



Can the advancements in the field of legislation, technology & manufacturing be incorporated cleverly into a design to permit greater design freedom, & retain the original design intention? Can the elegant, timeless and streamlined design language of the 1930's be brought back to the future?

This project aims to re-introduce **art and emotion to vehicle design**, enjoyed by the design scene back in the 1930's.

This would be accomplished by incorporating modern & future safety concepts that could aid in the **removal of current legislative hard points** to the design process. This would help in keeping the proportions of the vehicle **Exaggerated and Sculpted**.

Furthermore, a unique manufacturing process is incorporated in the design, with a **shell comprised of the floor and centre spine** onto which the BIW panels are assembled. This was a **sculptural exercise** inspired by the streamlined design language of the 1930's, thereby making the vehicle beautiful, elegant, classic and aerodynamically efficient.

NO

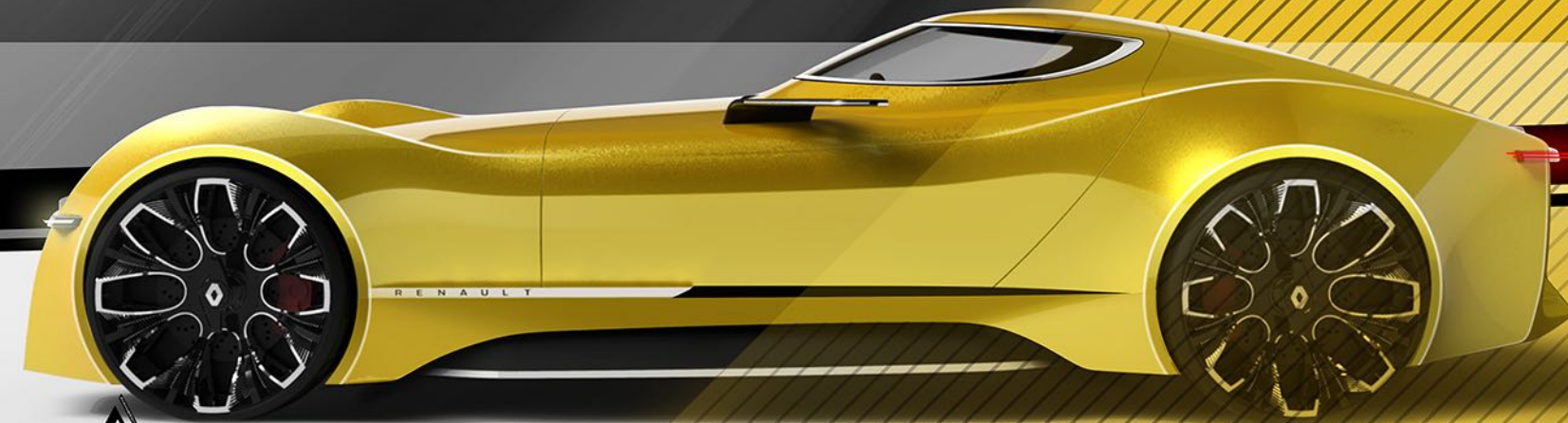
AVANT-GARDE RENAULT

BRIEF | RE-INTRODUCE THE STREAMLINED DESIGN LANGUAGE OF THE 1930's
RETRO COACH-BUILDS FOCUSED



AJAY.PARAMESWARAN

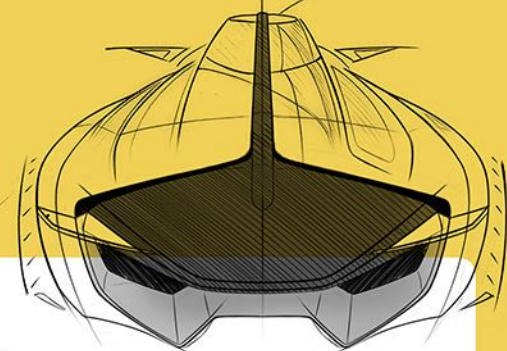
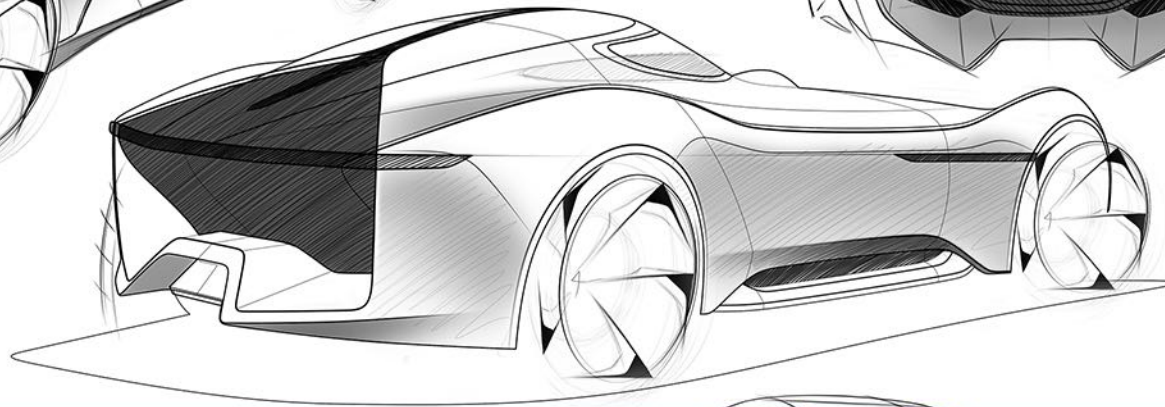
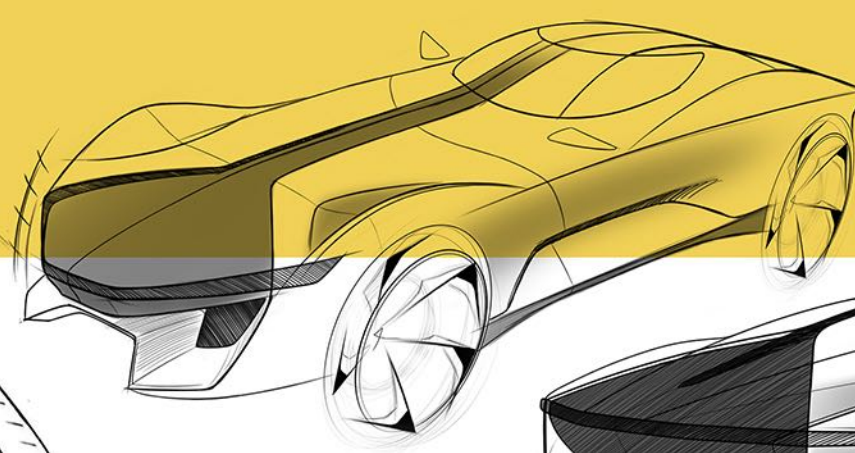
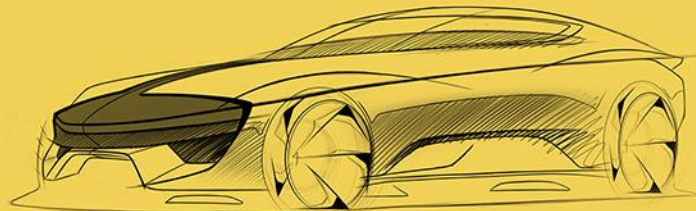
AJAY.PARAMESWARAN



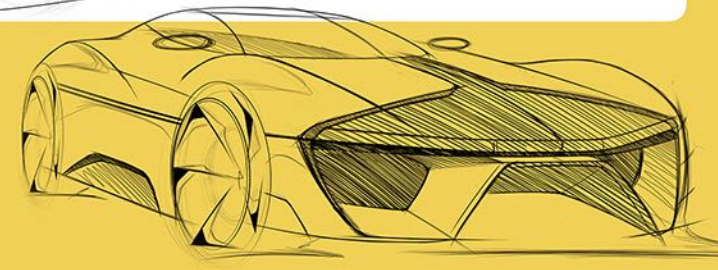
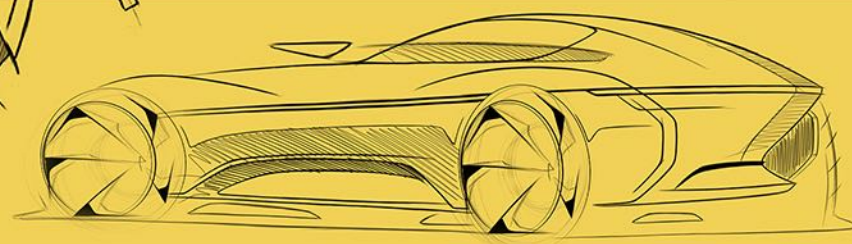
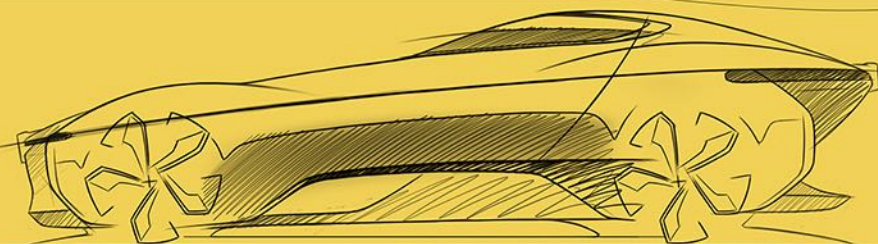
DESIGN CRITERIA

- Restrictions to emission (0g/km of CO2 per vehicle)
- Discussion on new vehicle architecture and mobility
 - Weight optimisation in terms of design
 - Reducing the size of the vehicle

Create an evolution to motoring according to ecological values.

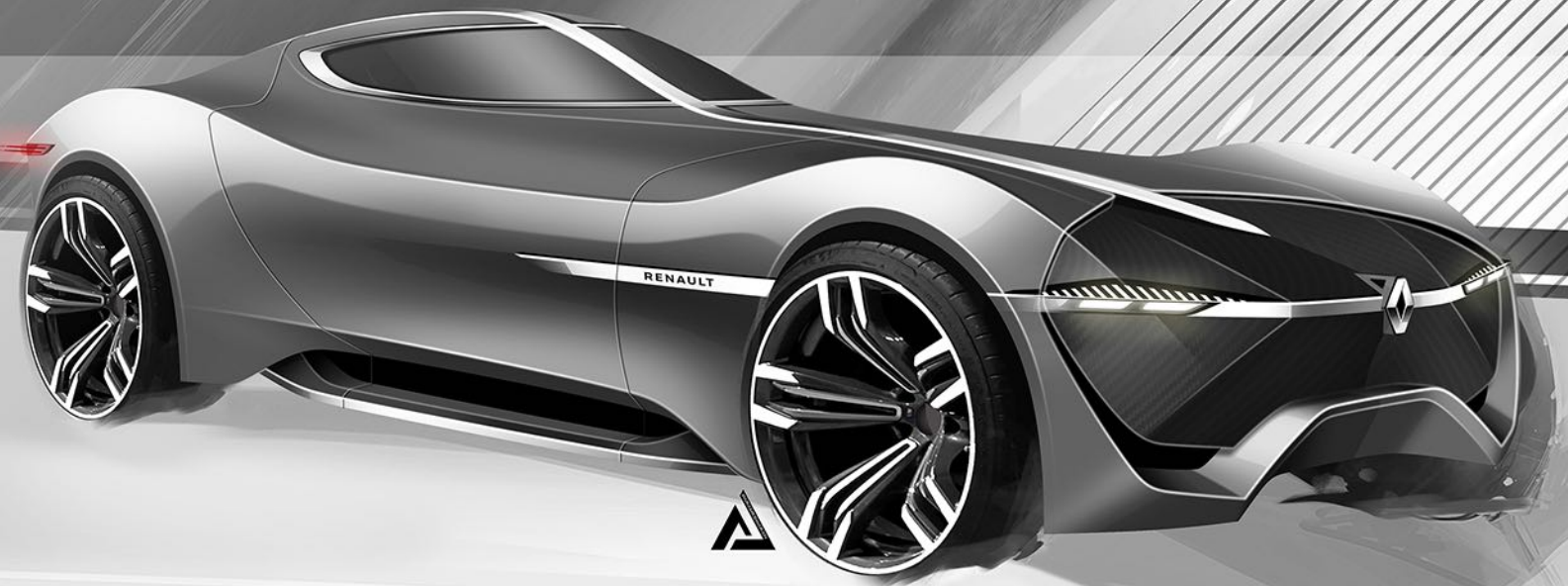


KEY SKETCHES

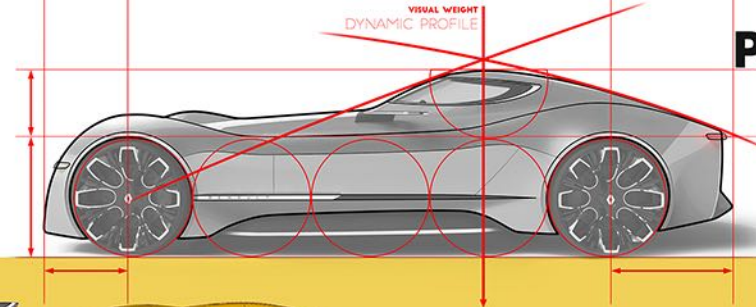
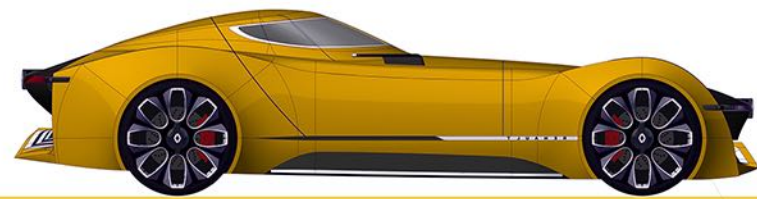


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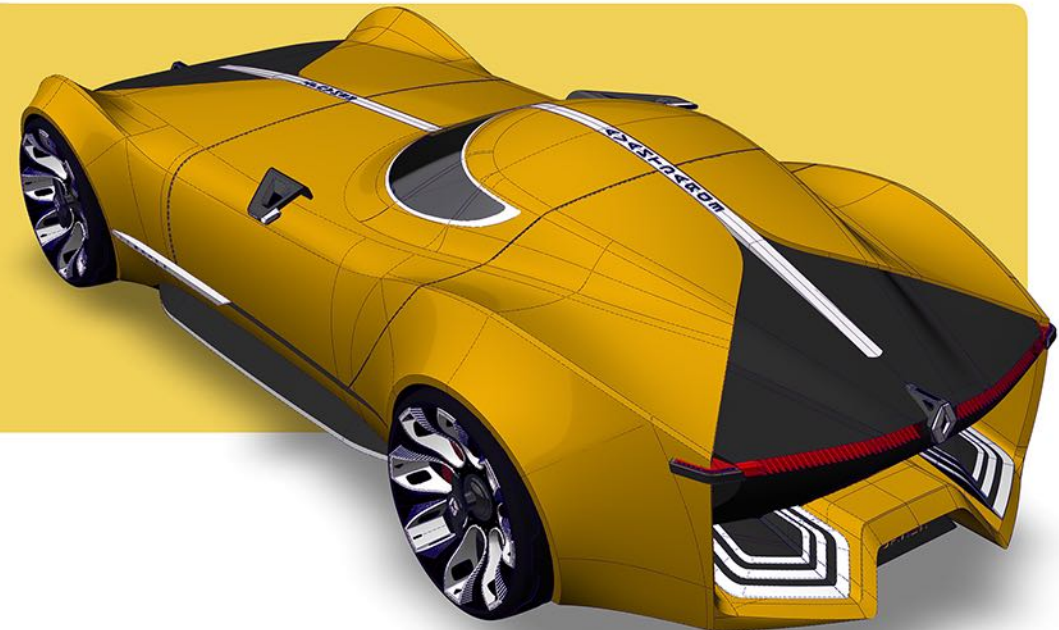
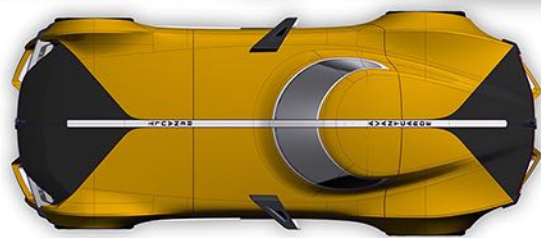
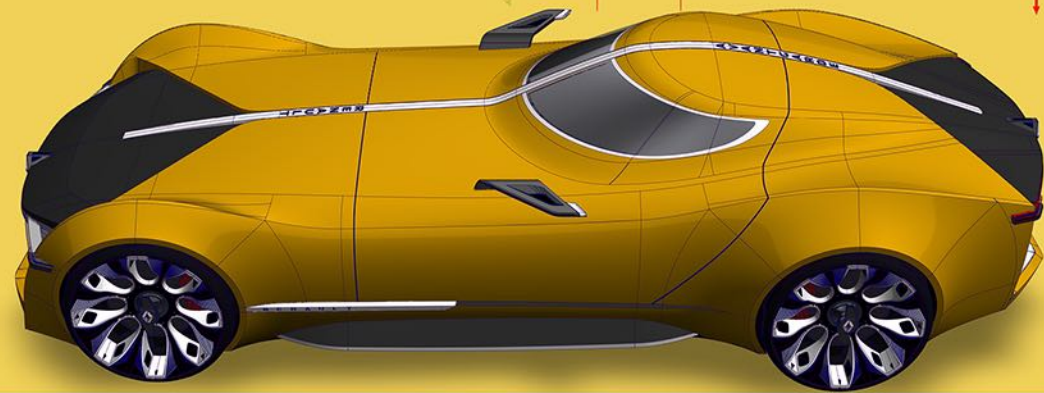
AJAY.PARAMESWARAN



CAS DEVELOPMENT



PACKAGEDRAWING







Mercedes-Benz

The AEROFLOW was conceived as an All-Electric vehicle as a spiritual successor to the iconic SL, but represent a new era of Open-Top Roadsters Inspired by Air Flow.

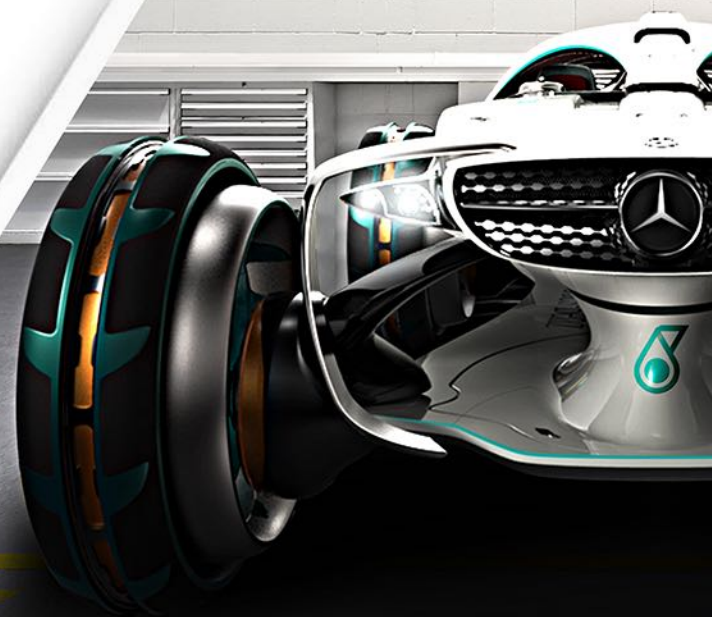
An ultra-lightweight sports tourer showcasing a **new vehicle architecture**, with shape memory technology that helps minimise vehicle parts and weight to **reduce carbon footprint**, and increase efficiency. The bare-minimalistic design features a slim **body-hugging structure and central spine**, which is the main suspension system, onto which all components are assembled. The vehicle incorporates **Electro-Magnetic propulsion (EMP)** comprising a static wheel with an electro-magnetic track all around, and held together by a centre static shaft, which in-turn is connected to **Mag Lev motors**.

FOUR

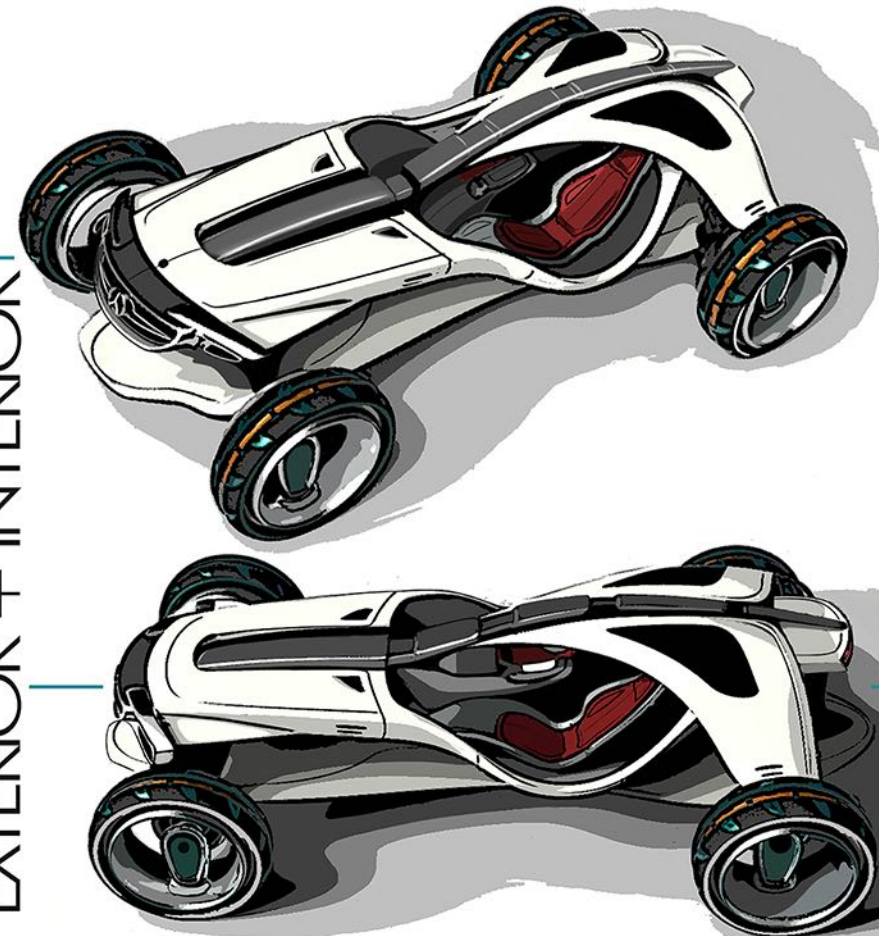
MERCEDES BENZ AEROFLOW

BRIEF | DEVELOP A NEW VEHICLE ARCHITECTURE AND DRIVING EXPERIENCE
MERCEDES BENZ CLASSIC CARS FOCUSED

MERCEDES
PETRONAS

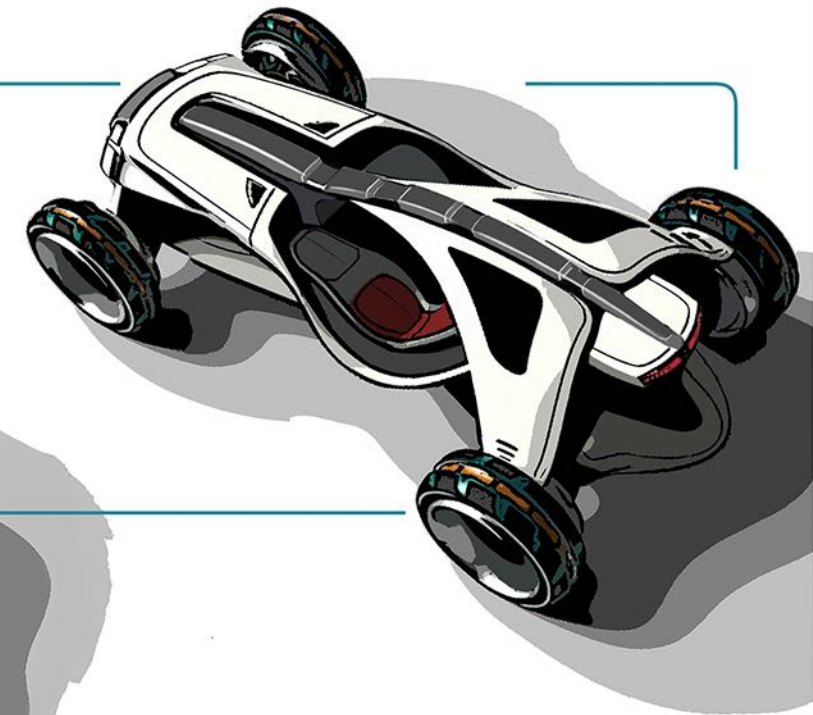


KEY DESIGN
EXTERIOR + INTERIOR



DESIGN CRITERIA
A spiritual successor to the iconic SL series
- A new era of Open-Top Roadsters - Inspired by Air Flow
- An all-new vehicle Architecture + Driving experience
- Powered by Electro-Magnetic propulsion (EMP)

Create an evolution to motoring with respect to ecological values



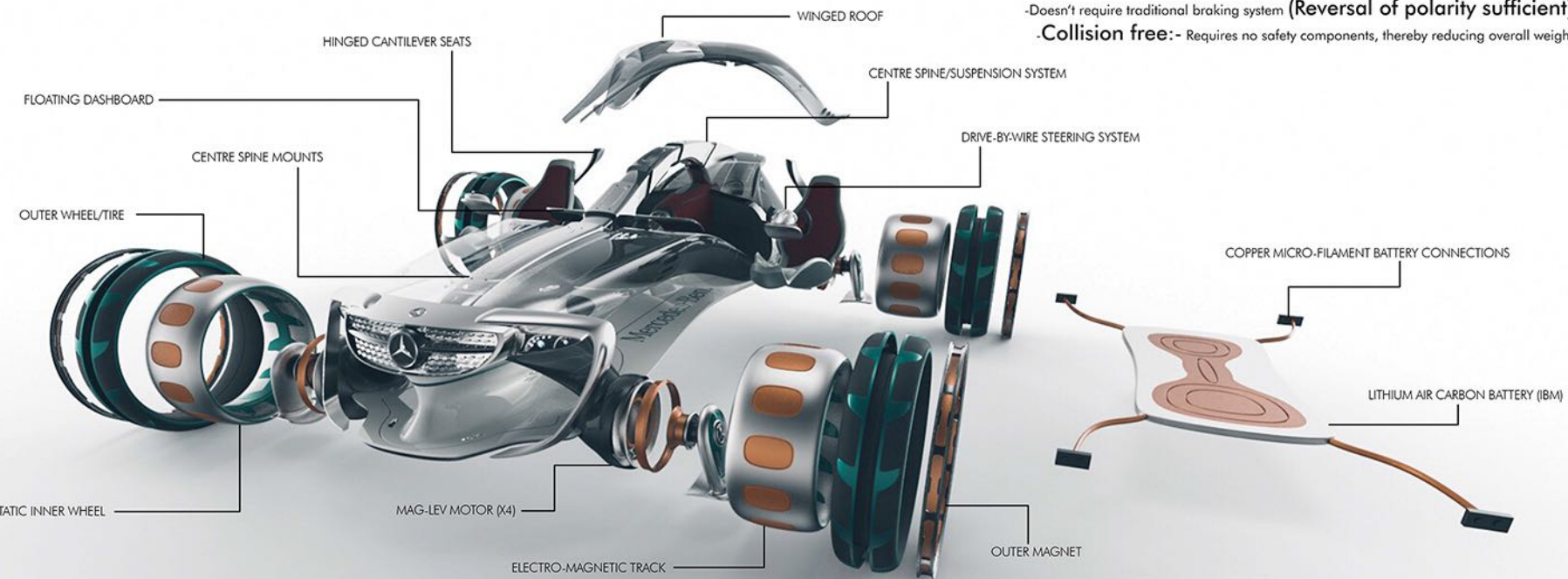
DESIGN CRITERIA
Restrictions to carbon dioxide emission (0g/km of CO2 per vehicle)
- Discussion on new vehicle architecture and mobility
- Weight optimisation in terms of design
- Size Reduction

Create an evolution to motoring according to ecological values.



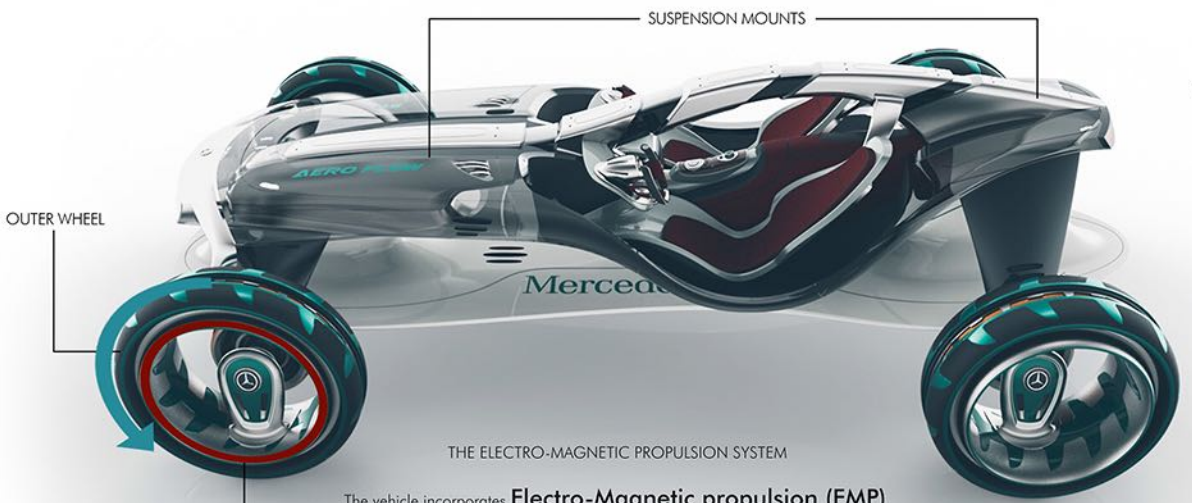
DESIGN SPECIFICATIONS

TECHNICAL



MERITS OF EMP

- Zero maintenance
- Zero friction in propulsion system (only air resistance)
- Limitless speed potential
- Doesn't require traditional braking system (Reversal of polarity sufficient)
- Collision free:- Requires no safety components, thereby reducing overall weight

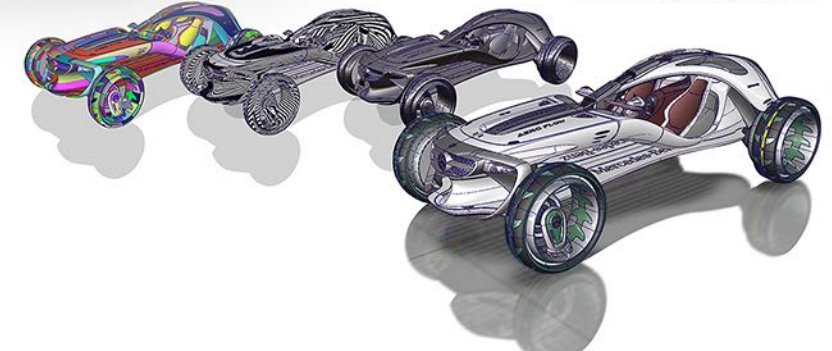


The vehicle incorporates **Electro-Magnetic propulsion (EMP)** which comprises of a **static wheel with an electro-magnetic track** all around, and held together by a **centre static shaft** which inturn is connected to the **Mag Lev motor**. The **outer wheel/Tire is suspended** around the static wheel by the help of magnets and **revolves round it, as well as steers**.

THE CENTRE SPINE/SUSPENSION SYSTEM

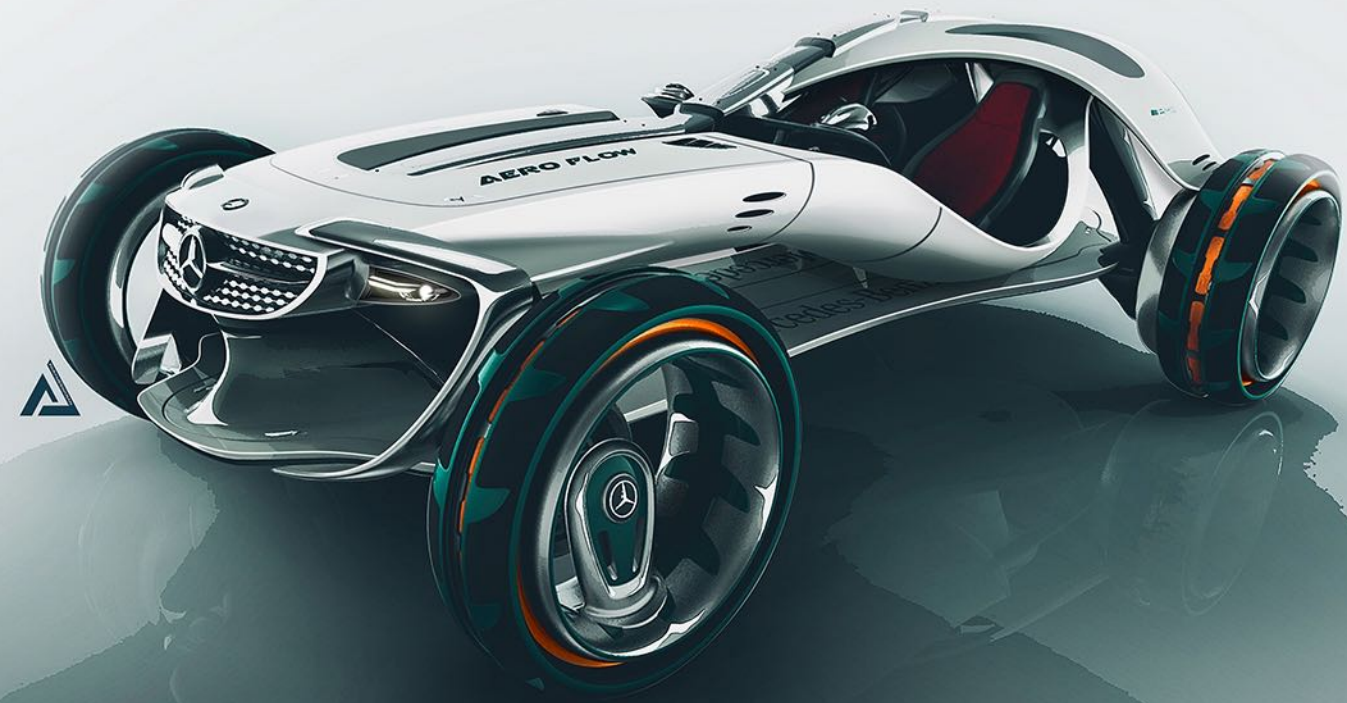
The centre spine as the name suggests, is **the main suspension system** of the vehicle, and is **mounted onto the vehicle frame** at the pillars. The spine stays **firm** when the vehicle drives over **uneven surfaces**, or even **tilts over a banked surface**. The **seats and dashboard are hinged at the spine**, and thereby provide a completely smooth driving experience to the occupants

- ALIAS MODELING PROCESS
1. Surface Patches
 2. Reflection Analysis
 3. Shader Visualization
 4. Alias Hardware Shader Review



TARGET & POSITIONING

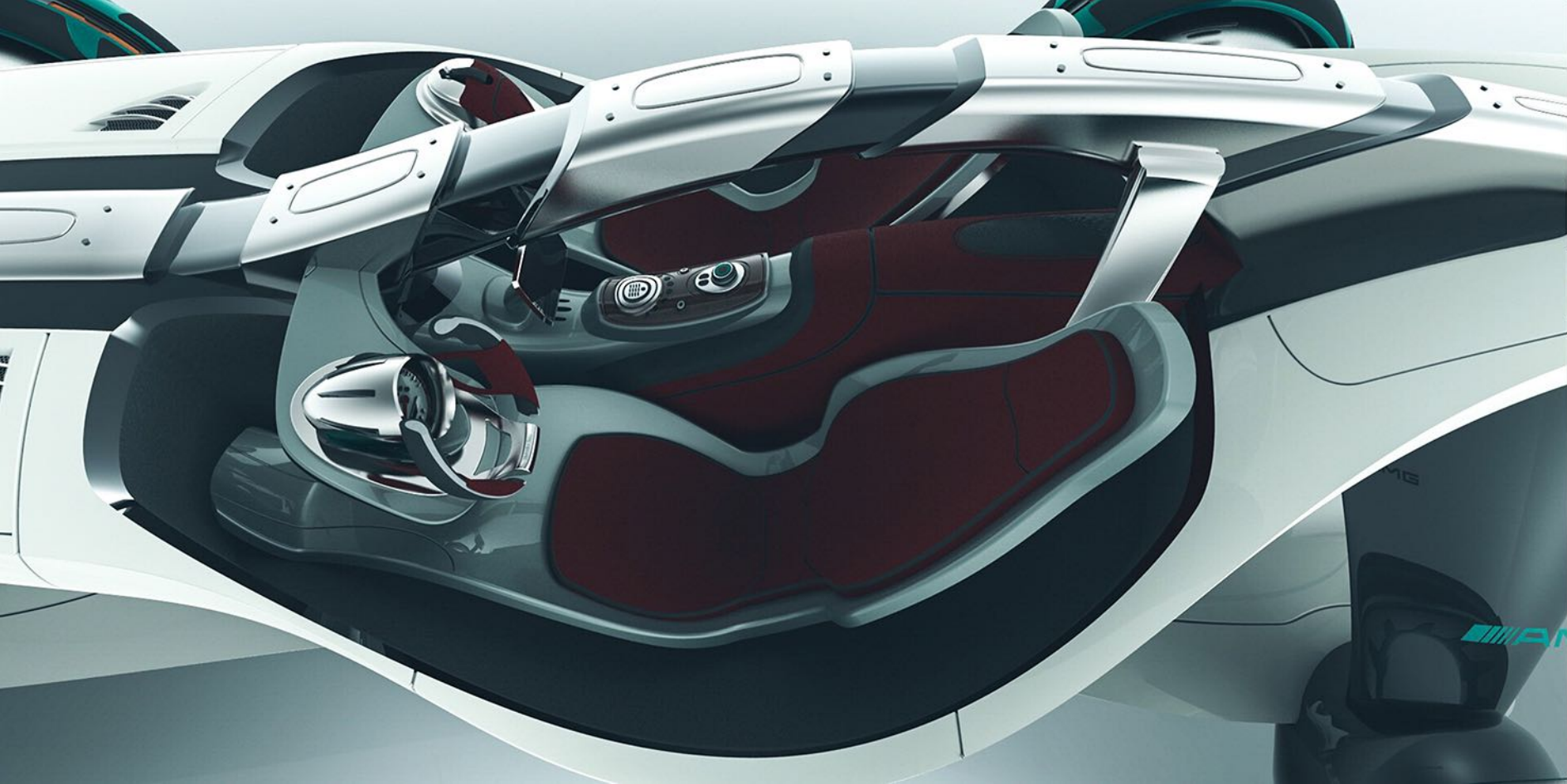
- THE SIGNIFICANCE OF THE AERO-FLOW IN THE LUXURY MARKET IN 2057?
- PREMIUM EXCLUSIVE** - Fashion inspired brand with high stand out features
 - TRACK-BRED RACER** - Tuned and set-up for serious future racing scenarios
 - LUXURY GRANDTOURER** - Luxury oriented GT car for long distance drives



MERCEDES-AMG
PETRONAS FORMULA ONE™ TEAM



AMG
PETRONAS
FORMULA ONE™ TEAM





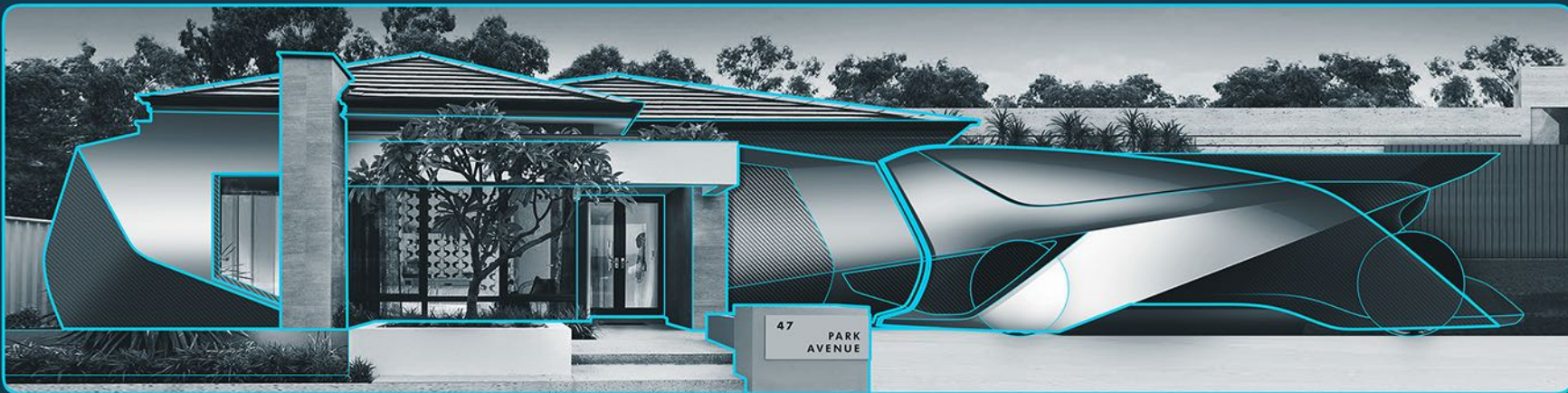
CAPSULE^{NIO}

BRIEF | HOW WOULD AUTONOMOUS VEHICLES RE-SHAPE THE FUTURE URBAN LANDSCAPE?
FUTURE OF MOBILITY



VISION

To Propose a Future Autonomous Transportation Scenario where the Automobile and the Living & Working space are physically integrated for optimal utilization of space and resources.

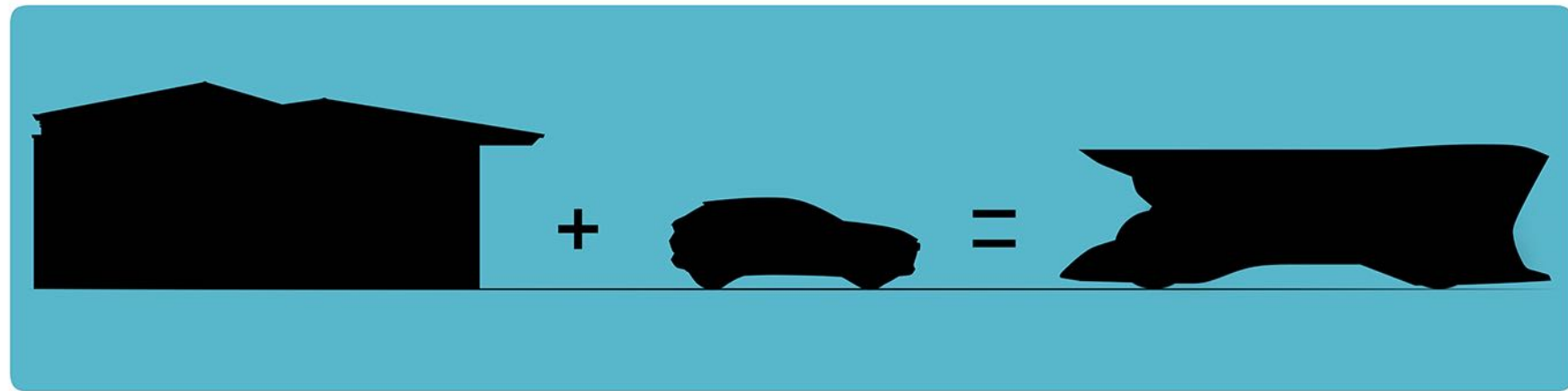


HOW WOULD AUTONOMOUS VEHICLES RE-SHAPE THE FUTURE URBAN LANDSCAPE?

- Could a Car be a Physical extension of a House & Workspace?
- Could a Car be a room at your home and a cubicle at your workspace at the same time?
- Could this concept help simplify/minimize the need for larger office spaces and houses?
- Could you literally carry your work and equipment along with you? (WORK ANYWHERE YOU ARE!)

PROJECT GOAL

To reduce the foot-print of houses and work-spaces by merging them with the transportation medium, thereby making efficient utilization of space and resources.



THE CONCEPT

Houses become redundant when you are at work, and the workplace becomes redundant when you are at home.

We spend most of our time at our homes and our workspaces on a daily basis, and a considerable amount of time commuting between them.

- How could we reduce the need for large permanent spaces for houses and work-spaces?
- How could we merge both these places into one with the help of our daily transportation medium?
- How could we make better use of the commuting time, and also carry our work with us at all times, and also possibly work wherever we are?

INSPIRATION

The Docking of a Space Capsule onto the target vehicle, thereby forming a temporary or semi-permanent connection to form a working Space Station was the main inspiration for this concept.

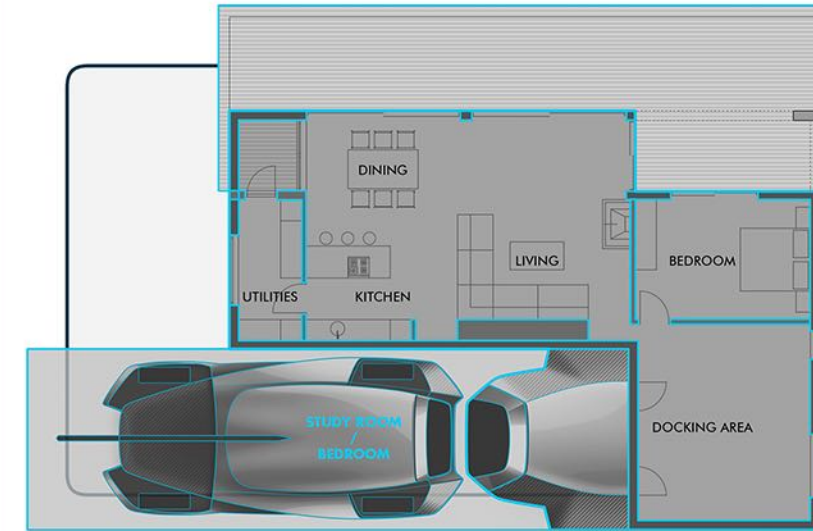


THE CONCEPT

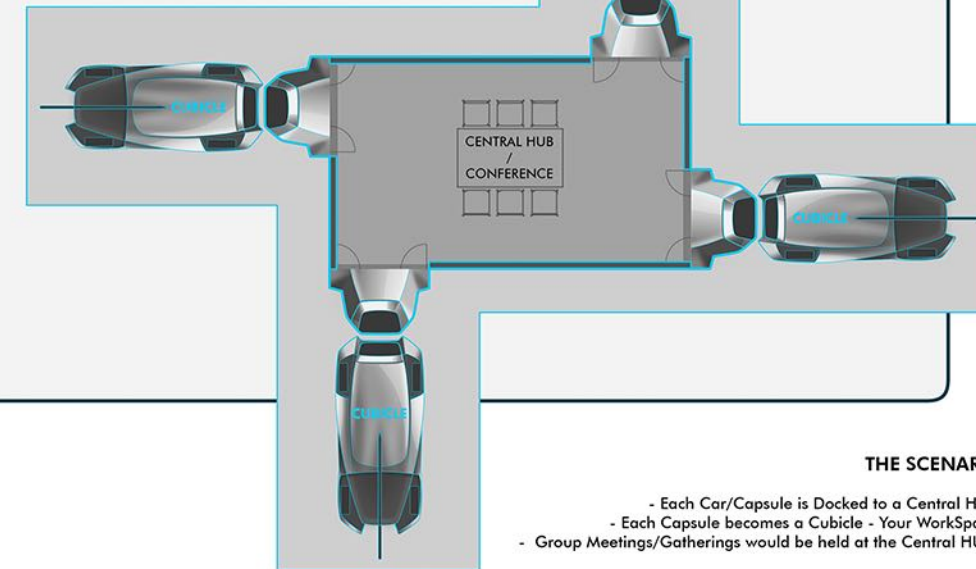
The International Space Station (ISS) is a space station, or a habitable artificial satellite, in low Earth orbit. Its first component was launched into orbit in 1998, with the first long-term residents arriving in November 2000. The last pressurised module was fitted in 2011, and an experimental inflatable space habitat was added in 2016. Development and assembly of the station continues, with several new elements scheduled for launch in 2019. The ISS consists of pressurised habitation modules, structural trusses, solar arrays, radiators, docking ports, experiment bays and robotic arms.

The basic principle of creating a Space station by the docking/merging of a number of Space Capsules, each of which would eventually work as a room or lab was the key inspiration for this project.

HOUSE MODE



OFFICE MODE



THE SCENARIO

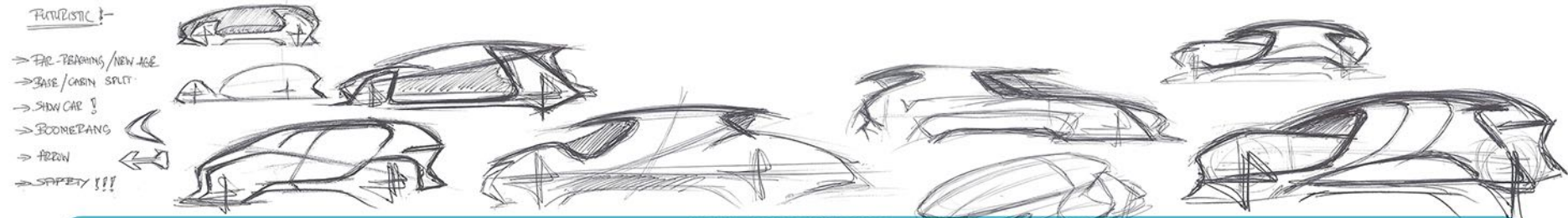
- The Car/Capsule becomes an integral part of the house.
- The Capsule could be used as a study room, or an additional bedroom based on the time and requirement.

This gives the opportunity to reduce the Cost & Size of the house and thereby reduce SPACE REDUNDANCY.

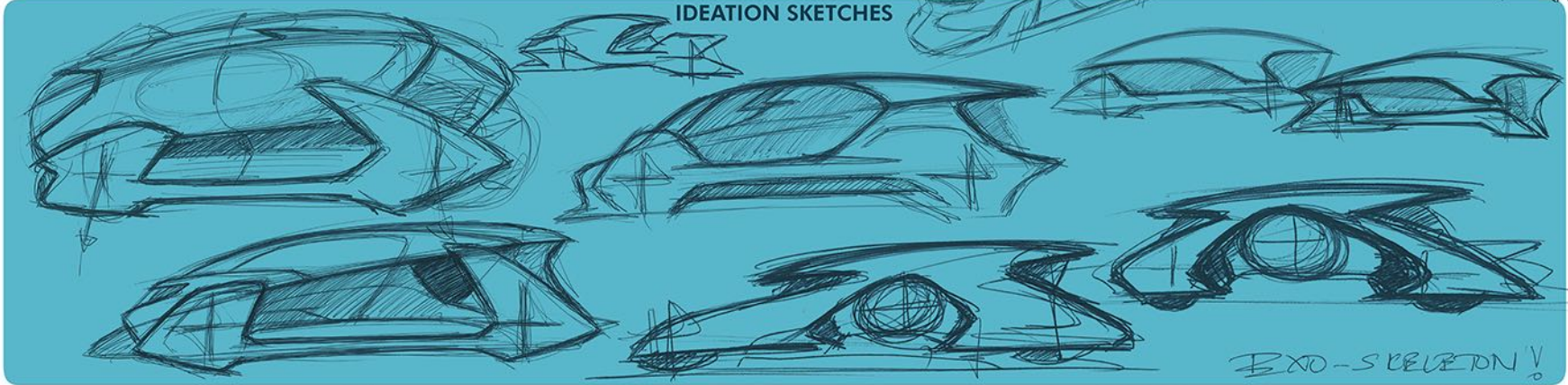
THE SCENARIO

- Each Car/Capsule is Docked to a Central HUB.
- Each Capsule becomes a Cubicle - Your WorkSpace.
- Group Meetings/Gatherings would be held at the Central HUB.

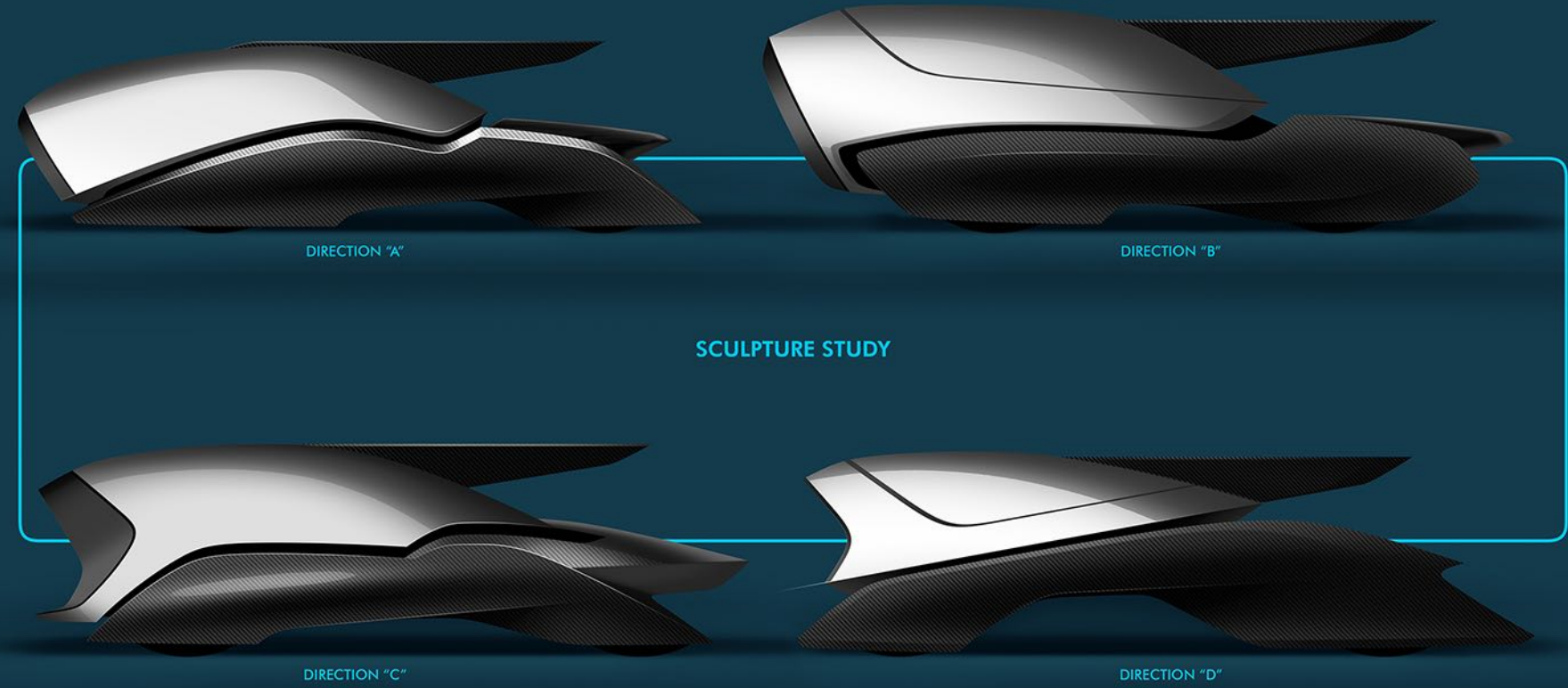
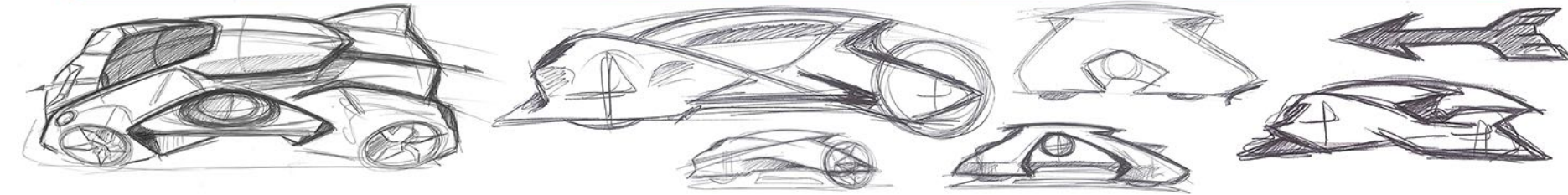
This Considerably reduces/eliminates the need to have vast Office Spaces, which would become redundant after Work.



IDEATION SKETCHES



EXO-SKELETON !



DIRECTION "A"

DIRECTION "B"

SCULPTURE STUDY

DIRECTION "C"

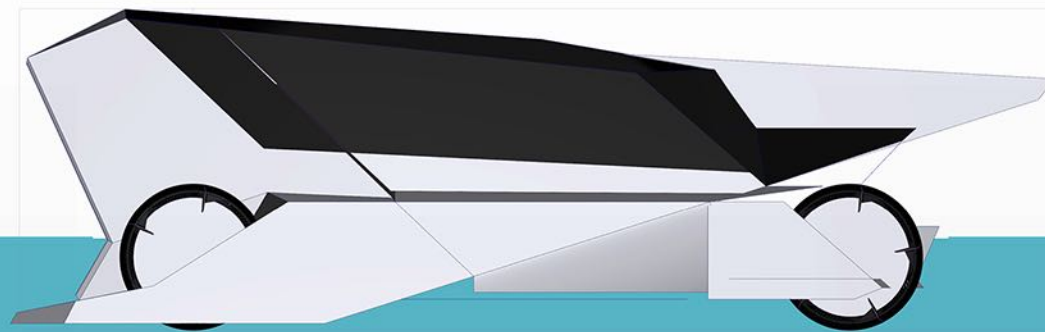
DIRECTION "D"

DESIGN GOAL

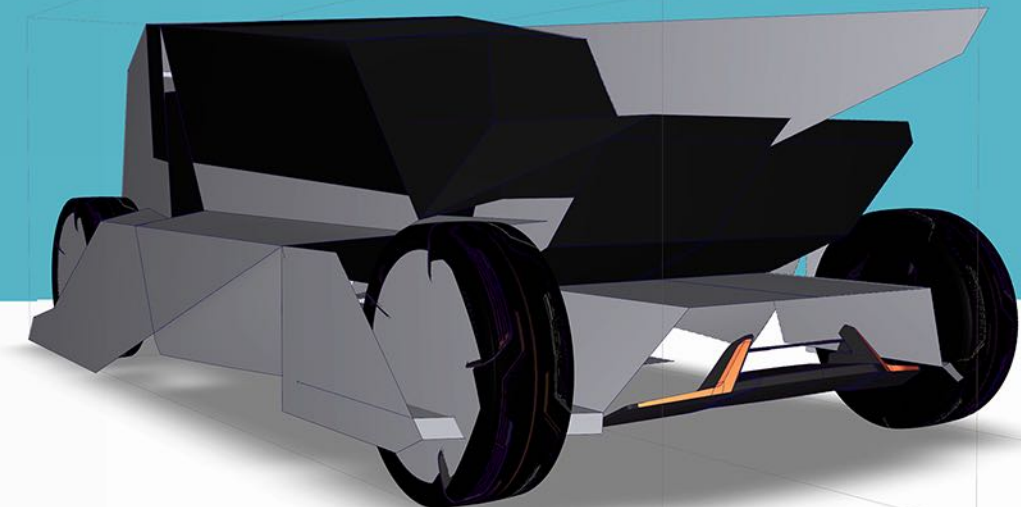
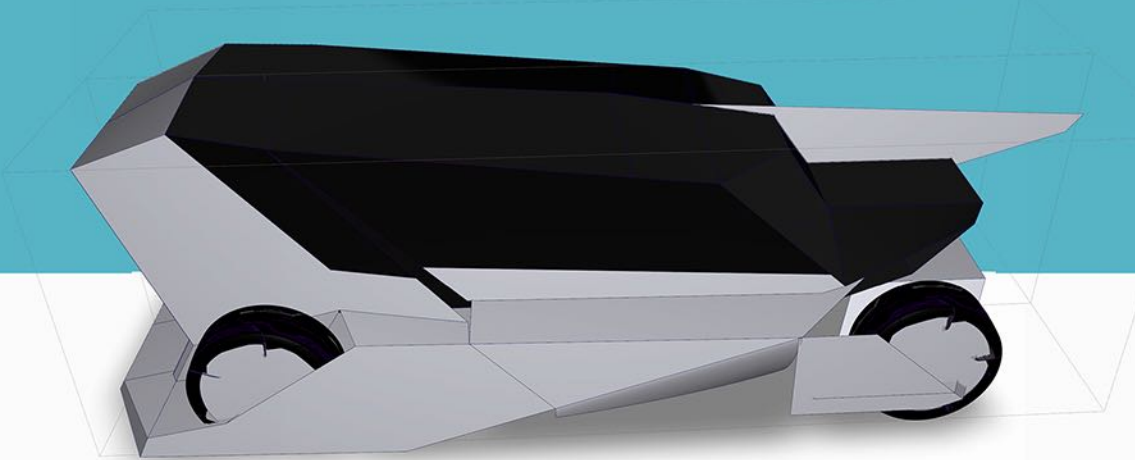
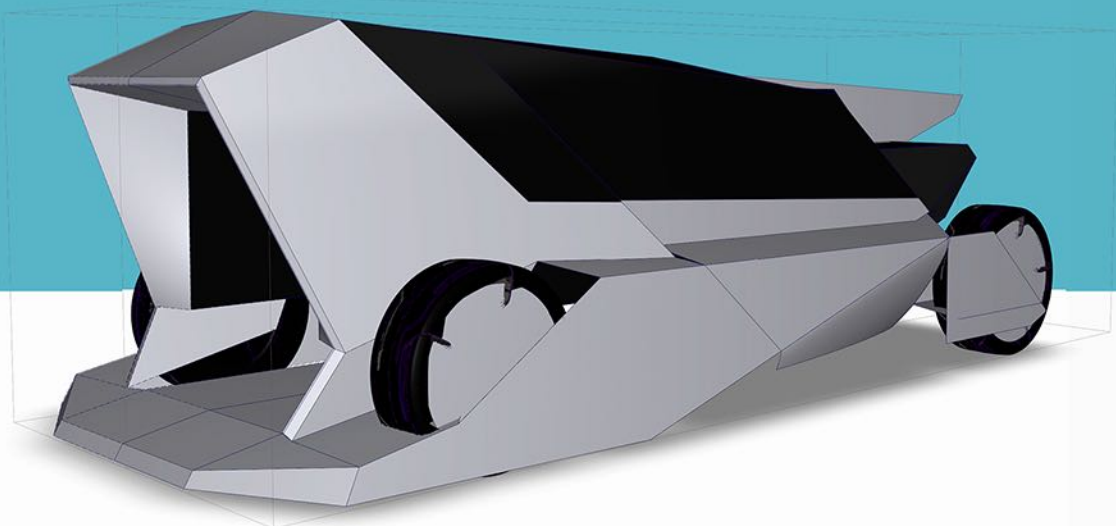
A basic model was developed in ALIAS.

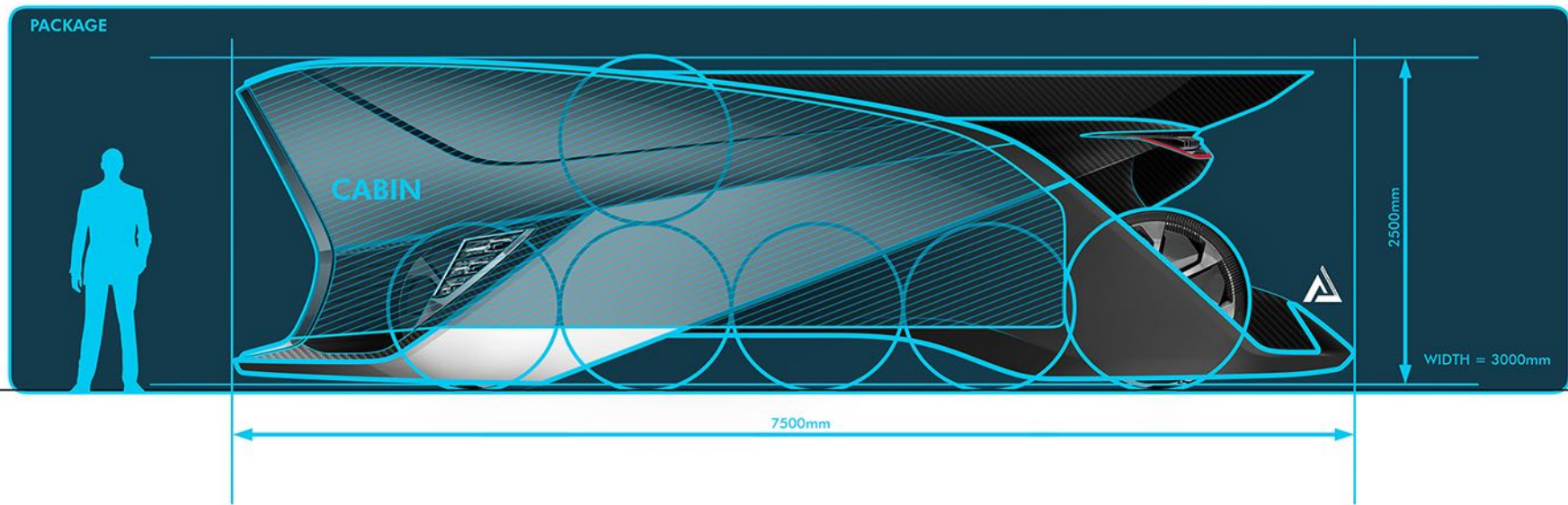
- A **Sculptural** exterior with a unique Front & Rear structure.
- **Architectural Front + Automotive Rear.**
- The **Interior** was kept basic - A simple modular box.

Create an expressive vehicle with a Non-Automotive Architecture.

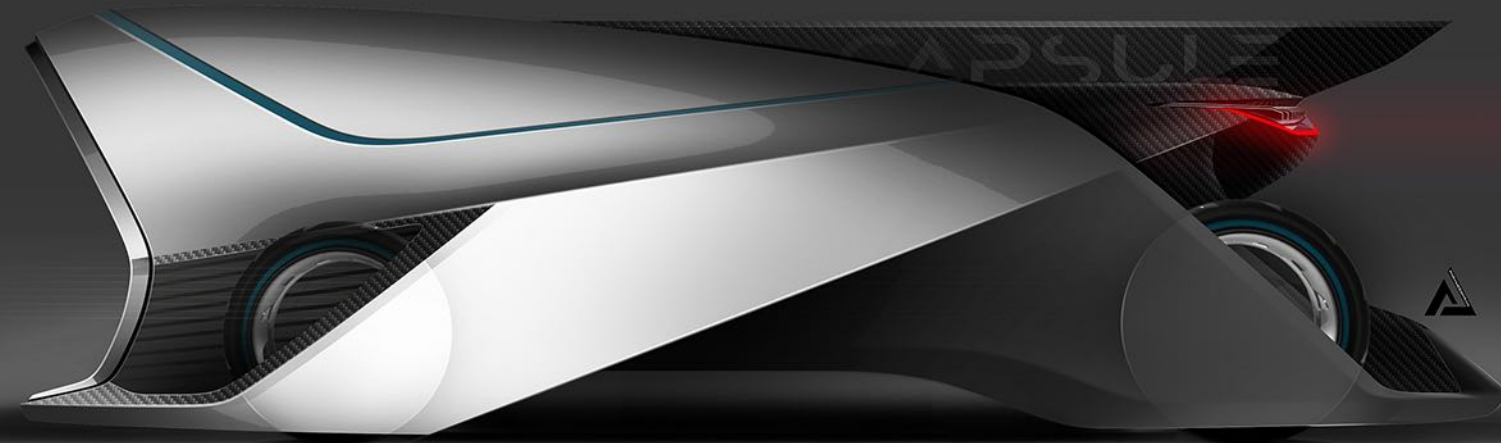
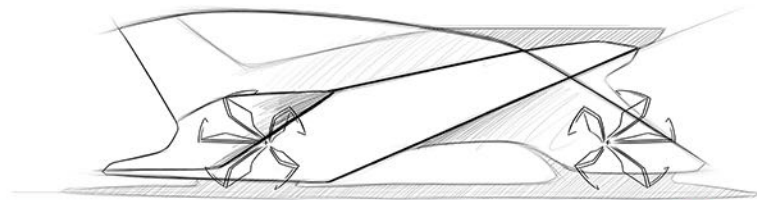


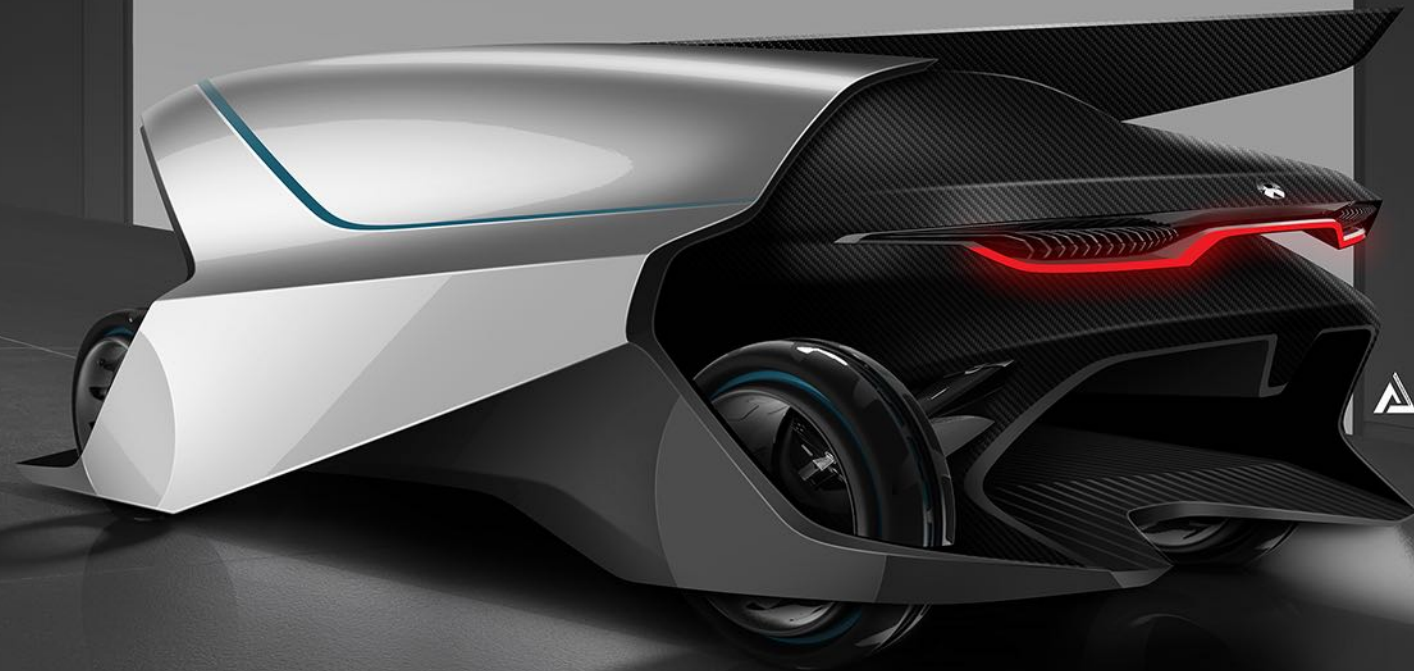
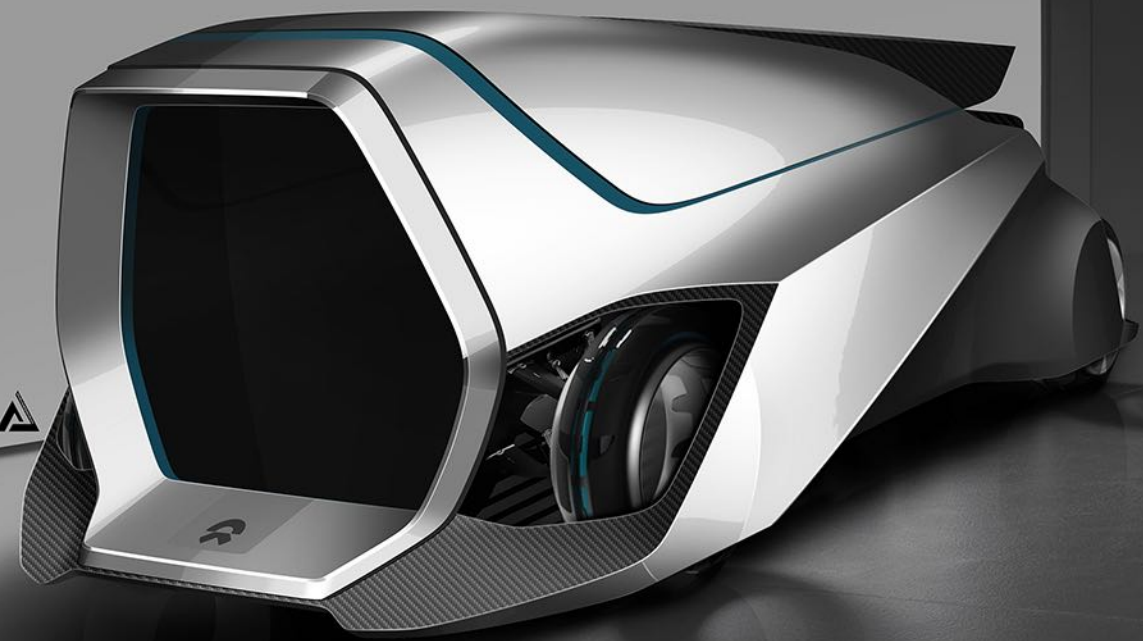
KEY DESIGN
CAS BLOCK IDEATION





THE DESIGN ARCHITECTURE







**MITSUBISHI
MOTORS**

XIX

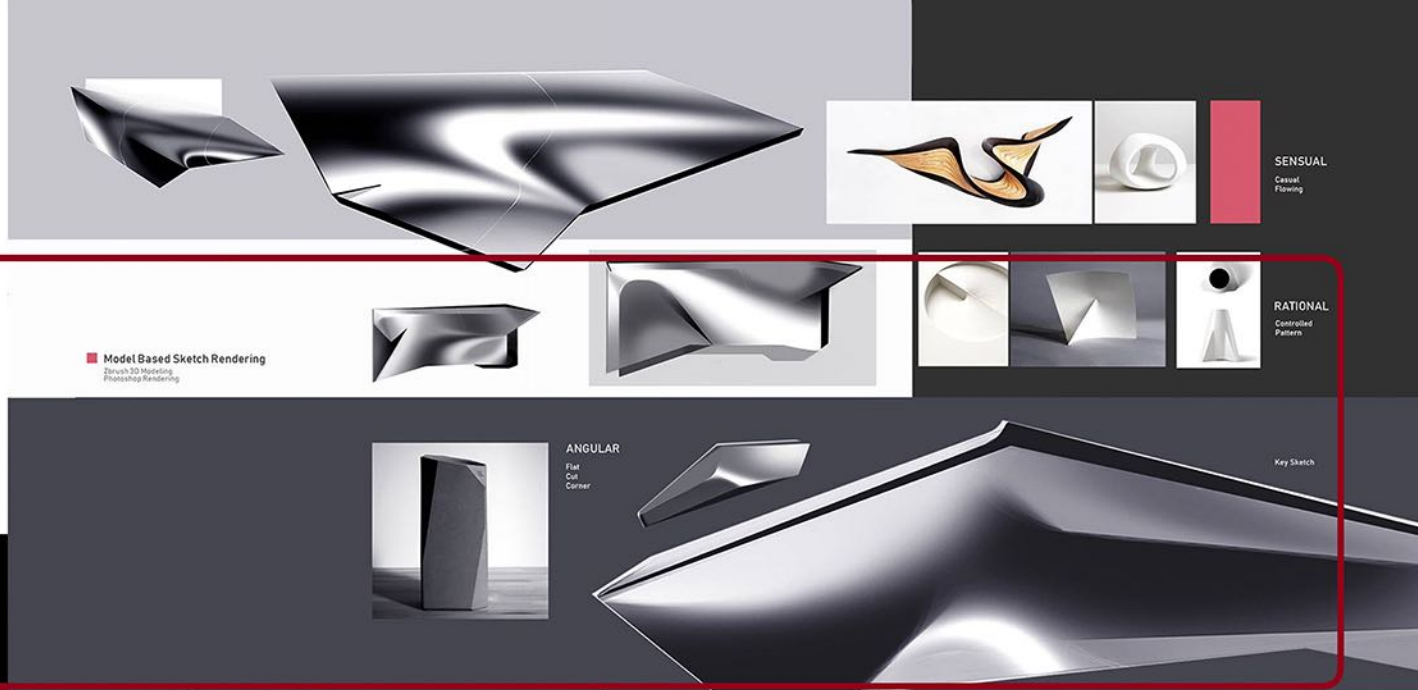
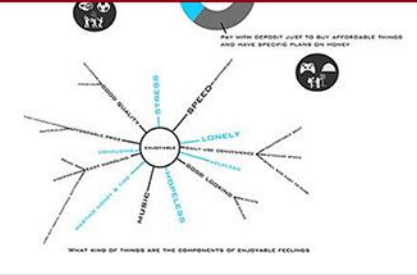
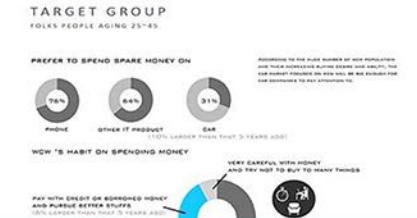
BRIEF | DESIGN A COMPACT EV CAR FOR THE URBAN ENVIRONMENT
INSPIRED BY THE ORIGINAL COLT MODELS

**MITSUBISHI
COLT**





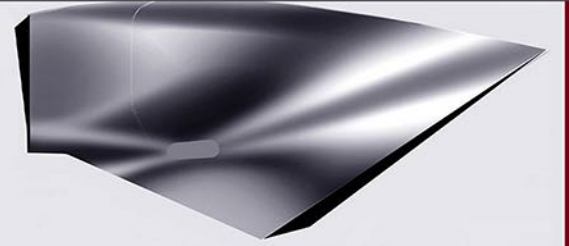
EVOLUTION OF THE COLT DESIGN DNA					
1960	1978	1984	1991	2004	2022
500 Pure - Iconic	A150 Sharp - Balanced	C10 Sharp - Flat Surfaces	C50 Iconic Lamps - Soft Pebble volume	Z30 Cab Forward - Unique A-Pillar + Integrated Headlamps	COLT EV Unique A-Pillar + Integrated Headlamps Dynamic Shoulderline + Silhouette
		.INSPIRED PERFORMANCED	.EMPOWER THE DRIVE	.ACCELERATING THE FUTURE	



DESIGN CONCEPT

COLT EVOLUTION

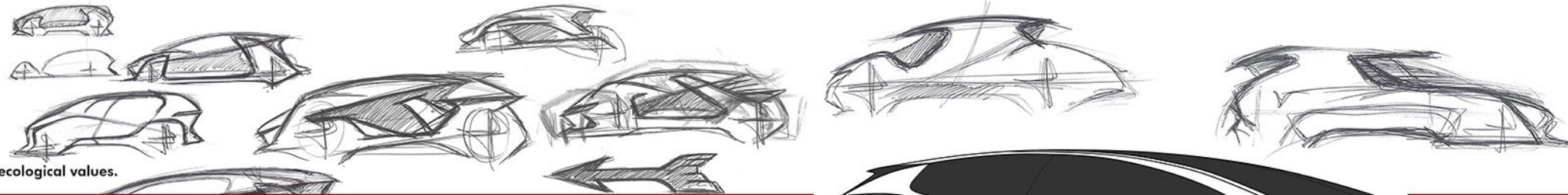
DESIGN CRITERIA



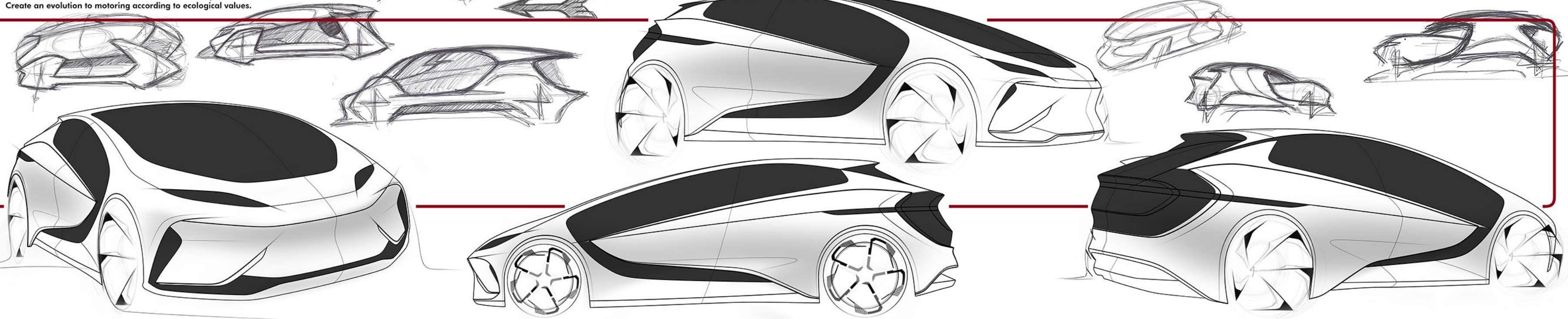
DESIGN CRITERIA

- Restrictions to emission (0g/km of CO2 per vehicle)
- Discussion on new vehicle architecture and mobility
 - Weight optimisation in terms of design
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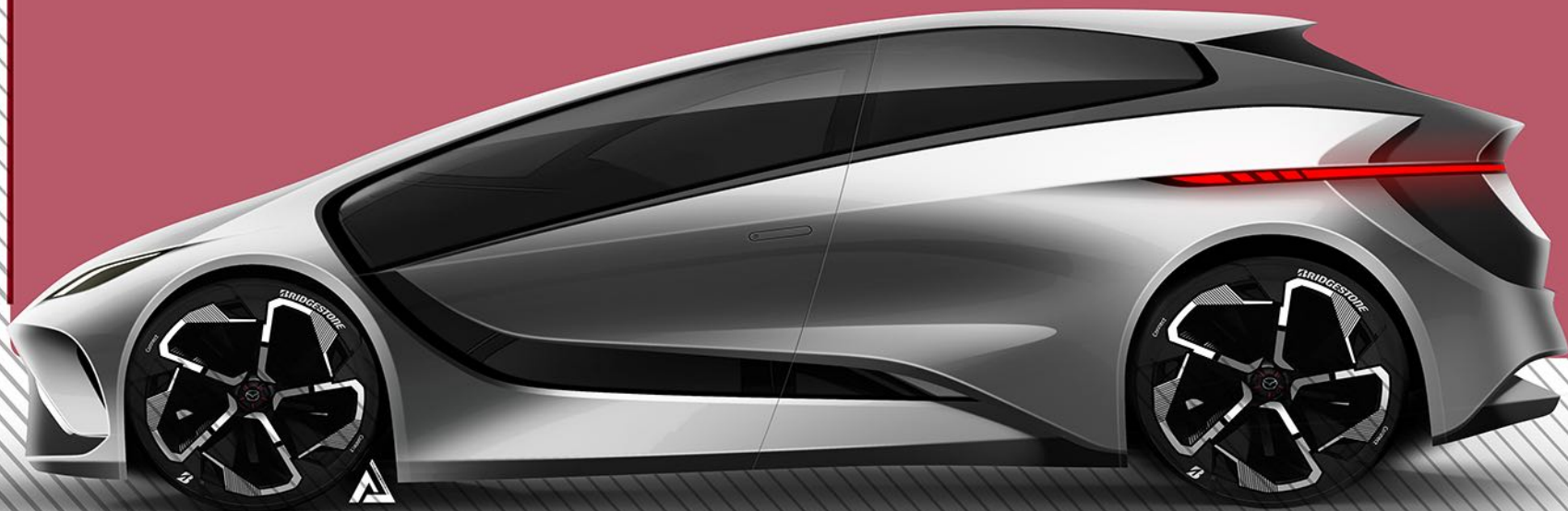
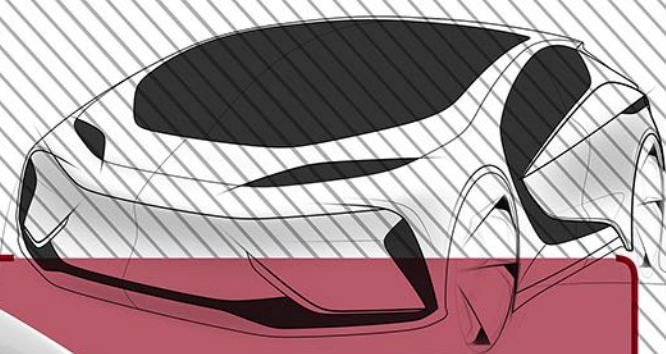
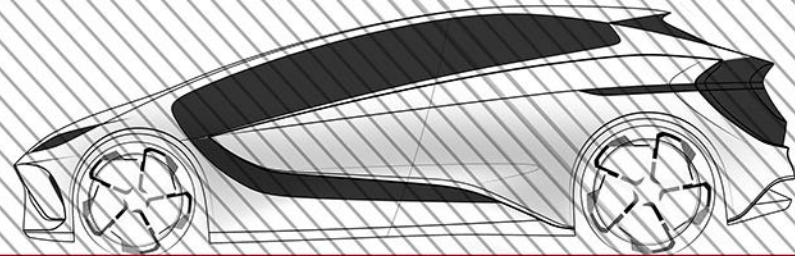
Create an evolution to motoring according to ecological values.



KEY SKETCHES



KEY DESIGN



AJAY.PARAMESWARAN



AJAY.PARAMESWARAN





NEVES

MAZDA
CX-ZERO

BRIEF | DESIGN A PURE SPORTS-SUV COUPE FOR MAZDA
KODO DESIGN FOCUSED



MAZDA α -ZERO

The goal was to design the next generation model of Mazda's Sport Coupe SUV - the CX-ZERO.
The design process began by studying the package (overall size and proportion) of the current generation model.

For the design process, the new **Kodo Design** language of Mazda was thoroughly studied. The **Vision Coupe Concept** was the key starting point.

The main goal of this design exercise was to find a Pure design philosophy for a vehicle, with minimal body lines and surface cuts. **Light and Shadow defines the design.**

The final design proposal hopes to present a beautiful, well-balanced design that would point towards the Perfect **Driver's vehicle** with excellent driving dynamics to support the emotional design.

*KODO is a depiction of potential energy in stationary forms.
The design philosophy can be represented by a sword ready to strike in the ancient Japanese martial art of kendo.*



"KODO: speed, tense, and alluring"

The design language aims to breathe life and art into vehicle design, transferring the heart and soul of the artist into the machine.

A car isn't simply a mass of metal. Mazda believes it's more like a living creature.
Creating an emotional bond between a driver and their car comparable with
the relationship between horse and rider.

That's the ultimate goal of Mazda's "Soul of Motion" design.

魂動 KODO : SOUL of MOTION

魂動

DESIGN BRIEF
A next generation SUV by MAZDA
What? DESIGN AN URBAN LIFESTYLE VEHICLE
Where? URBAN AREAS
When? 2020

KEYSKETCHES
EXTERIOR

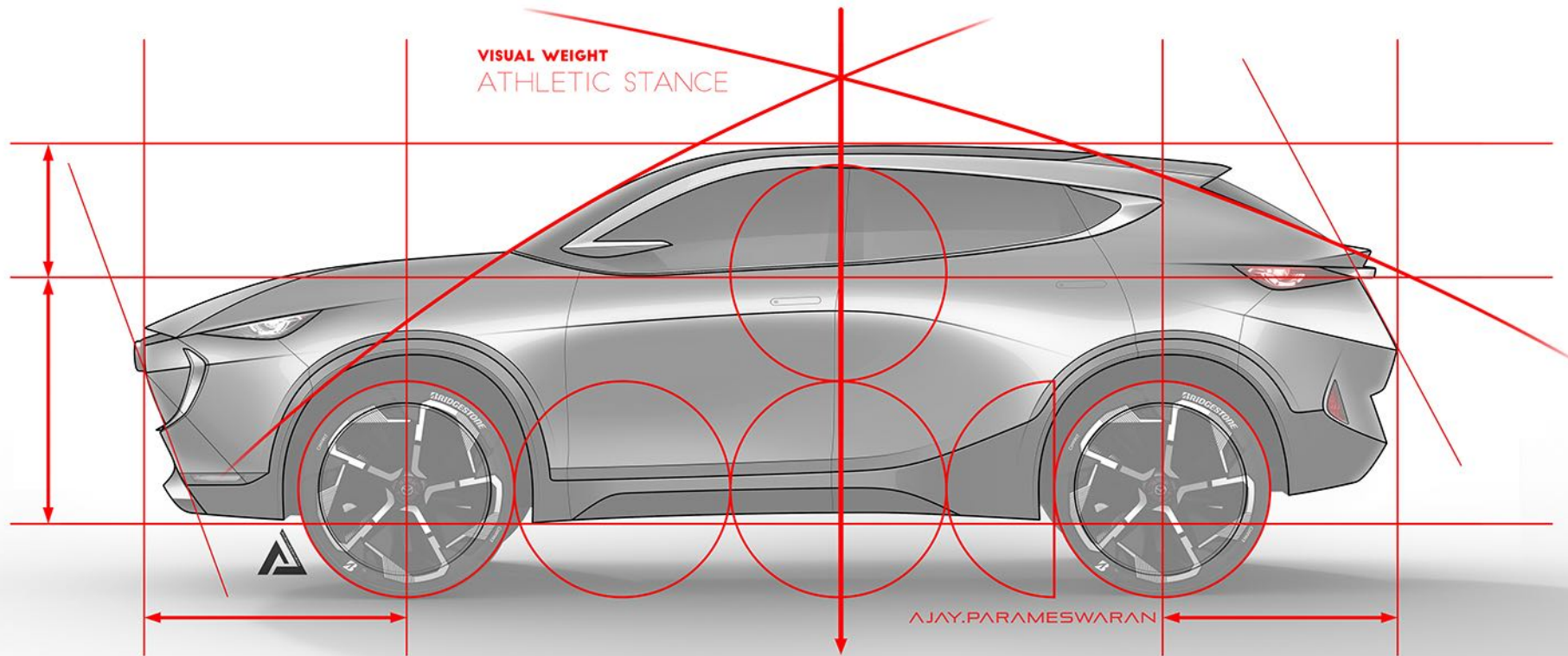


DESIGN CRITERIA

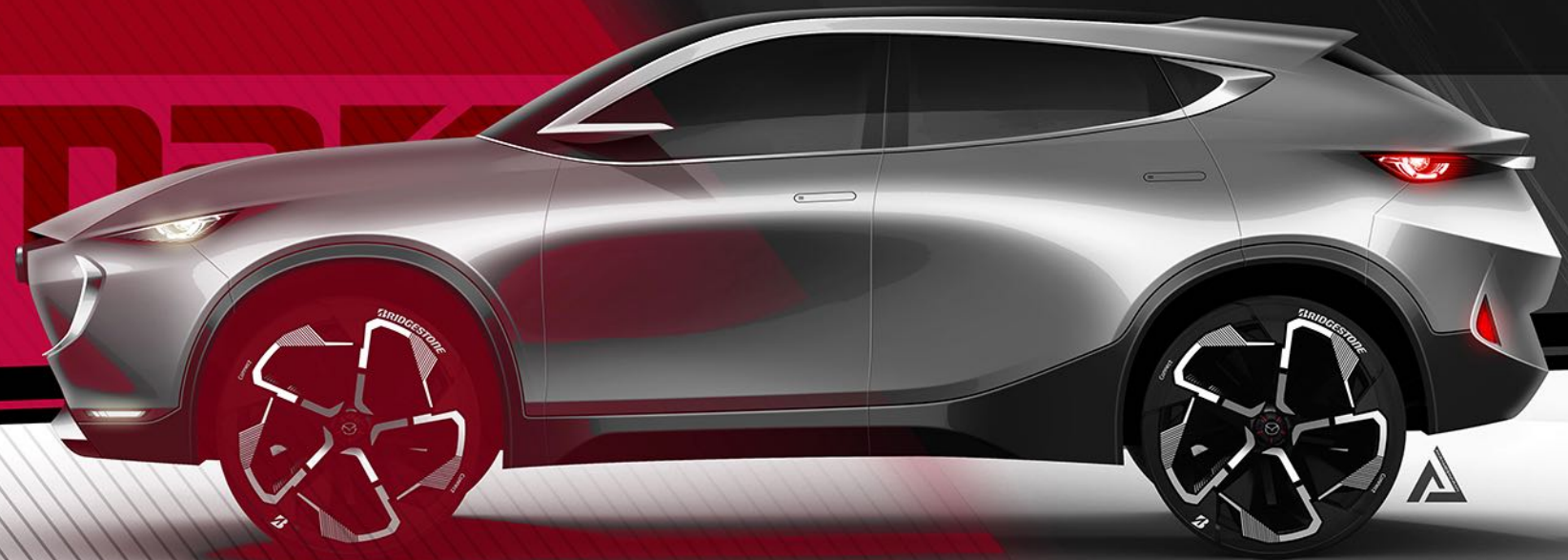
- Electric All-wheel-drive Sports SUV Coupe
- Emotional body surfacing with minimal lines - Light and Shadow define the shape
- Weight optimisation in terms of design
- Strong visual connection to the Mazda Vision coupe concept car

Create an emotional vehicle that is pure in form and surfacing

DESIGNSTUDY

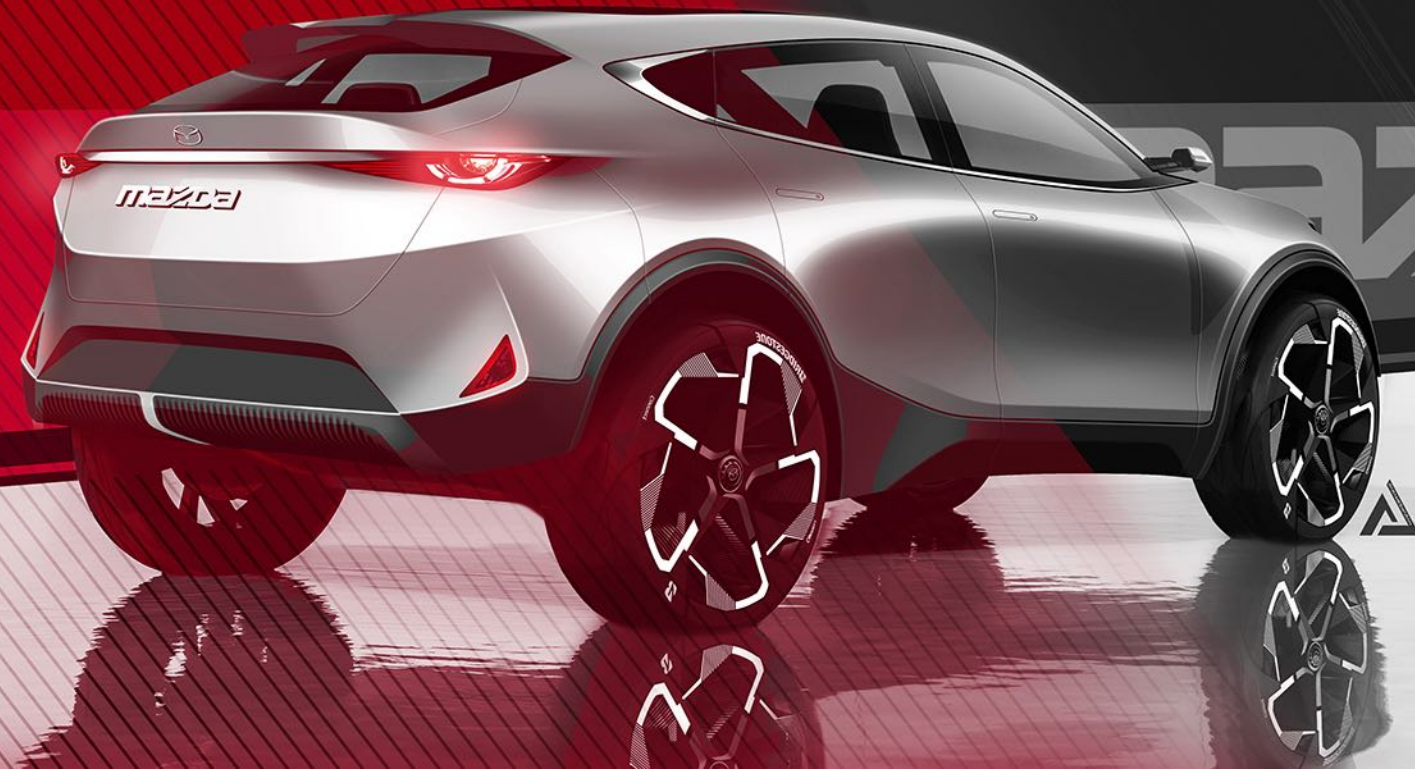


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MAZDA

MAZDA

EIGHT

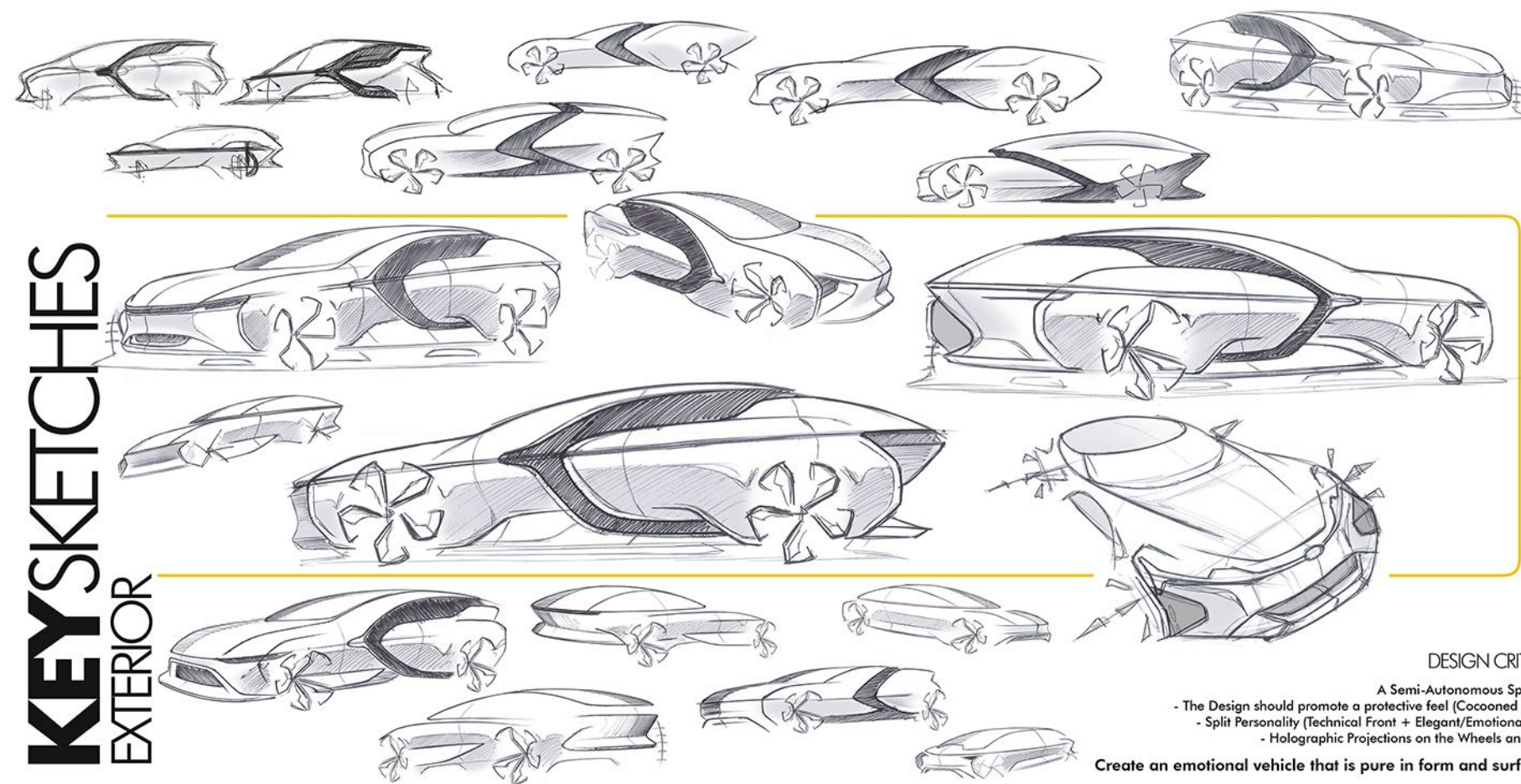
FREE
SKETCHES

BRIEF | A COLLECTION OF FREE DESIGN SKETCHES



KEY SKETCHES

EXTERIOR

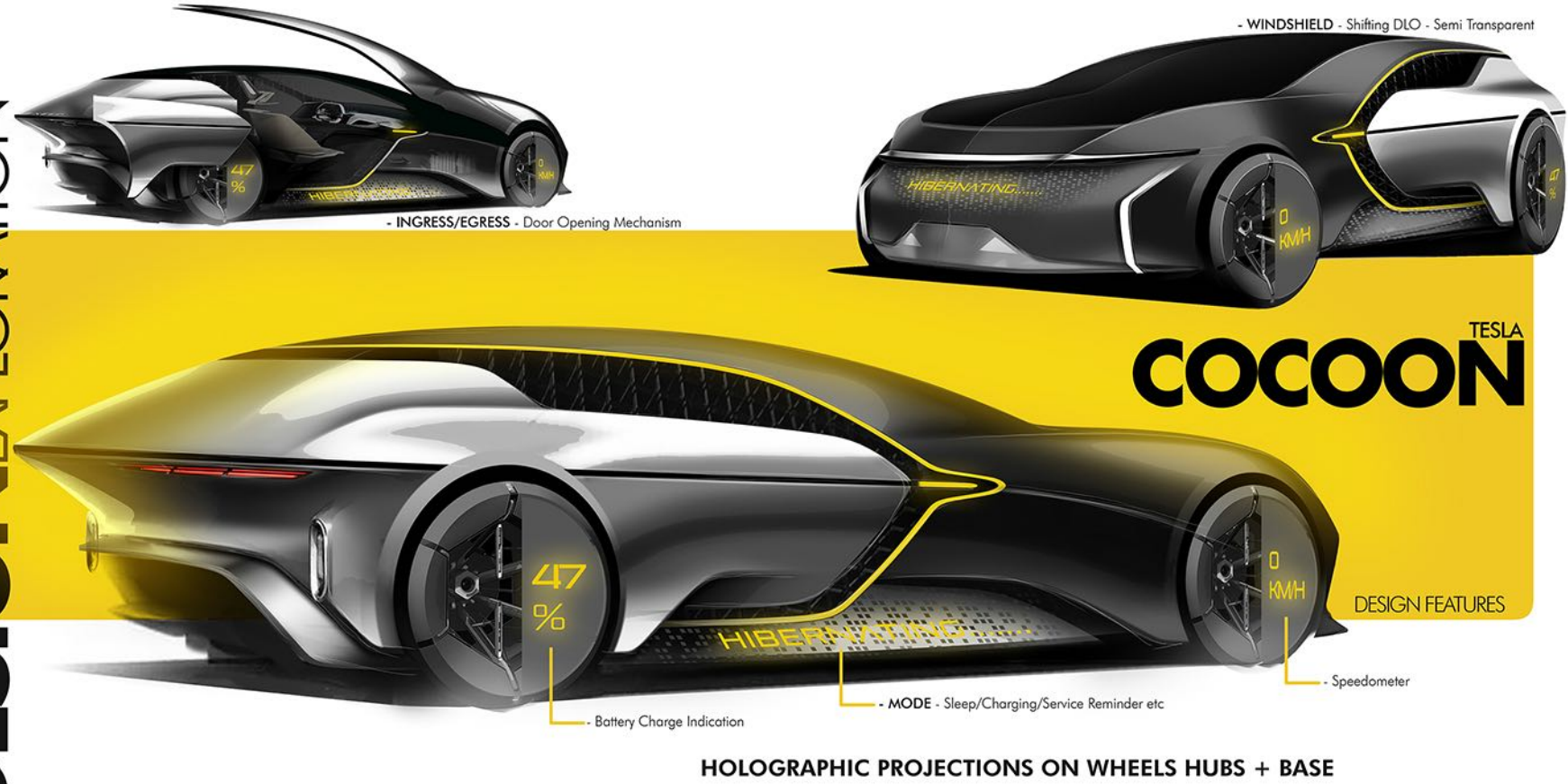


DESIGN CRITERIA

- A Semi-Autonomous Sport GT
- The Design should promote a protective feel (Cocooned inside)
- Split Personality (Technical Front + Elegant/Emotional Rear)
- Holographic Projections on the Wheels and Base

Create an emotional vehicle that is pure in form and surfacing

DESIGN EXPLORATION



TESLA COCOON

HOLOGRAPHIC PROJECTIONS ON WHEELS HUBS + BASE

AJAY.PARAMESWARAN

AJAY.PARAMESWARAN



TESLA
COCOON

TARGET & POSITIONING

THE SIGNIFICANCE OF 609 IN THE SPORT-SEDAN MARKET?

PREMIUM LUXURY

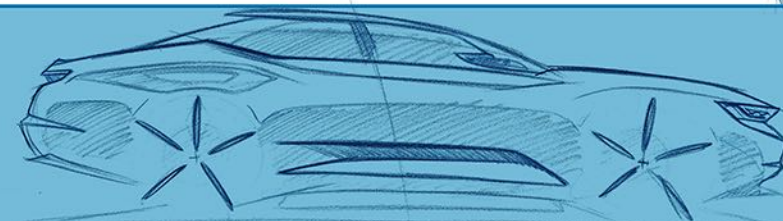
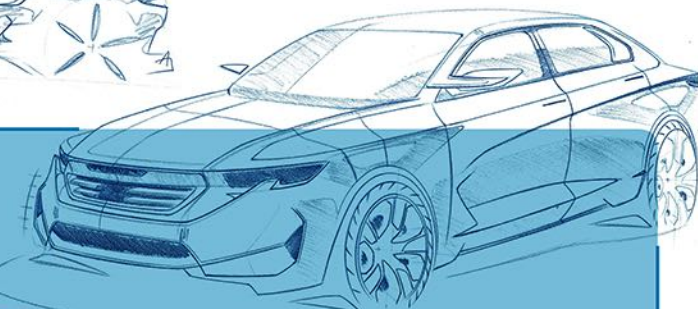
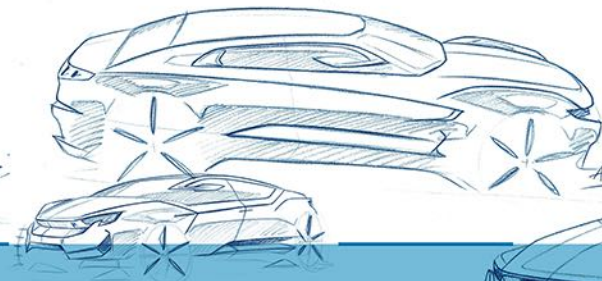
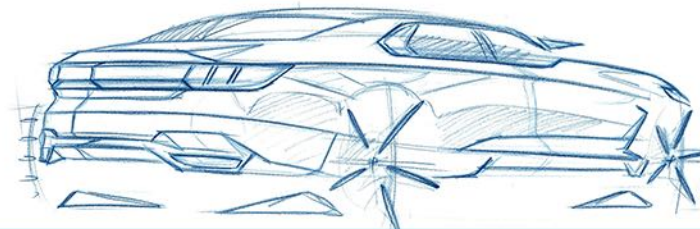
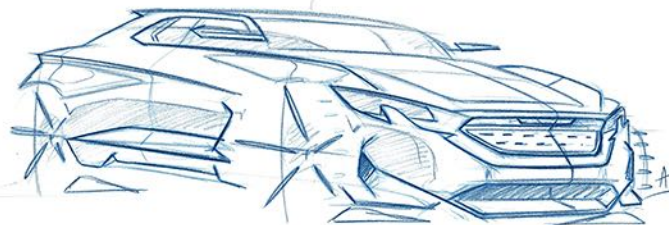
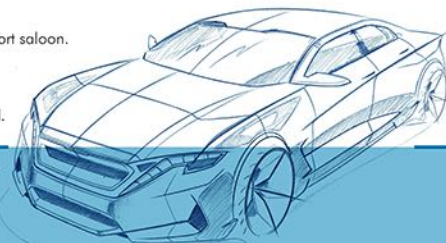
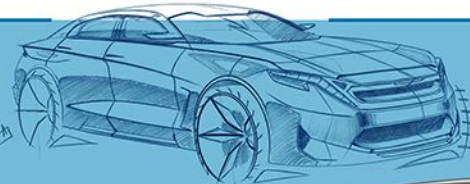
- The Peugeot 609 presents a sublime vision of a sport saloon.

SOPHISTICATED

- The Design is based on French Opulent Lifestyle.

GRAN TOURER

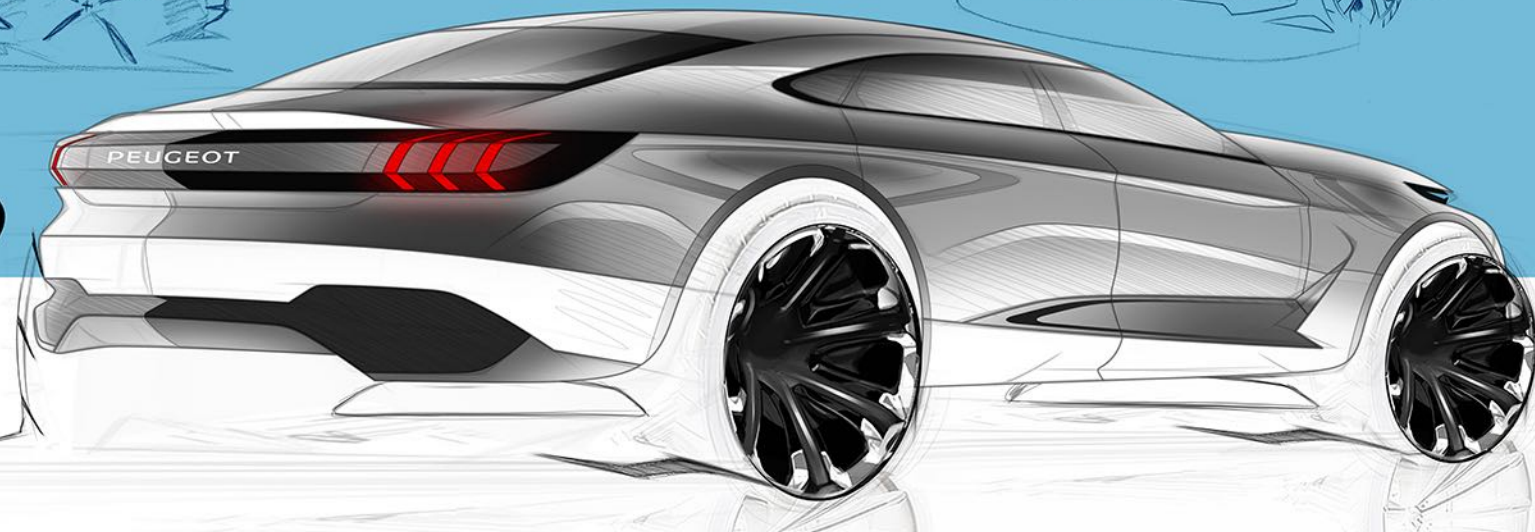
- Urban Sports Sedan with GT Performance Potential.



KEY DESIGN



PEUGEOT **609**



AJAY PARAMESWARAN



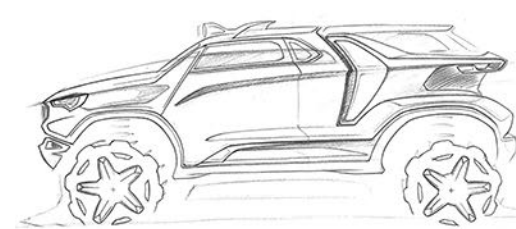
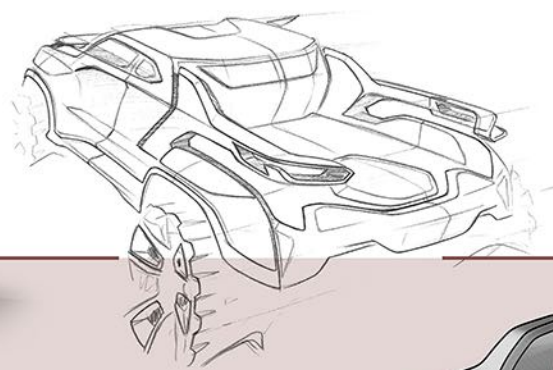
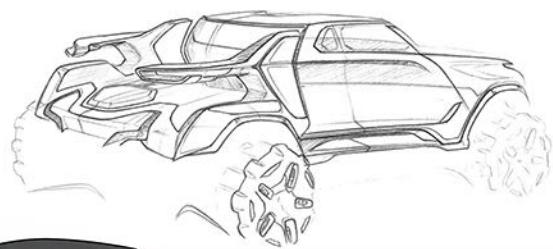
AJAY PARAMESWARAN



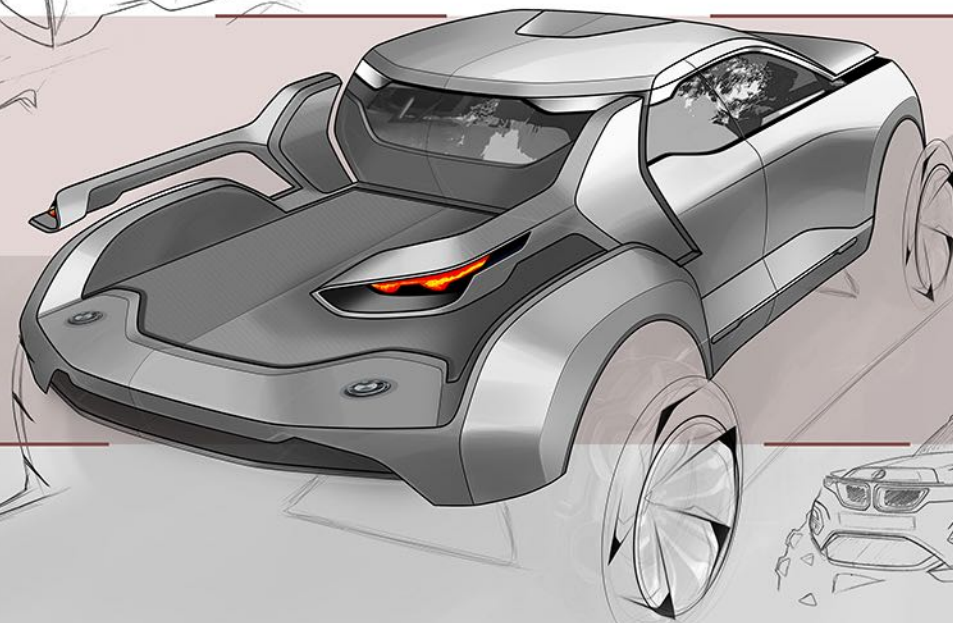
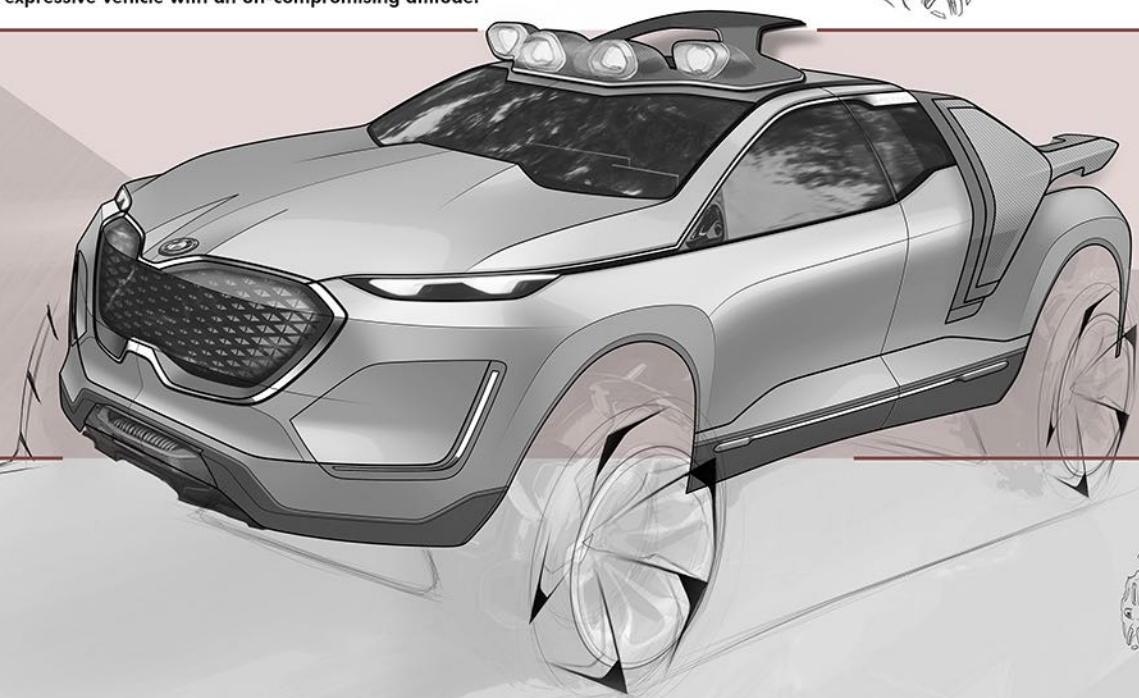
PEUGEOT **609**

DESIGN GOAL

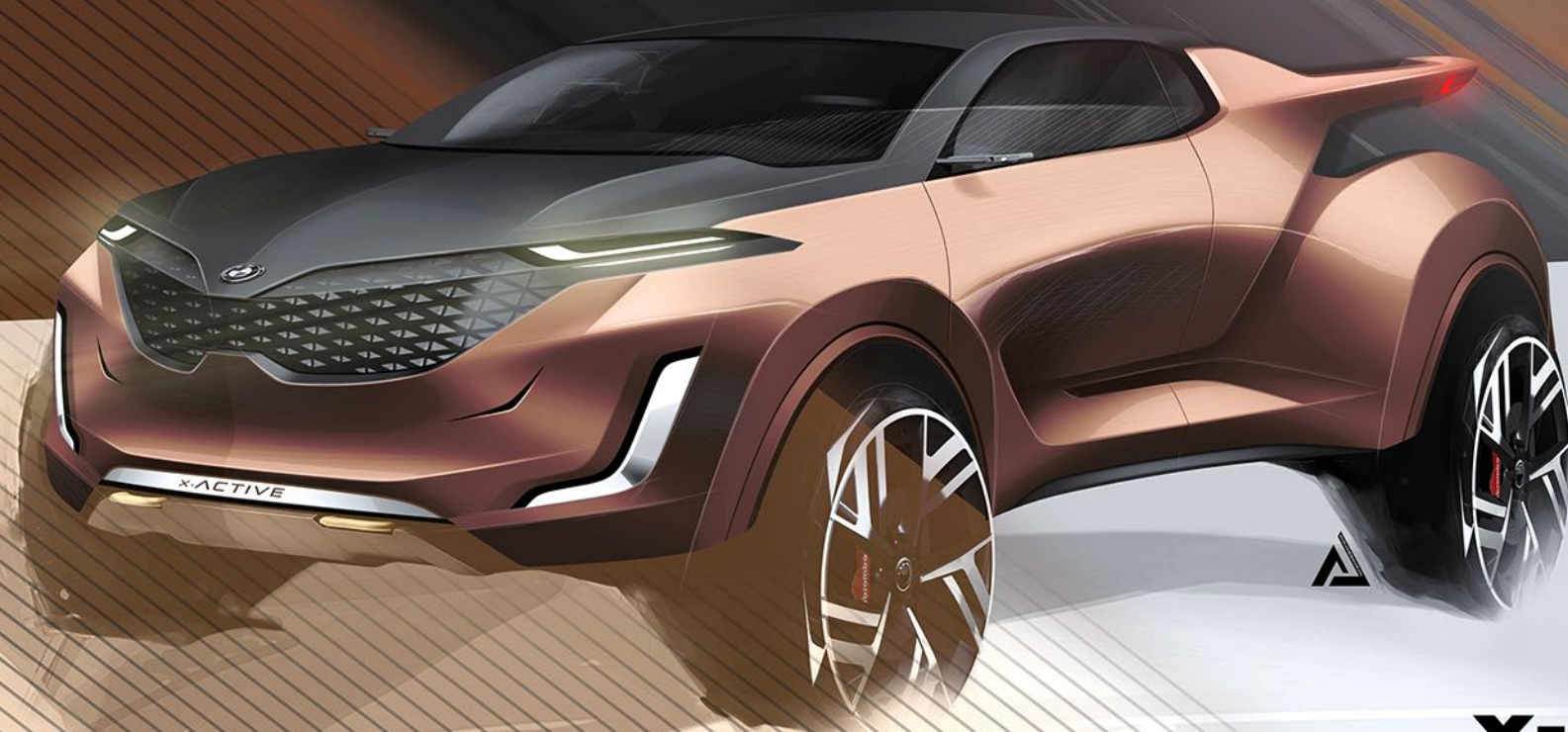
- A multi-purpose Modular UTE.
 - New **Modular-Pickup Architecture** with a unique rear structure.
 - **Mid-Sized** pickup developed for Adventure Seekers
 - **Tough + Chiseled** design language.
- Create an expressive vehicle with an un-compromising attitude.



KEY DESIGN
EXTERIOR



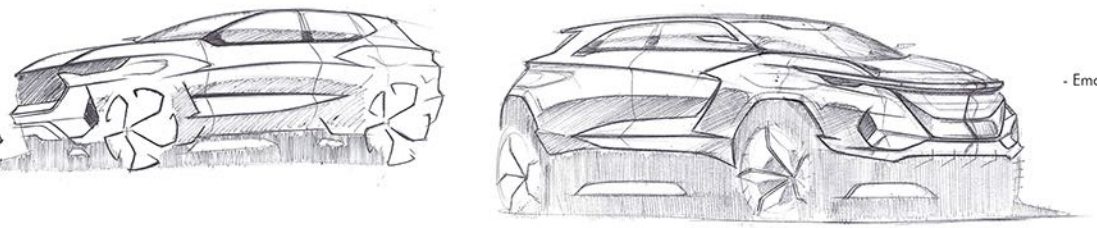
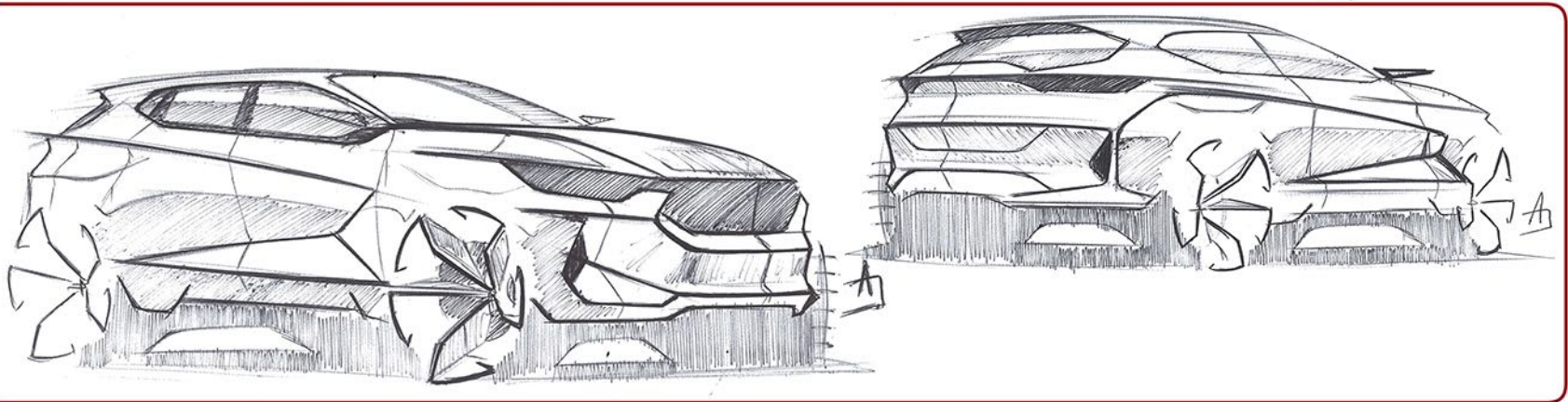
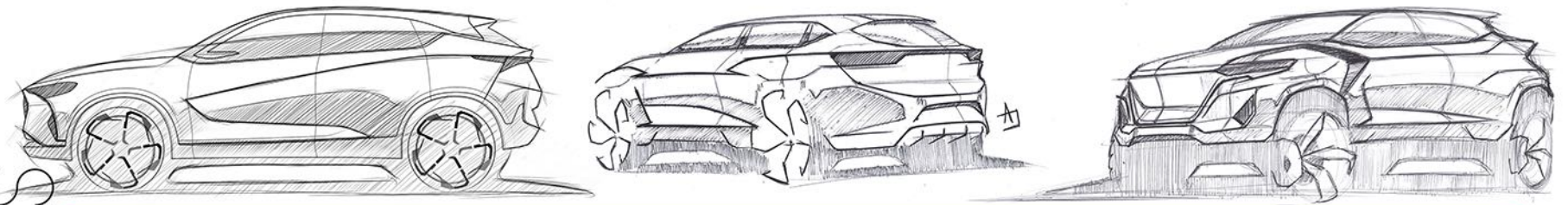
BMW **X-ACTIVE**



BMW **X-ACTIVE**

KEY SKETCHES

EXTERIOR



DESIGN CRITERIA

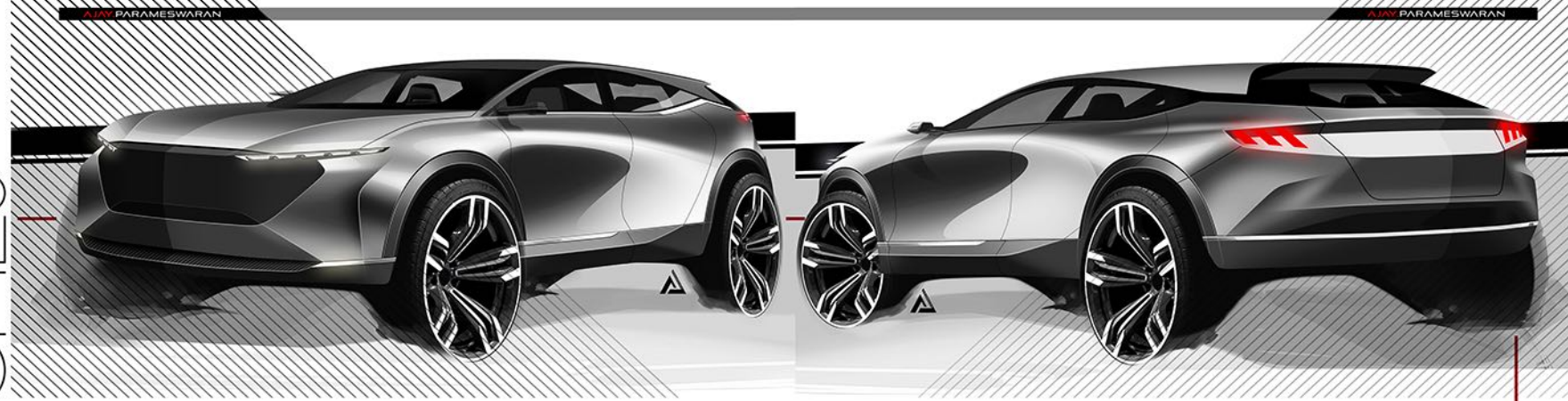
Next Generation VV7 by WEY

- Emotional body surfacing with strong character lines - Light and Shadow define the shape.
- Weight optimisation in terms of design.
- Strong visual connection to WEY X & S concept cars.

An emotional vehicle dynamic in proportion and surfacing.

KEY SKETCHES

EXTERIOR



WEY VV7

DESIGN CRITERIA

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