Byeongmin Kim 2026

Portfolio

Byeongmin Kim

Industrial Designer

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Education

College for Creative Studies in Transportation Design — FALL 2022, Detroit, MI
Bachelor of Fine Arts, graduated in May, 2025

Pukyong National University in Industrial Design — 2019, Busan, Korea

Kyungsung University in Economics and Logistics — 2017 - 2018 Busan, Korea

Projects

Nissan Zen-Mobility — 2026, Seoul, Korea
A mobile Zen Garden for busy office workers in 2050 Tokyo, designed to provide moments of rest and recovery on the move. Circadian-rhythm-based lighting, sound, massage, and other restorative features create a calming environment that enhances comfort and supports brief moments of relaxation and meditation during transit.

GM Dream Racer — 2025, Detroit, MI
This is GM Sponsored Studio's 2040 performance car project. It's a next-generation racing concept designed for a future race track equipped with wireless charging and a rail system. The car allows drivers to experience both GT mode and Midship mode simultaneously, and enhances the driving excitement with a virtual booster effect.

Jeep Huntington — 2025, Detroit, MI
This project is designed for younger couples who want to enjoy sunbathing and surfing anytime, without the need for preparation. The vehicle features a flexible roof system with rails-it functions as a roof while driving and transforms into a comfortable sunbed at the beach. It also includes a lightweight surfboard that doubles as a door in driving mode. This Jeep is always ready for an adventure under the sun, whenever you are.

Alfa romeo Hydrogenic — 2024, Detroit, MI
This is the 2040 Alfa Romeo three-seater performance vehicle powered by hydrogen and solar energy. It features a compact battery and an integrated solar panel, contributing to reduced weight and enhancing the exotic driving experience.

Bentley Aurora — 2023, Detroit, MI
A 2045 electric boat project inspired by the aurora—an exclusive phenomenon limited by time and place. Its flowing, organic forms are expressed in both exterior and interior, enhancing a sense of refined luxury.

Skills

2D (Visual Communication)

- Sketching / Marker Rendering / Adobe Photoshop / Adove Illustrator / Adobe Premier

3D (Modeling)

- Autodesk Alias (Sub D) / Blender / Unreal / Clay Modeling

Work Experience

- General Motors Design Sponsored Studio — 2025, Detroit, MI
- American Chemistry Council Sponsored Clay modeling Studio — 2024, Detroit, MI
- Republic of Korea Army Truck and Bus Driver & Car Maintenance Soldier — 2015 - 2016, Gyeryong, Korea

Language

- Korean / English / German

Interests

-Listening Music / Traveling / Driving / Traveling / Communication

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Zen - Mobility

2050 A mobile Zen garden for urban professionals



A Curating calm' in motion







A mobile Zen garden for busy urban professionals that transforms transit time into a restorative and mindful experience.

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Zen Mobility

The hardships of city workers



Overcrowded



Sensory Overload



Social Stress



Activity-Rest Imbalance

■Problem & Solution



Name : Ayaka (28)
Location : Tokyo
Job : Marketing Manager
Problem : She experiences high levels of stress driven by excessive workload, lack of adequate rest, and overcrowded commuting environments.

Self-driving Mobility + UX/UI-driven Circadian balance + Fresh Air

Reducing stress and enhancing wellness through circadian rhythm balance.

NISSAN

Zen Mobility

The UX/UI system provides users with brief moments of rest and restores harmony between body and environment during transit.

■User Journey Map



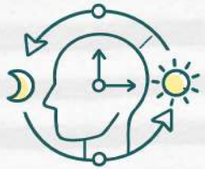
"My energy feels steady throughout the day!!"







1. Way to Work
<Cool Light, High intensity, Warm Tea>



The Circadian Harmony [WA]

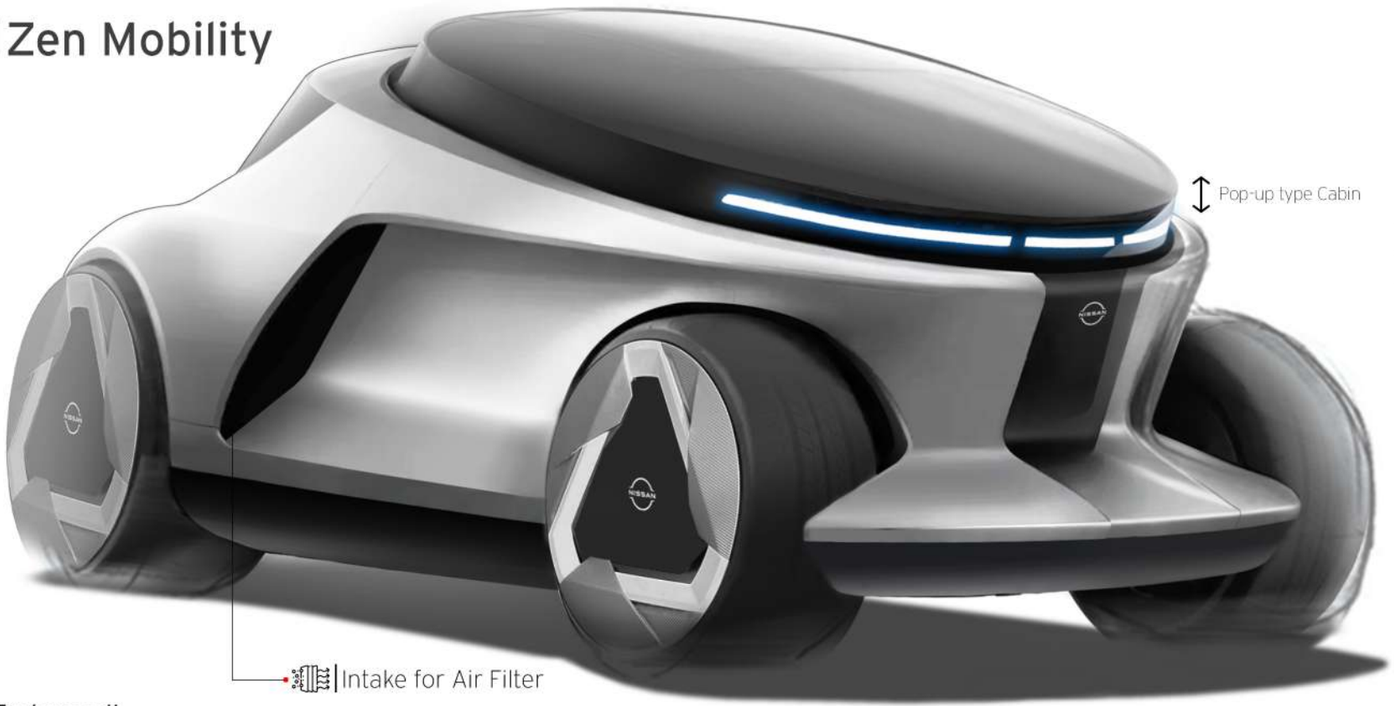


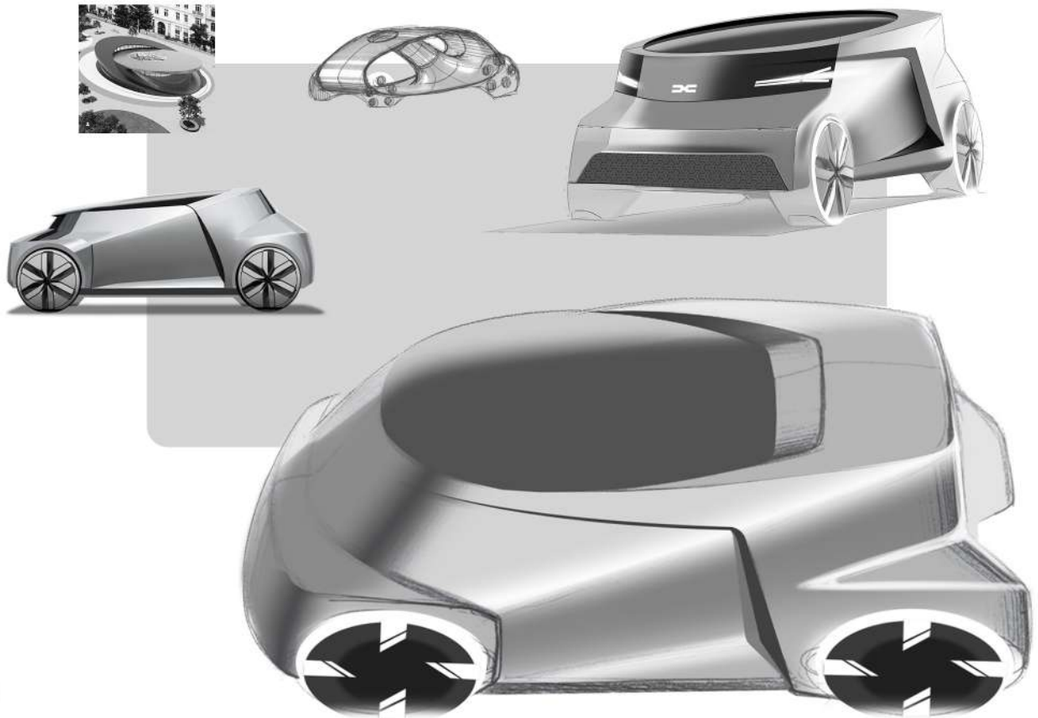
3. Way to home
<Warm Light, Massage, Low intensity>



2. Way to Busness Trip
<Noise Canceling, Meditation>

Zen Mobility

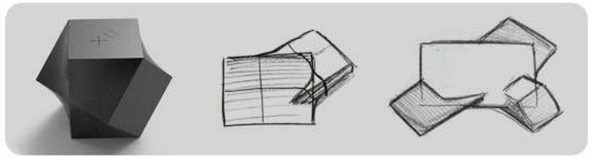


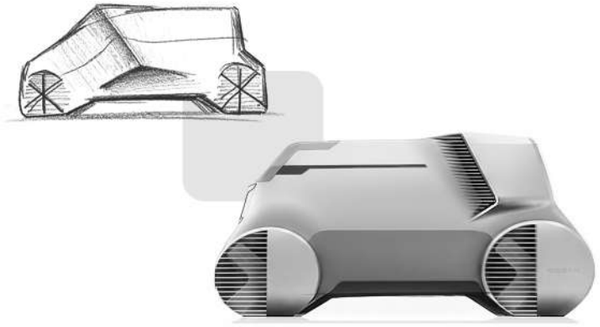


'Embraced'

Translating the embracing language of architecture into automotive form, the vehicle balances coziness with dynamic expression.

Zen Mobility





'Oblique Polyform'

Shaped by the fusion of two cuboids, the vehicle evokes moving architecture, naturally blending into the urban landscape.

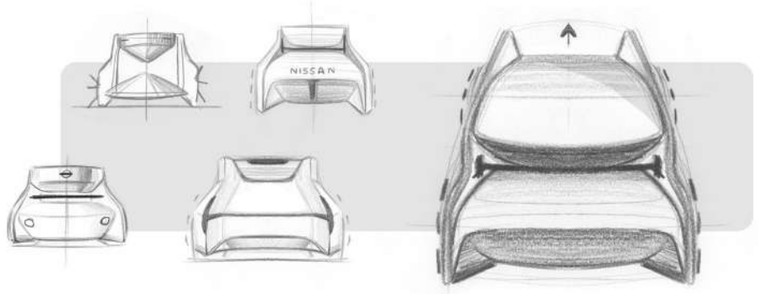




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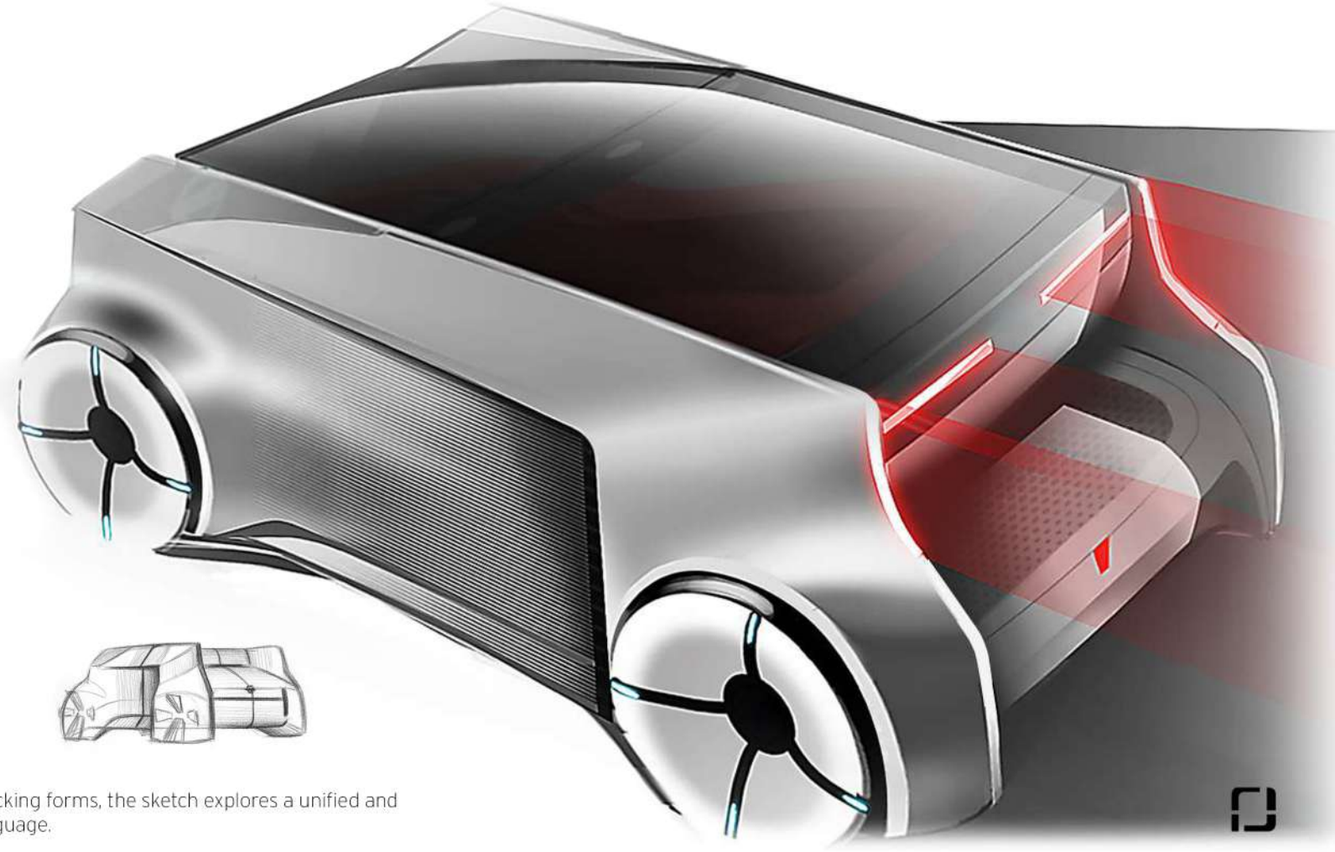
Zen Mobility

■Direction C









'Interlocked'

Inspired by interlocking forms, the sketch explores a unified and cohesive body language.

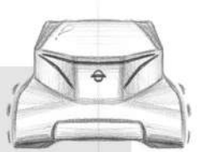
Zen Mobility

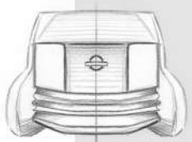


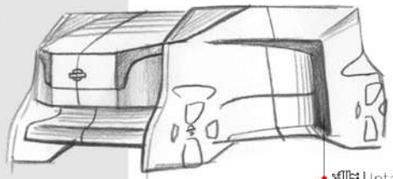
'Interlocked'

A futuristic approach that fuses the original inspiration with a sleek, device-like aesthetic.

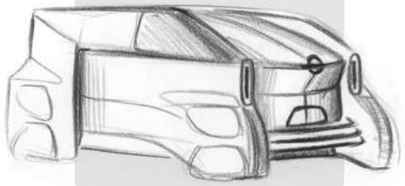


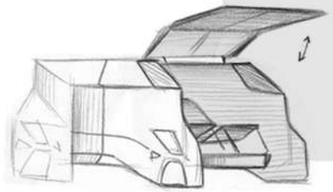






Intake for Air Filter





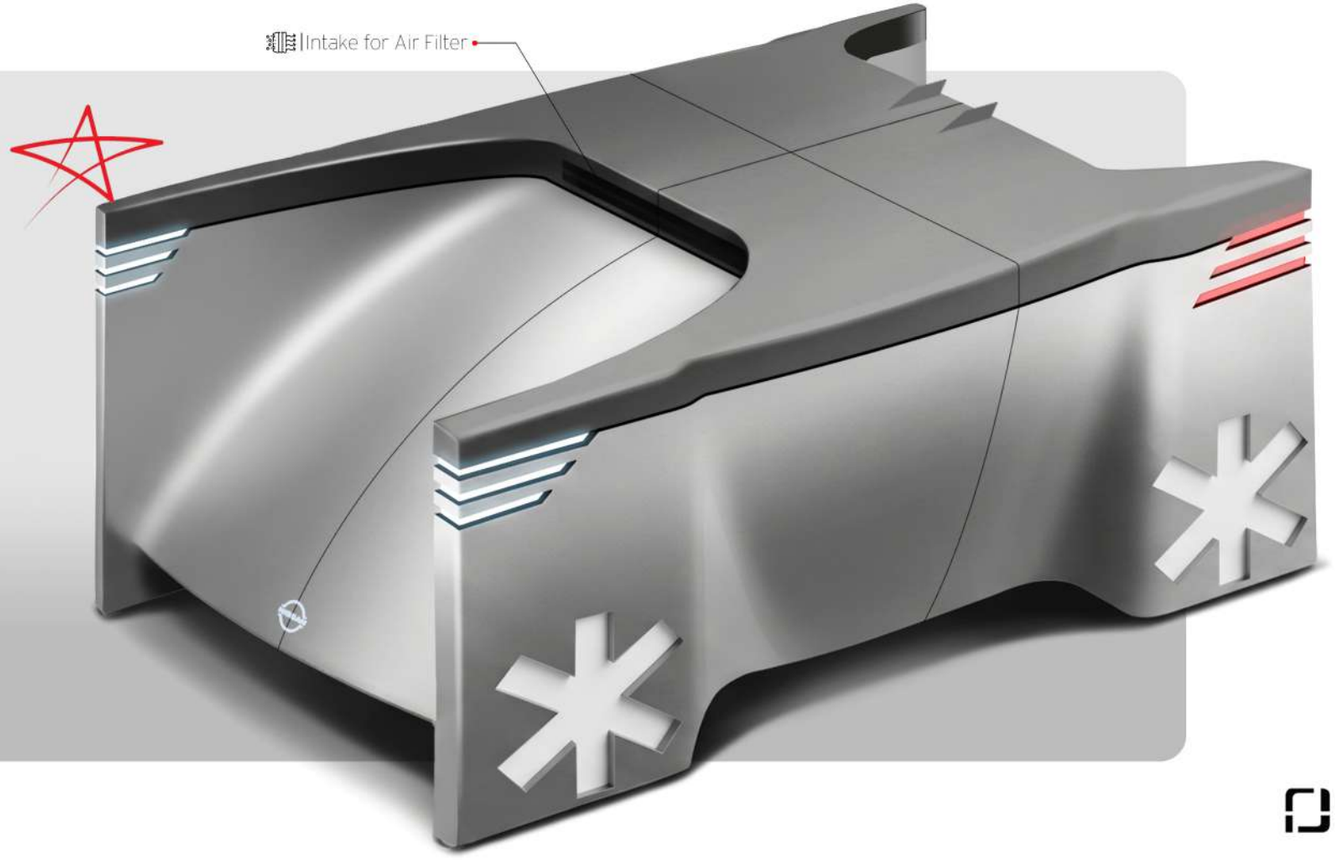


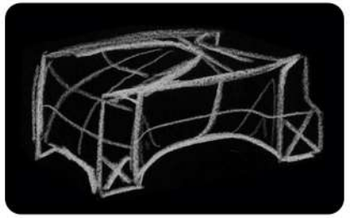
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Zen Mobility

Direction C - Key Sketch









'Japanese Minimalism'

Preserving the essence of the inspiration, the design accentuates its inherent qualities through a simple and sleek form rooted in Japanese minimalism.

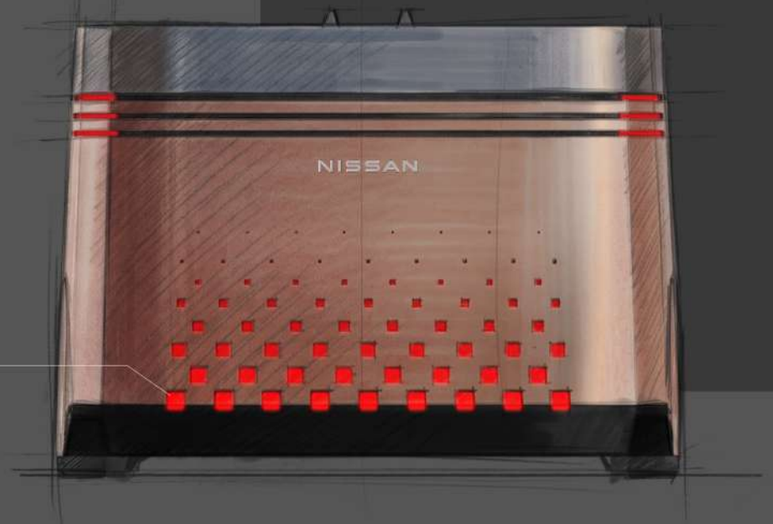
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Zen Mobility

Detail Exploration

'Pixel Gradient'

Gradient pixel patterns on the rear lamps and wheel covers create a distinctive expression of motion.



1. Tail Ramp Graphic

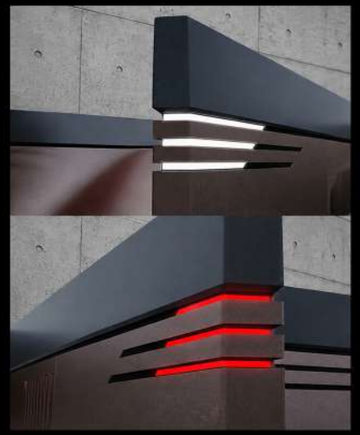


2. Wheel Graphic

Zen Mobility

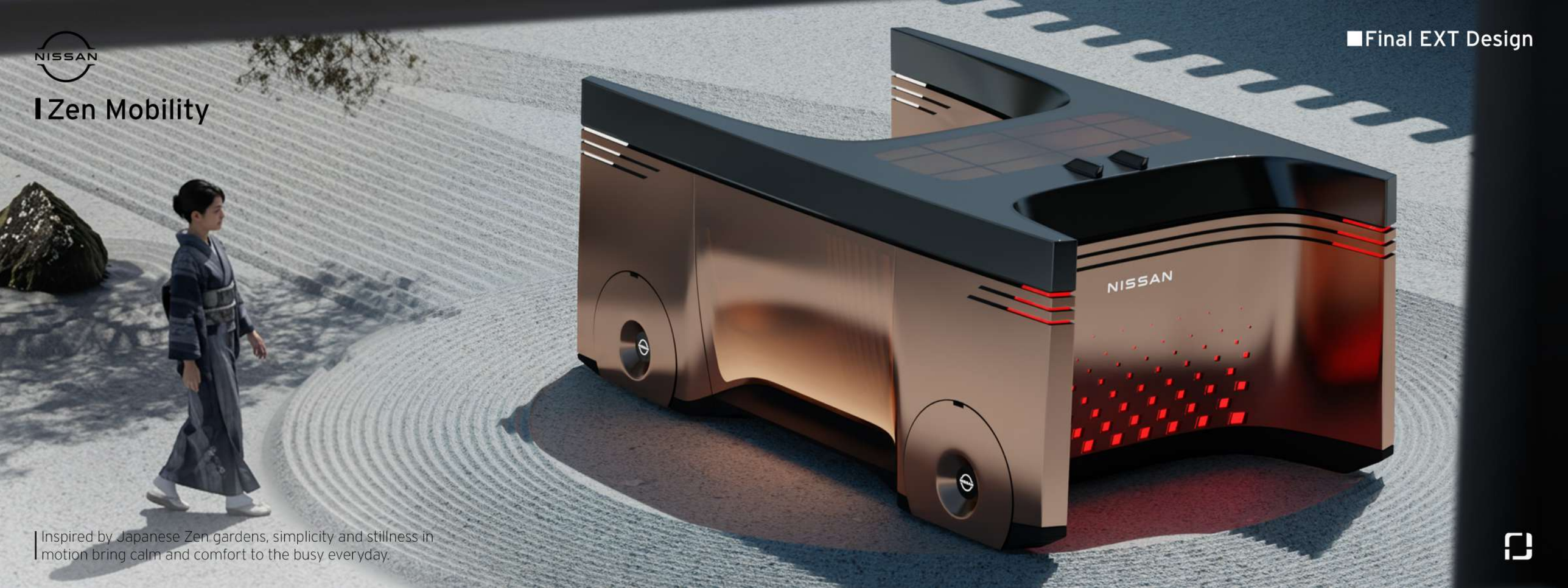


Inspired by Zen garden texture and layered architectural form.



Intake for Air Filter

Final EXT Design


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Zen Mobility
Final EXT Design
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Inspired by Japanese Zen gardens, simplicity and stillness in motion bring calm and comfort to the busy everyday.

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Zen Mobility

A specialized air filtration system delivers fresh, clean air, providing a refreshing and comfortable experience amid the polluted urban environment.

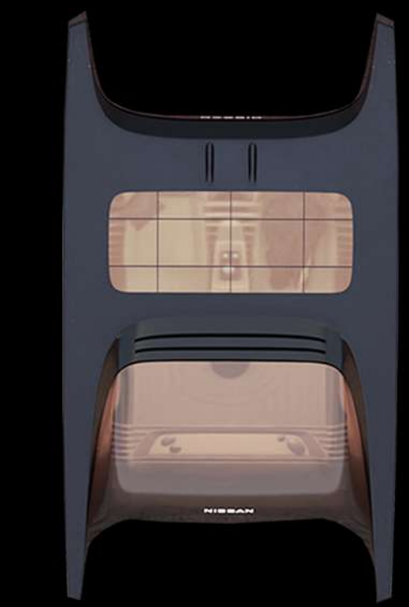
■Final EXT Design





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Zen Mobility







Veiled Presence
Blurred Silhouette,
retain privacy, preserve calm.

The features of 'Shoji screen'



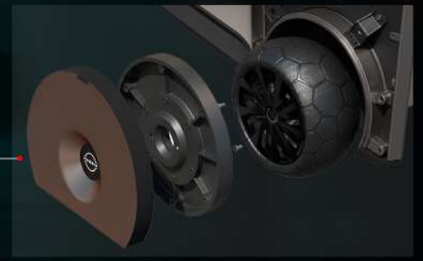
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Zen Mobility

Final EXT Design

A 'Moving Stillness'

Concealed wheels create a static impression, emphasizing stability.

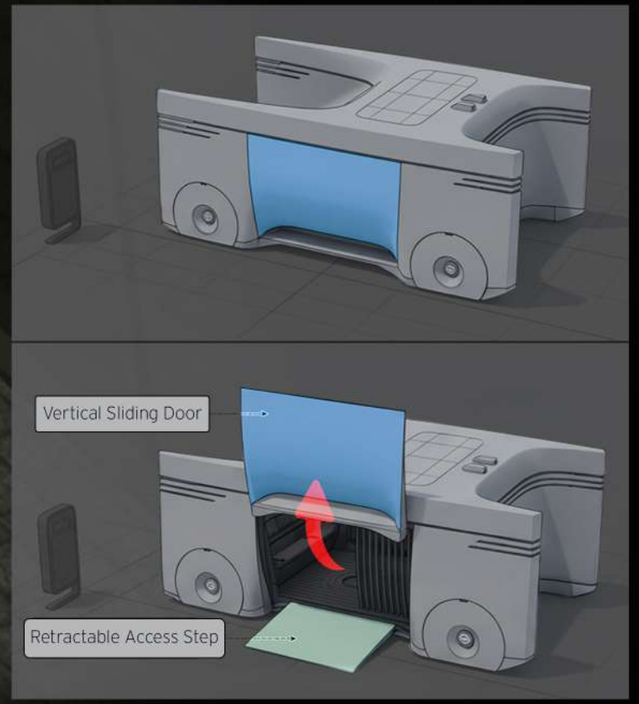


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Zen Mobility

User Scene

The upward-sliding door and retractable step enable effortless entry and exit in busy urban environments.

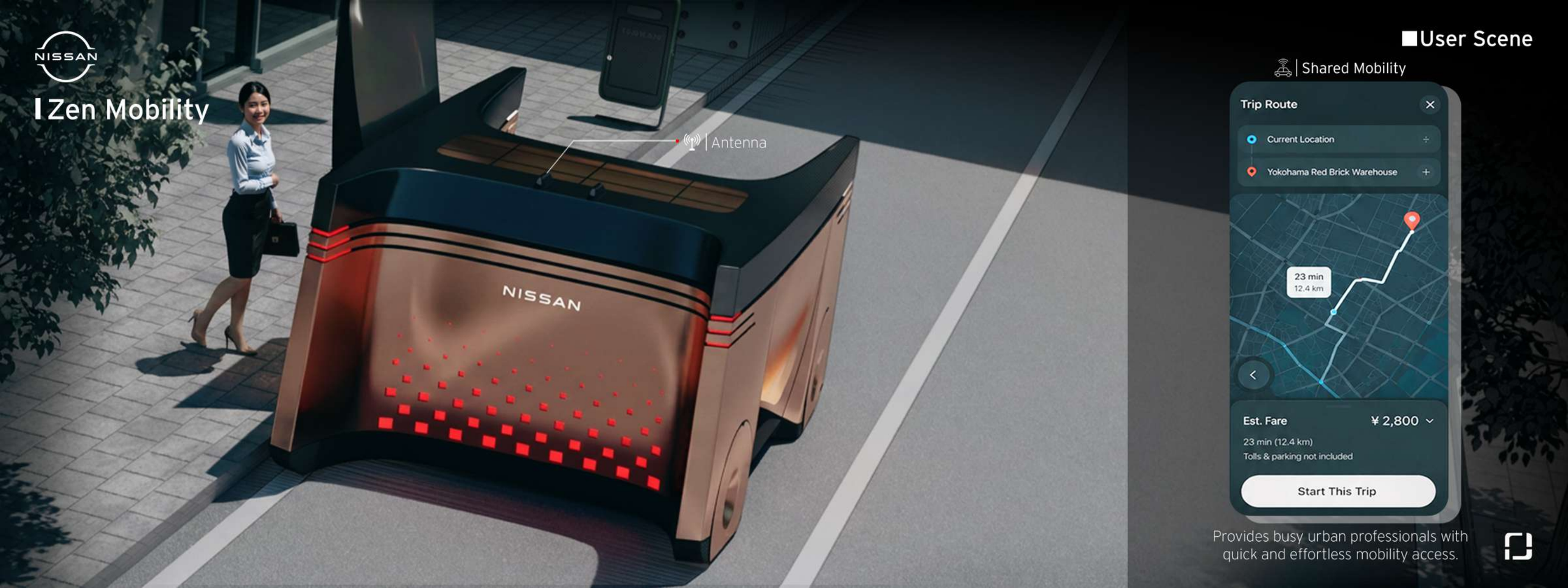


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Zen Mobility

User Scene

Shared Mobility



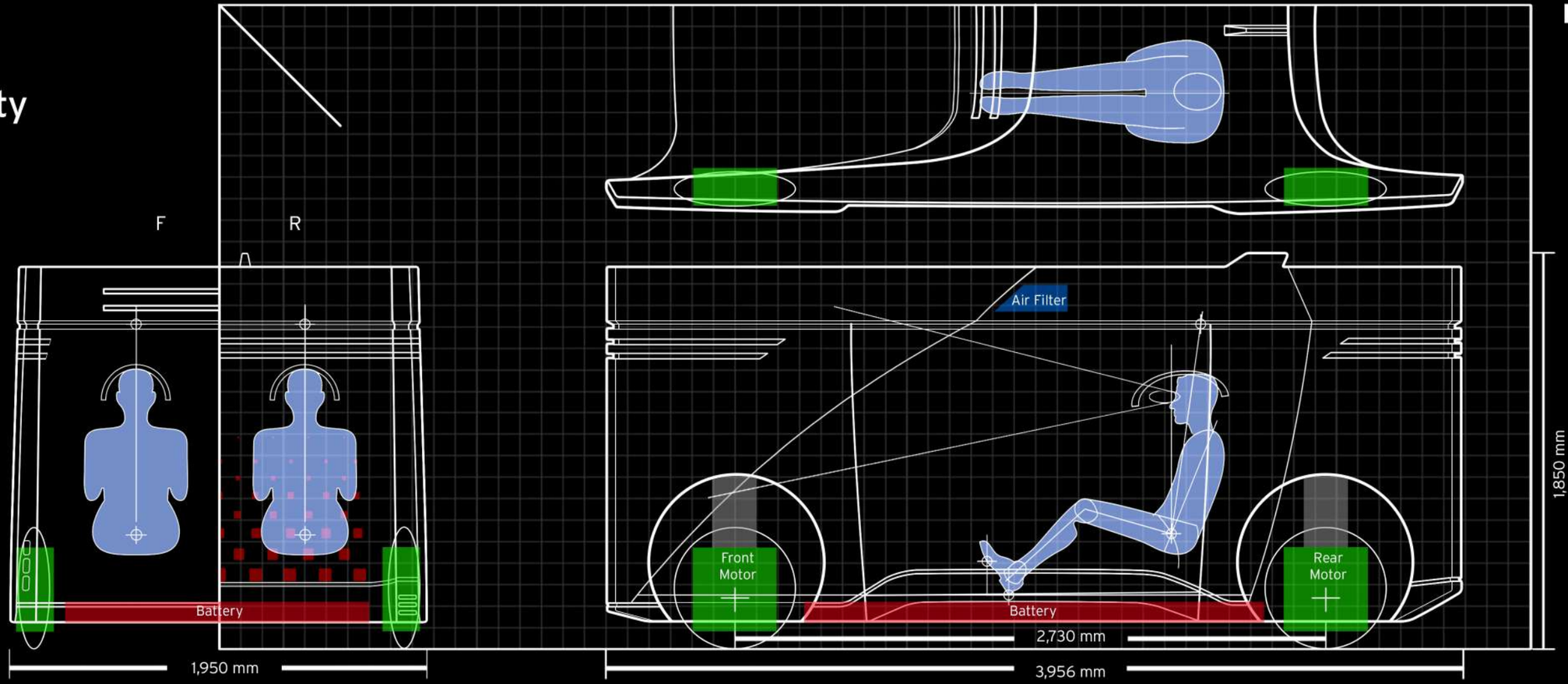
Provides busy urban professionals with quick and effortless mobility access.

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Zen Mobility

O.A.L : 3,956 mm
O.A.W : 1,950 mm
O.A.H : 1,850 mm
W/B : 2,730 mm
Autonomous Level : 5

■Dimension



NISSAN

Zen Mobility



- Serenity
- Japanese Harmony [WA]
- Minimalism
- Warmth
- Privacy



Wooden-Layered Dashboard

■Final INT Design



Zen Mobility

‘Framing the Essential’



Diffused light

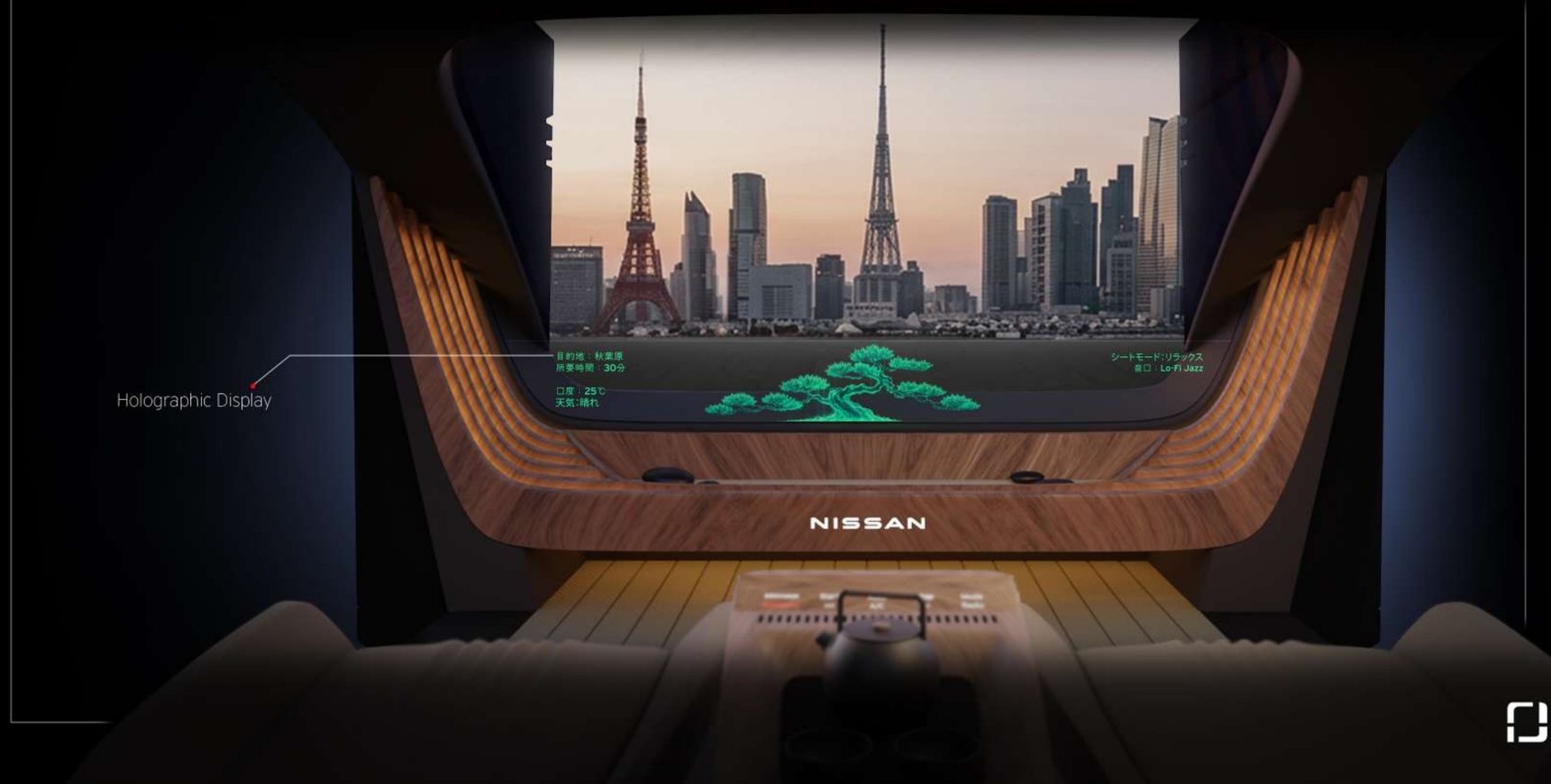
Framing

Selective visivility

Selective revelation encourages a restful state by directing attention away from distractions and toward moments of calm.

The ‘Shoji Windshield’

Holographic Display



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Zen Mobility




- **Morning** > Gentle awakening with High Intensity




- **Lunch** > A brief meditation with Noise Canceling




- **Evening** > Deep rest & recovery with Warm Lighting

The 'AI biological rythm balancing'





Optimizes lighting, temperature, and ambient conditions according to the body's circadian rhythm for enhanced comfort and relaxation.

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Zen Mobility



'Warm Enclosure'

Inspired by Japanese Zen garden and traditional wooden architecture, a private sanctuary for finding calm within the city.

Final INT Design

2. Vent for Air Conditional & Air Filter

1. Wooden Center console & Main Controller

Zen Mobility

A word of traditional Japanese concept of harmony “Wa,”, the interior design and ergonomic layout are focused on maximizing comfort and relaxation.





‘Ergonomic Comfort’

Warm linen and integrated massage create a soothing sense of comfort.

Functions




NISSAN
Enjoy a moment of stillness in your
moving Zen Garden.

general motors | Dream Racer

2040 Shared track racing car



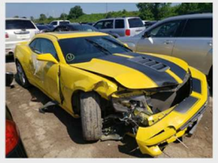
Dream Racer



Name : Lucas
Age : 34
Income : $ 200.000 / Year
Location: San Jose, California, U.S
Wants :
Lucas is a software developer who spends most of his weekdays in the office. He is now trying to balance his work and personal life.

Customer's Problem : Lucas recently became interested in car racing and wants to experience it, but he's hesitant due to strict traffic laws, limited driving skills, and the high cost of vehicles and maintenance.









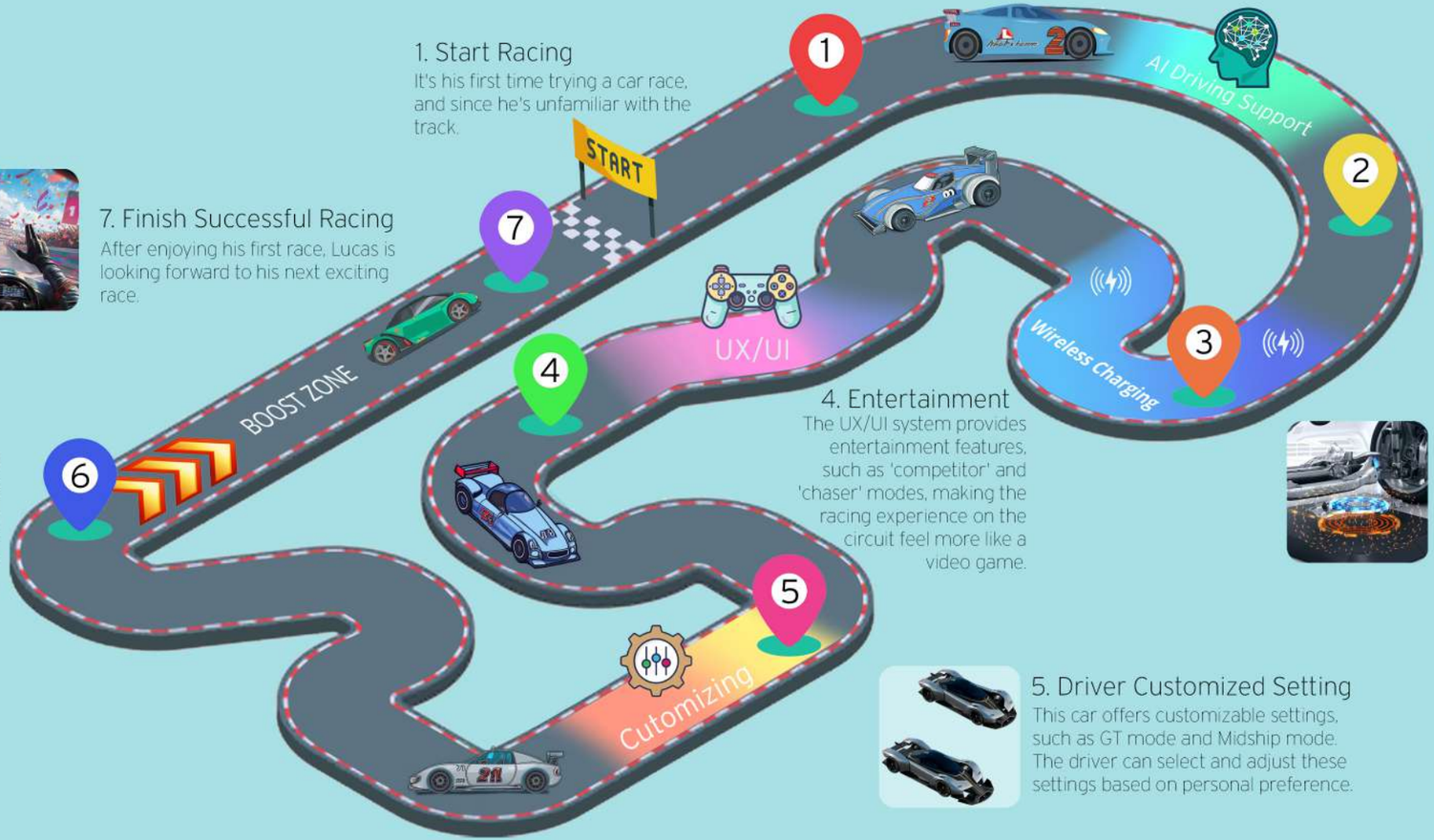
GM Racing Experience Center in 2040

Solution : In 2040, General Motors operates a **Racing Experience Center** that allows users like Lucas to enjoy car racing through a monthly subscription, without having to purchase expensive racing cars. By showcasing the company's advanced technology, GM promotes its brand and generates revenue through subscription fees and various additional services. AI-equipped racing cars enhance the exotic racing experience while minimizing the risk of accidents.



Dream Racer

Lucas's Journey Map



1. Start Racing

It's his first time trying a car race, and since he's unfamiliar with the track.

7. Finish Successful Racing

After enjoying his first race, Lucas is looking forward to his next exciting race.

6. Maximize Exotic Racing

The booster effect provides explosive acceleration, maximizing the driver's exotic racing experience on the circuit.

4. Entertainment

The UX/UI system provides entertainment features, such as 'competitor' and 'chaser' modes, making the racing experience on the circuit feel more like a video game.



2. Support Driving

The AI-based UX/UI system supports and guides Lucas during his driving on the circuit.

3. Wireless EV Charging

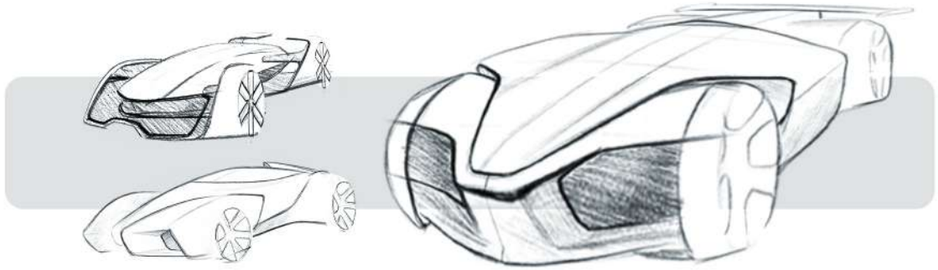
The wireless battery charging system frees the driver from manual charging and contributes to a lighter vehicle, enhancing the exotic driving experience.

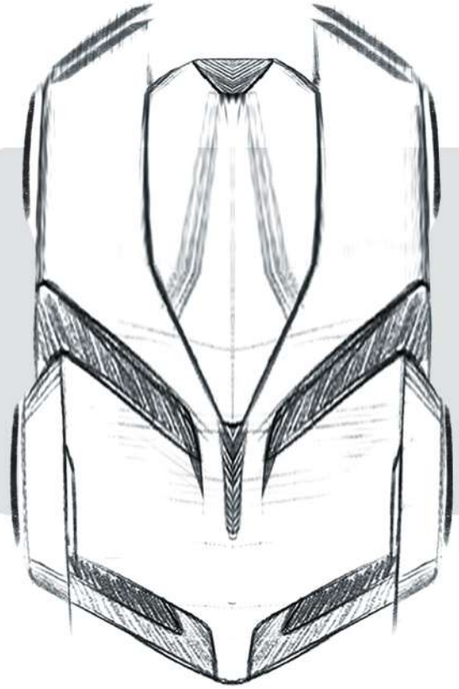
5. Driver Customized Setting

This car offers customizable settings, such as GT mode and Midship mode. The driver can select and adjust these settings based on personal preference.

N

Dream Racer



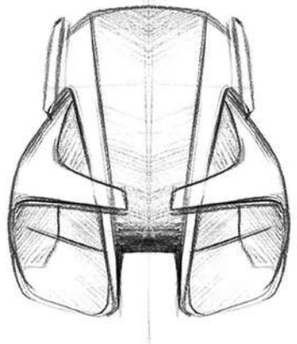


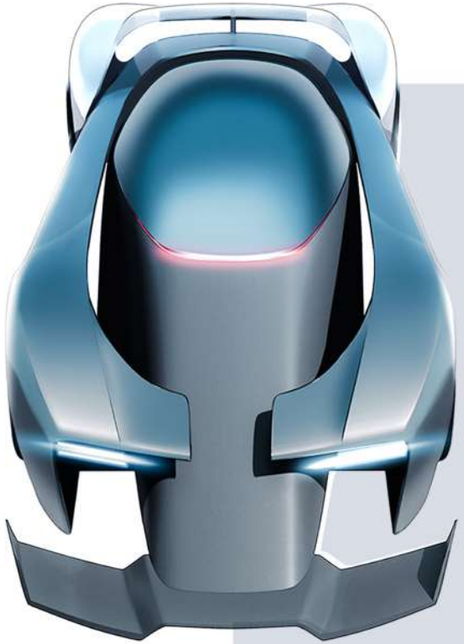


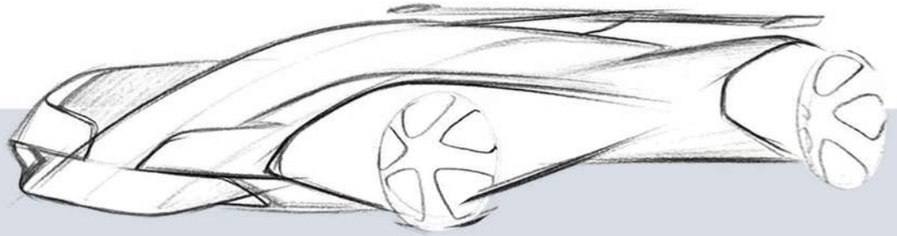


Dream Racer

Geometric Boldness is a design language that expresses three core elements of American design: simplicity, modernity, and straightforwardness.







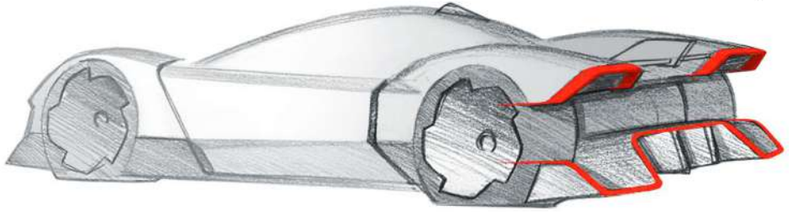




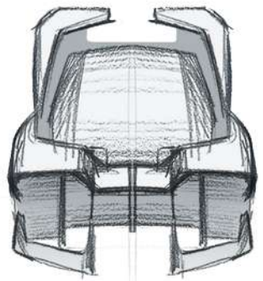
Dream Racer

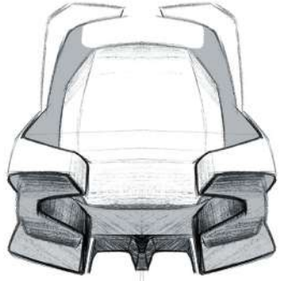
Inspired by the ignition and ascent of a spacecraft, the 'Propulsive' design language expresses pure energy, acceleration, and a forward-driving spirit in the sports car.



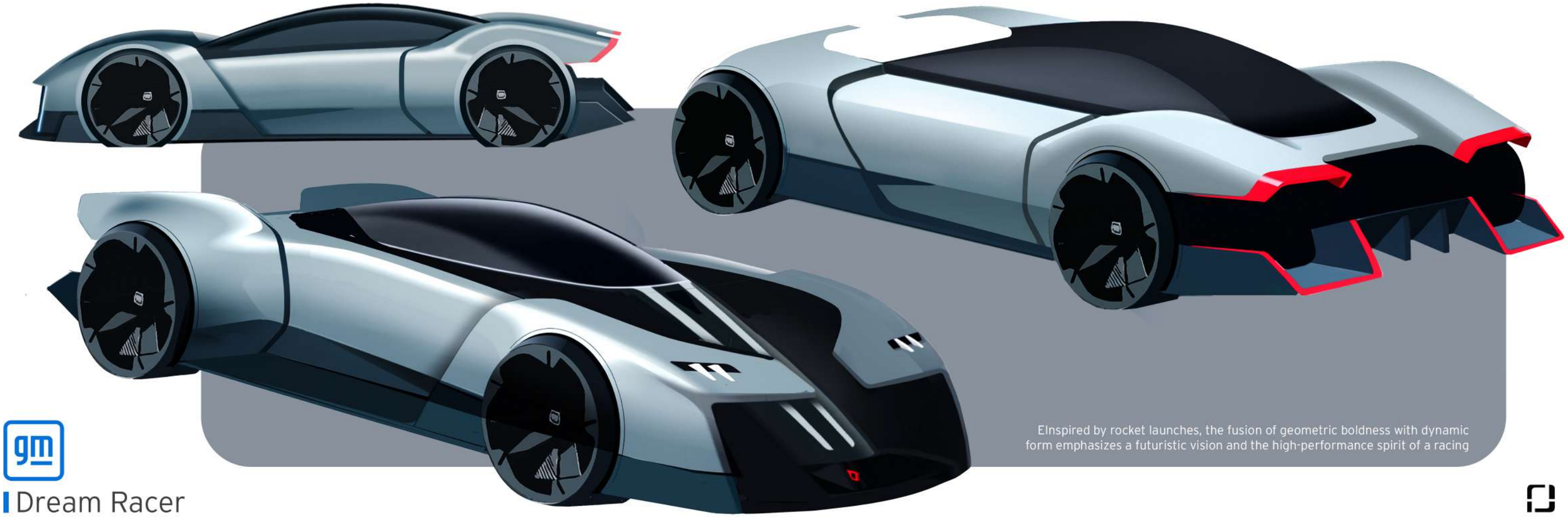












EInspired by rocket launches, the fusion of geometric boldness with dynamic form emphasizes a futuristic vision and the high-performance spirit of a racing

Dream Racer

Every design element of this vehicle serves a real function, contributing to the exotic racing experience–not just existing for appearance.



1. The front deployable spoilers help with downforce and braking.



2. The headlights are designed to help the aerodynamic of the vehicle.

■Final Design



Dream Racer

The vehicle added entertainment elements such as video games to the track-only high-performance

Final Design

Booster Effect

The booster effect brings a video game-like sensation to real-life racing, enhancing the driver's enjoyment.

Dream Racer

We all need to escape the seriousness and competitiveness of daily life from time to time. This vehicle offers the driver a sense of joy in response.



■Final Design

Dream Racer

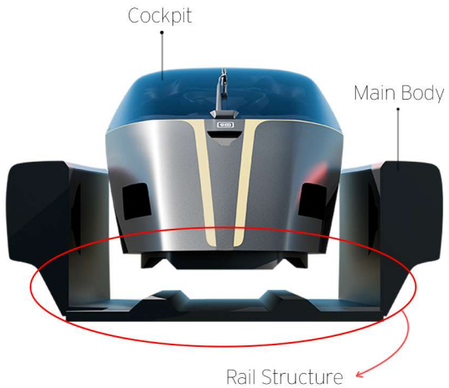
The rear design, inspired by a rocket launch, emphasizes the powerful output that this vehicle unleashes.



Final Design

Dream Racer

The rail structure located between the driver's seat base and the vehicle body enables the movement of the driver's seat.



1. GT Mode (Rear Wheel Traction)

2. Formula Mode (All-WheelTraction)
Cabin and Aeroparts is moving forward like a Formular Machine

Dream Racer

The vehicle's unique canopy-style doors and lighting effects, rarely seen in everyday cars, offer drivers a sense of excitement and enjoyment.

1. Lighting Effect

The lights mounted on various sides of the vehicle provide visual enjoyment to both drivers and spectators through a range of effects.



2. Canopy-Type opening Door

The canopy-style door, inspired by a fighter jet cockpit, provides the driver with easy access and a sense of openness when the vehicle is at rest.



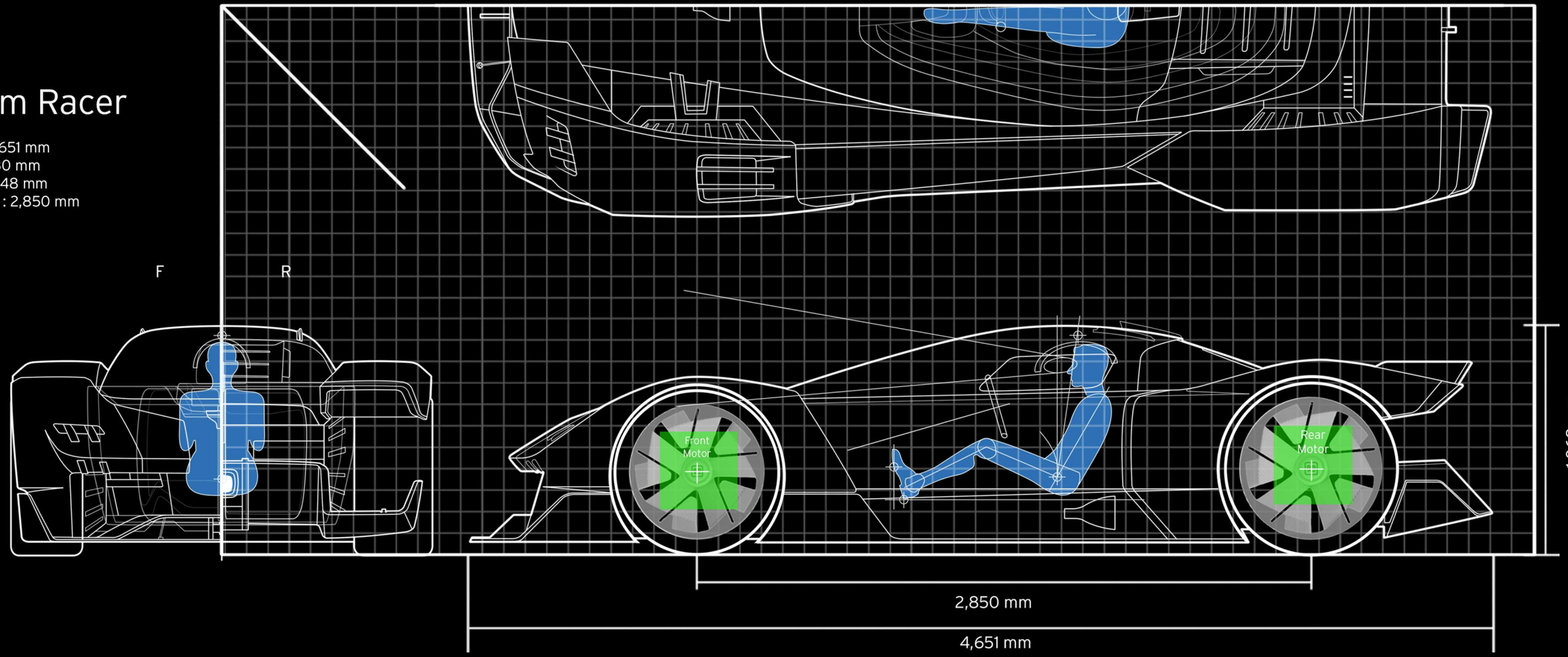


Function

Dream Racer

Dimension
Length : 4,651 mm
Width : 1,930 mm
Height : 1,048 mm
Wheelbase : 2,850 mm

■Dimension

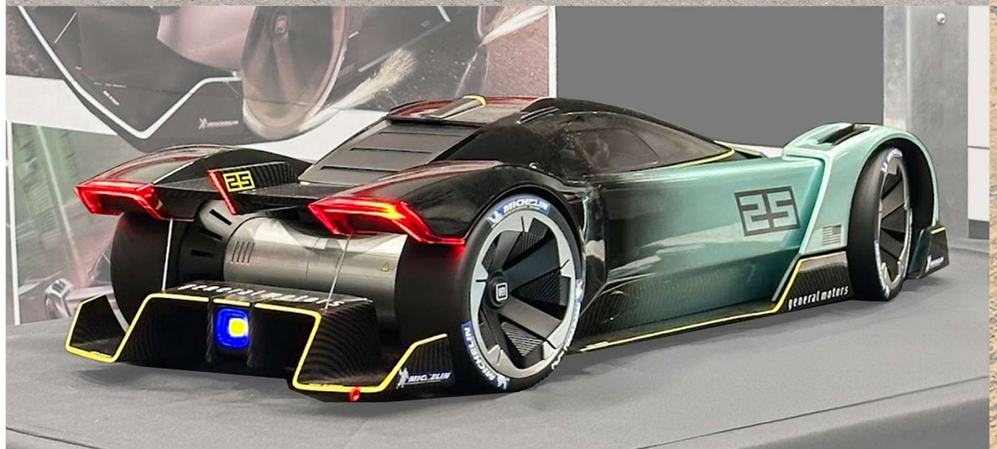


Dream Racer

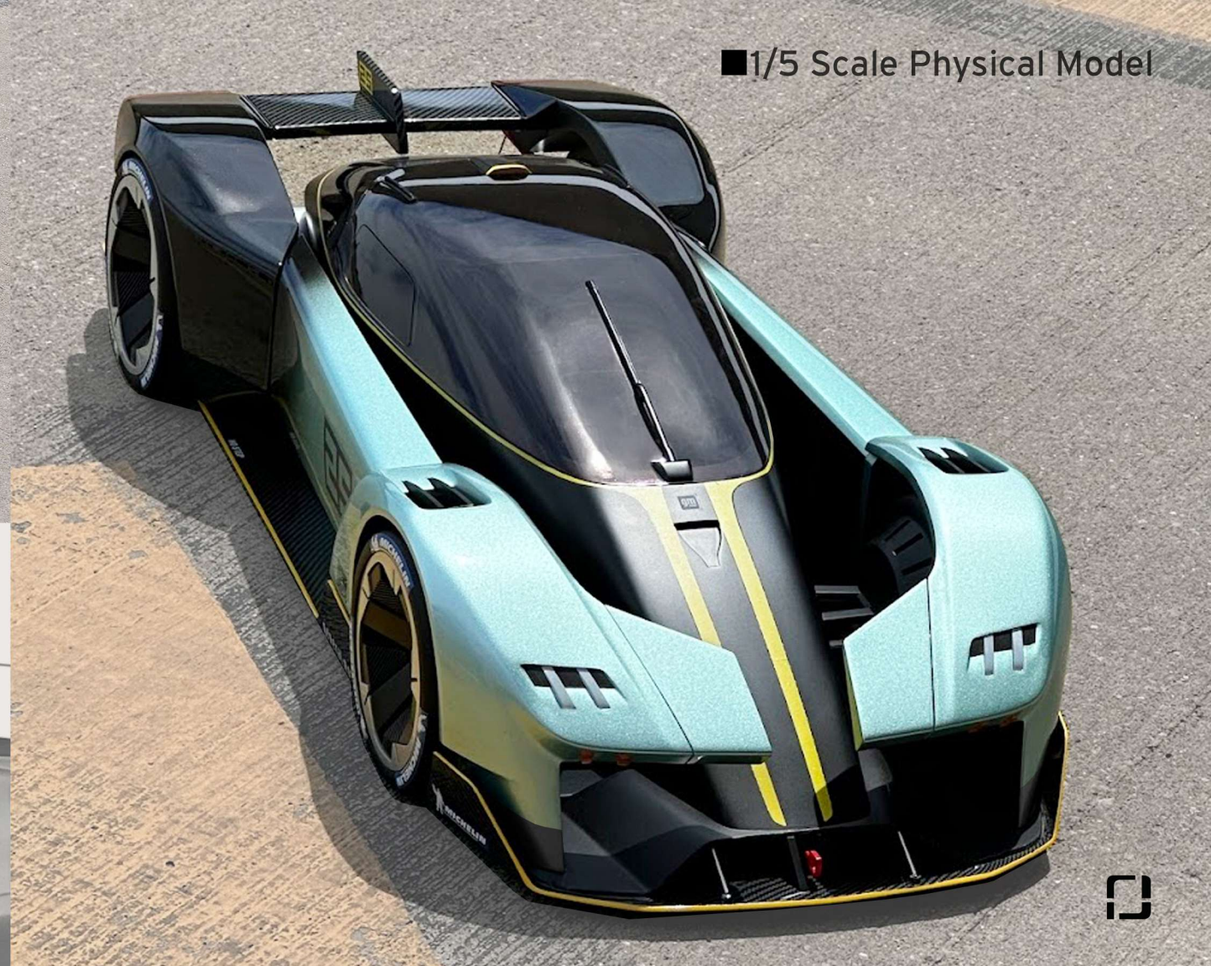
The use of gradient paint evokes a sense of dynamic speed—making the car look as if it's racing forward, even at a standstill.







■1/5 Scale Physical Model





Watch the full animation on Youtube

Youtube video Link


Jeep
Huntington
2040 Sunbathing Dating on your Jeep
Jeep
Jeep

Jeep®

Huntington



1. Name : Jessica (26) / Brandon (31)
2. Location : Huntington beach, California
3. Job : Physical Therapy Assistant /
   Certified CrossFit Trainer
4. Pain Point : As an active couple who enjoys sunbathing, surfing, and off-road adventures, they often find that preparing for outdoor activities takes too much time and effort—packing gear, planning routes, and setting up once they arrive.





Enjoy Outdoor Adventure without Preparation!



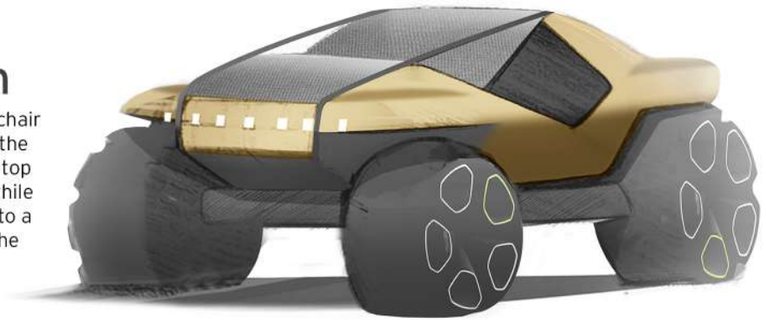
Concept Explanation : Designed for young couples, this vehicle enables carefree beach drives and sunbathing anytime, with no preparation needed. While most leisure activities require extra spending, this leisure-optimized vehicle offers worry-free enjoyment without added costs.

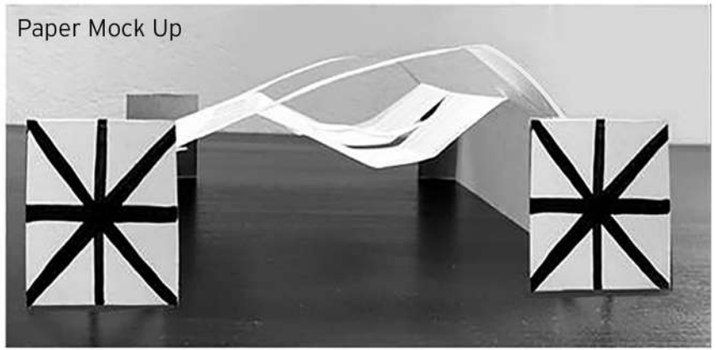
Jeep®

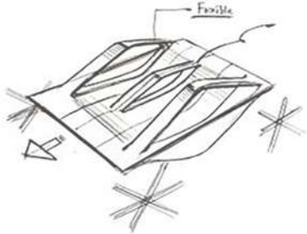
Huntington

Inspired by a lightweight chair designed for sunbathing, the vehicle features a canvas top that functions as a roof while driving and transforms into a sunbed when parked on the beach.

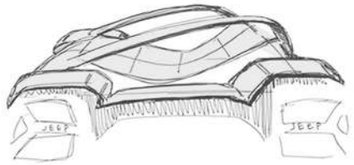


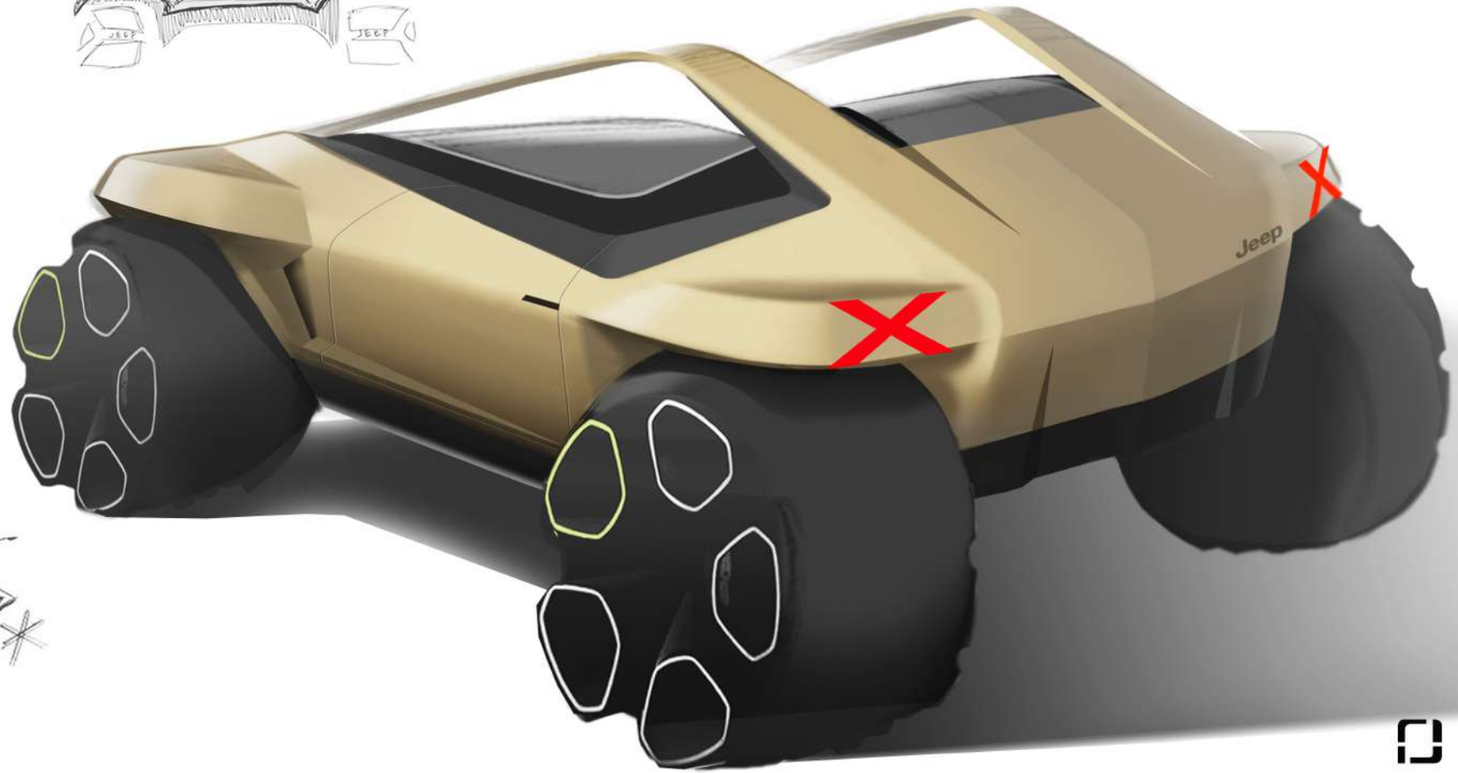






Ideation A (Windshield to Sunbed)





Jeep®

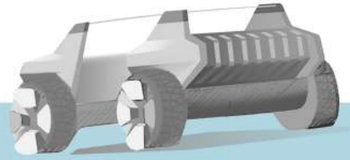
Huntington

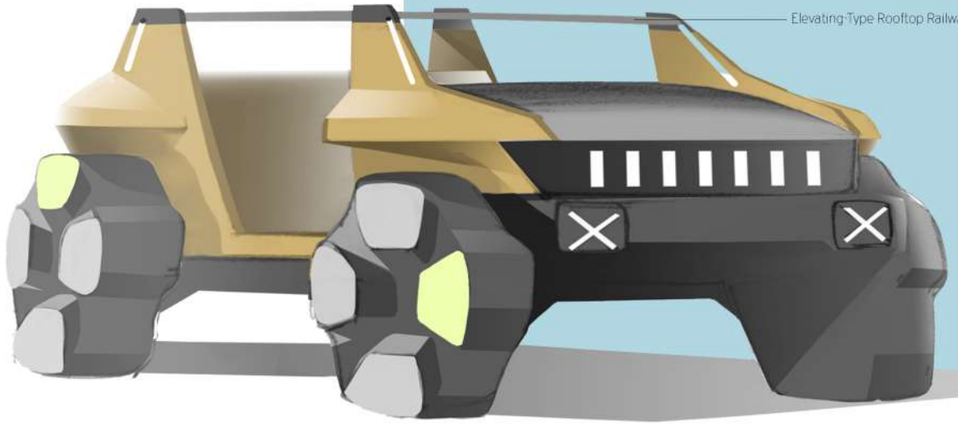
Inspired by beach items such as surfboards and beach towels, the elevating rooftop made of canvas fabric offers users a comfortable and enjoyable sunbathing experience.

■ Ideation B (Elevating type Sunbed)







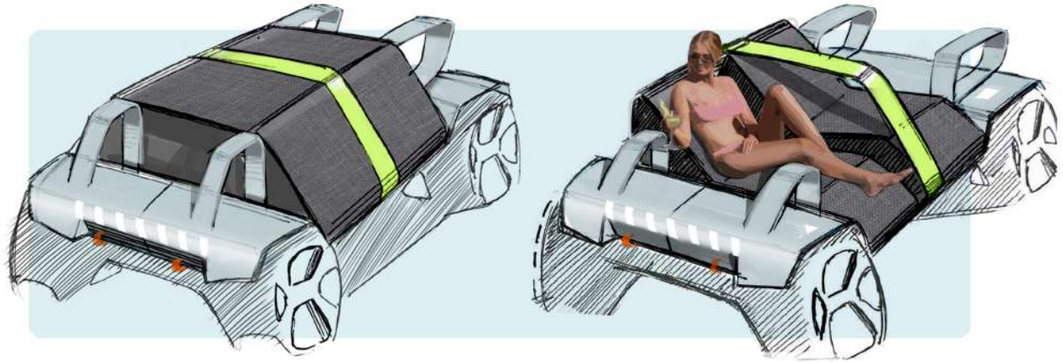




Jeep

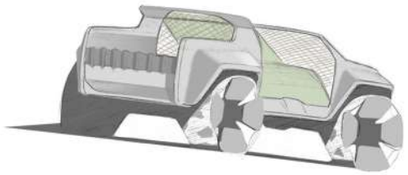
Huntington

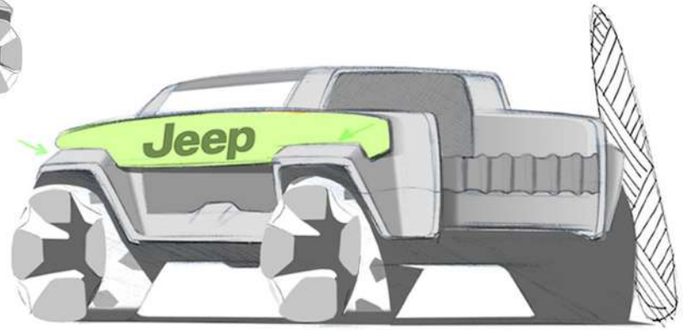
The main point of this page is that the directions for driving and sunbathing are different.



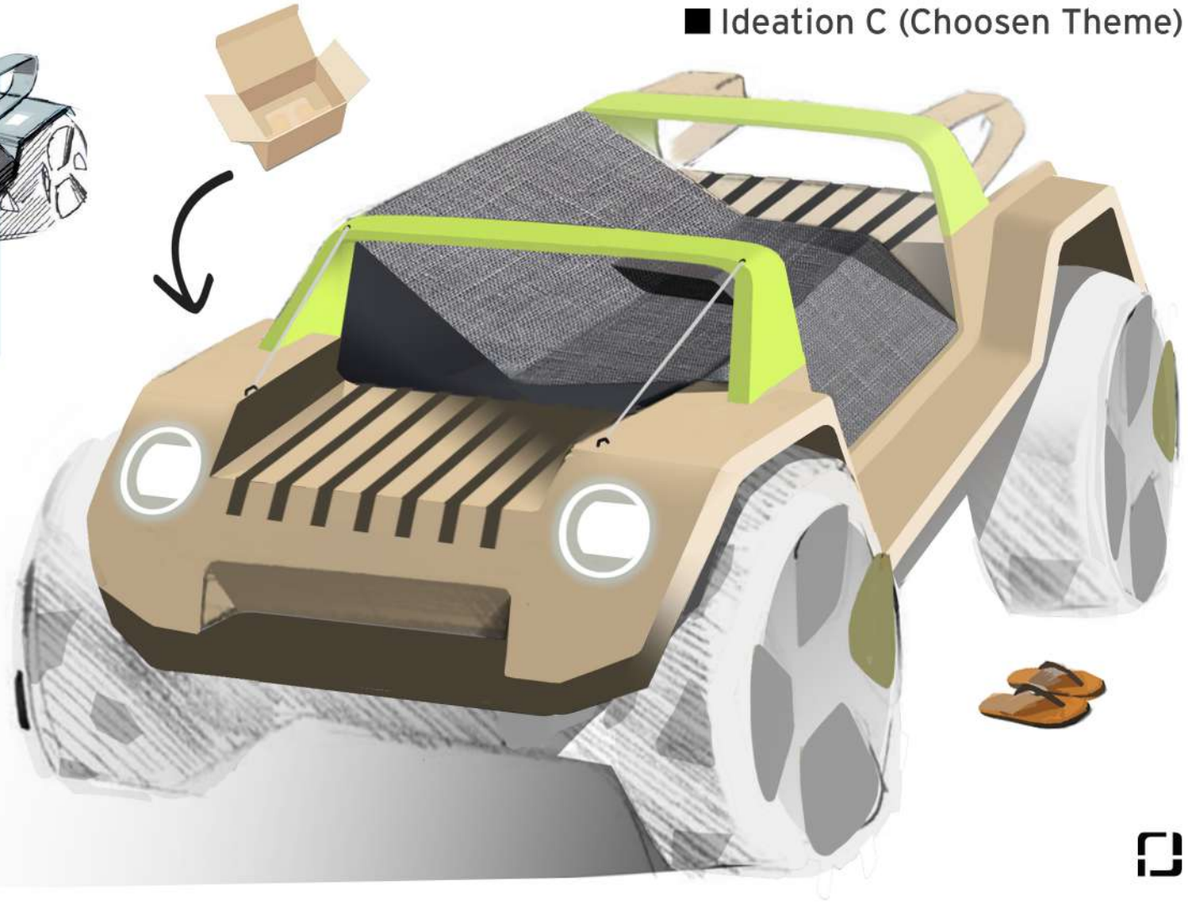
Driving Mode

Sunbathing mode





■ Ideation C (Choosen Theme)



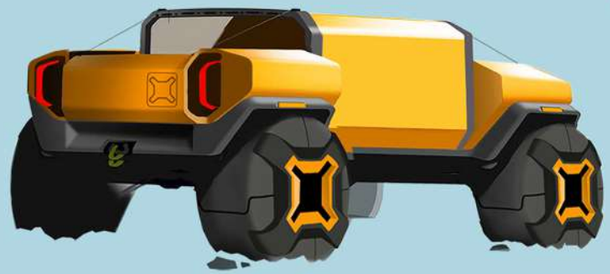
Jeep

Huntington

These development sketches show how sunbed concepts are incorporated into the vehicle's design.







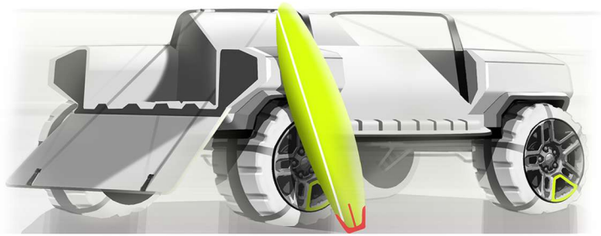
Jeep®

Huntington

Various design ideas are developed around the concept of combining driving and sunbathing experiences.

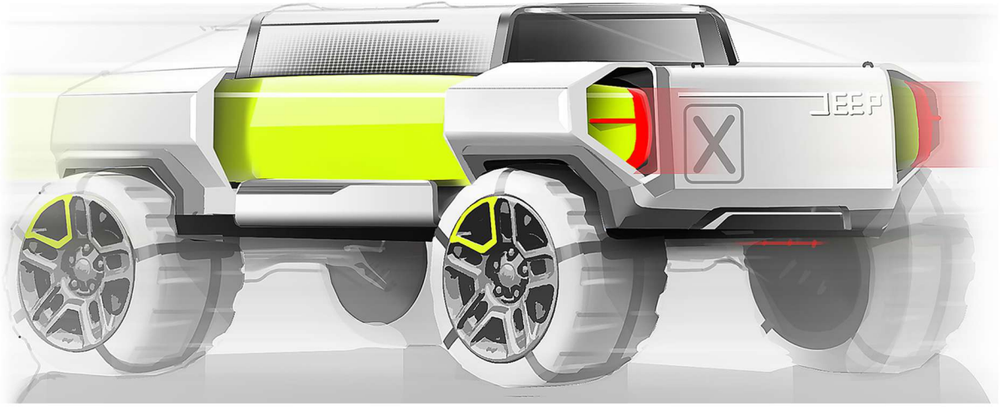
1. Sunbathing Mode

The flexible rooftop transforms into a sunbed.



2. Driving Mode

Surfboards are mounted on both sides of the vehicle and become integrated into the body when driving.





Jeep

Huntington

Final Design



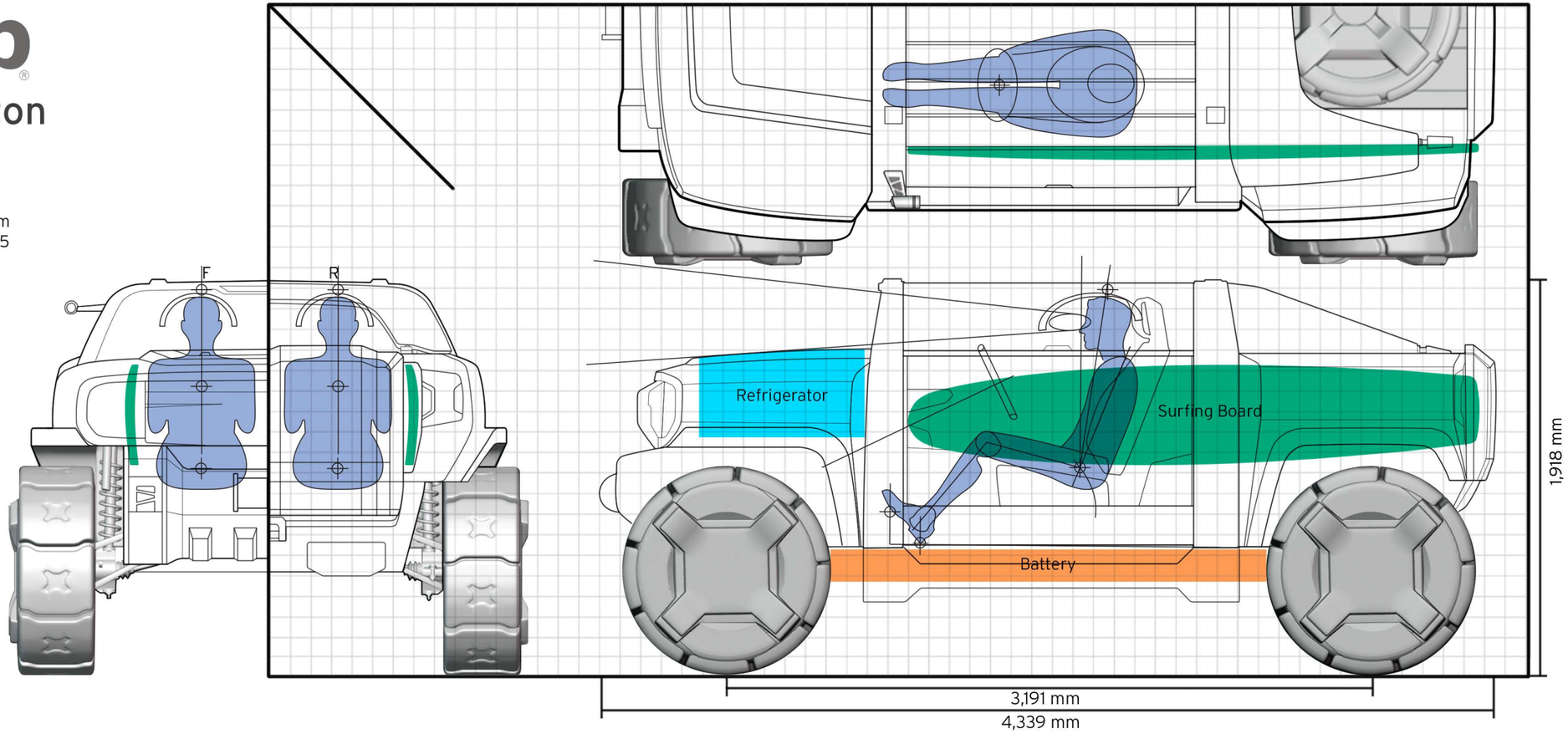


Jeep®

Huntington

Dimension
Length : 4,325 mm
Width : 2,327 mm
Height : 1,951 mm
Wheelbase : 3,192 mm
Autonomous Level : 5

■Dimension



Jeep
Huntington

Final Design



Sunbathing Mode

On the beach, User can make the flexible canvas top as a sunbed for enjoying sunbathing and take the surfing board from the side part for surfing.

Jeep
Huntington

Terrain Mode

More than just a vehicle for on-road driving and sunbathing, it also excels at rock crawling and off-road performance.

Final Design

Surfing board
Storage

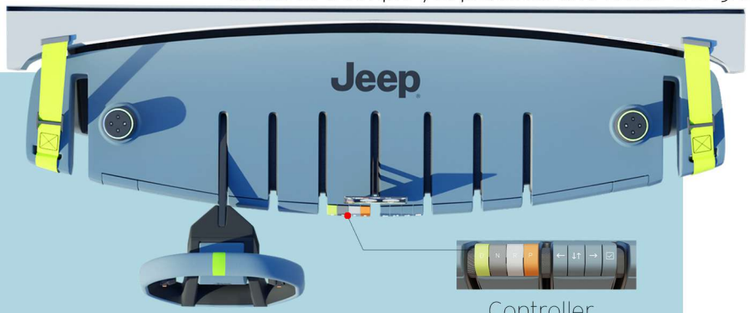
Jeep

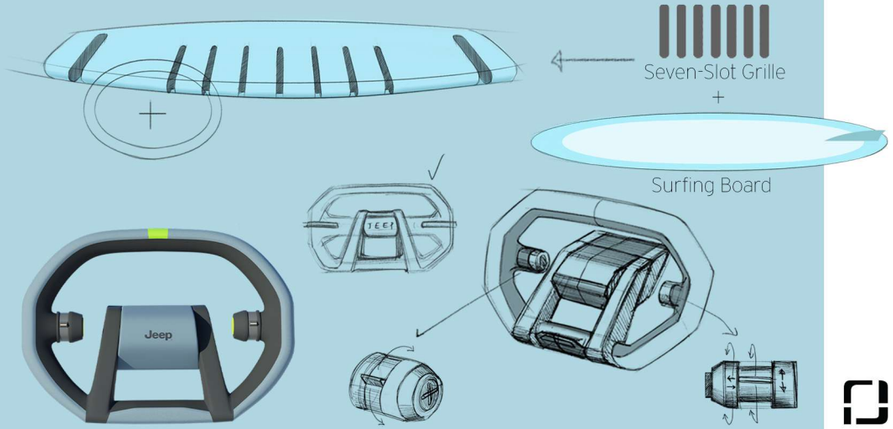
Huntington

Interior Design

Inspired by surfboards, Jeep's seven-slot grille, this dashboard features a simple yet practical and iconic design.

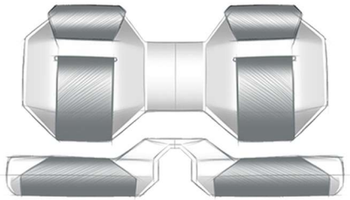


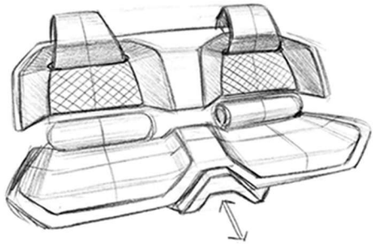


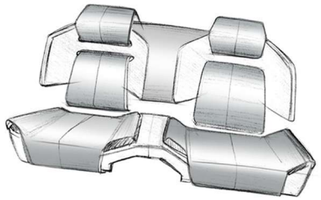


Jeep®

Huntington









Interior Design



Fabric and mesh grille sheets offer ventilation, enhancing comfort after outdoor activities like sunbathing, surfing, and swimming.



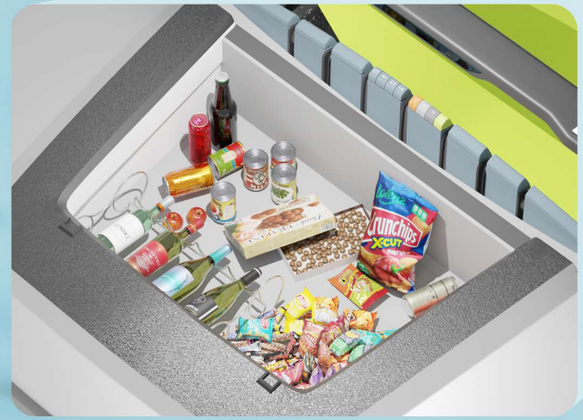
The detachable mesh grille cusion allows for effective ventilation, offering enhanced comfort after activities like swimming or intense physical movement and washable after use.

Jeep

Huntington

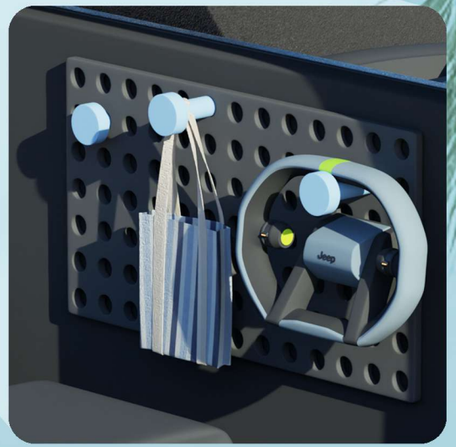
For passengers who enjoy sunbathing in the vehicle, features like refrigerators and steering wheel hangers add essential comfort and convenience.

1. Front Refrigerator





2. Hanger for Steering Wheel & Bags



Jeep®

Huntington

The transition from a simple and intuitive three-step process to a sunbed is easy for any user to understand.

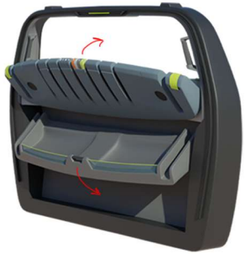
Sunbathing Mode

Sliding-Type Rail roof System

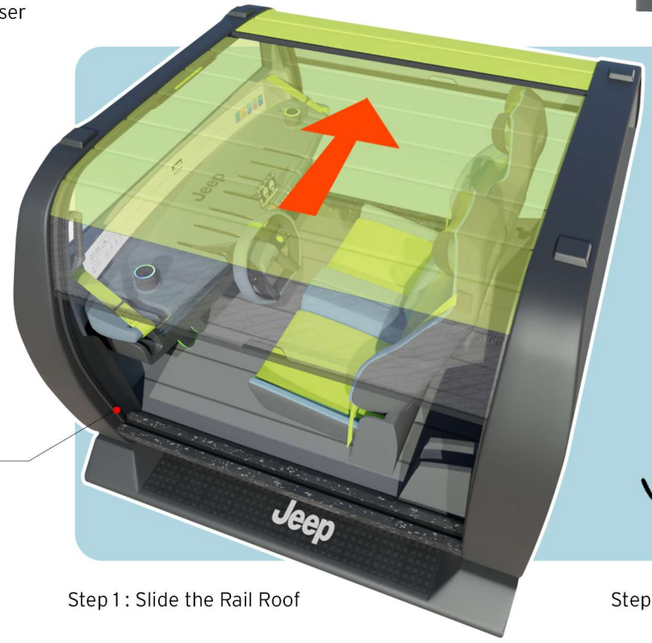




+



2-side Foldable Dashboard with Detachable Steering wheel



Step 1 : Slide the Rail Roof



Step 2 : Fold the seats and dashboard



Step 3 : Outspread the rail roof & Enjoy sunbathing

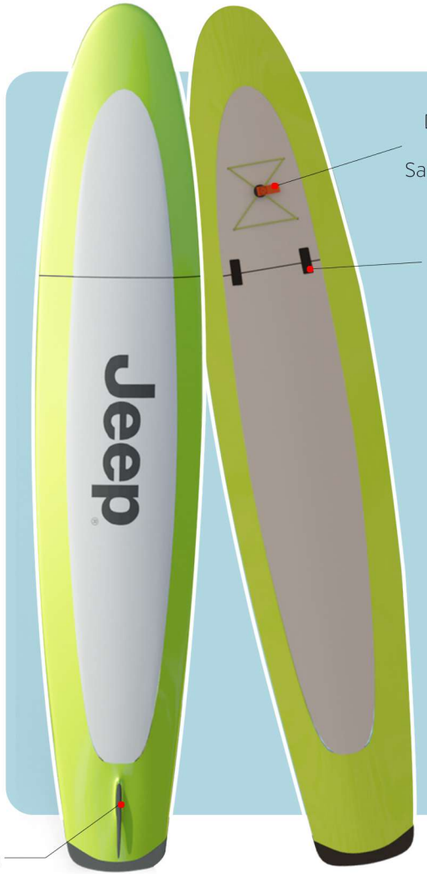
Jeep®

Huntington

In driving mode, the foldable surfboard serves as a vehicle door, and when detached, it can be used for surfing in the sea.



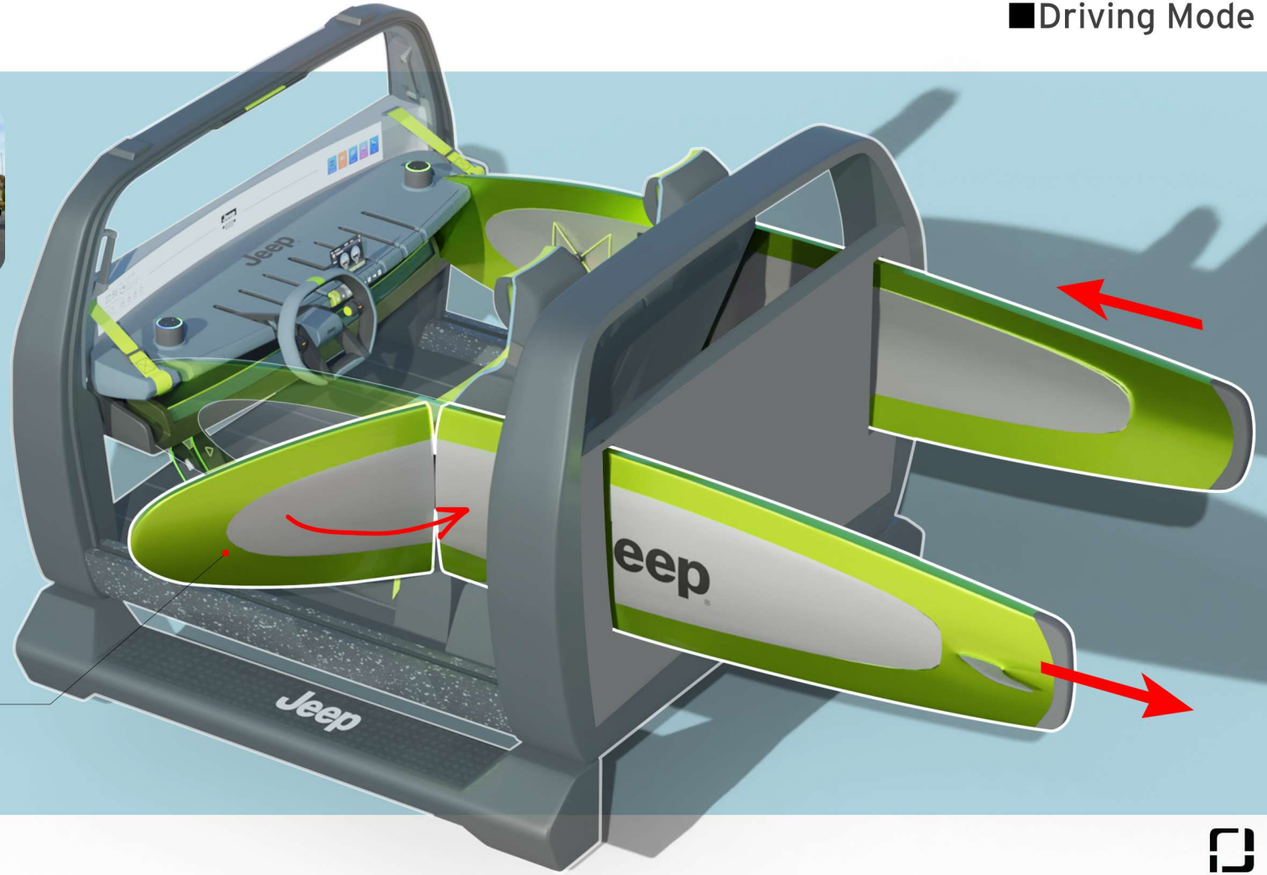
Function Idea Inspired by a girl running with a SurfBoard on the beach





This surfboard is made with high-strength materials and secure fixtures, ensuring reliable folding and full functionality as a surfboard.

■Driving Mode




Thank you so Much
Jeep
Jeep
DUNLOP
Jeep


Solaroid
The New 2040 hybrid Performance EV
Alfa Romeo

Solaroid

Persona

Sport Driving



Nature & Sustainability



Family



Bianca (40), Fashion Model

Milano, Italy



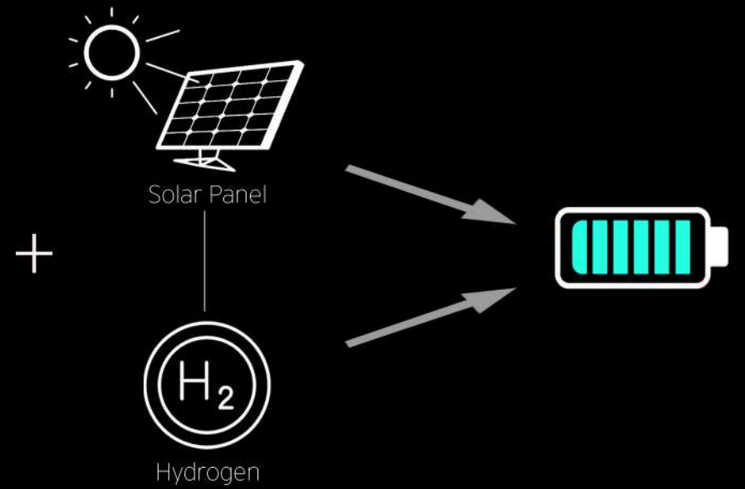
Needs

- She wants a car that reflects her identity: artistic, bold, and future-oriented
- She desires Eco-friendly. She's done compromising between beauty and eco-consciousness
- She enjoys performance driving and wants to enjoy and share this thrill with her two kids

I Solaroid

The new 3 seaters Hybrid performance EV







■ Performance

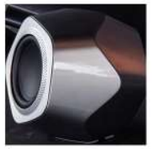
■ Eco-friendly and highly efficient

■ Shared Thrill

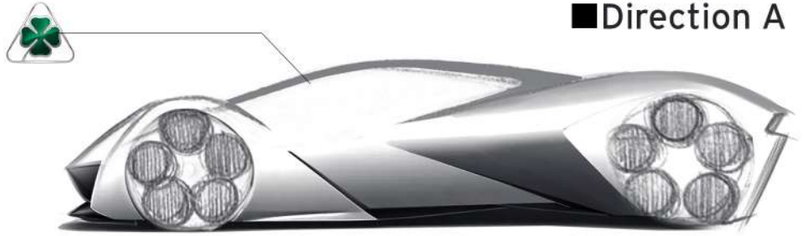
Direction A

Sculptural

Inspired by the bold and dimensional forms of sculptural speakers, the design expresses a futuristic identity with a strong and unmistakable character.







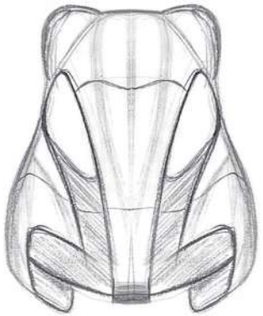
This form gently echoes the silhouette of Alfa Romeo's iconic Quadrifoglio emblem within the side reflections, evoking a quiet homage to the brand's performance legacy.



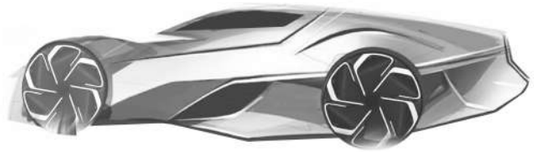


Voluptuous

The design features a voluptuous form language, where flowing surfaces and generous volumes come together to create an emotional and sensuous presence.











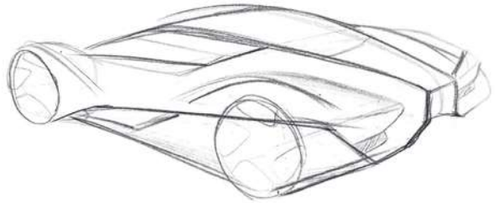
Cap-Forward Design

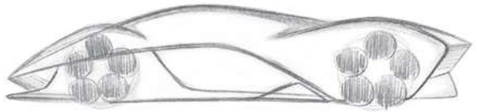


Dynamic Flow

The form, derived from a parallel slash motif, accentuates the vehicle's assertive performance and dynamic velocity through its precise and cutting contours.





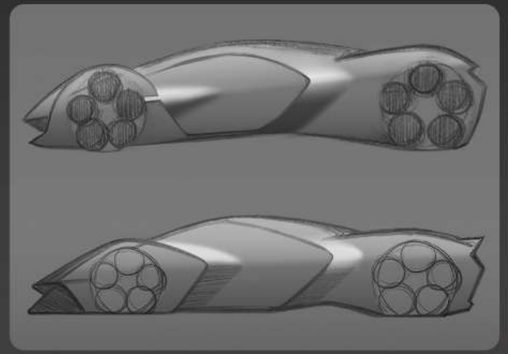








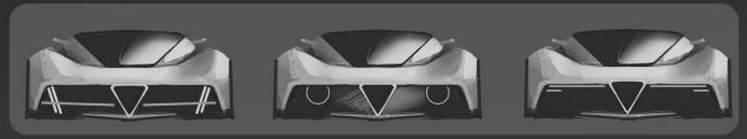
Solaroid

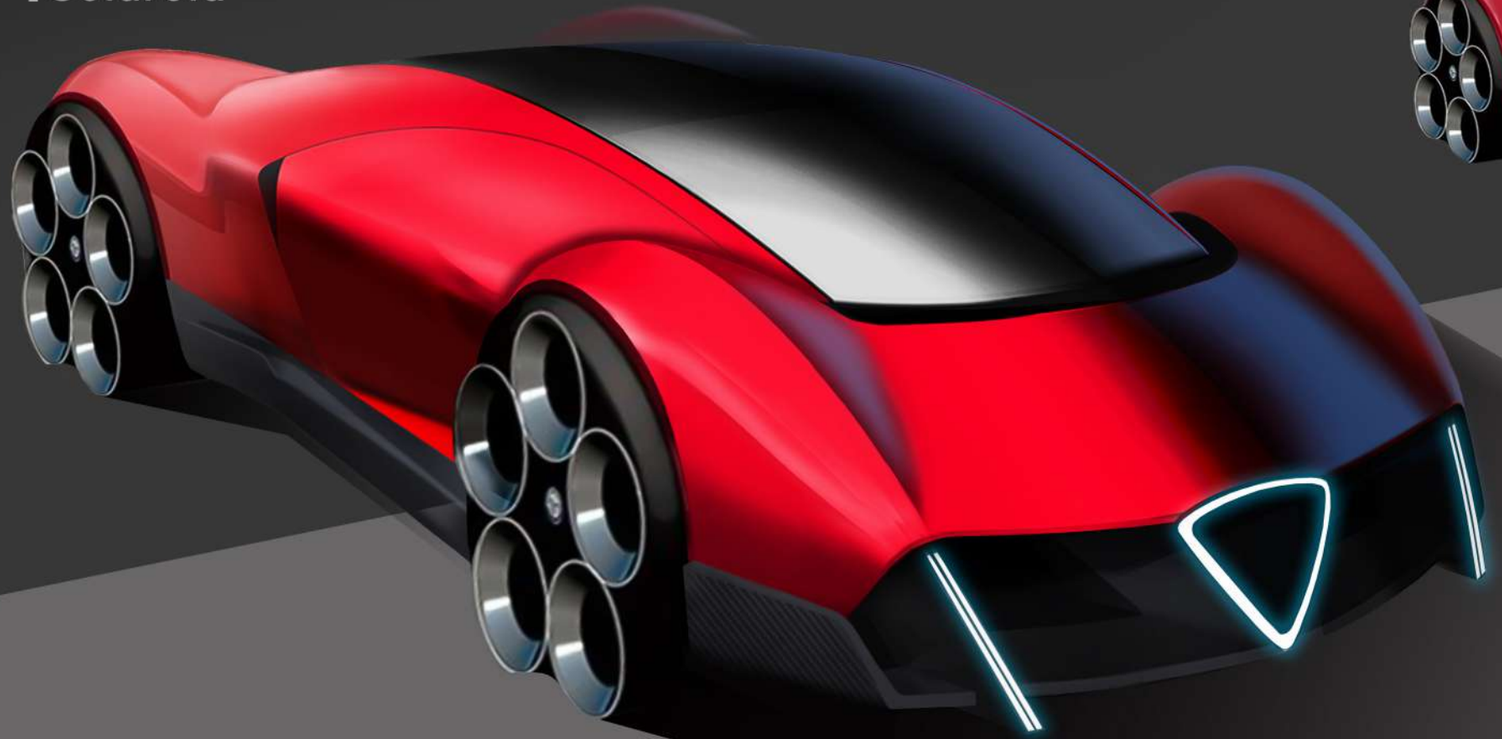


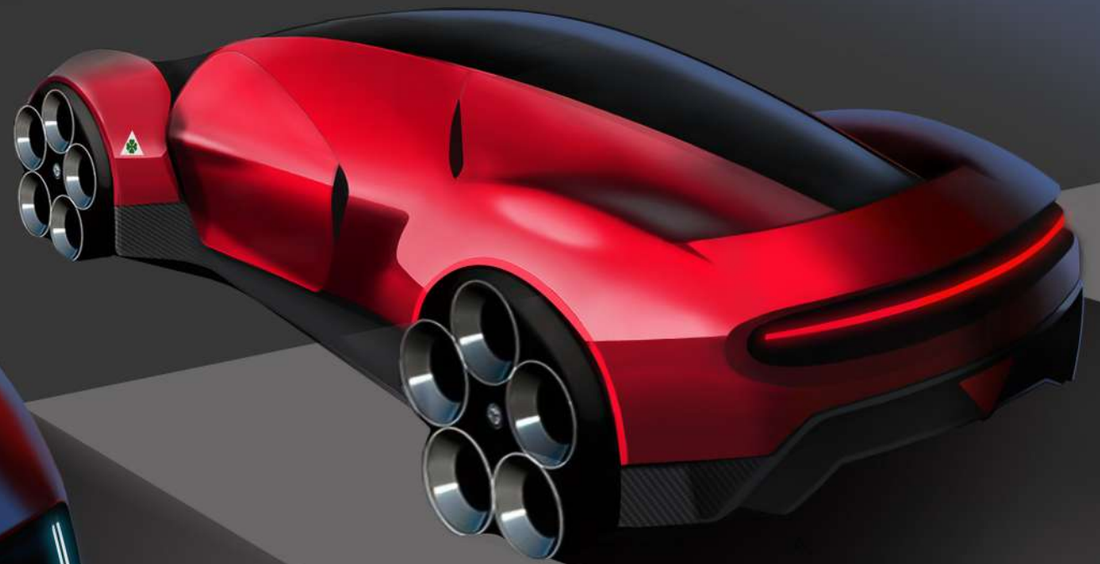
The final side view expresses a distinctive character through the poetic interplay of Alfa Romeo's signature voluptuous volumes and bold, futuristic

Solaroid

Design Refinement



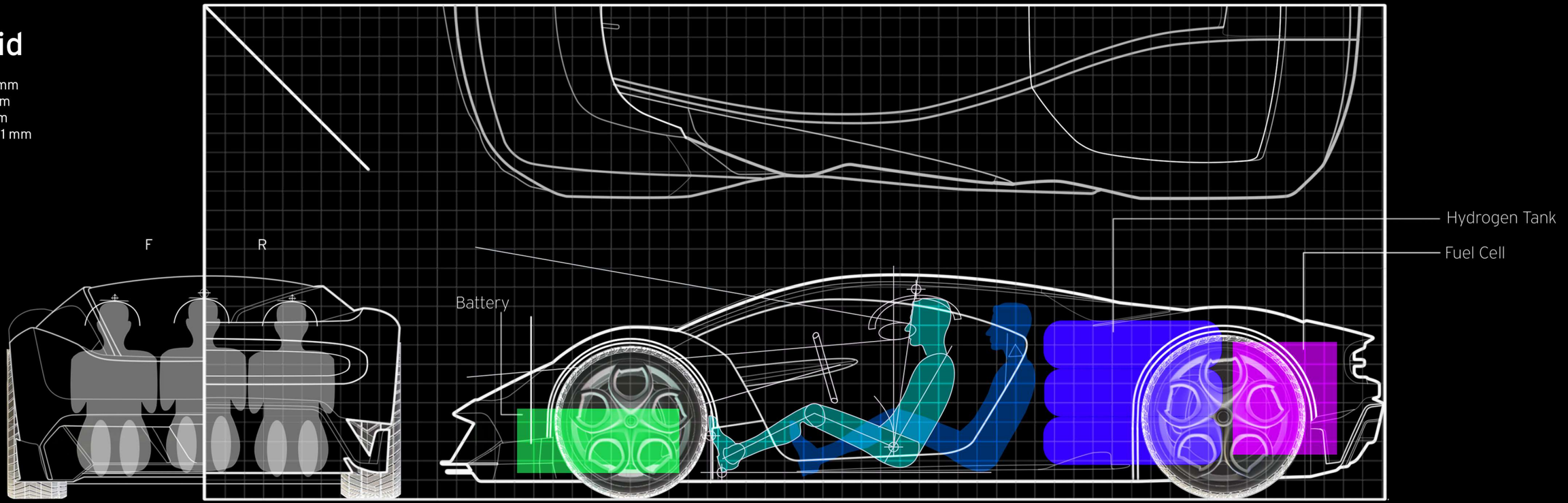




The front and rear fascias explore a variety of sculptural experiments, aiming to create forms that are playful yet full of character.

Solaroid

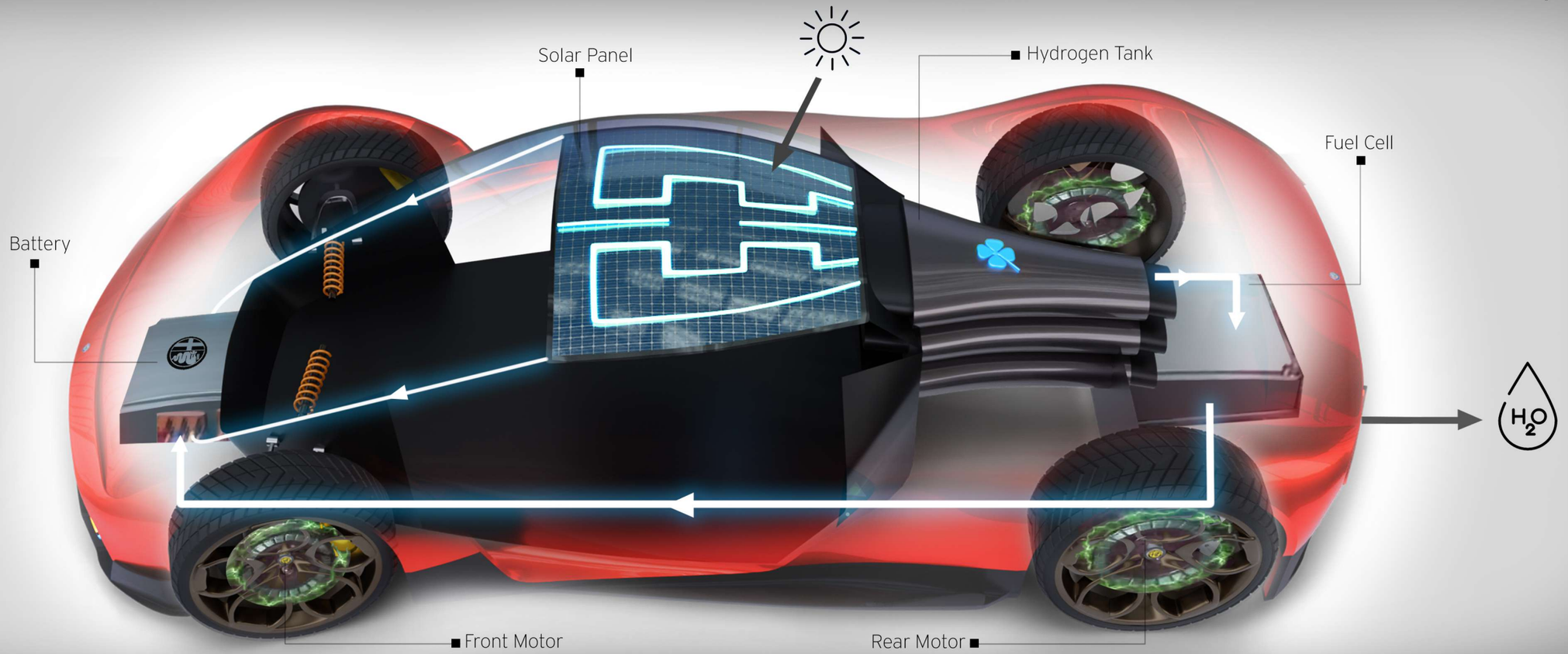
Dimension
Length : 4,865 mm
Width : 2,200 mm
Height : 1,188 mm
Wheelbase : 3,191 mm
Seats : 3 Seats



Solaroid

'Solaroid' is a new hybrid system that integrates a high-efficiency solar panel with a hydrogen cell, eliminating battery charging time and delivering high performance, with a lightweight structure that improves overall vehicle dynamics.

Powertrain system



Solaroid

A captivating red finish, voluptuous volumes, and uniquely distinctive shapes come together to harmonize futurism with Alfa Romeo's timeless heritage.



The front fascia echoes Alfa Romeo's signature grille, evoking the brand's distinctive character.

Solaroid

Two seamlessly flowing lines from front to rear emphasize both a sense of speed and the elegance of a smooth, continuous profile.



■Final Design

Solaroid

The harmony between sharp lines, voluptuous volumes, and the advanced solar roof captures both the heritage and the future of Alfa Romeo.



Scissor doors inspired by the Alfa Romeo 33 Stradale

Functions

Solar Panel Roof

Hydrogen Tank

Touch-type Door handle

Solaroid

A design that embodies the famous principle 'form follows function' goes beyond mere aesthetic appeal, gaining its true allure through its actual performance.



Incorporating a flap-style brake design enhances braking efficiency and vehicle control.

Flap-type brake spoiler


Solaroid
Thank you so much