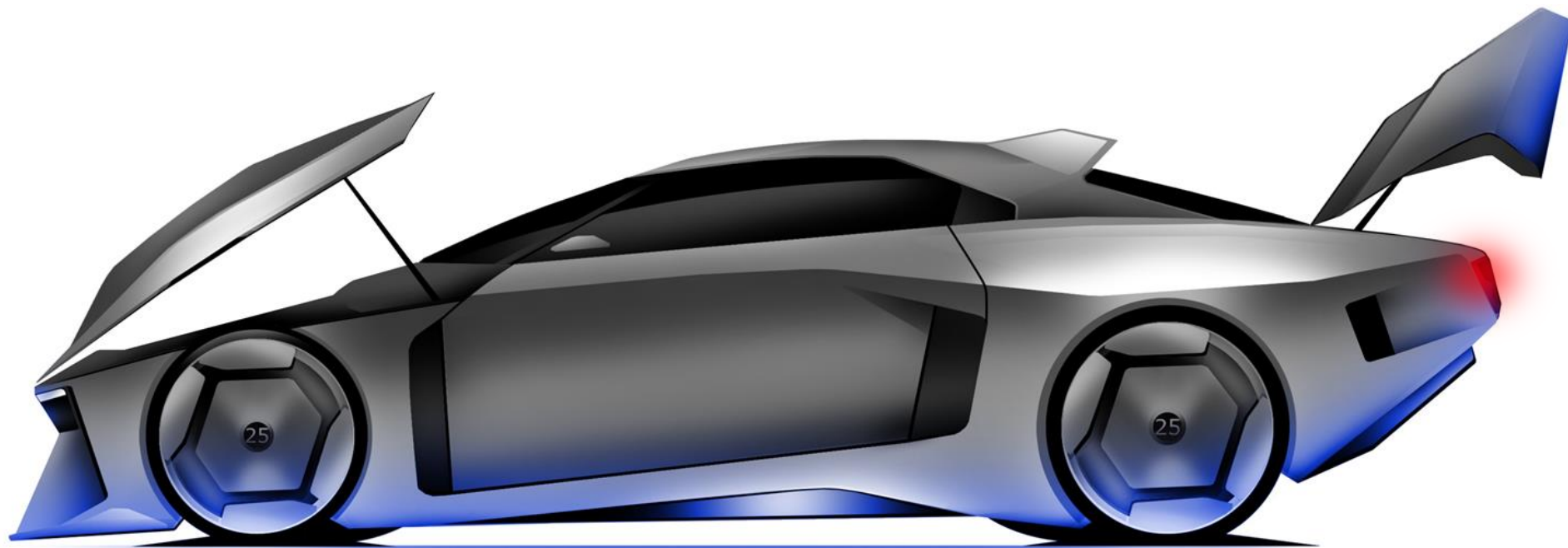


2022 THEISIS PROJECT  
REVIVAL 25



Libby Rose Marie Dakin



# Revival 25 Introduction

A **coach built** one off **German** premium brand, **2 box design** inspired by the best hits of the late **70's** and **80's**.

Merged with a **21<sup>st</sup> Century powertrain** and groundbreaking **haptic feedback** systems means this piece of automotive history and future can be used however you wish. **VR Integrated tech** allows for an **immersive drive** in any time zone you want.

## Project **Aims**

AIM **1**: Create a **Connecting** driving experience.

AIM **2**: **Alleviate stress** and **anxiety** with VR Tech.

AIM **3**: Evoke **nostalgia** and **emotions** for the user.

AIM **4**: Design a **fresh new** face with **classic** influence.



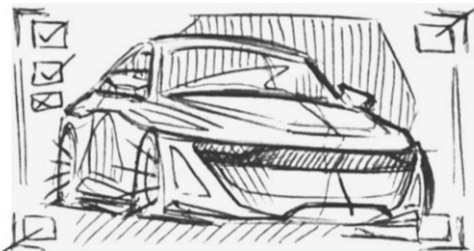
# Vehicle in Context

## Persona Key needs for the vehicle:

A compelling design which harks back to classic BMW products from the 70's & 80's. A tailor-made vehicle allowing full personalization. A drive train which will connect driver feel and evoke emotions created by classic / historic vehicles.



8AM – Waking up, weekend off which car to take out? (Poor Weather Conditions)



9:30AM – Chooses her vehicle, sets driving mode. (Preheating the cabin + suspension changes)

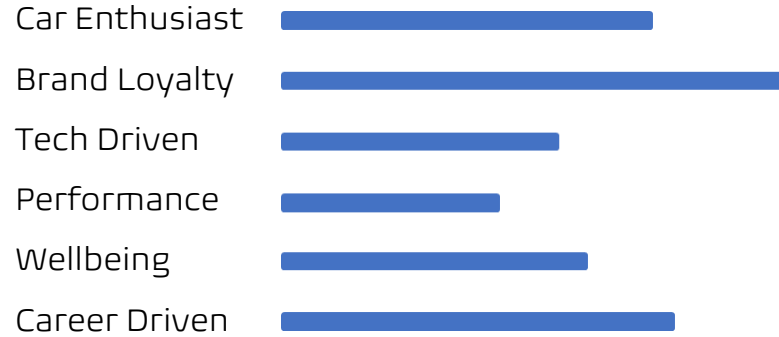


1PM – AI Assistant suggests a convoy through exhilarating driving roads.

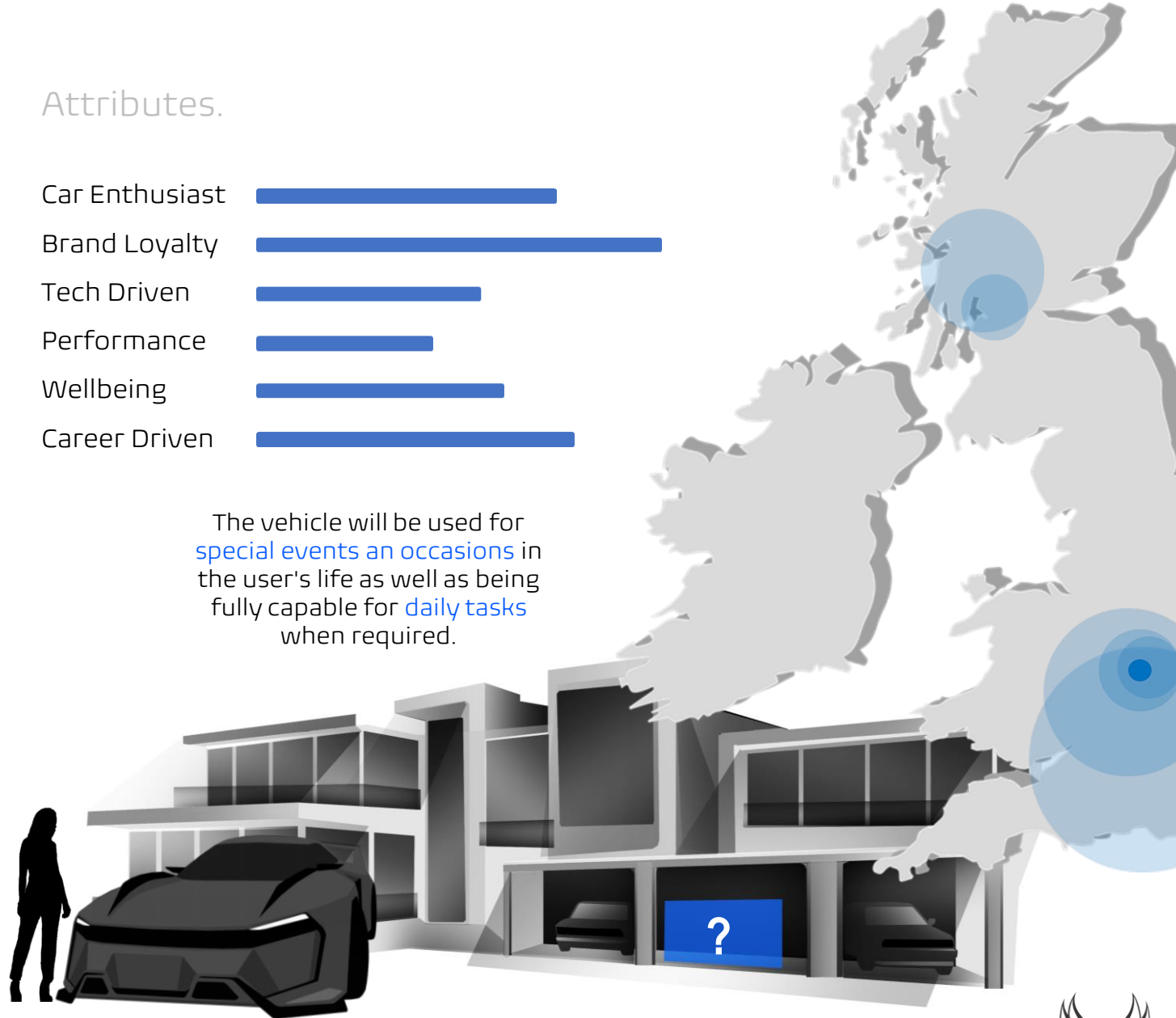


3PM – Coffee stop before heading to an owner's club meet..

## Attributes.



The vehicle will be used for special events an occasions in the user's life as well as being fully capable for daily tasks when required.



# Benchmarks / Competitors



## BMW M6 COUPE

Transmission - 7 Speed Automatic  
0 - 60 time - 3.7 seconds  
Body style - Coupe  
Driven Wheels - Rear  
Kerb Weight - 1850kg

Wheelbase - 2851mm  
Length - 4898mm  
Width - 1899mm  
Height - 1375mm  
Wheel Size - 295 / 30 / R20



600HP



## MERCEDES E63S SALOON

Transmission - 9 Speed Automatic  
0 - 60 time - 3.3 seconds  
Body style - Saloon  
Driven Wheels - All  
Kerb Weight - 1990kg

Wheelbase - 2939mm  
Length - 4993mm  
Width - 2065mm  
Height - 1460mm  
Wheel Size - 295 / 30 / R20

603HP



## AUDI RS5

Transmission - 8 Speed Automatic  
0 - 60 time - 3.9 seconds  
Body style - Coupe  
Driven Wheels - All  
Kerb Weight - 1707kg

Wheelbase - 2766mm  
Length - 4723mm  
Width - 2029mm  
Height - 1387mm  
Wheel Size - 295 / 30 / R20

444HP



# REVIVAL 25 Technical Data



## REVIVAL 25 DATA

Transmission - 7 Speed Automatic  
Body style - Coupe  
Driven Wheels - Rear + 4WD  
Kerb Weight - 1600kg

### Vehicle Data

Power (BHP) : 600  
Number of Electric Engines : 2  
Driven Wheels : 4  
Transmission : Auto + Manual

### Battery Technical Data

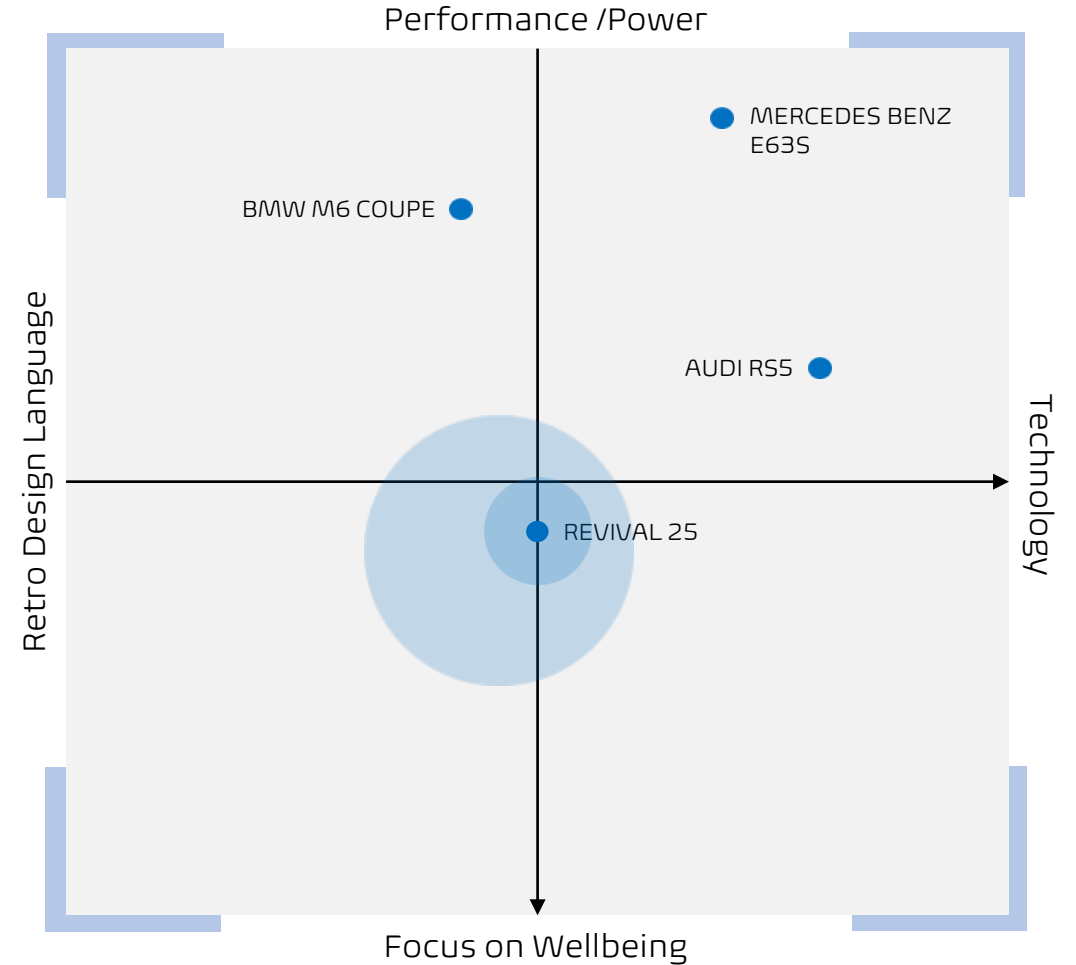
Battery Type : Lithium  
Average Energy Consumption : 230Wh/hr  
Charging Time : 30 minutes  
Battery Capacity : 100 Kwh.  
CO2 Emissions : None

### Performance Data

Top Speed : 195 mph  
Acceleration (0to62) : 2.8 seconds

### Dimensions

Body Style : Coupe  
No. of Doors : 2  
No. of Seats : 4  
Wheelbase : 2700mm  
Length : 4700mm  
Width : 1950mm  
Height : 1350mm



# Inspiration and Design Ques

Surfacing and Classic Design

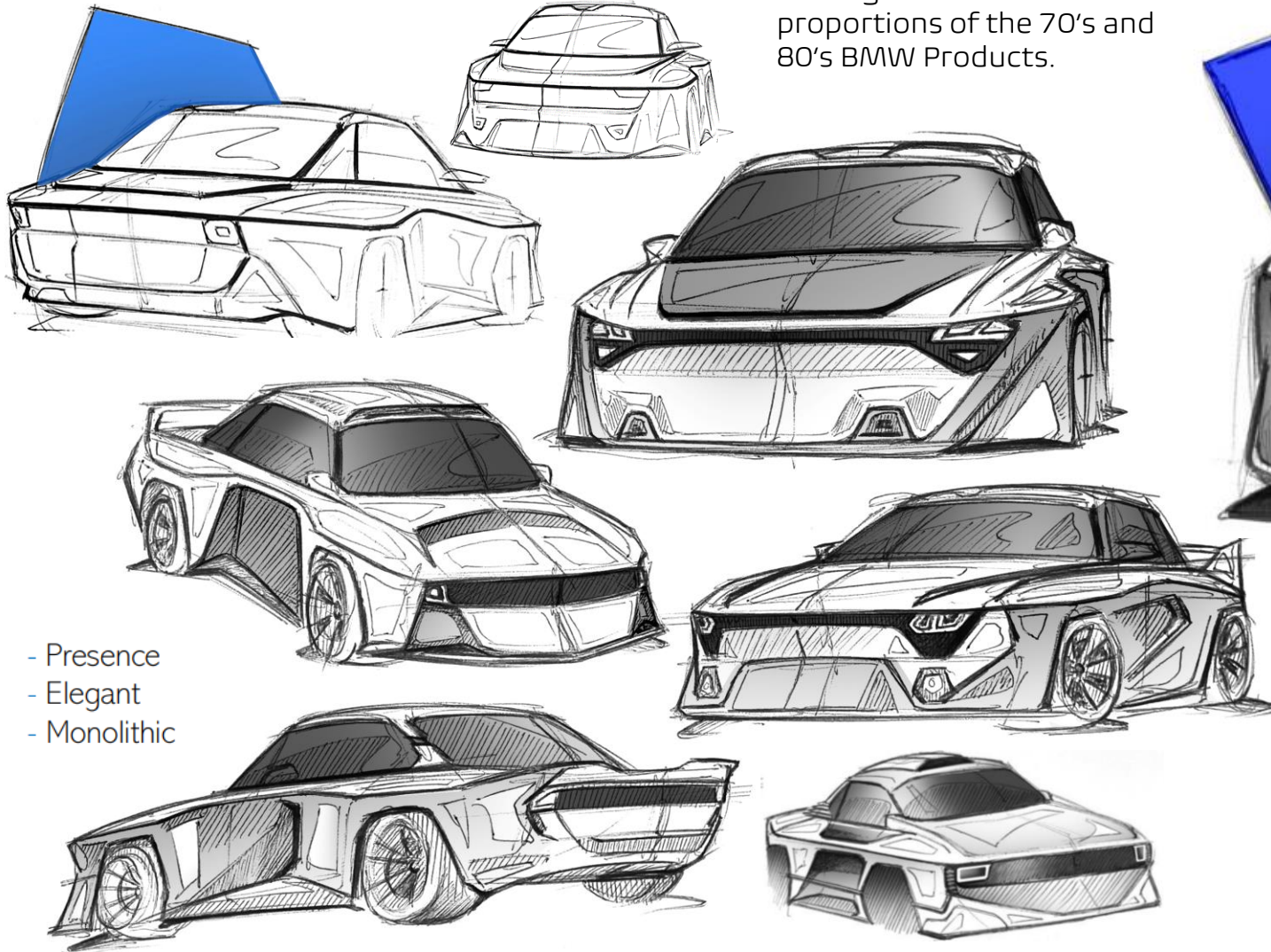


- MODERN
- CLEAN
- PURPOSEFUL

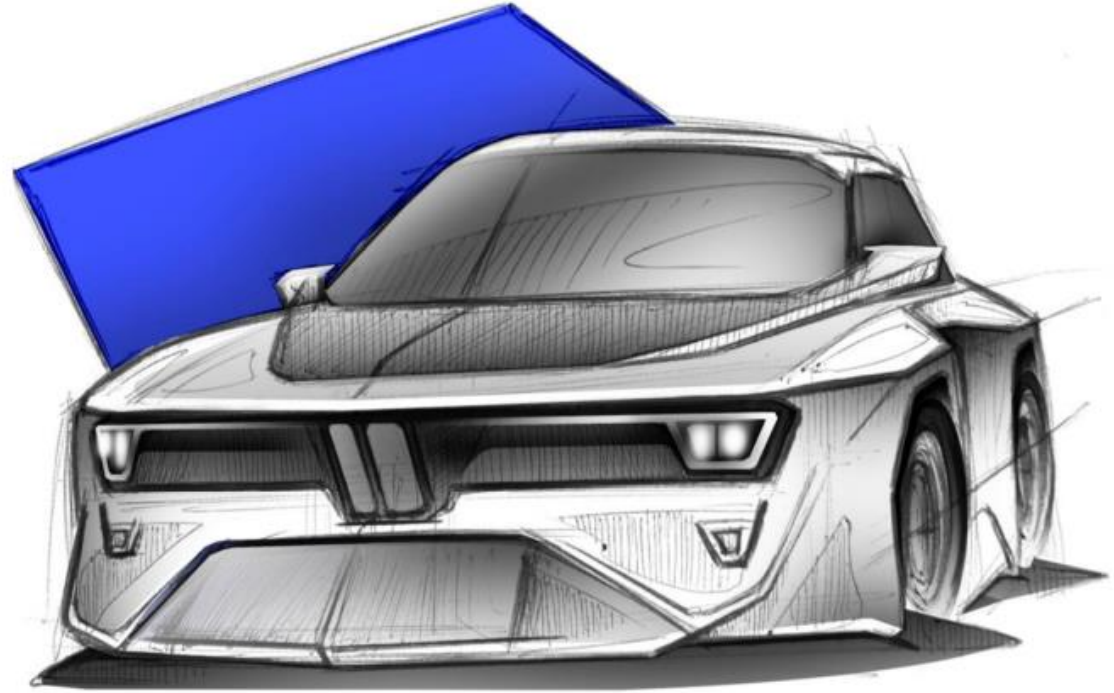


# Exterior Design

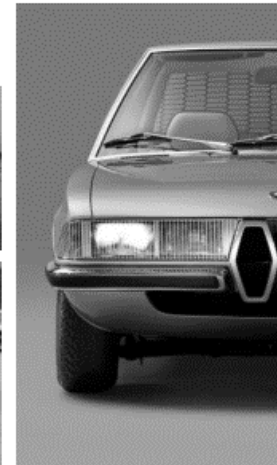
Initial sketches were done by looking at the overall proportions of the 70's and 80's BMW Products.



- Presence
- Elegant
- Monolithic



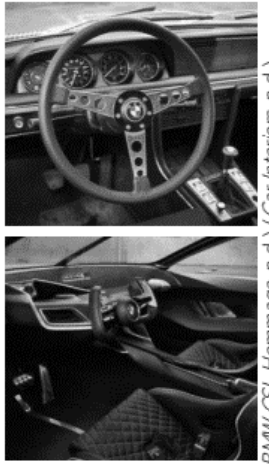
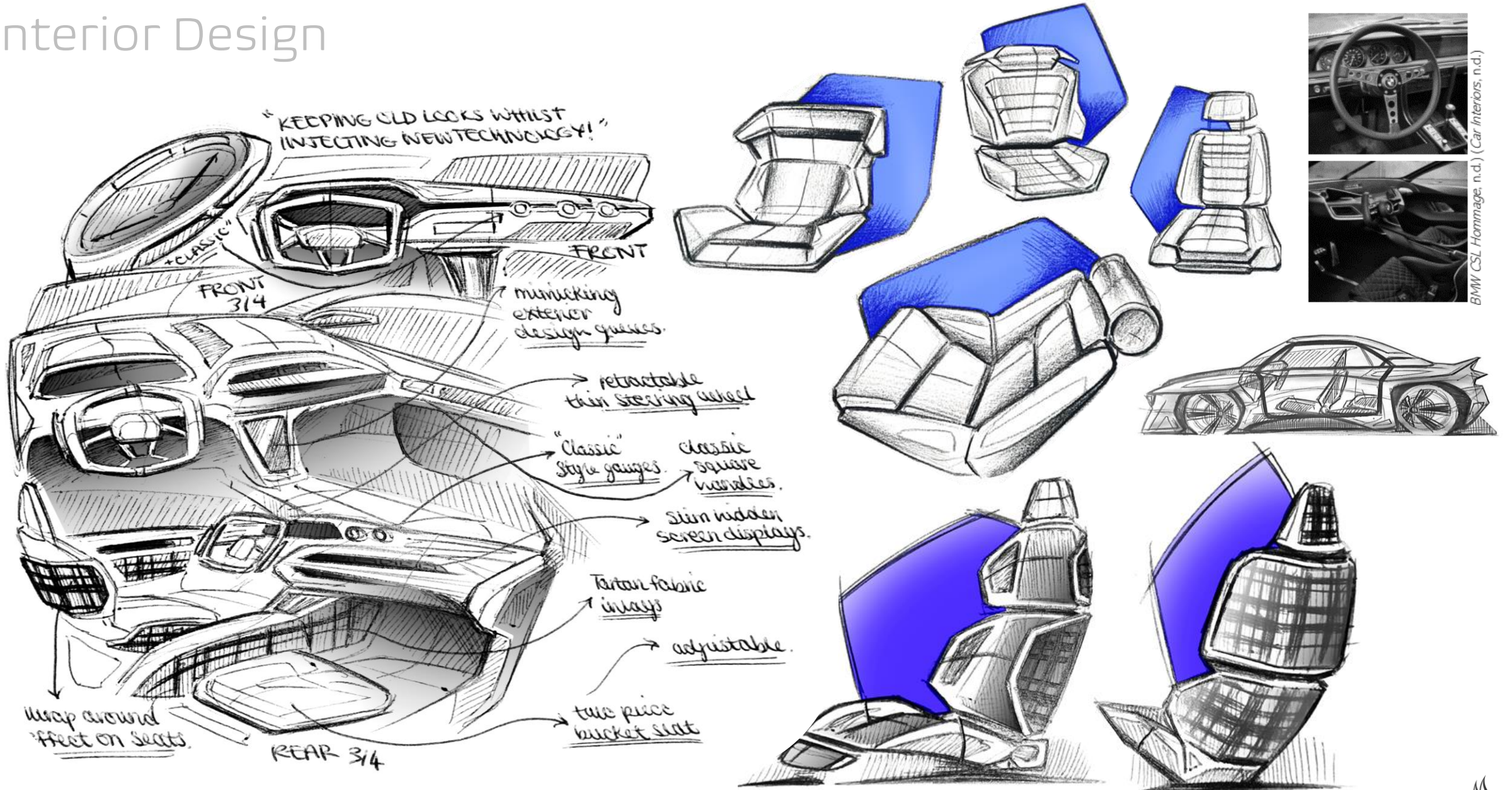
(M1 Pro Car Image, n.d.)



(BMW 3.0 CSL, n.d.) (BMW Recreates Classic Garmisch Concept Car, n.d.)



# Interior Design

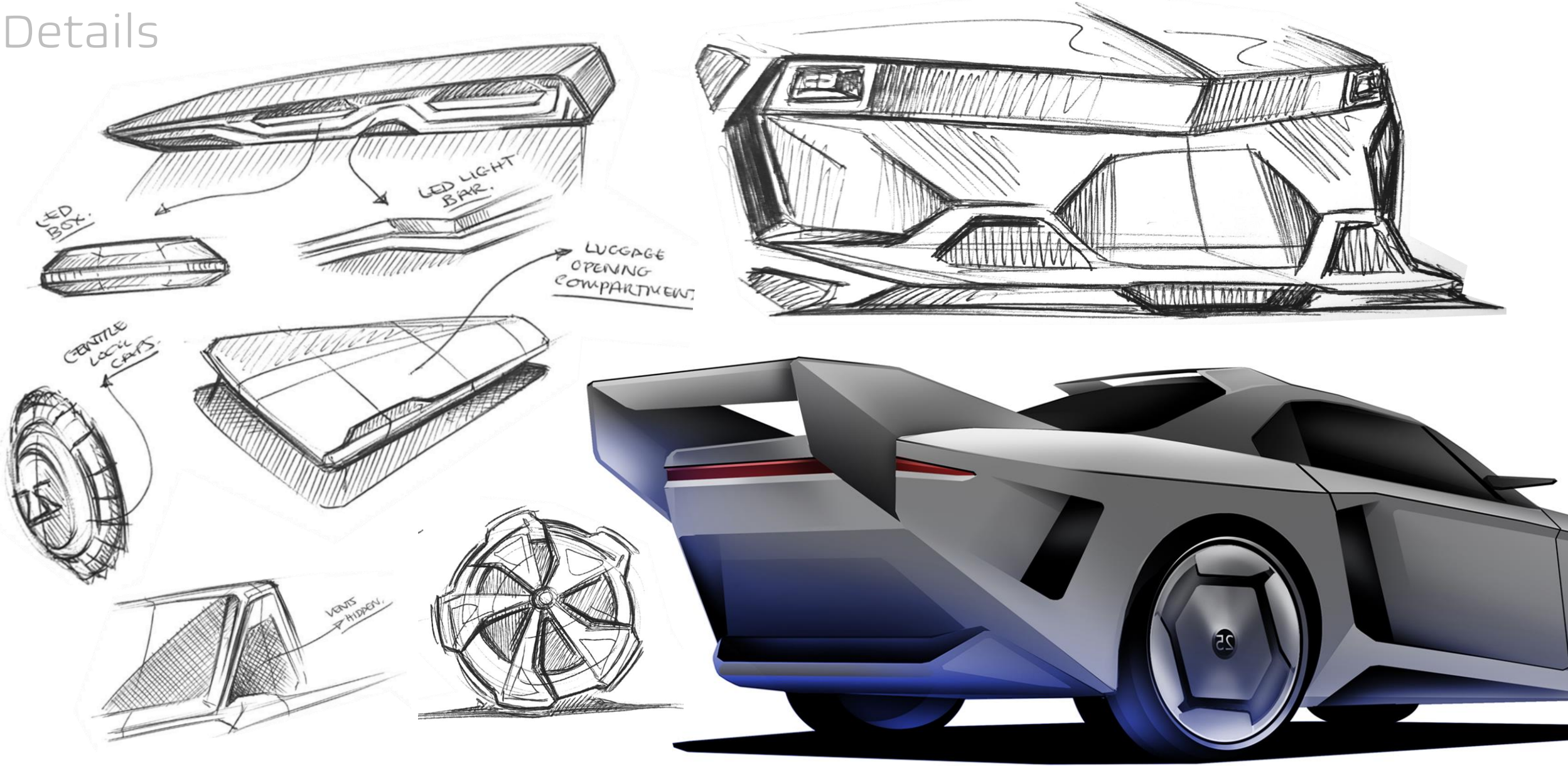


BMW CSL Hommage, n.d.) (Car Interiors, n.d.)





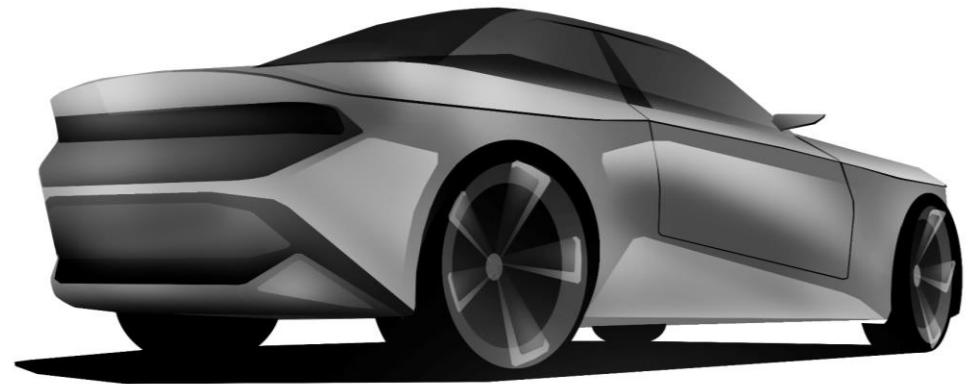
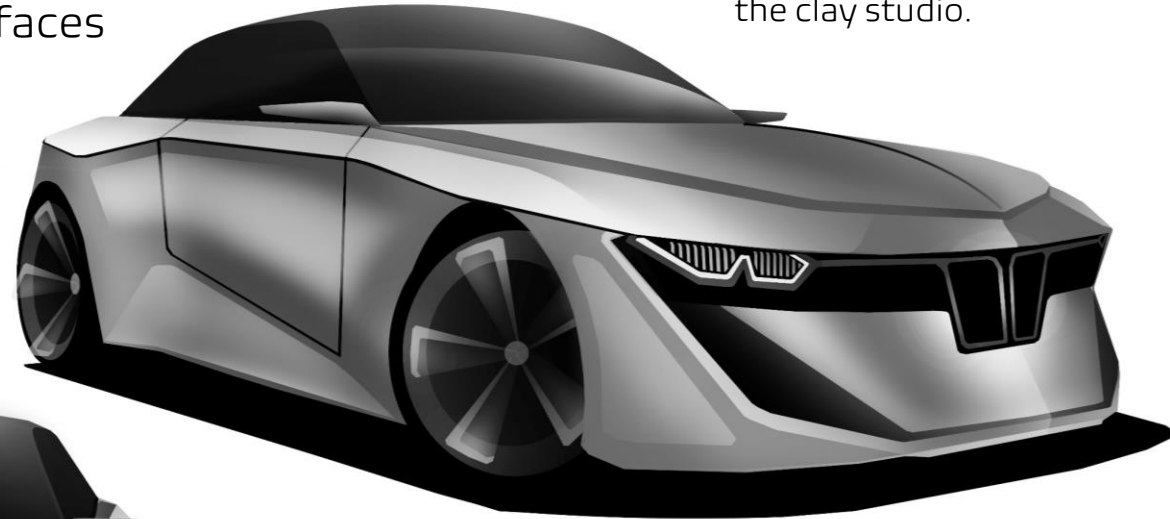
# Details



# Exterior Direction prior to 3D

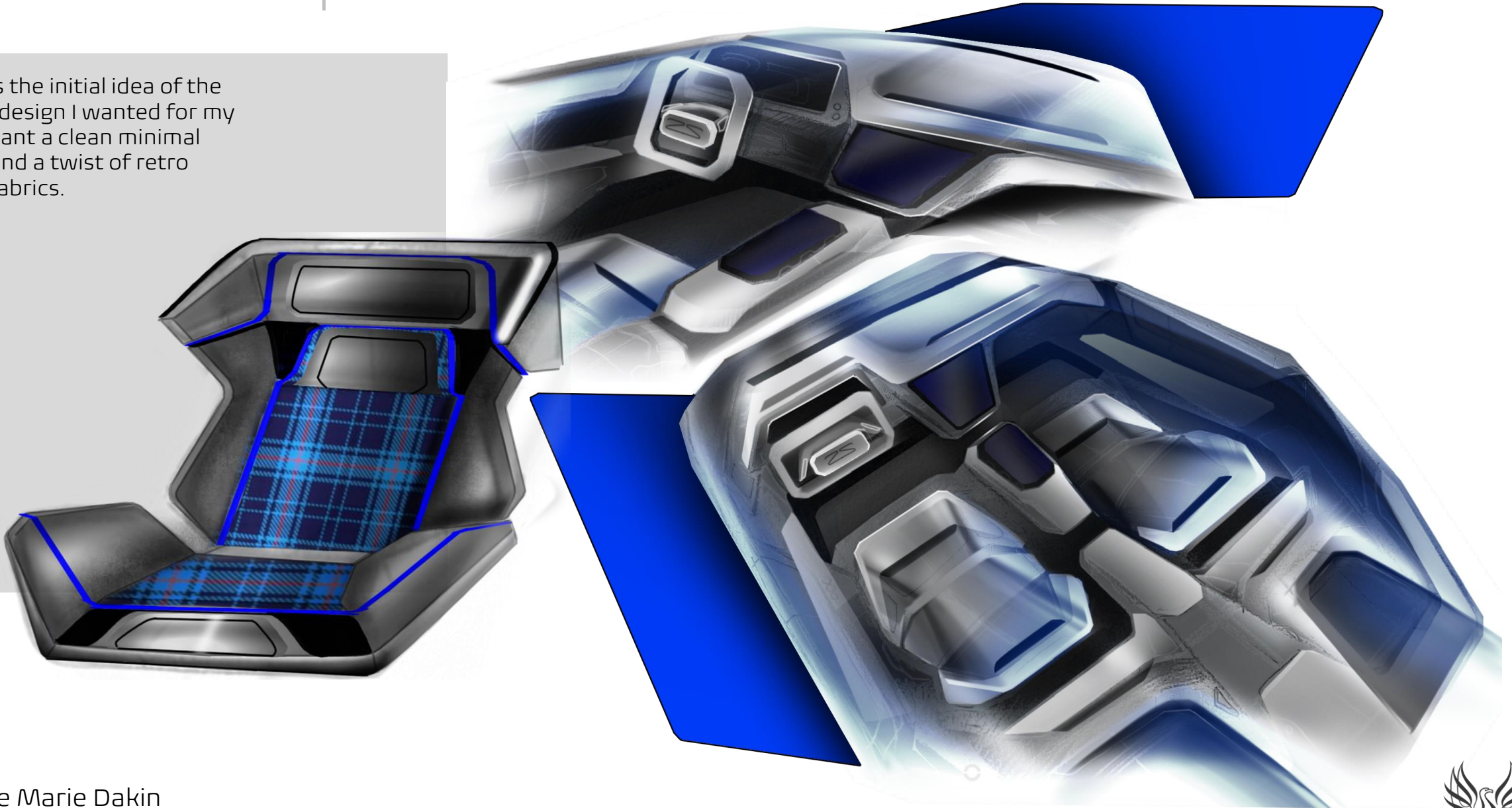
- Minimalistic
- Crisp Lines
- Flowing surfaces

I used my refined renders as inspiration for the surfacing of my design when I started in the clay studio.



# Interior Direction prior to 3D

This was the initial idea of the interior design I wanted for my FMP. I want a clean minimal design and a twist of retro classic fabrics.



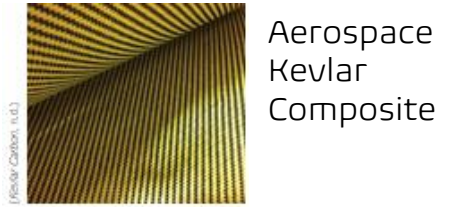
# Interior CMF

All Materials used have a focus on sustainability but also lightness to promote the attributes used in the historical classic vehicles which its inspired by.

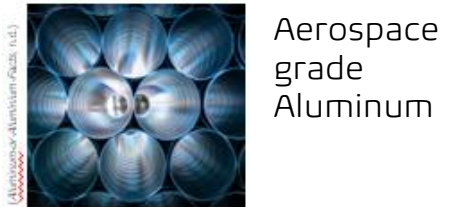
## Construction Materials:



Highly sustainable, Natural Finishes



Aerospace Kevlar Composite



Aerospace grade Aluminum



Carbon Composite

Pinatex

Coconut

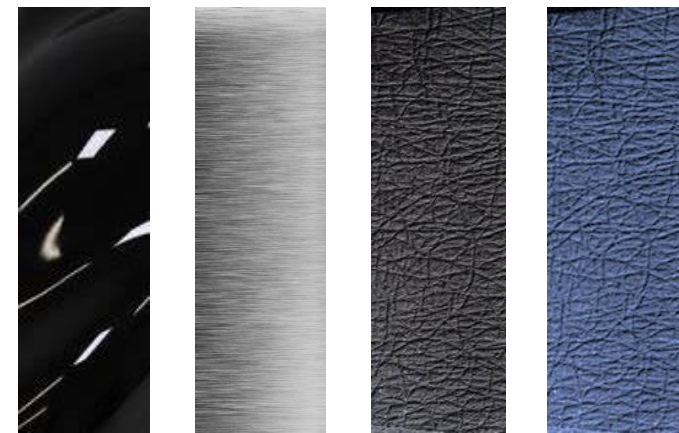
Bamboo Fiber

Pressed Cork



Pinatex. V (<https://www.pinatex.com/Simple-Page/Home-Products/>, n.d.) Coconut. V (Coconut - MaterialDistrict, n.d.) Raw Bamboo. V (Raw Material, n.d.) Cork. V (Raw Cork Products, n.d.)

## Selected Interior Finishes:



Gloss Black  
Aluminum Finish  
Blue Pinatex  
Grey Pinatex  
Dark Grey Pinatex




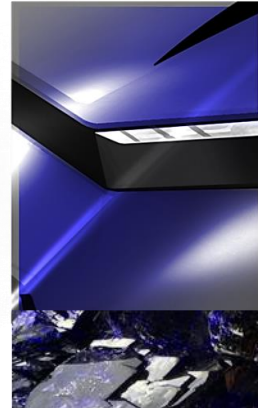


# Exterior CMF

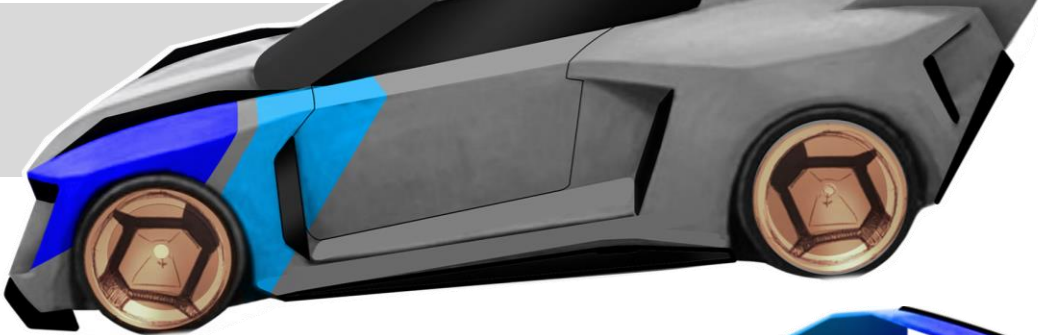
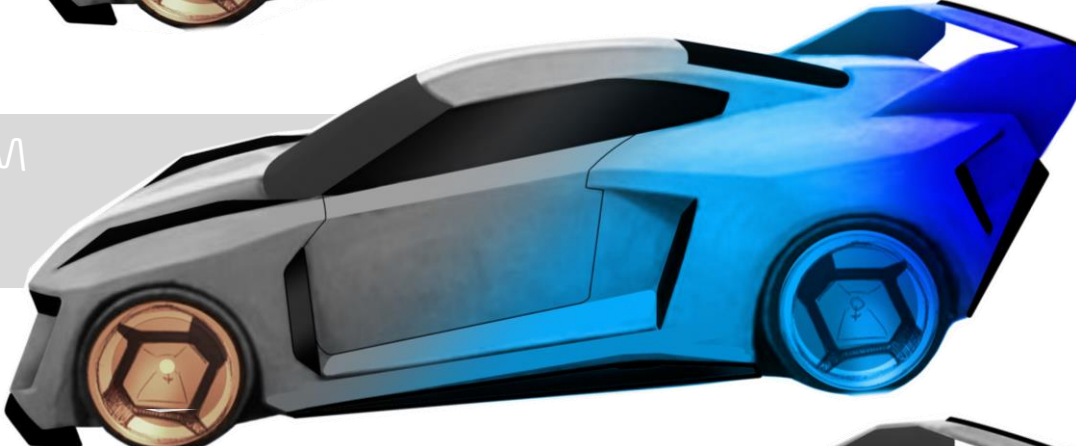
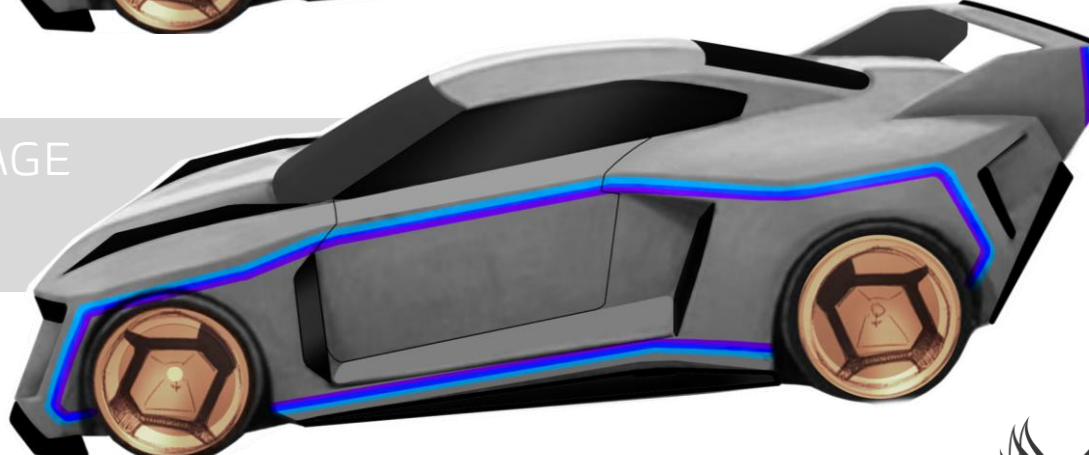
## Selected Options:

EXTERIOR PAINT – HERITAGE CHARCOAL  
STICKER PACK – HERITAGE PACK

All options are **fully customizable** to the user upon purchase as this vehicle is a fully **bespoke build** for a singular client. These CMF options show the most **relevant designs** and colors related to the cars which have inspired the design.

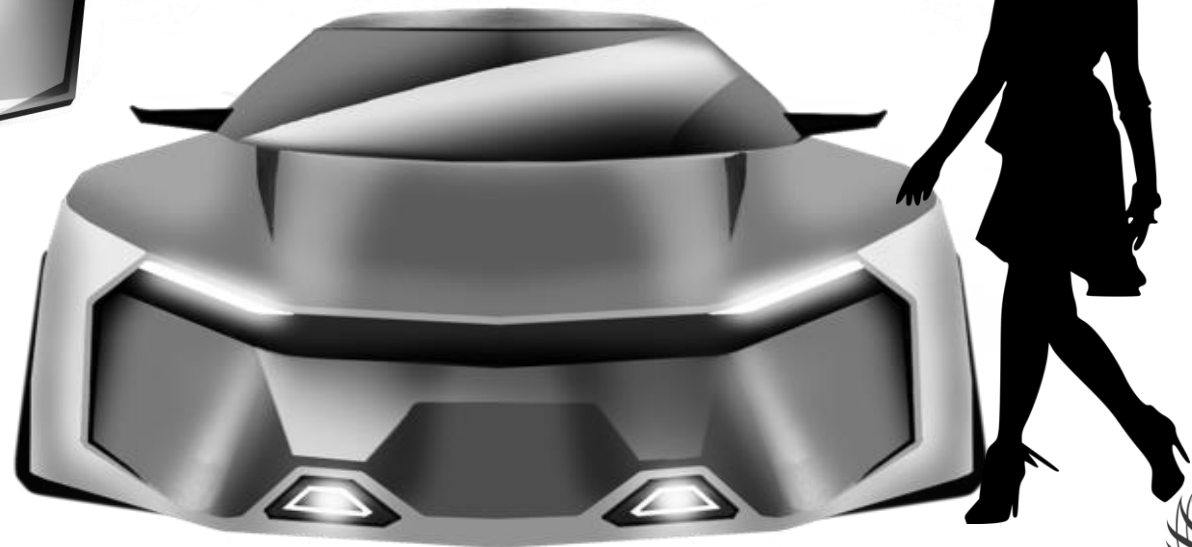
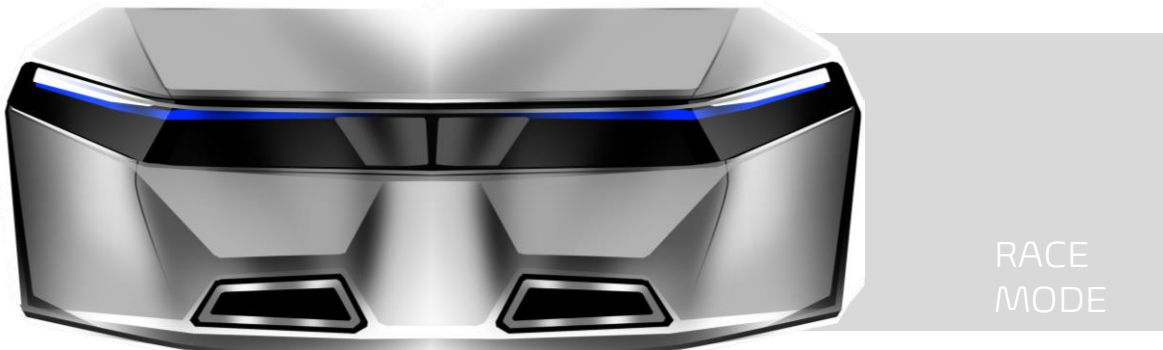
			
Heritage Charcoal ●	Magma Crimson ●	Bahama Blue ●	Crystal Indigo ●
#303030	#D51905	#095BFF	#1E0284

## Sticker Pack Options

RACE ●	
CUSTOM ●	
HERITAGE ●	



# Exterior HMI / UX



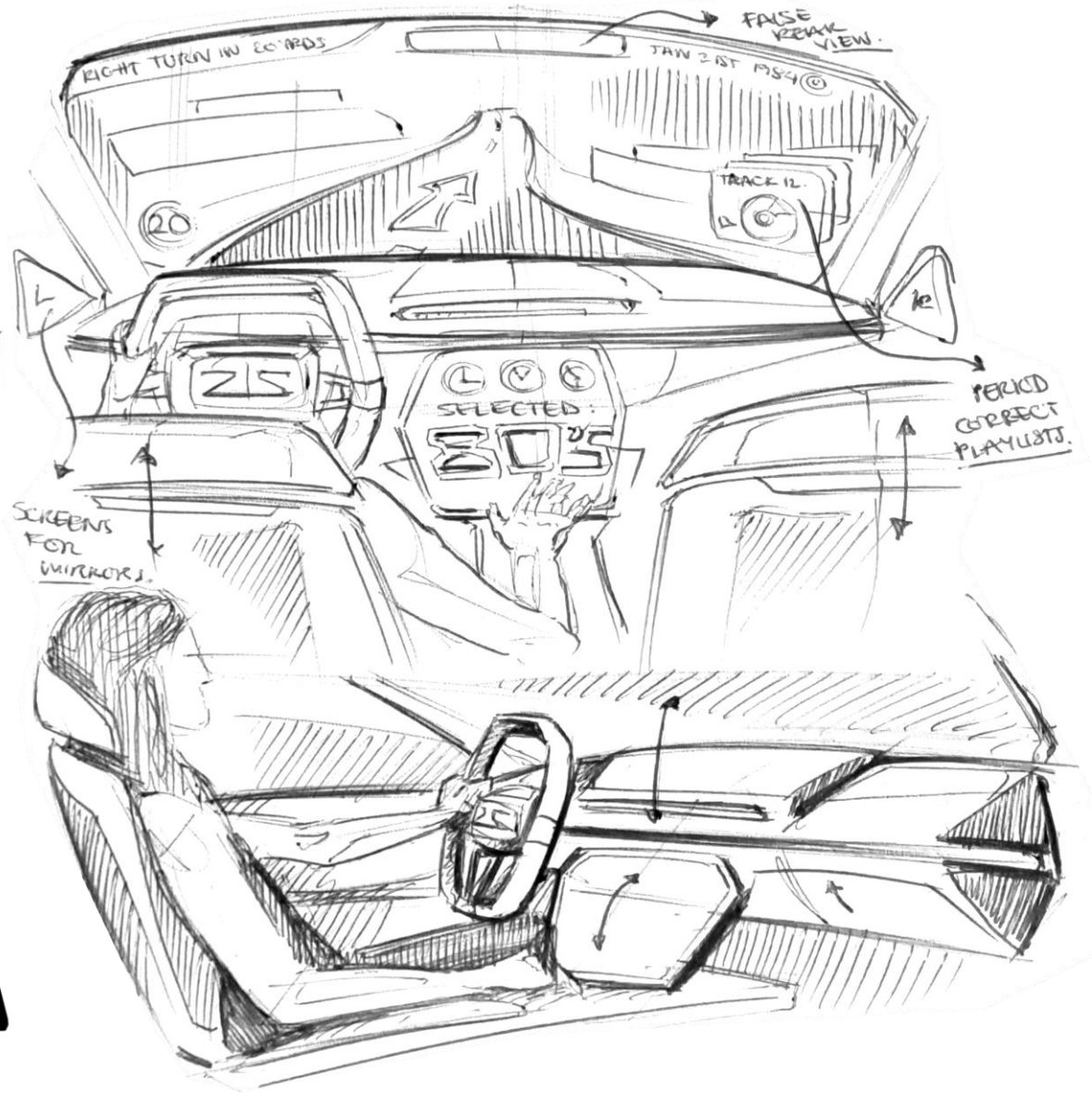
# Interior HMI / UX

SAT NAV



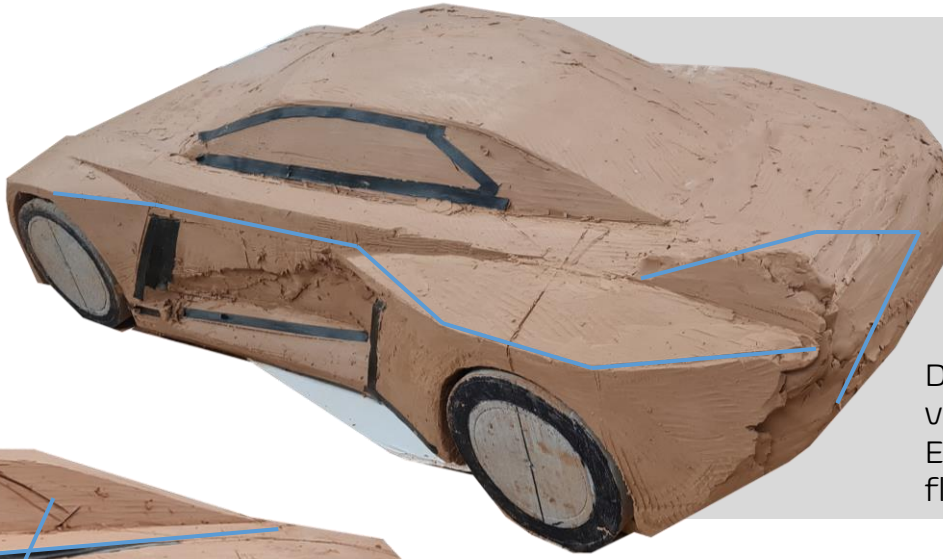
DRIVE  
MODE

START



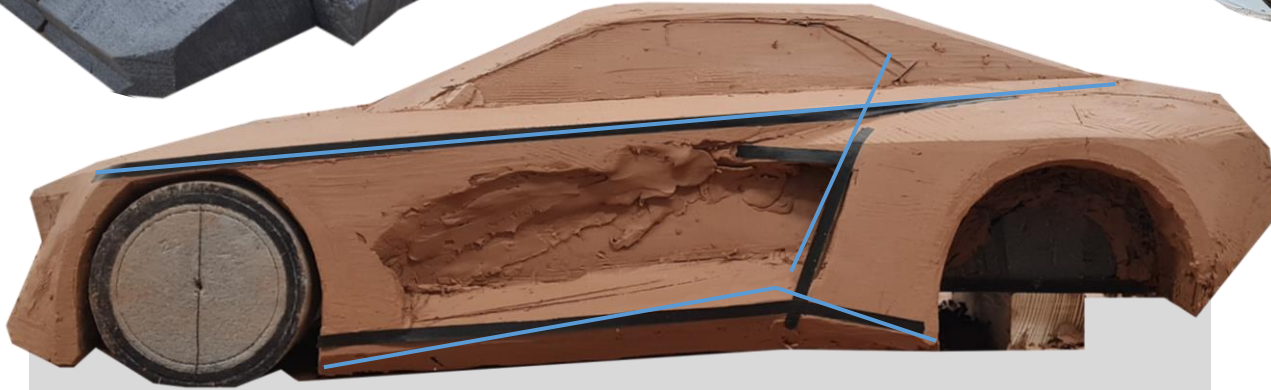
# Exterior Development

Initial Armature Structure.

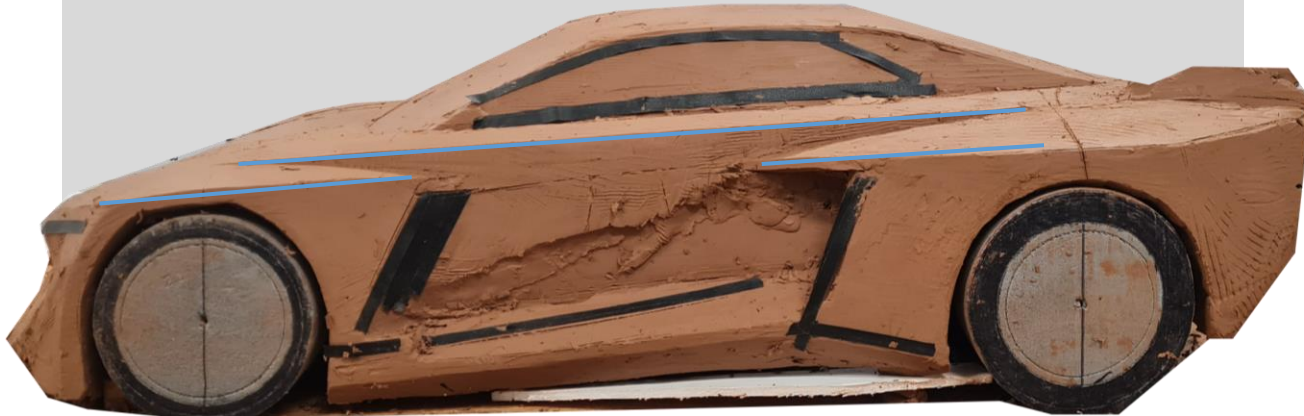


WEEK 1 TO 3

Developing the strength in volumes of the clay. Experimenting with the box flare layouts.



Front end shark nose work.



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Making the design more 'BMW' as similar era cars such as the Audi Quattro were starting to be reflected in the bottom side profile.

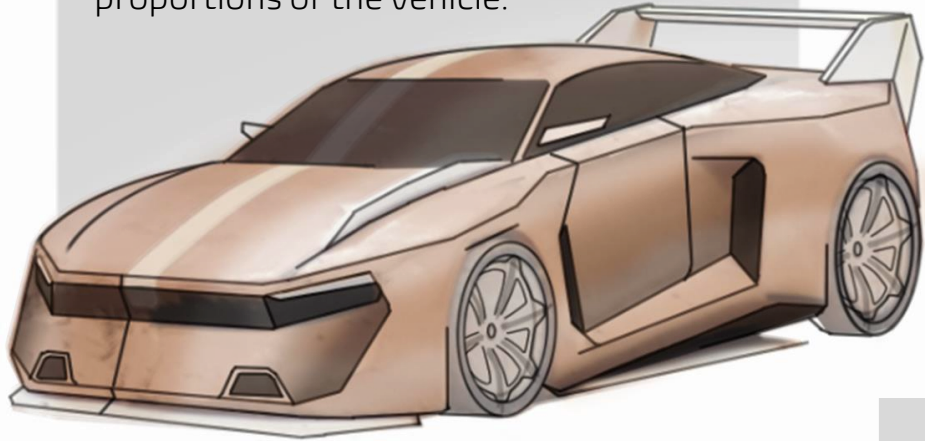




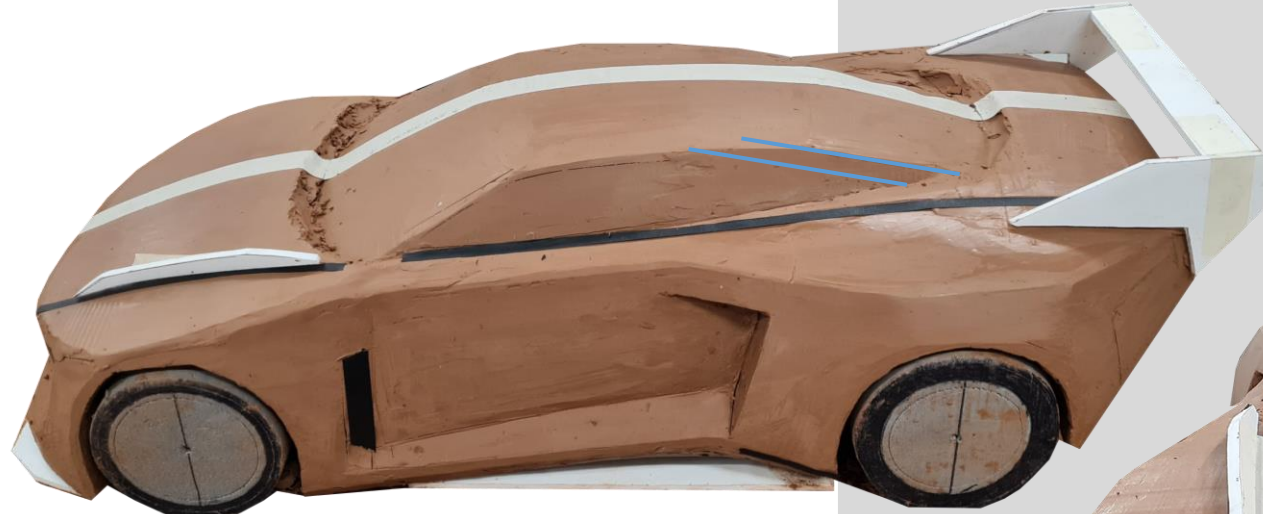
# Exterior Development

WEEK 3 TO 5

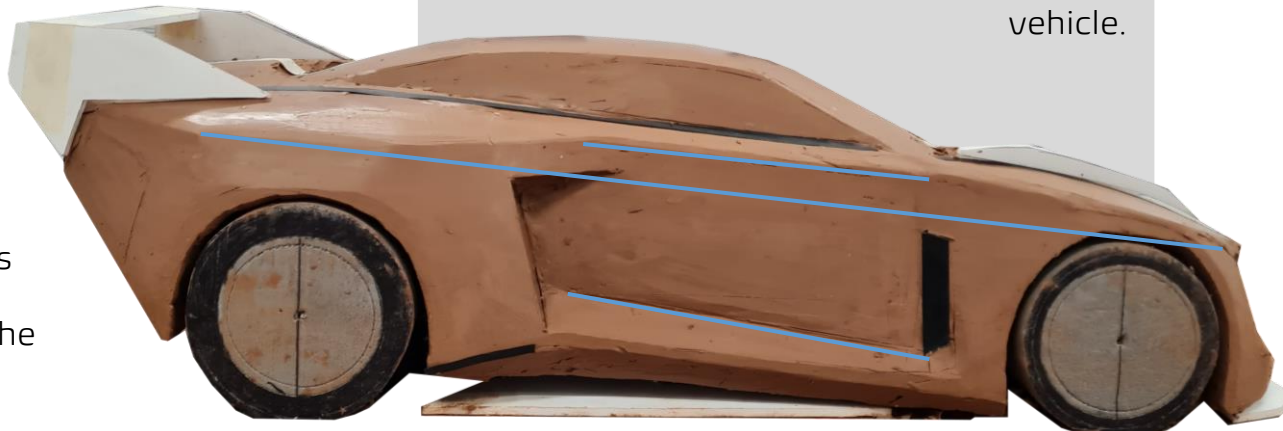
Sketching over the clay model images allowed me to see the details along side the new proportions of the vehicle.



Extending the roofline for a more dynamic side view.



Angled side lines to create a nose forward stance to the vehicle.



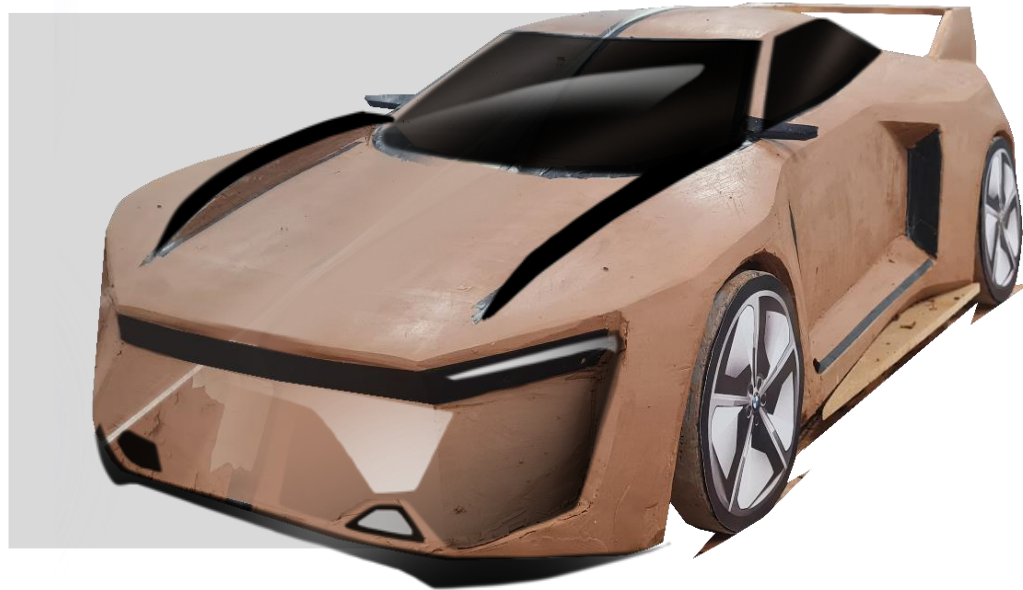
Adding form board wings and skirts to get a rough idea of volumes before the bodywork was finalized.



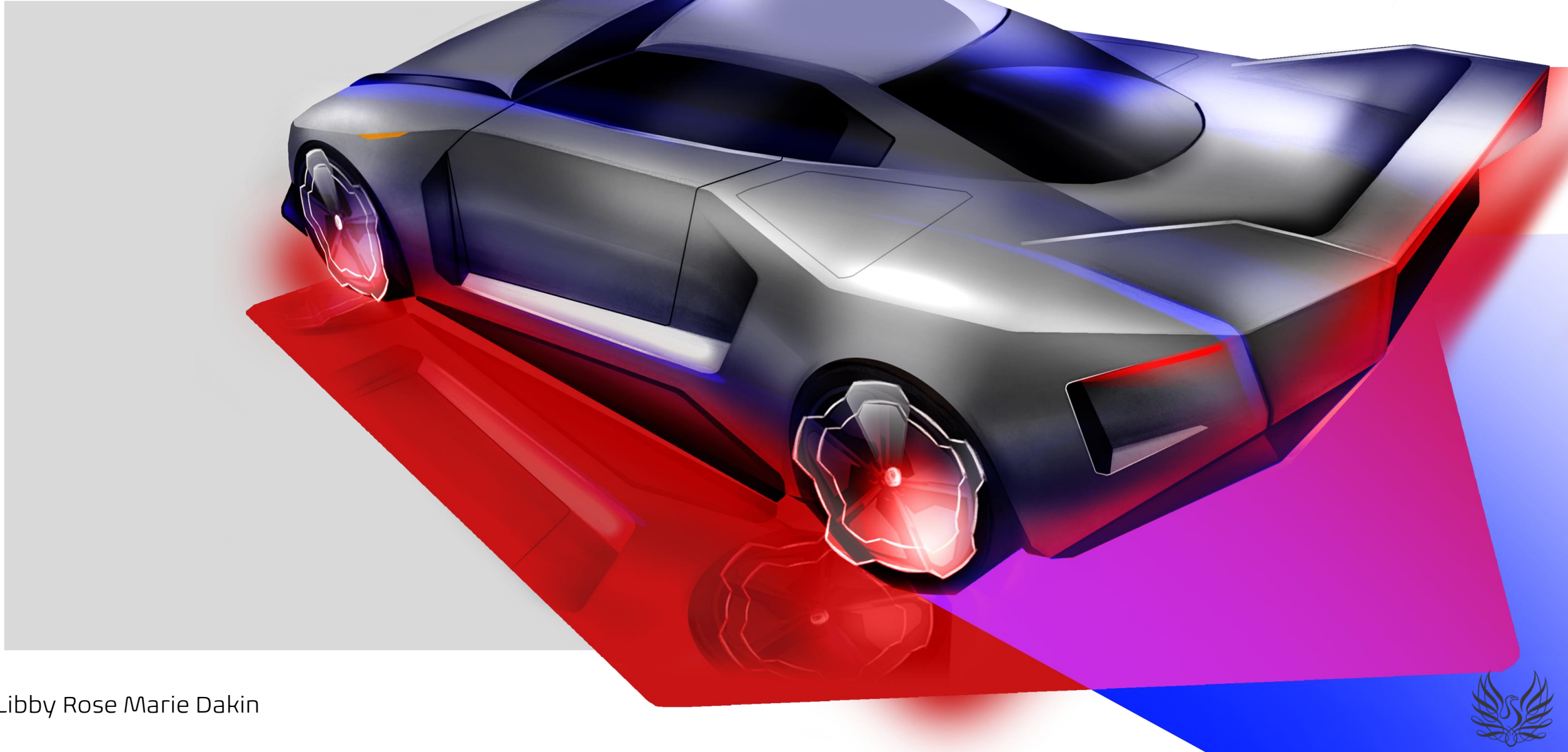
# Exterior Development

WEEK 5 TO 6

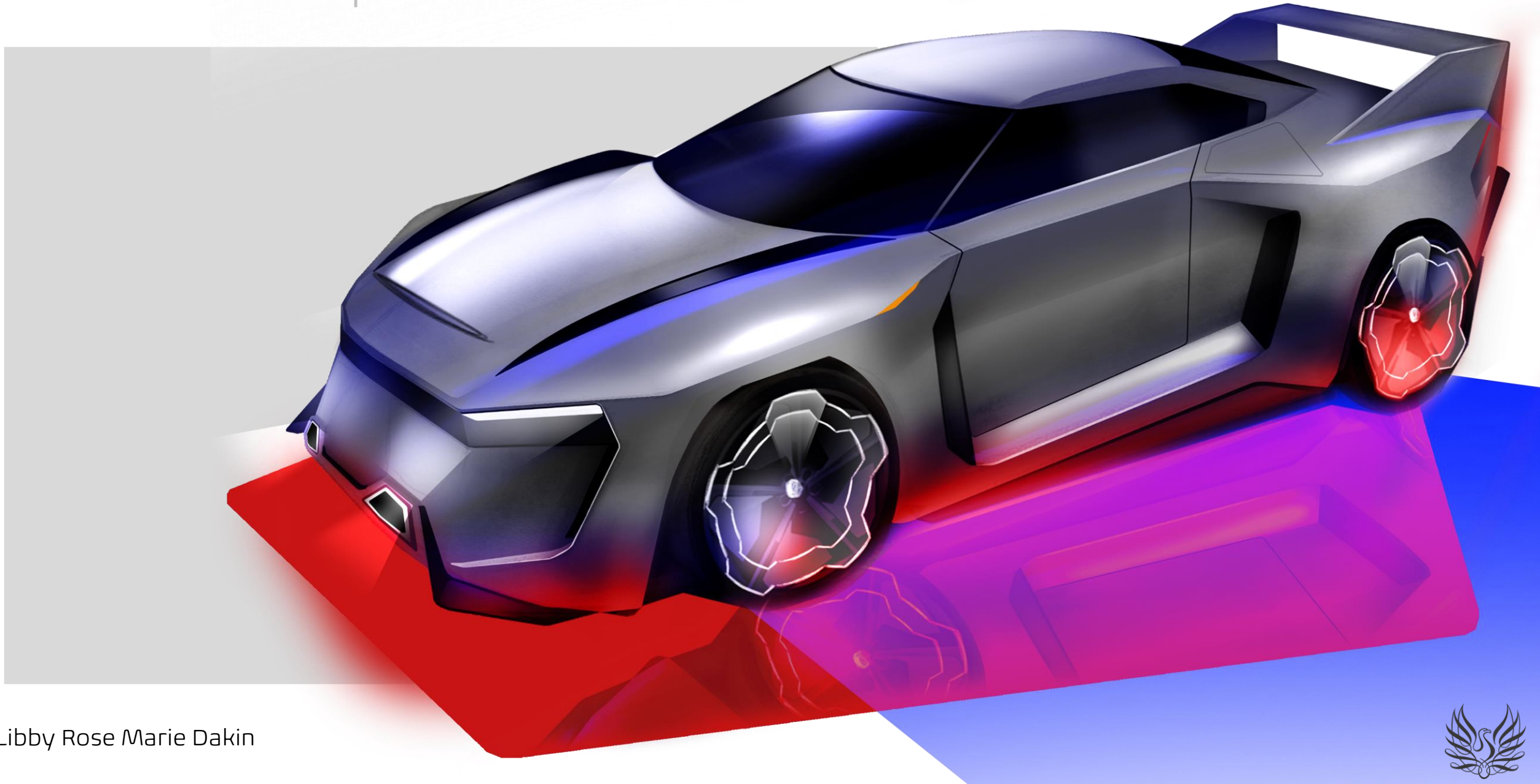
The final weeks in the clay studio were used to make sure the surfaces were correctly radius built. Also, I tried to clean up edges and surface breaks to give a clear representation of the surfacing approach I wanted for the body work.



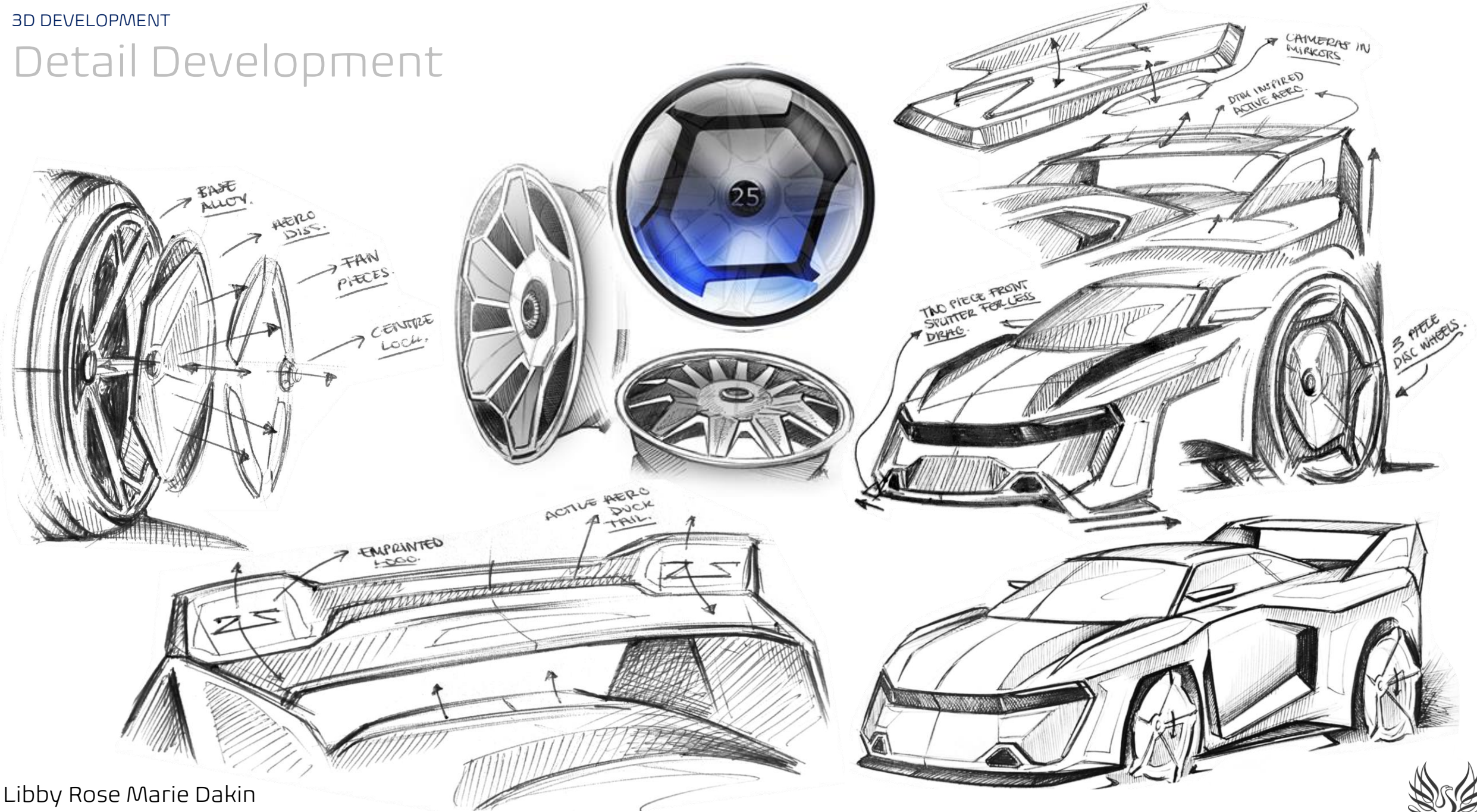
# Exterior Development



# Exterior Development



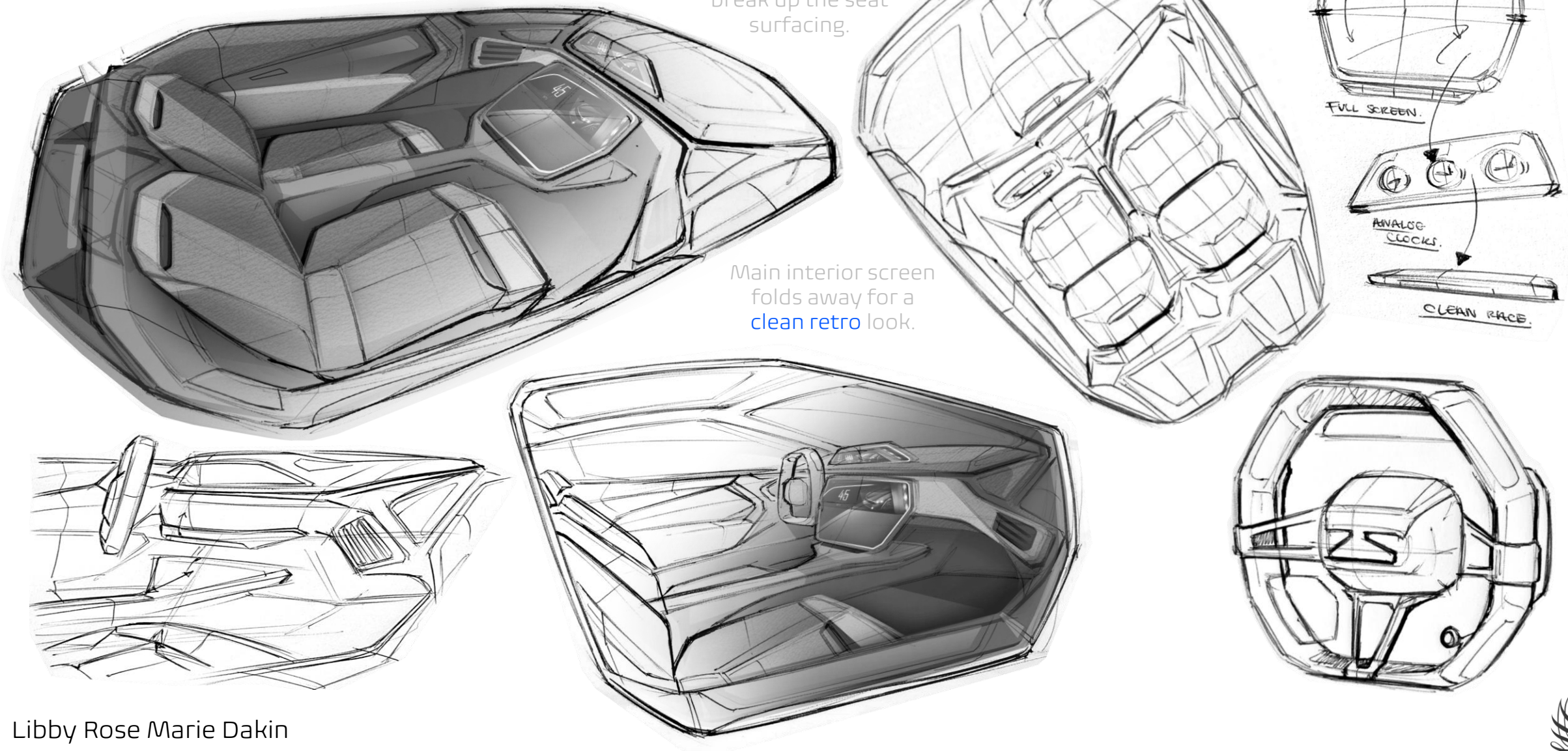
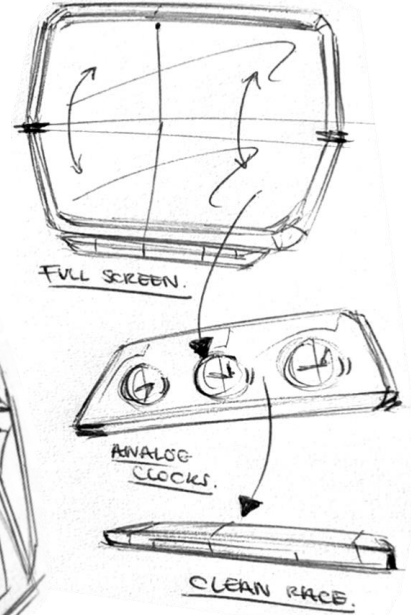
# Detail Development



# Interior Development

A mix of different dyed Pinatex will be used to break up the seat surfacing.

Main interior screen folds away for a clean retro look.

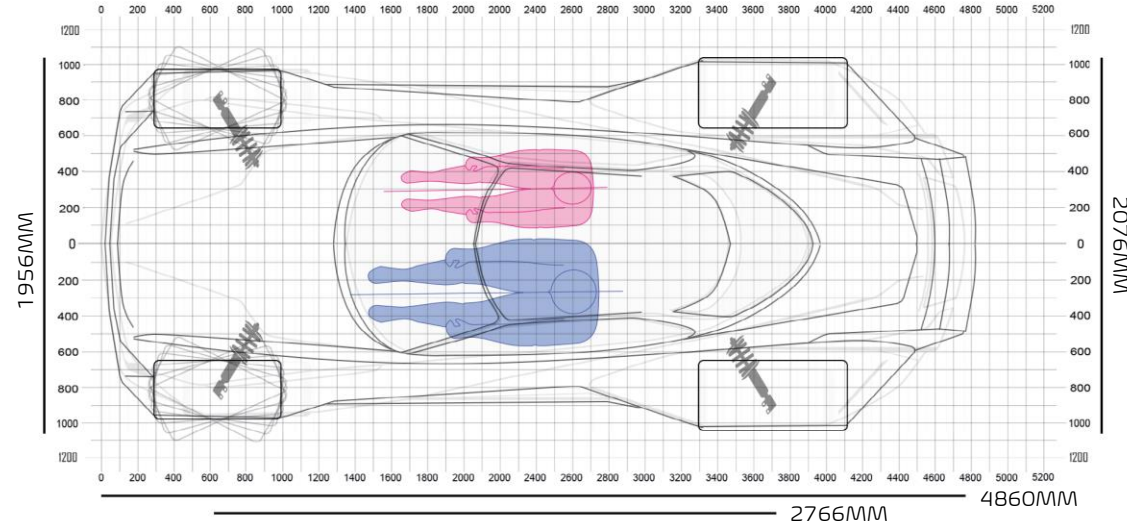


# Final Package Layout

## VEHICLE DIMENSIONS

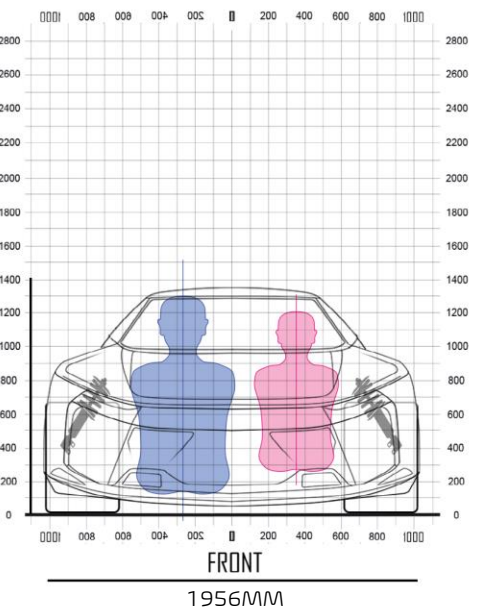
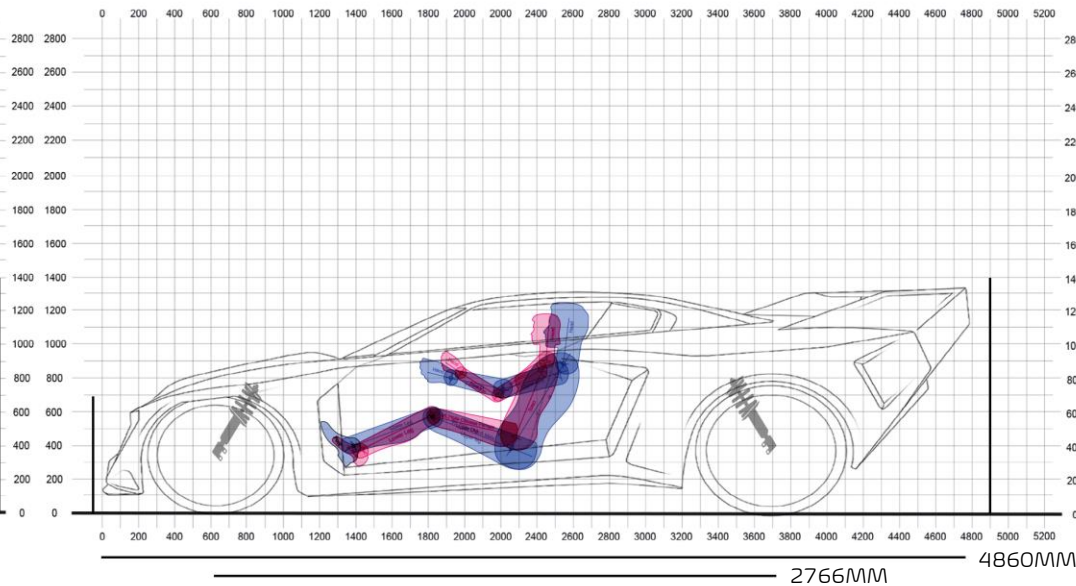
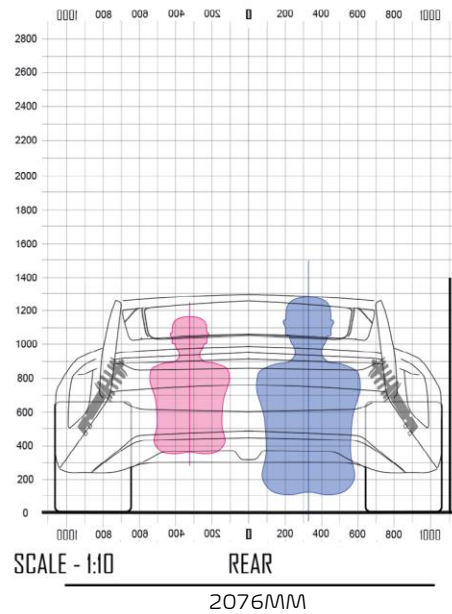
### KEY

- GREENHOUSE AREA
- HAPTIC FEEDBACK POWER
- FRONT LUGGAGE SPACE
- BATTERY PACK
- HUB MOTORS
- BRAKES
- REAR LIGHTS
- VIEWING ANGLES
- SUSPENSION



### OVERALL DIMENSION SPECS.

- FRONT WIDTH: 1956MM
- REAR WIDTH: 2076MM
- HEIGHT: 1140MM
- WHEELBASE: 2766MM
- WHEEL SIZE FRONT: 22 INCH
- WHEEL SIZE REAR: 24 INCH
- LENGTH: 4860MM

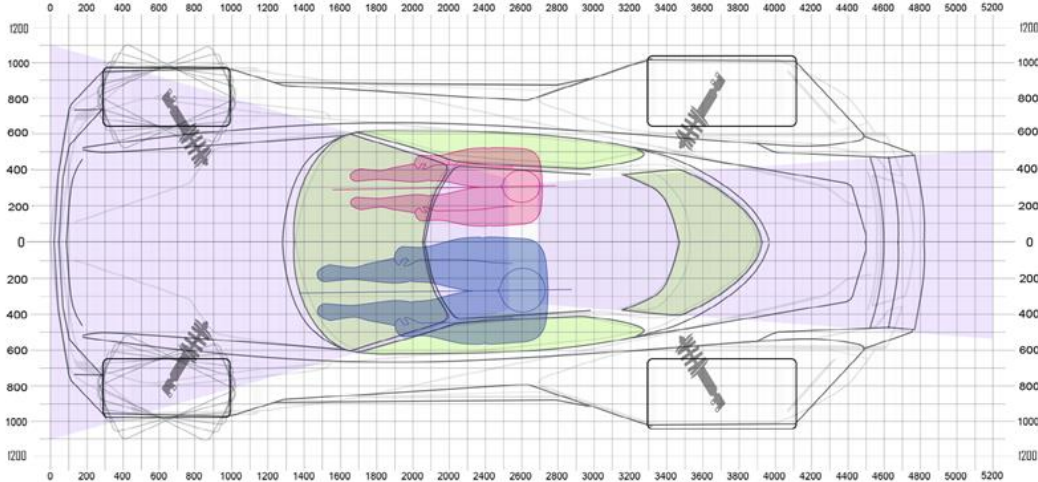


# Final Package Layout

FORMAT – 3<sup>rd</sup> ANGLE PROJECTION

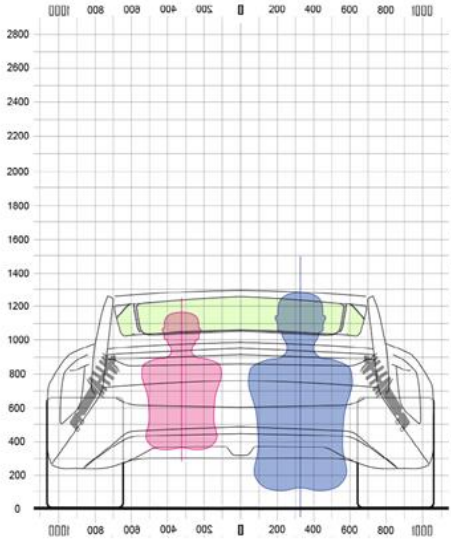
## KEY

- GREENHOUSE AREA
- HAPTIC FEEDBACK POWER
- FRONT LUGGAGE SPACE
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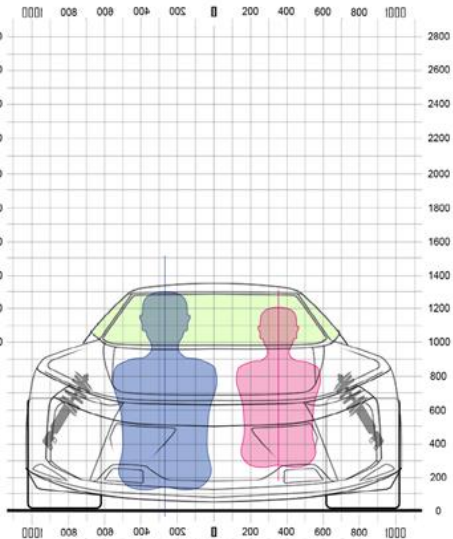
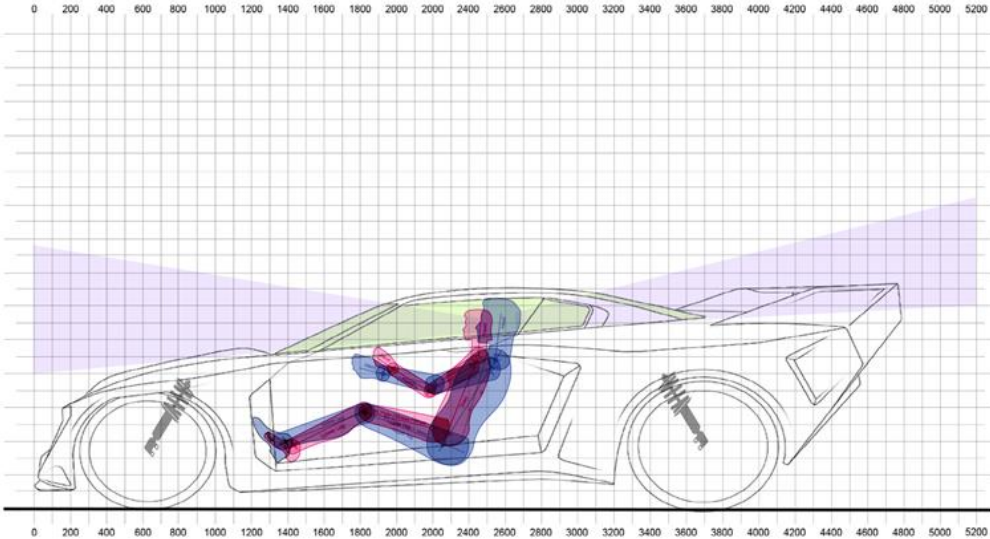


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- WHEEL SIZE REAR: 24 INCH
- LENGTH: 4860MM



SCALE - 1:10 REAR



FRONT



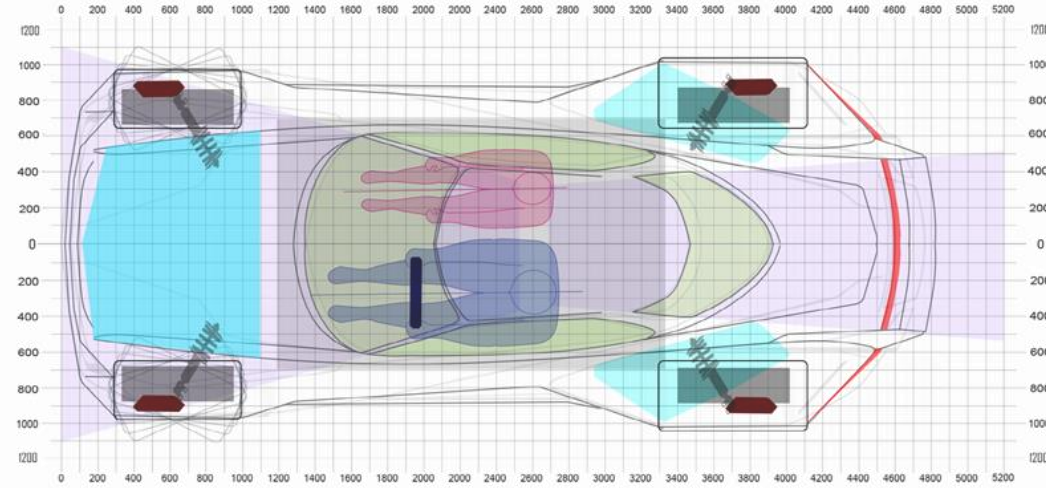


# Final Package Layout

## VEHICLE OCCUPANTS AND POWERTRAIN

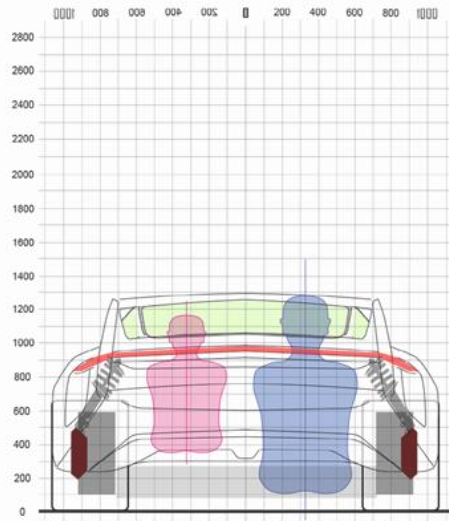
### KEY

- GREENHOUSE AREA
- HAPTIC FEEDBACK POWER
- FRONT LUGGAGE SPACE
- BATTERY PACK
- HUB MOTORS
- BRAKES
- REAR LIGHTS
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- SUSPENSION

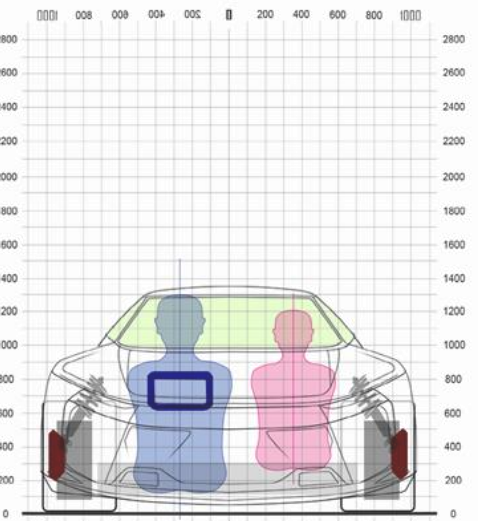
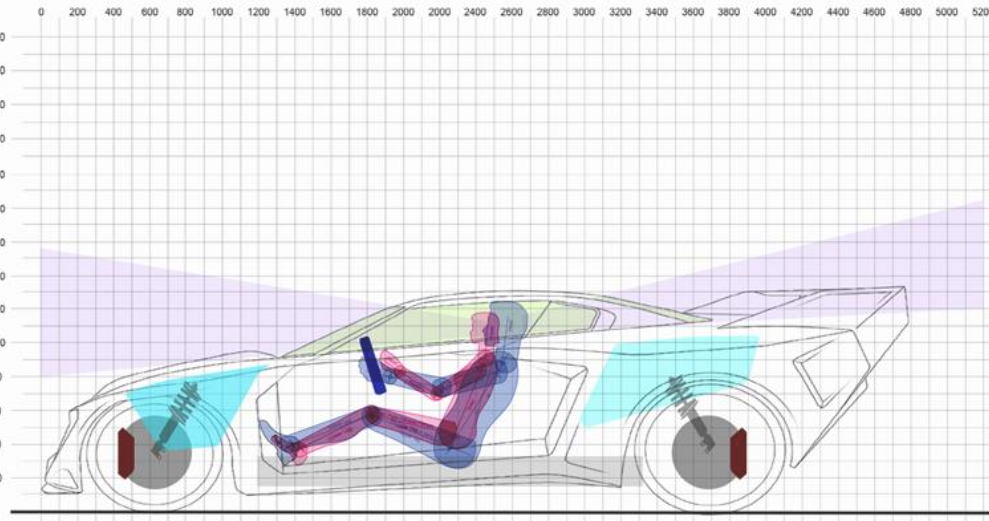


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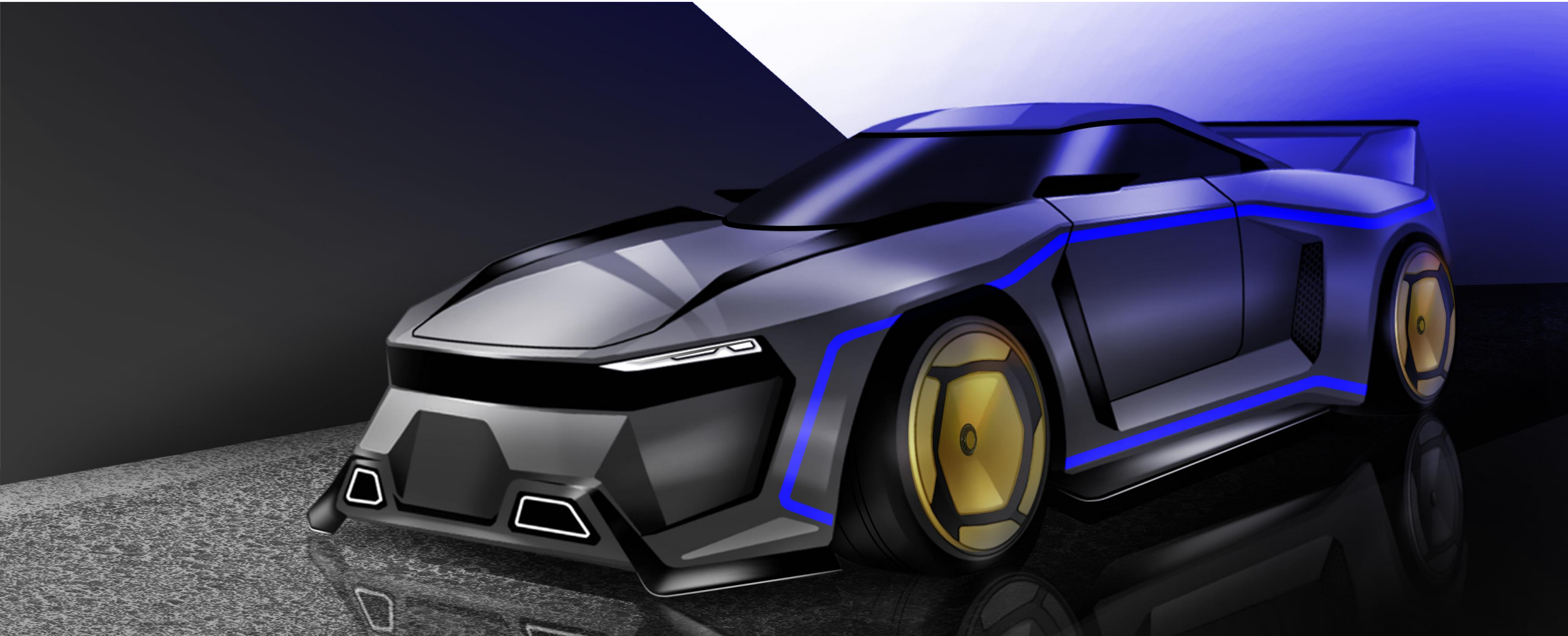
SCALE - 1:10 REAR



FRONT

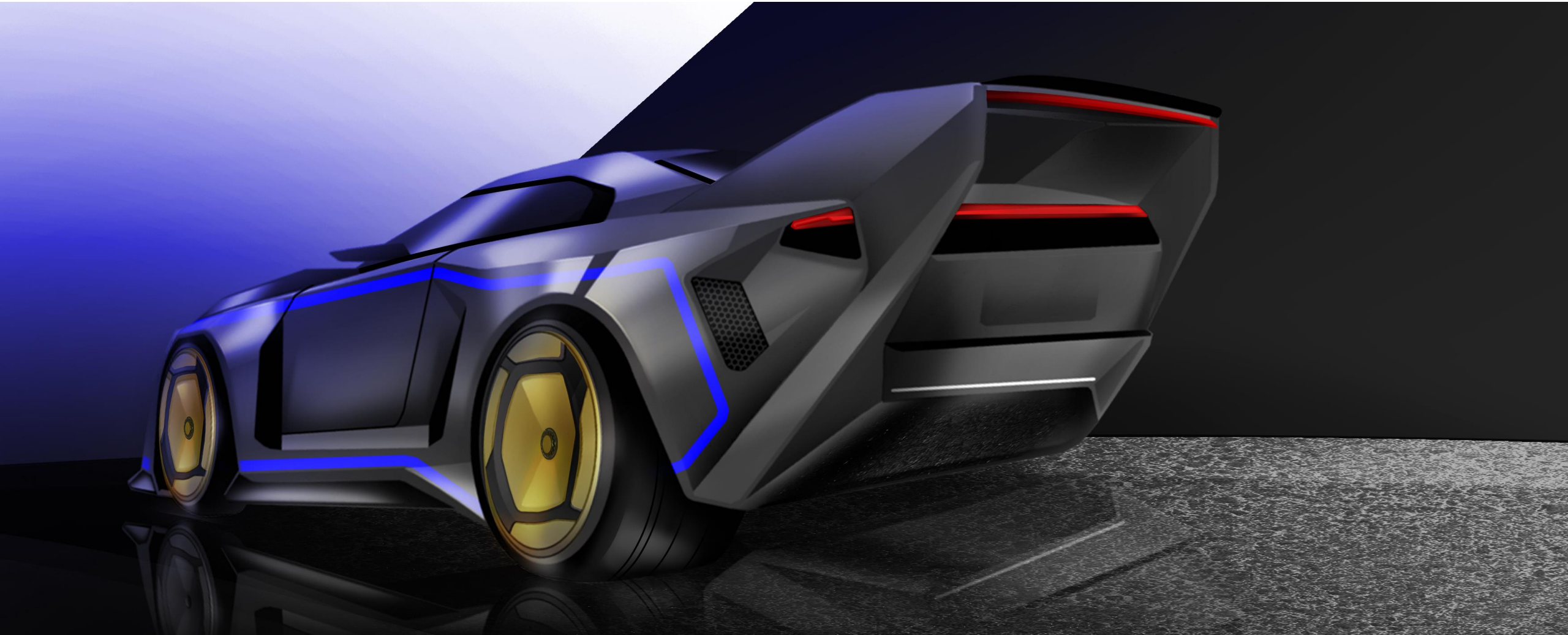


# Exterior



FINAL PRESENTATION IMAGES

# Exterior



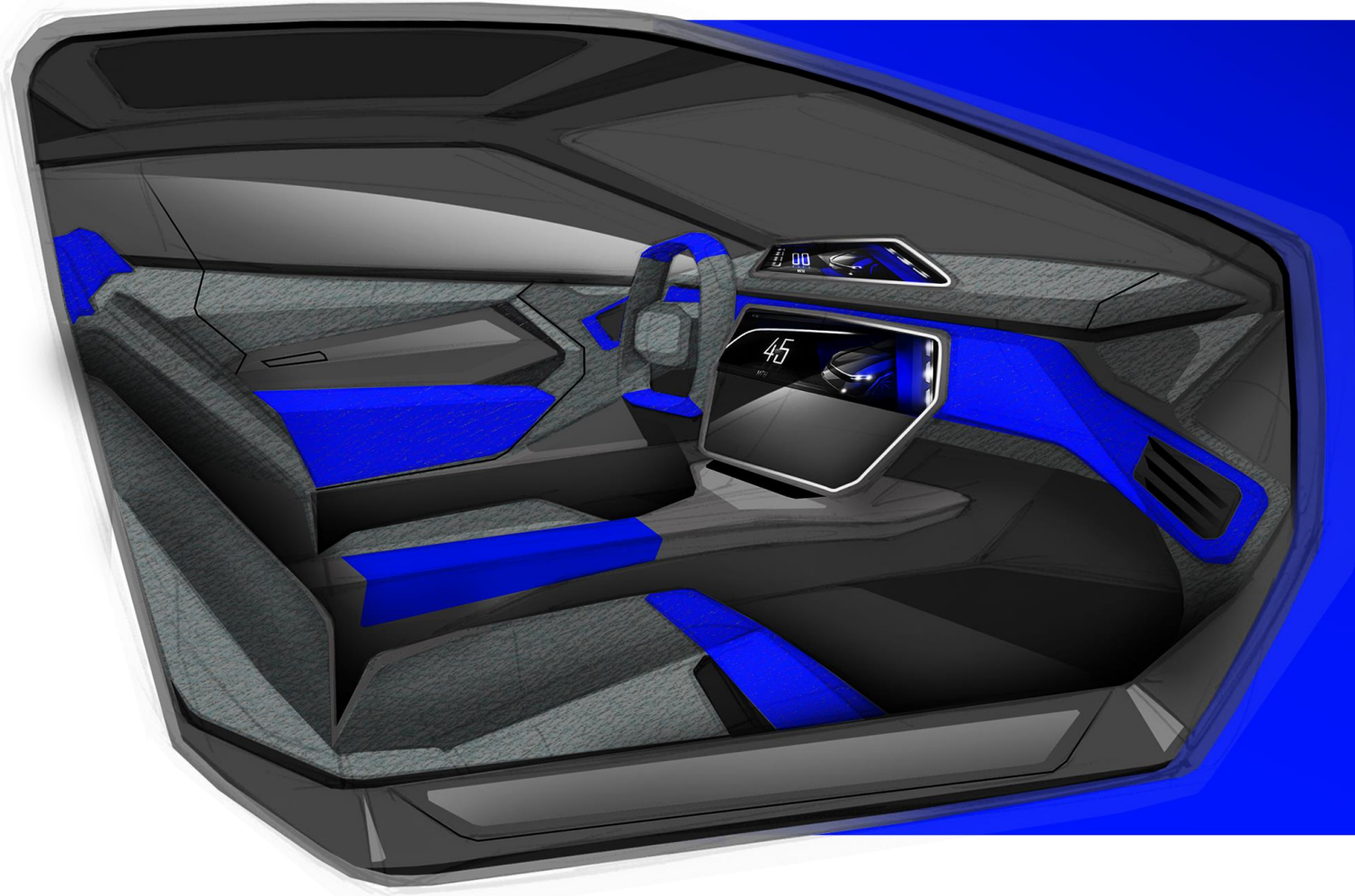
Libby Rose Marie Dakin



# Exterior



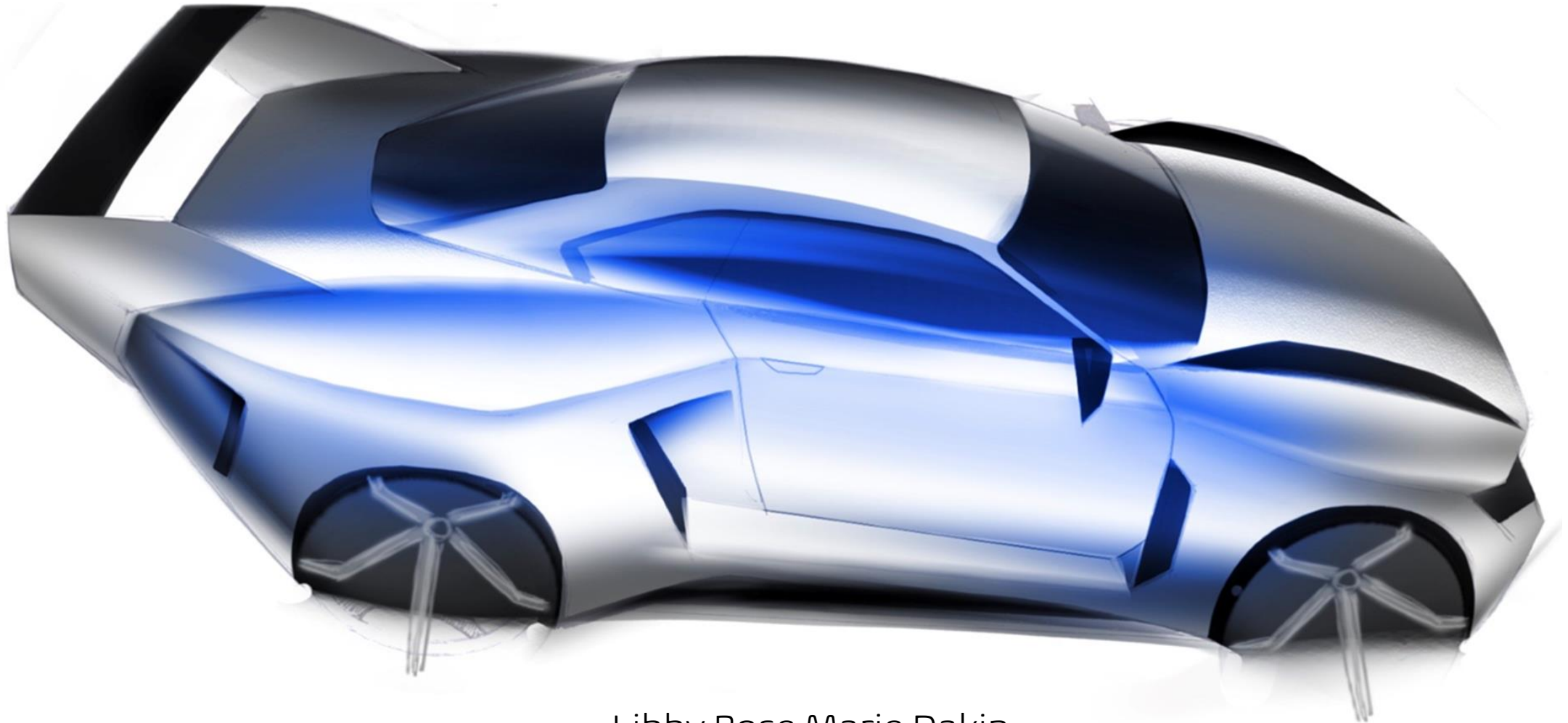
# Interior



# Interior



THANKYOU !



Libby Rose Marie Dakin



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