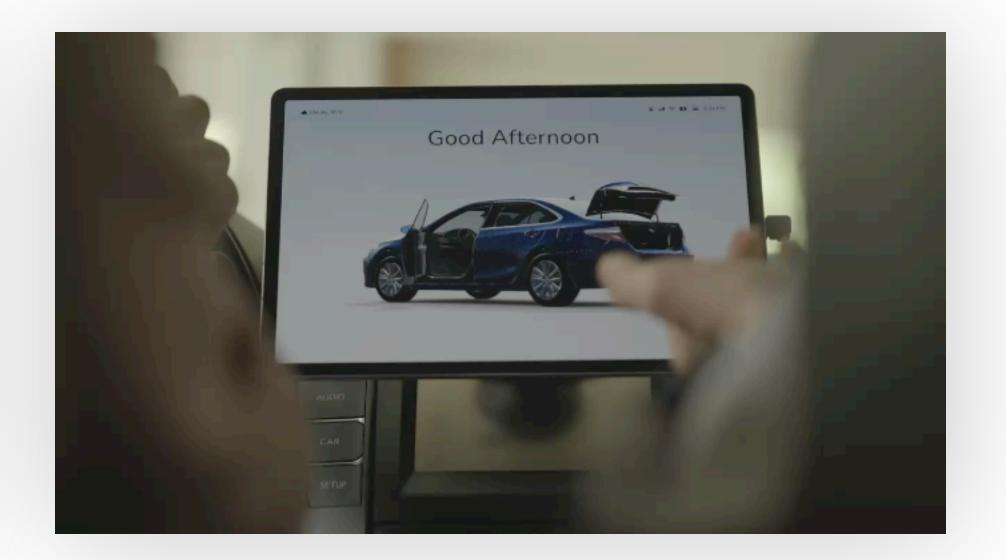
This approach ensured actionable insights while fostering a unified commitment to delivering an exceptional driving experience.



A Design Workflow inspired by Hollywood and Video Games

When the team set out to build a 3D-native operating system, we adopted cutting-edge tools like Cinema 4D, Houdini, and Unity3D to elevate our skills and align with workflows inspired by Hollywood and video games. Learning Unity3D allowed our designer-engineers to collaborate closely with developers, bridging the gap between design and code for faster iteration. This approach enabled us to release new features weekly, leveraging real-time rendering and procedural workflows to create a seamless, innovative user experience.







Design



Prototyping





Implementation and Experimentation

