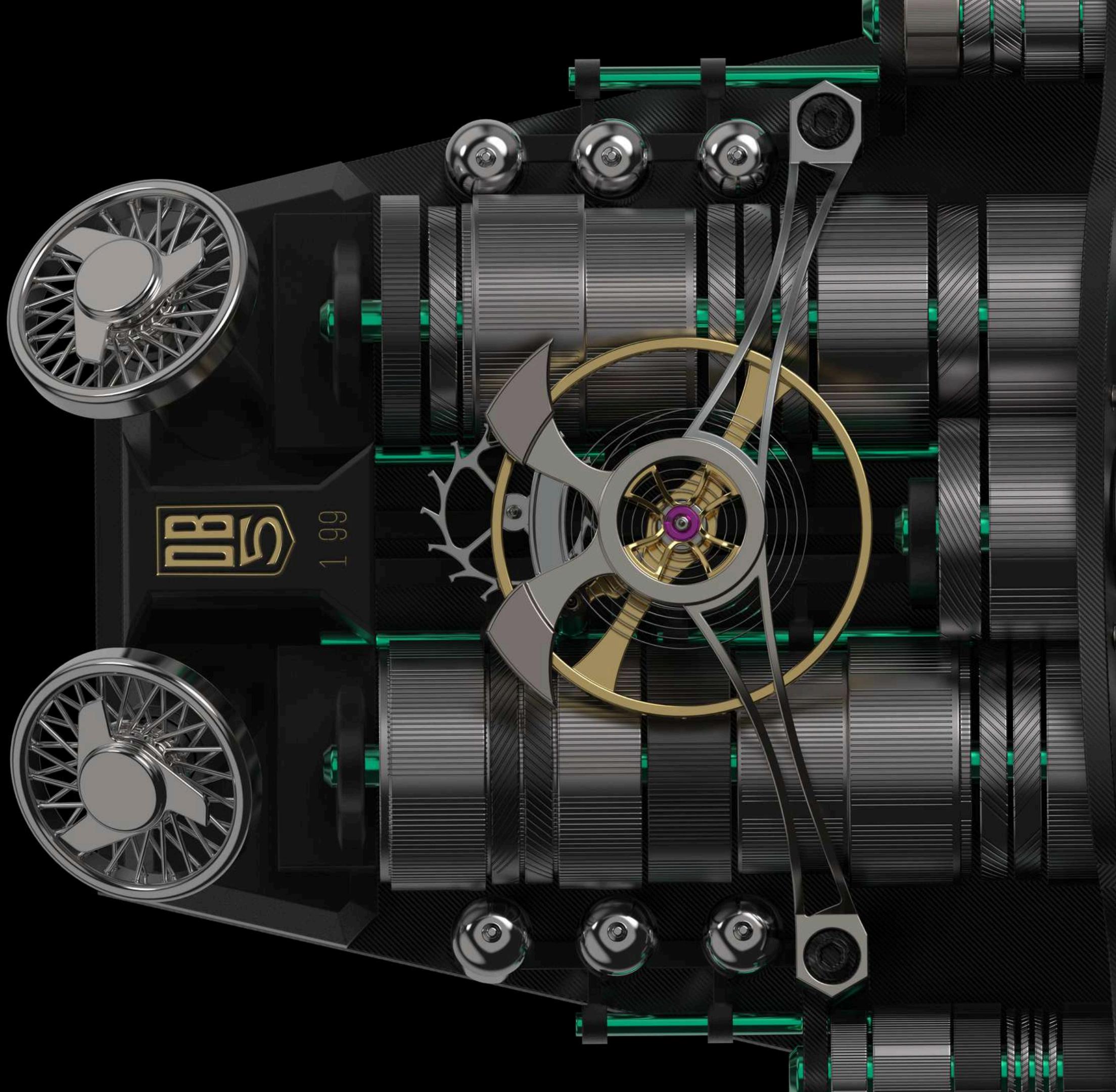


VAIBHAV CHAWLA
DESIGN PORTFOLIO
 **2025**





ABOUT ME

WHERE SHOULD WE START?!



DECVAIBHAV07@GMAIL.COM
@THE.PROTOTYPER
(INSTAGRAM)

WWW.LINKEDIN.COM/IN/DEC
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+91 96342 36605

EDUCATION

2019-23
BACHELORS OF DESIGN, FASHION & LIFESTYLE
ACCESSORY DESIGN
NATIONAL INSTITUTE OF FASHION & TECHNOLOGY,
MUMBAI

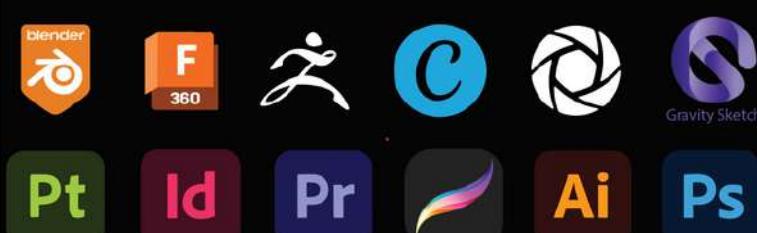
2023-2025
MASTERS OF DESIGN, MOBILITY & VEHICLE DESIGN
INDUSTRIAL DESIGN CENTER, IIT BOMBAY

RECENT WORKS

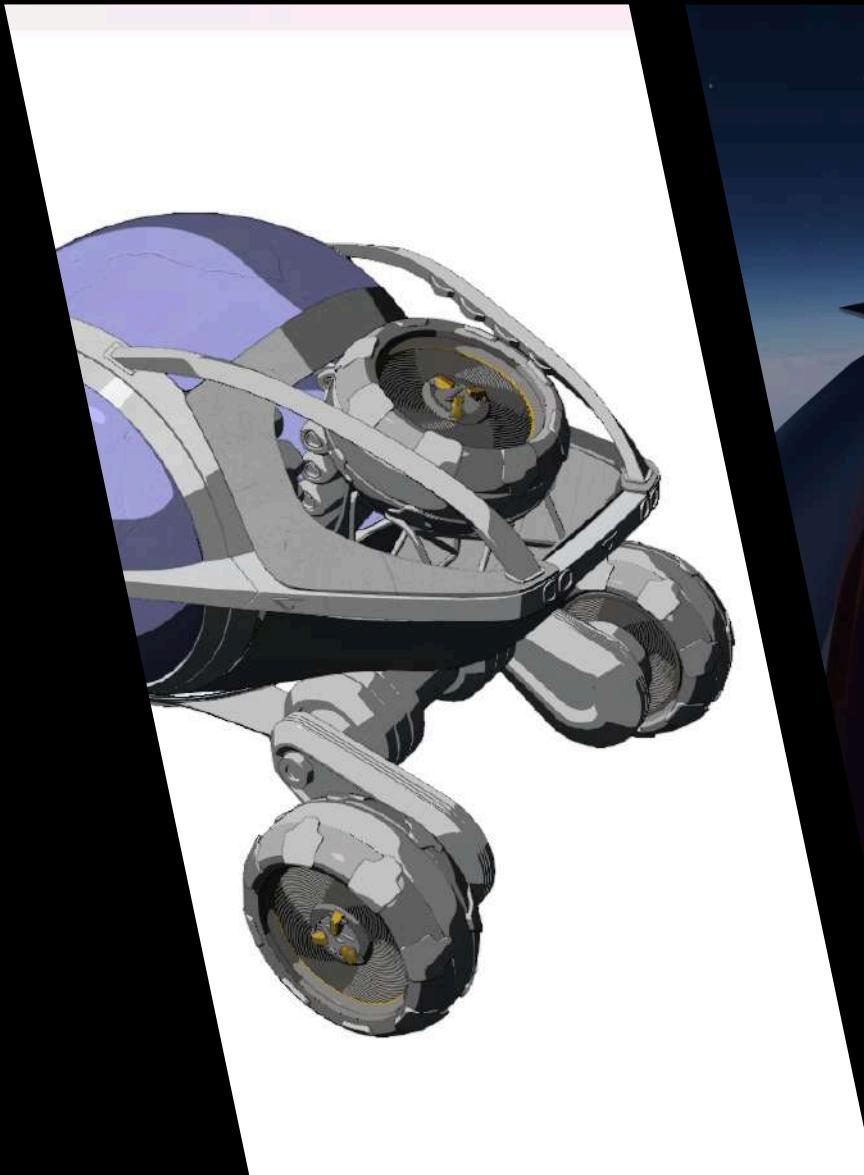
VEHICLE DESIGNER (FEB, 2025 - PRESENT)
NMD MOTORCYCLES, AL AIN, UAE

3D ARTIST (AUG, 2021 - AUG, 2023)
VIGA ENTERTAINMENT TECHNOLOGIES, BANGALORE

INDUSTRIAL DESIGNER (JAN, 2023 - APRIL, 2023)
TATA ELXSI LTD., BANGALORE



CONTENT



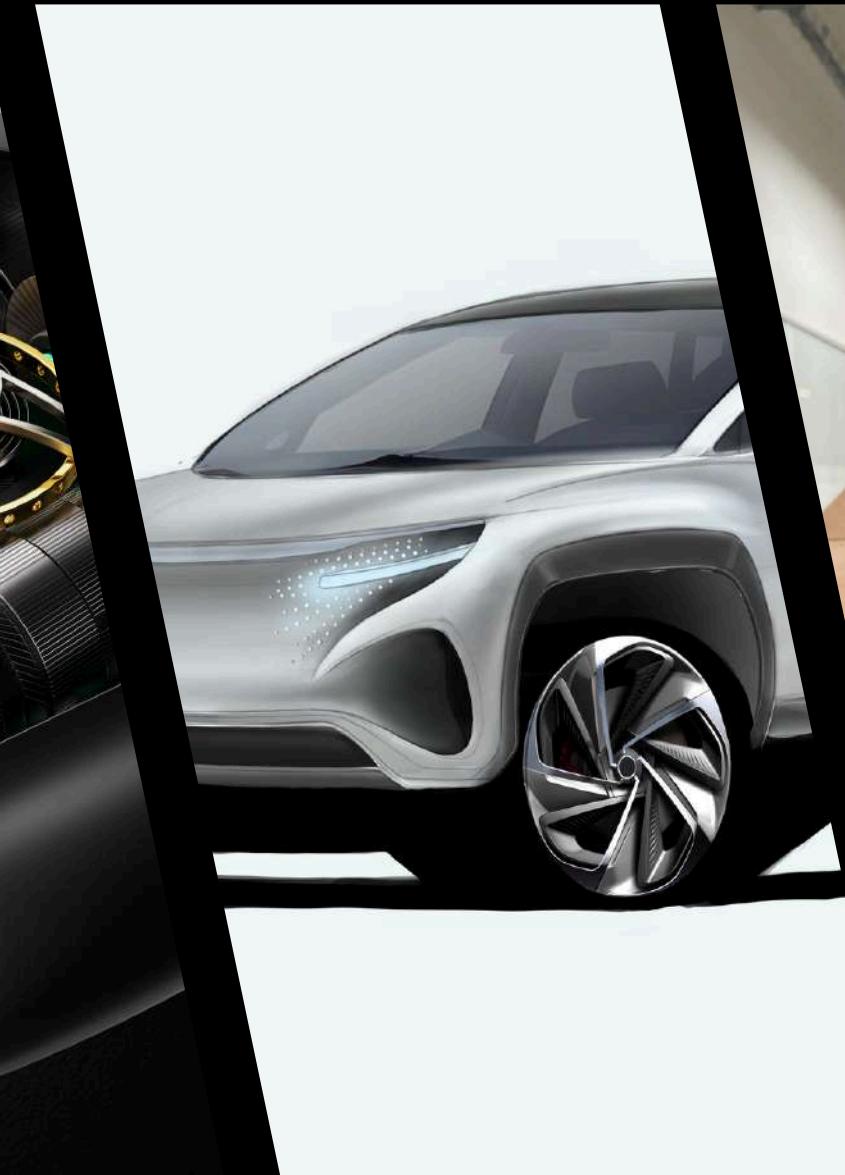
**NXT GEN ADV
TOURER**



**COCKPIT
DESIGN**



**WATCH
DESIGN X
JAMES BOND**



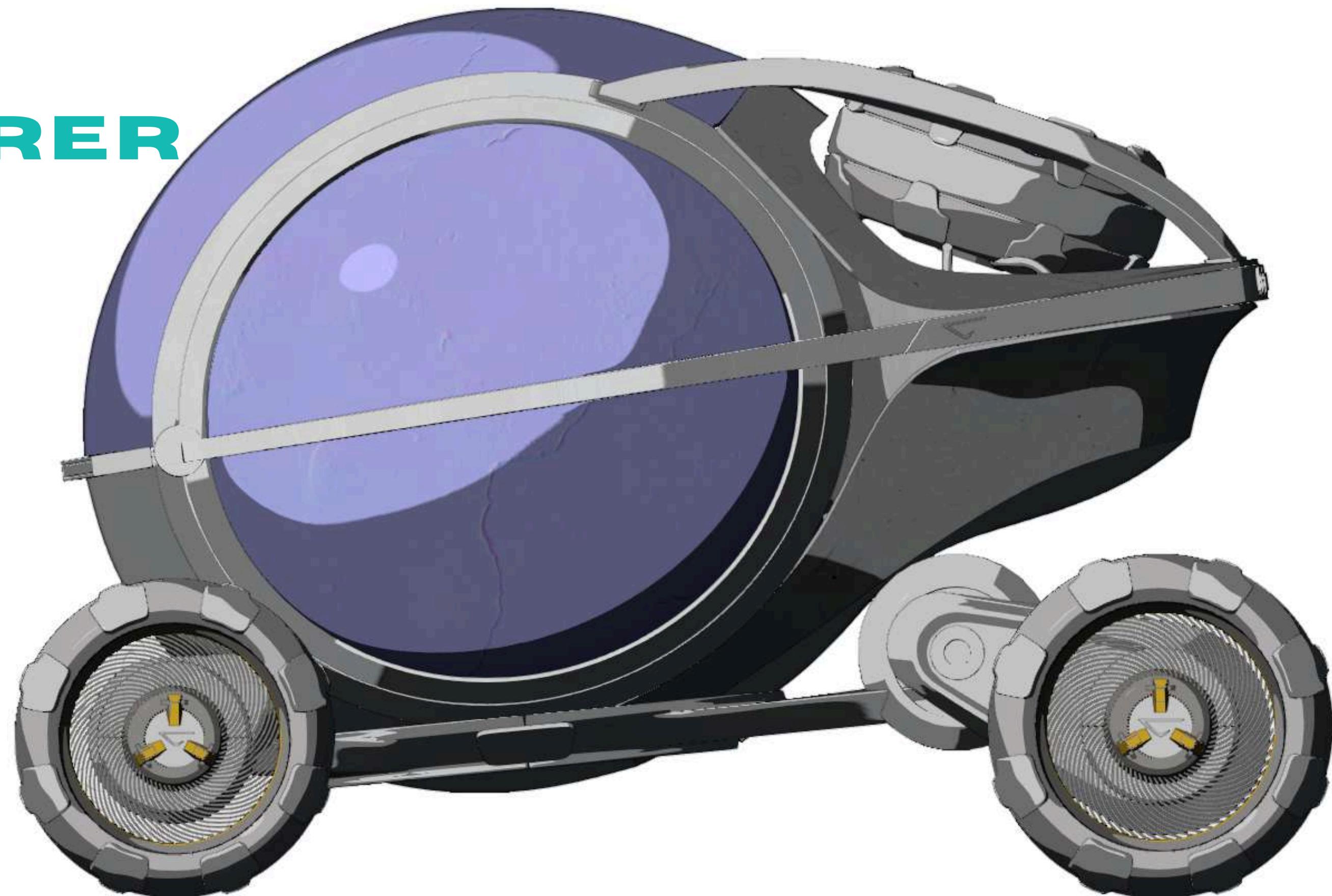
HI.VI



**CLAY
SCULPTING**

01

NXT-GEN ADV TOURER



DESIGN BRIEF

Design an innovative 4 wheeled Adventure Tourer for year 2040 that seamlessly integrates urban practicality with off-terrain capabilities, creating a vehicle that embodies a lifestyle of both everyday convenience and spontaneous exploration. Targeted at urban dwellers with an adventurous spirit.

MOOD BOARD

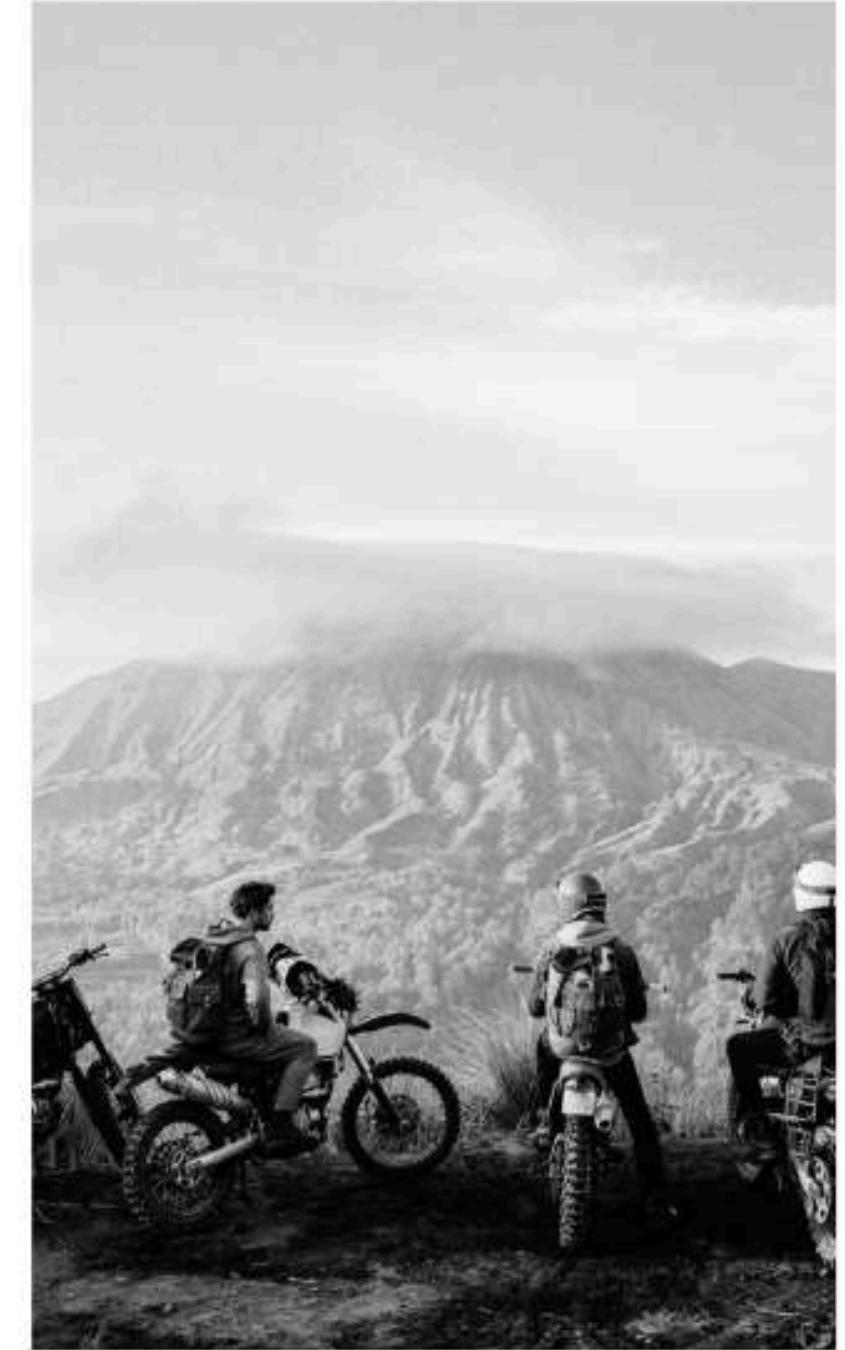


Free-Spirit

Wanderlust



Urban-Explorer



Rebel

INSPIRATION BOARD



Organic



Chiseled



Organic



Robust



Resilient

Minimal

INTERVIEW INSIGHTS



BEST FOR TOURING AND MOUNTING LUGGAGE



560+KMS RIDES

SENSE OF FREEDOM AND PEACE



CONSTANT EXPOSURE TO KACCHA RASTA
TODAY'S ROAD CONDITIONS AND TRAFFIC ARE
NO LESS THAN AN ADVENTURE!



EXPOSED TO ENVIRONMENT AND DANGER
CREATES A SENSE OF FEAR THAT GIVES THEM
ADRENALINE RUSH!

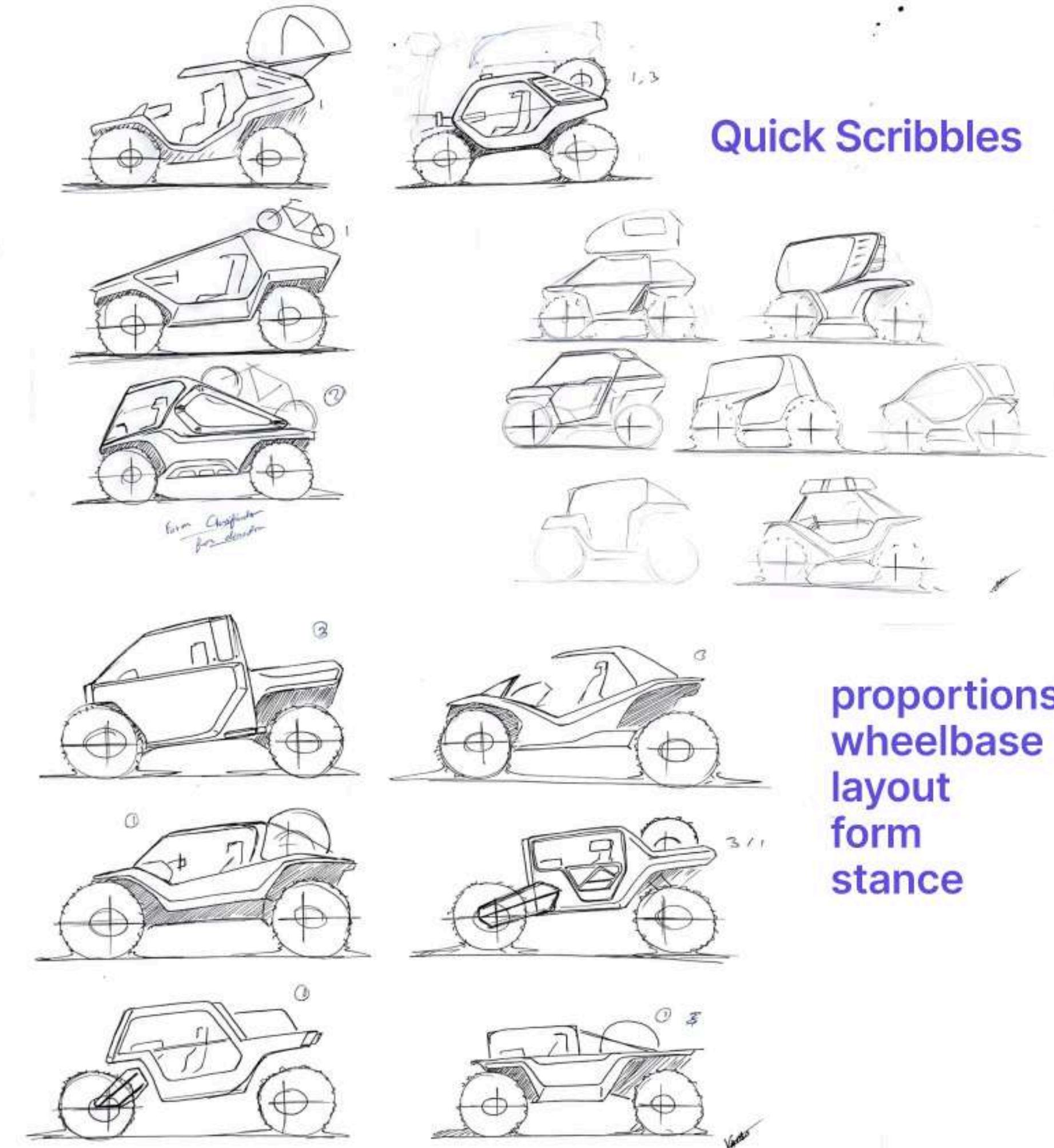
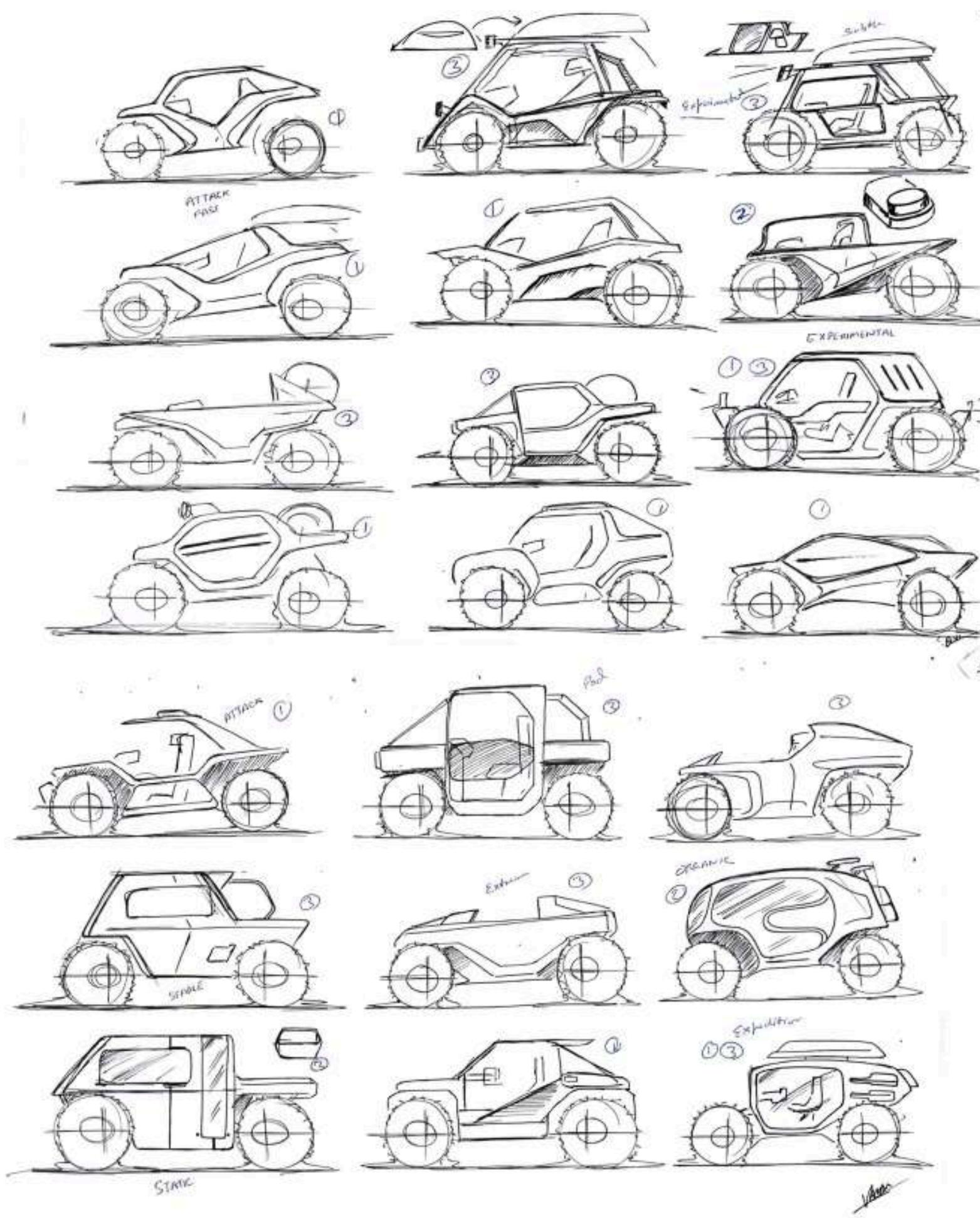


A TRUE ADVENTURE RIDER
DOESN'T JUST OWN A
BIKE-THEY NURTURE IT,
NAME IT, AND TRUST IT
LIKE FAMILY.



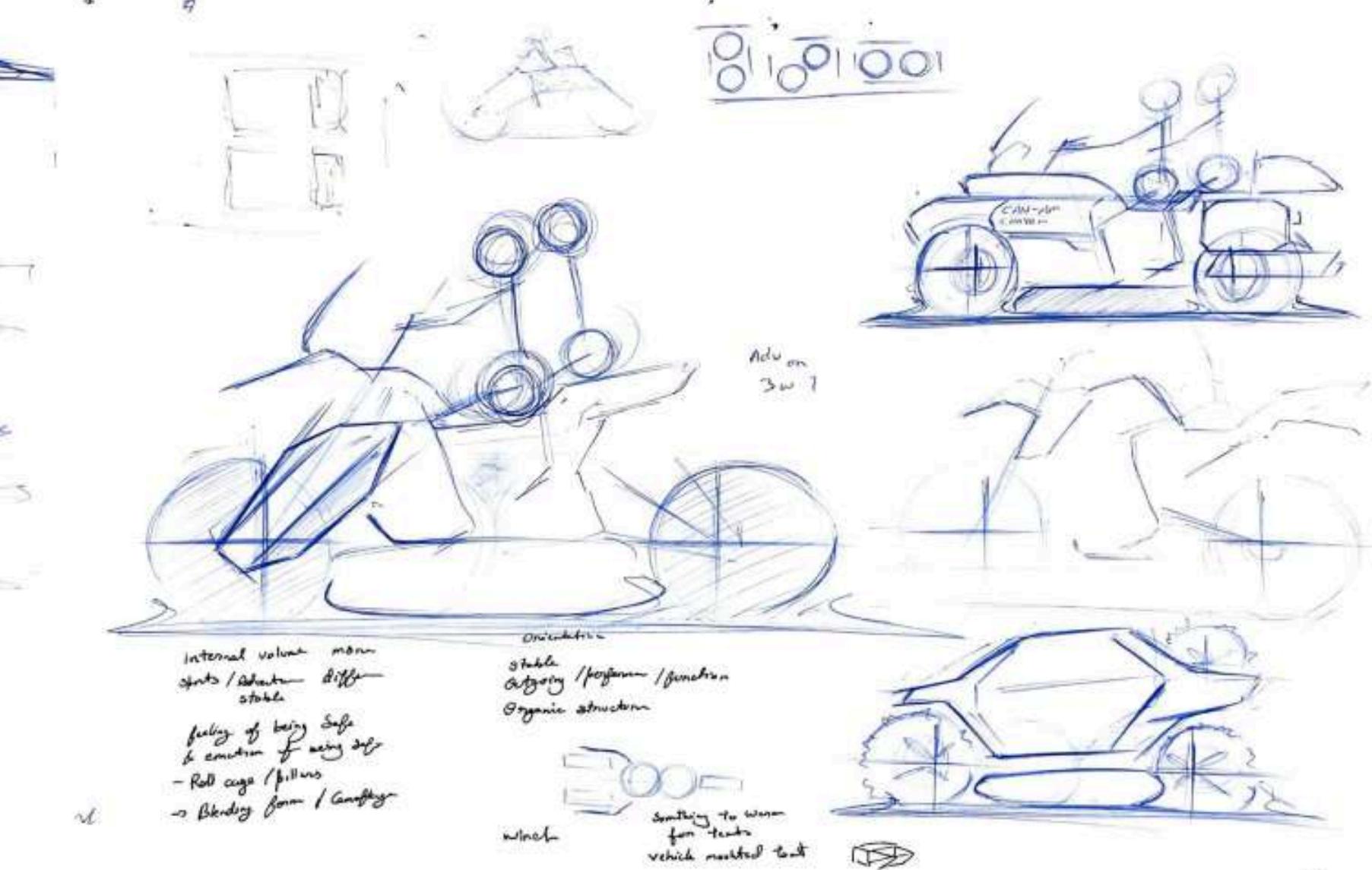
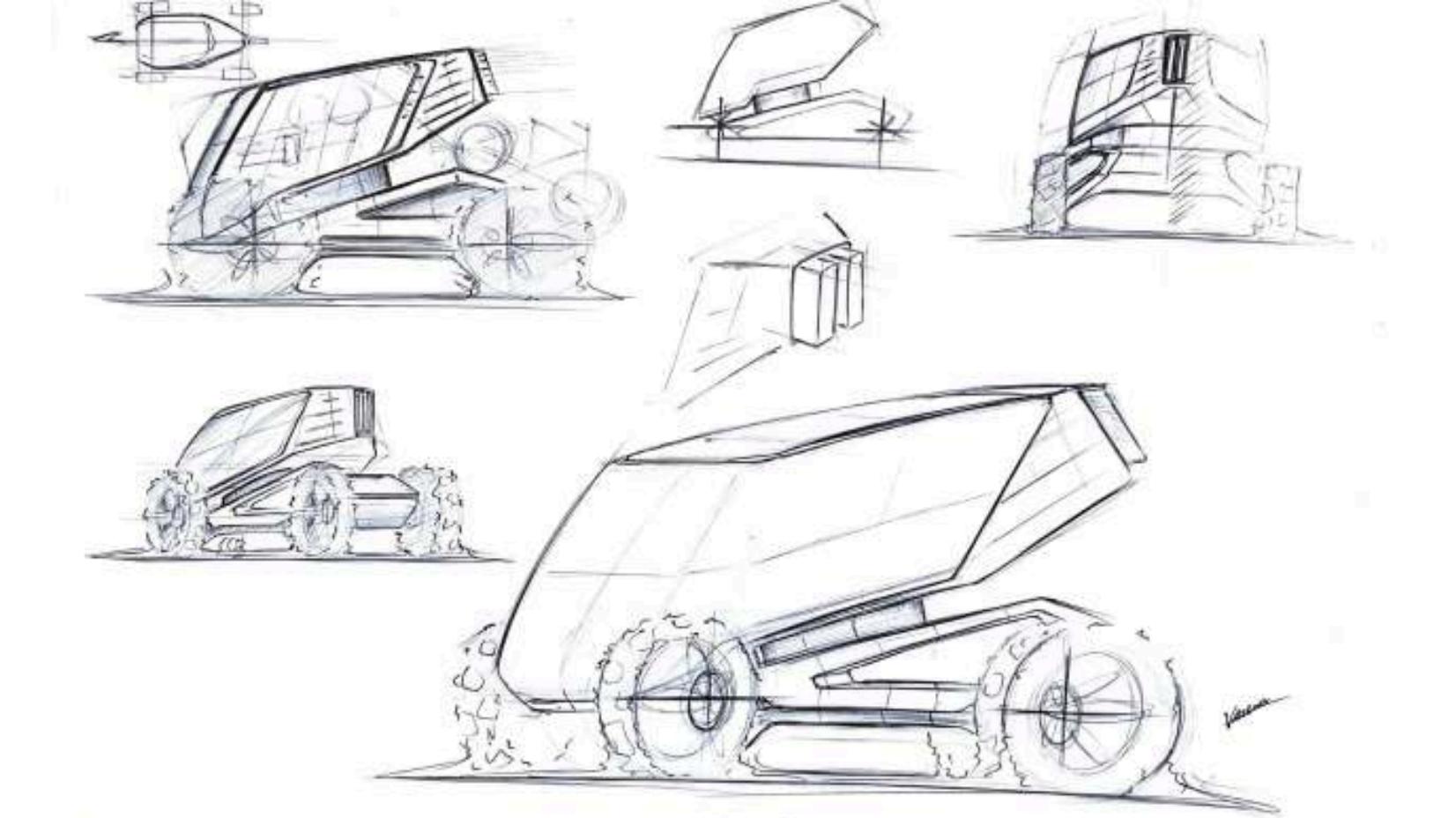
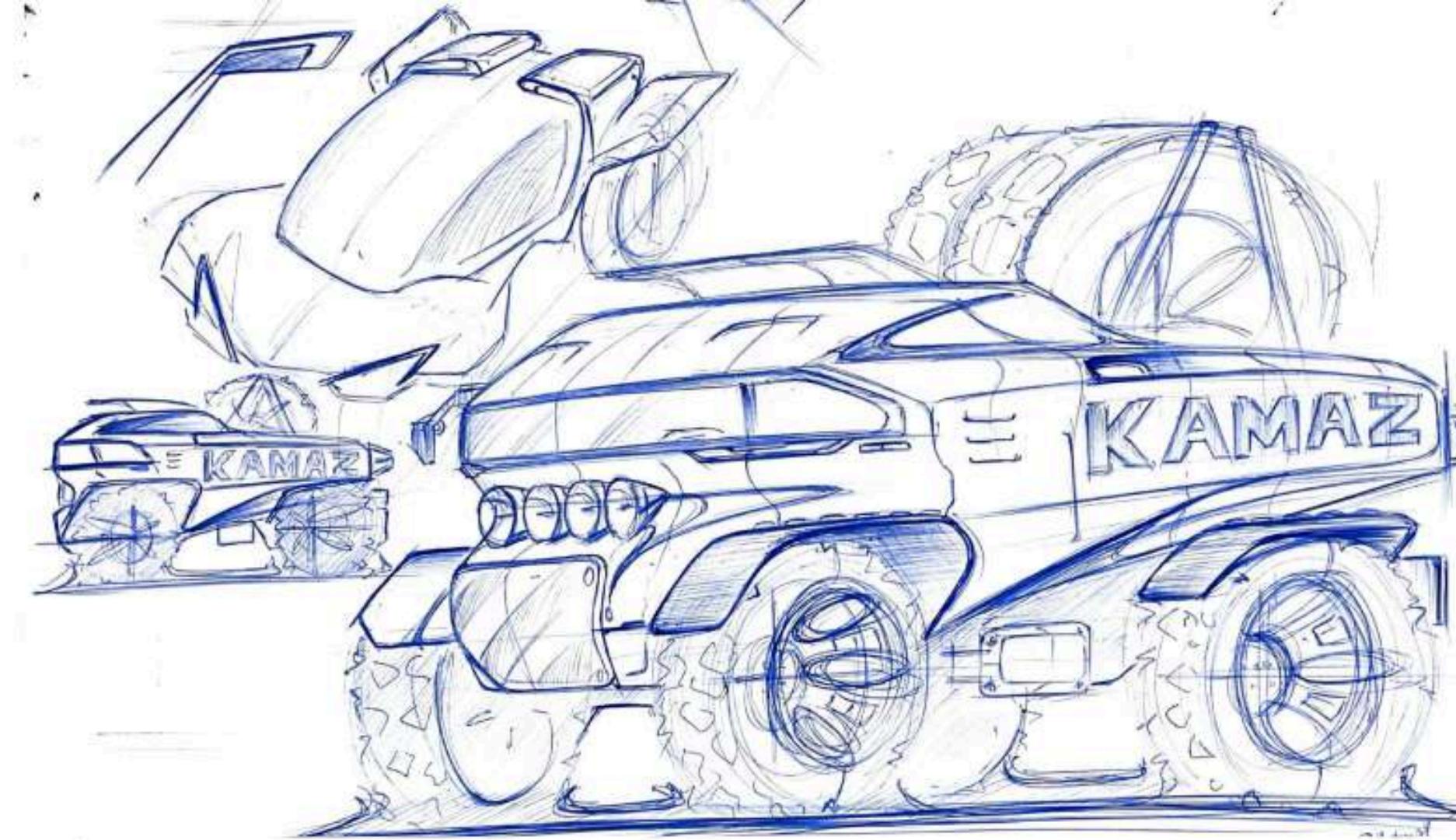
WE'RE REBELS AGAINST LIMITATIONS,
CHASING FREEDOM BEYOND THE
HORIZON

SOME IN-PERSON INSIGHTS

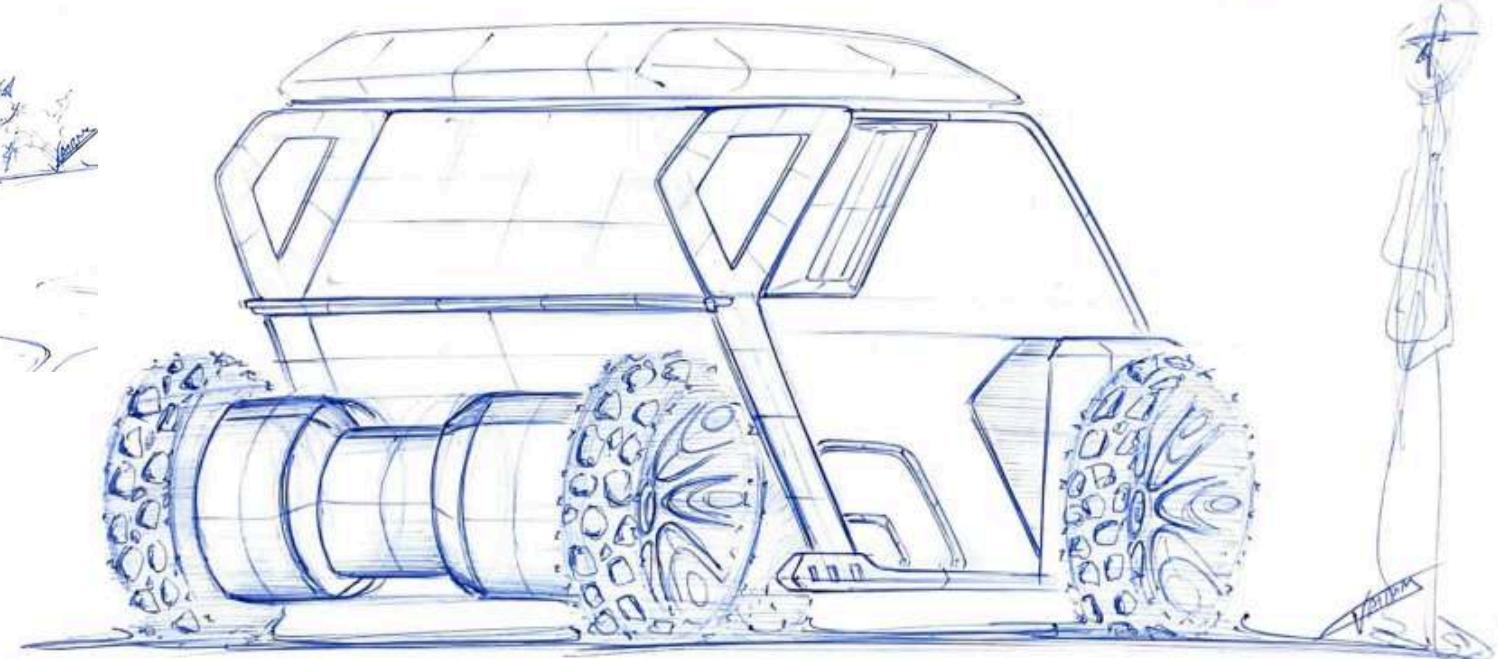
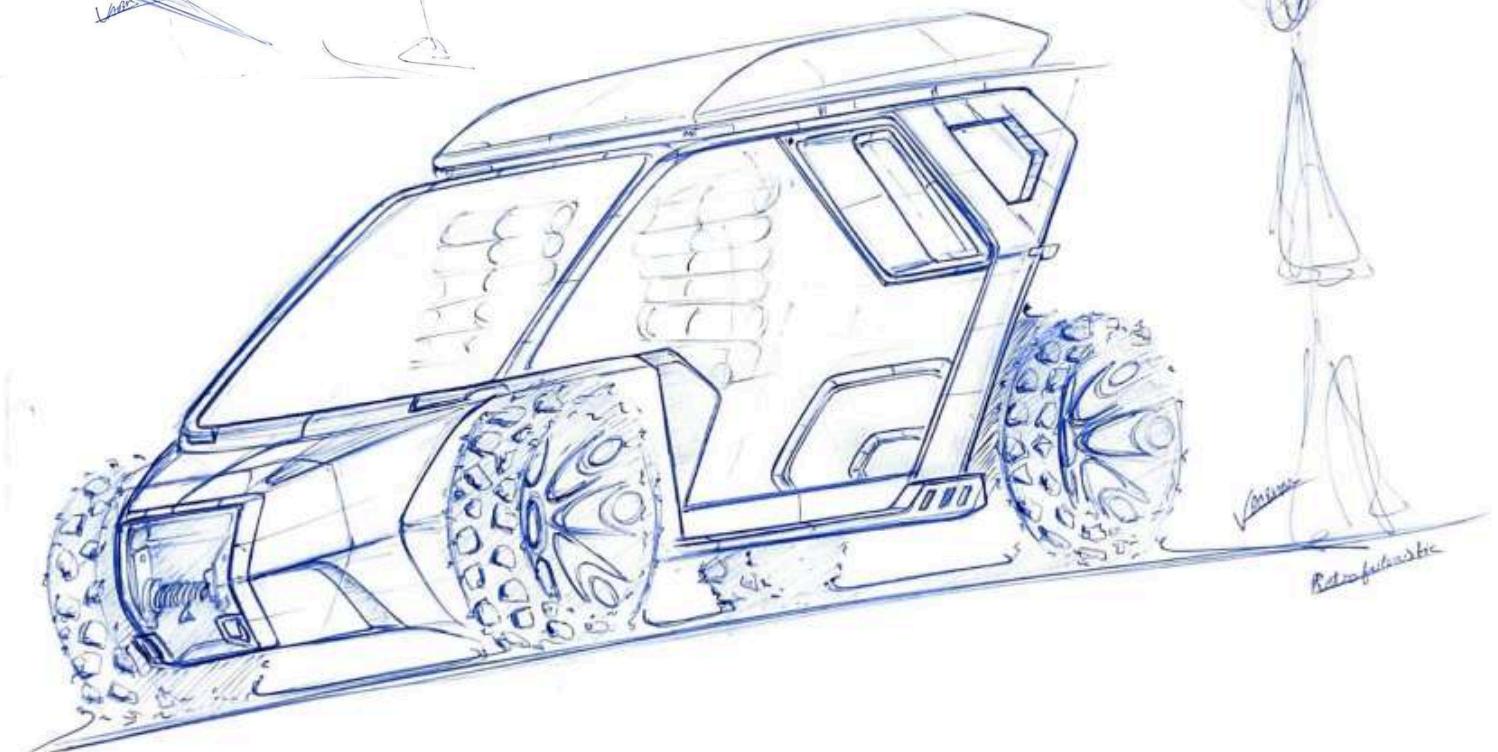
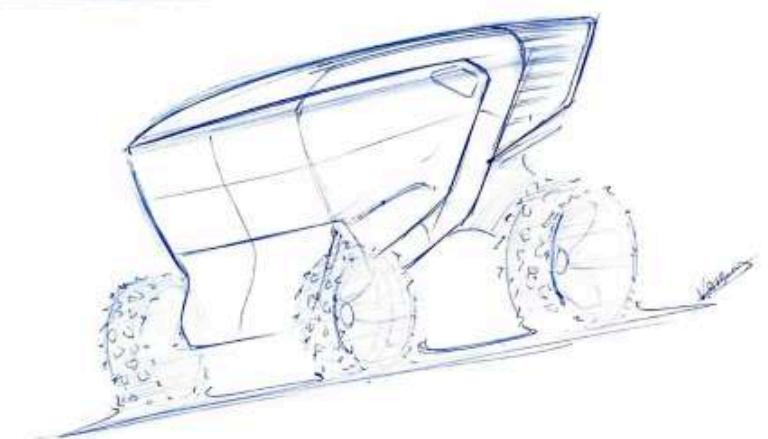
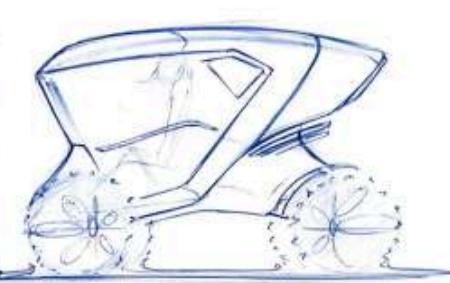
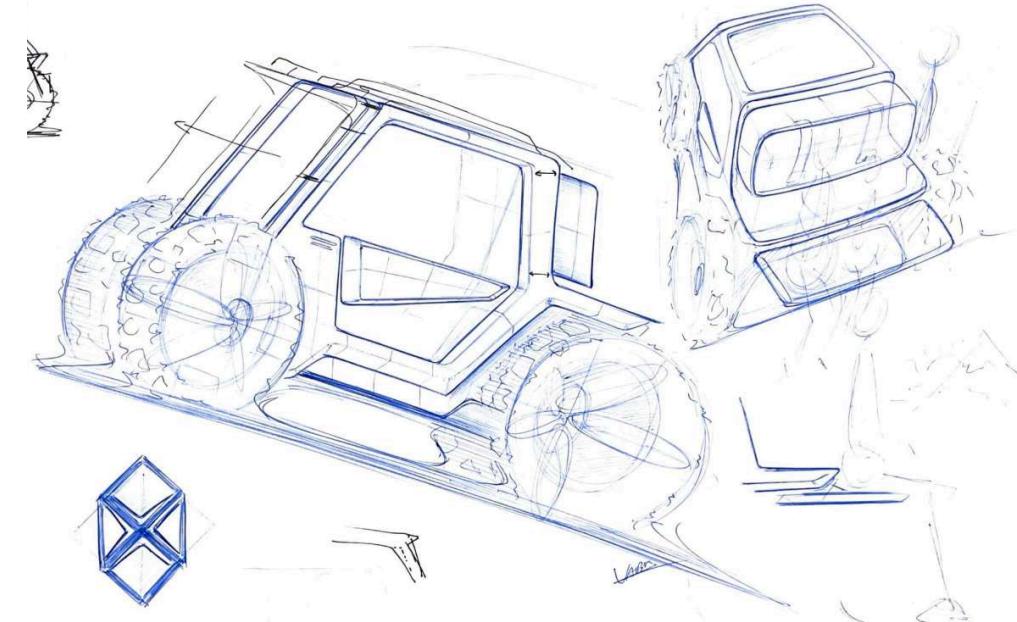
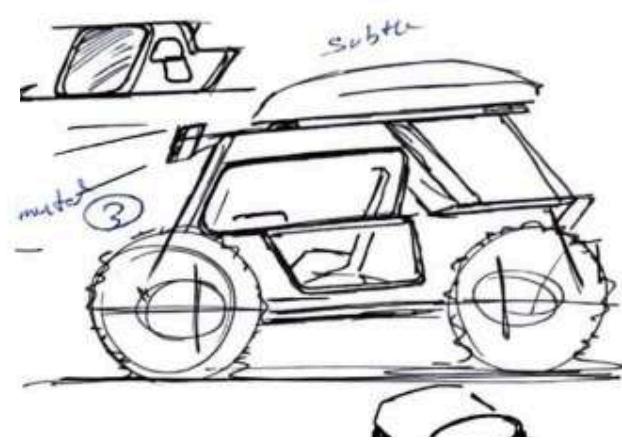
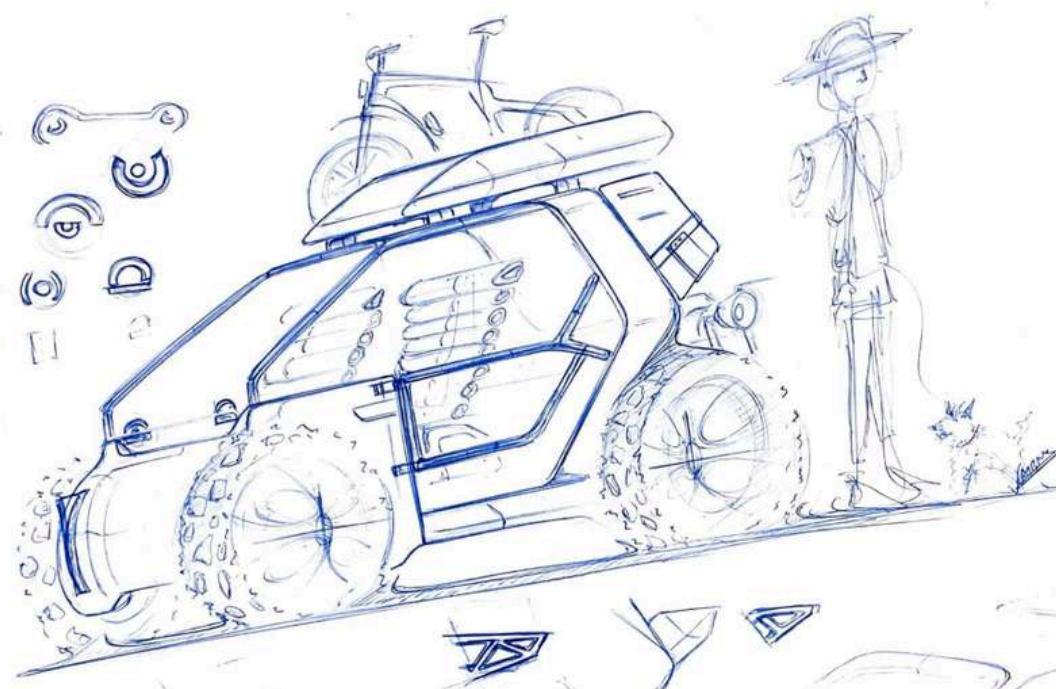
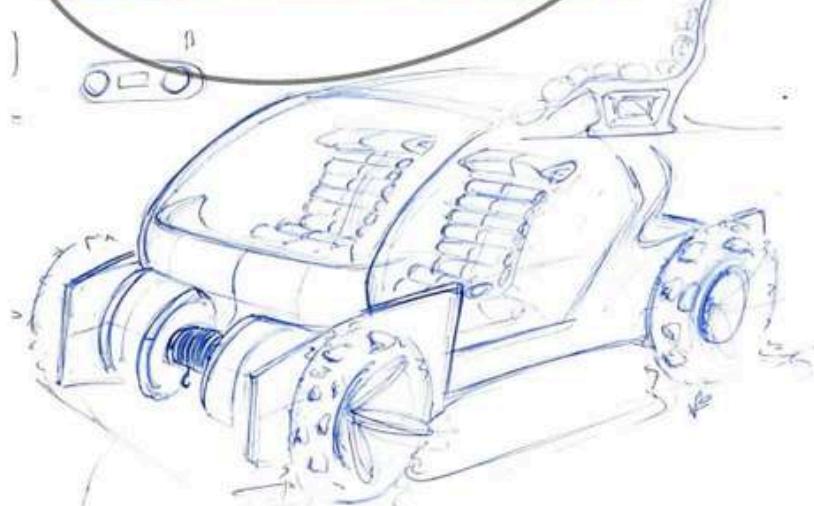
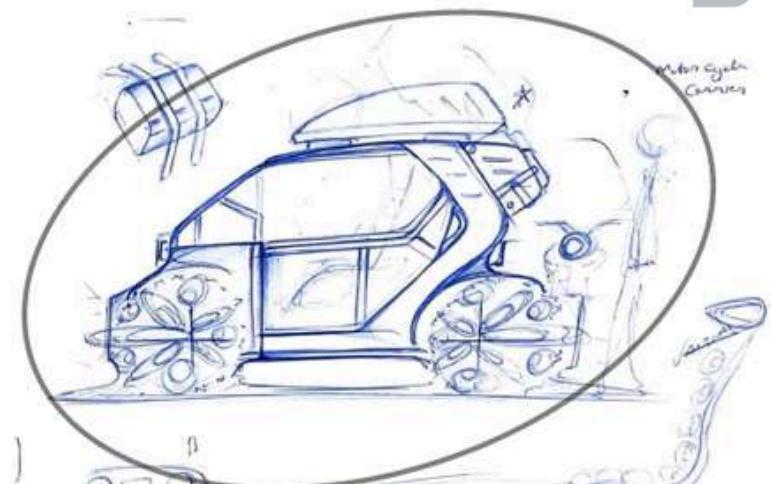


Quick Scribbles

proportions
wheelbase
layout
form
stance

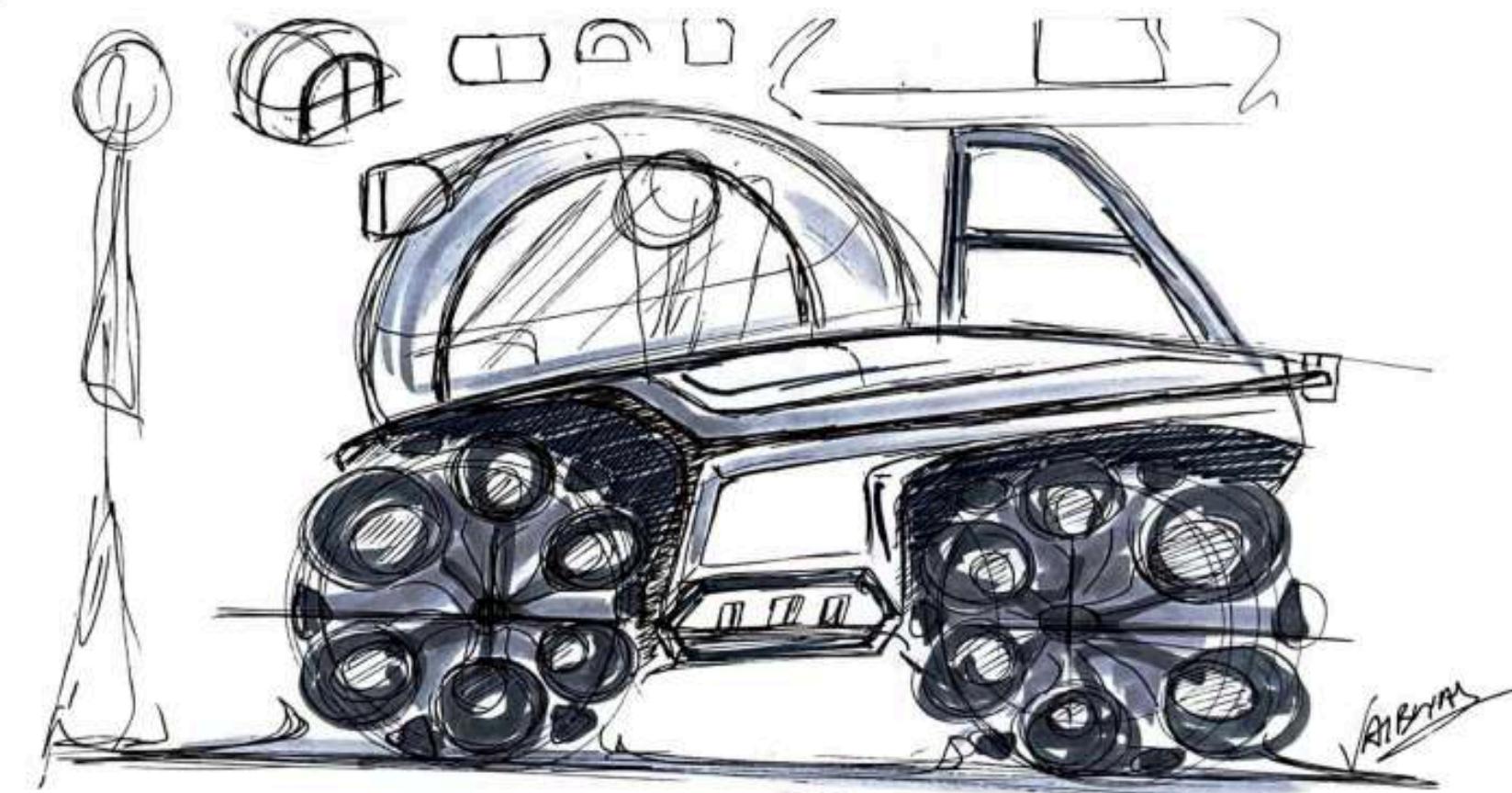
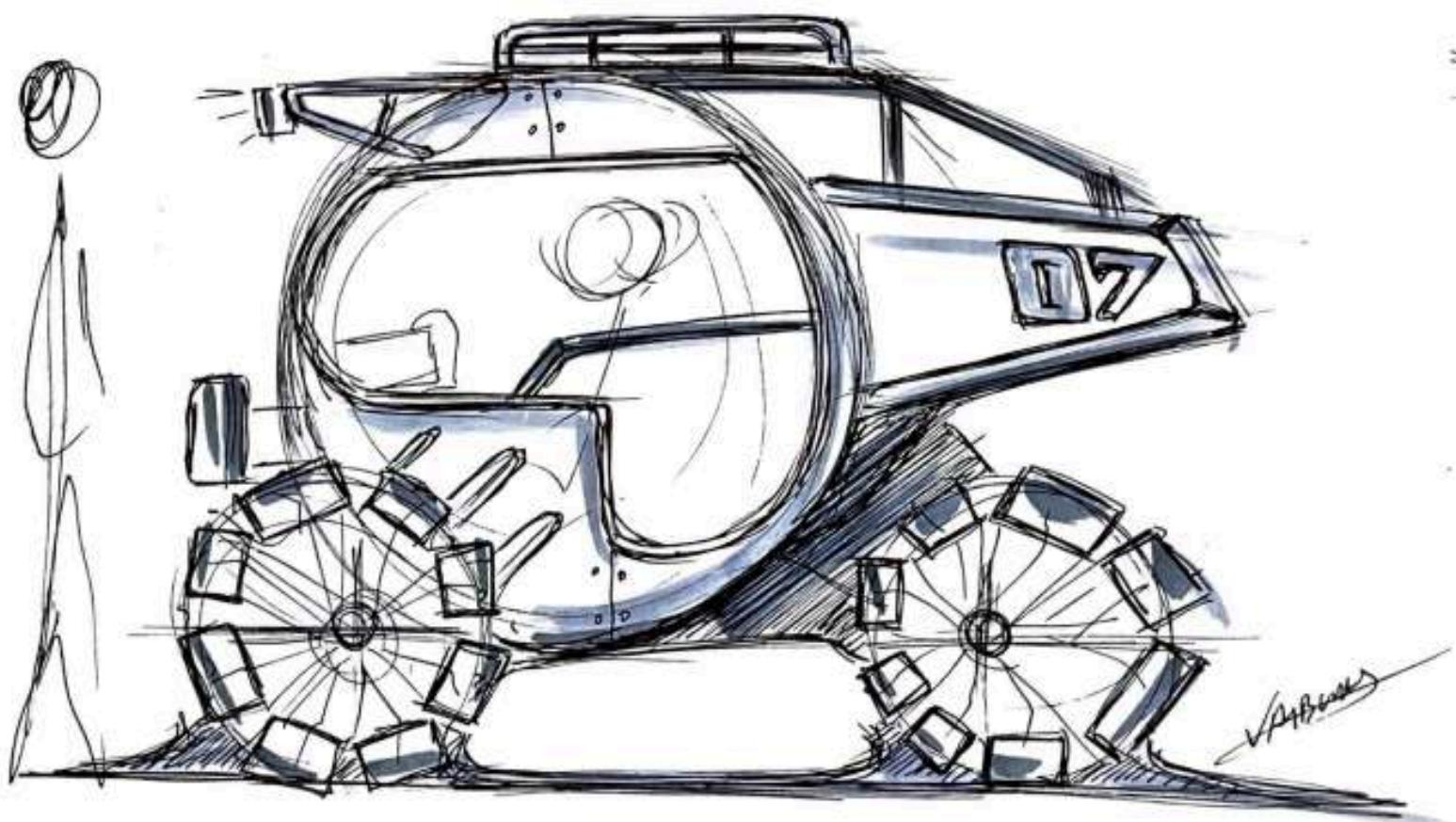
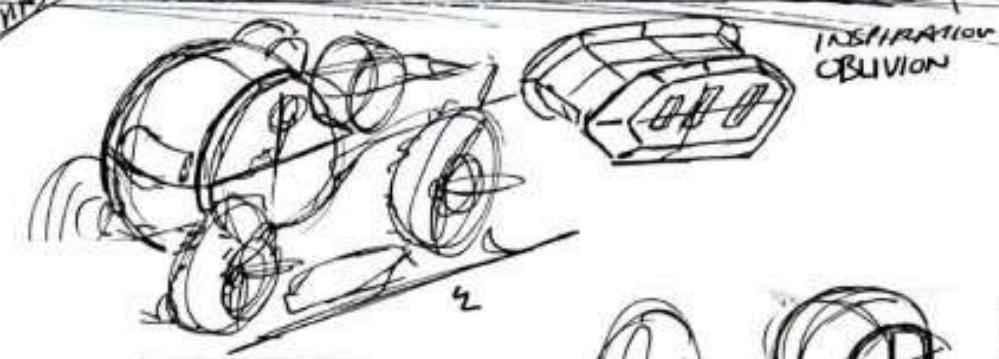
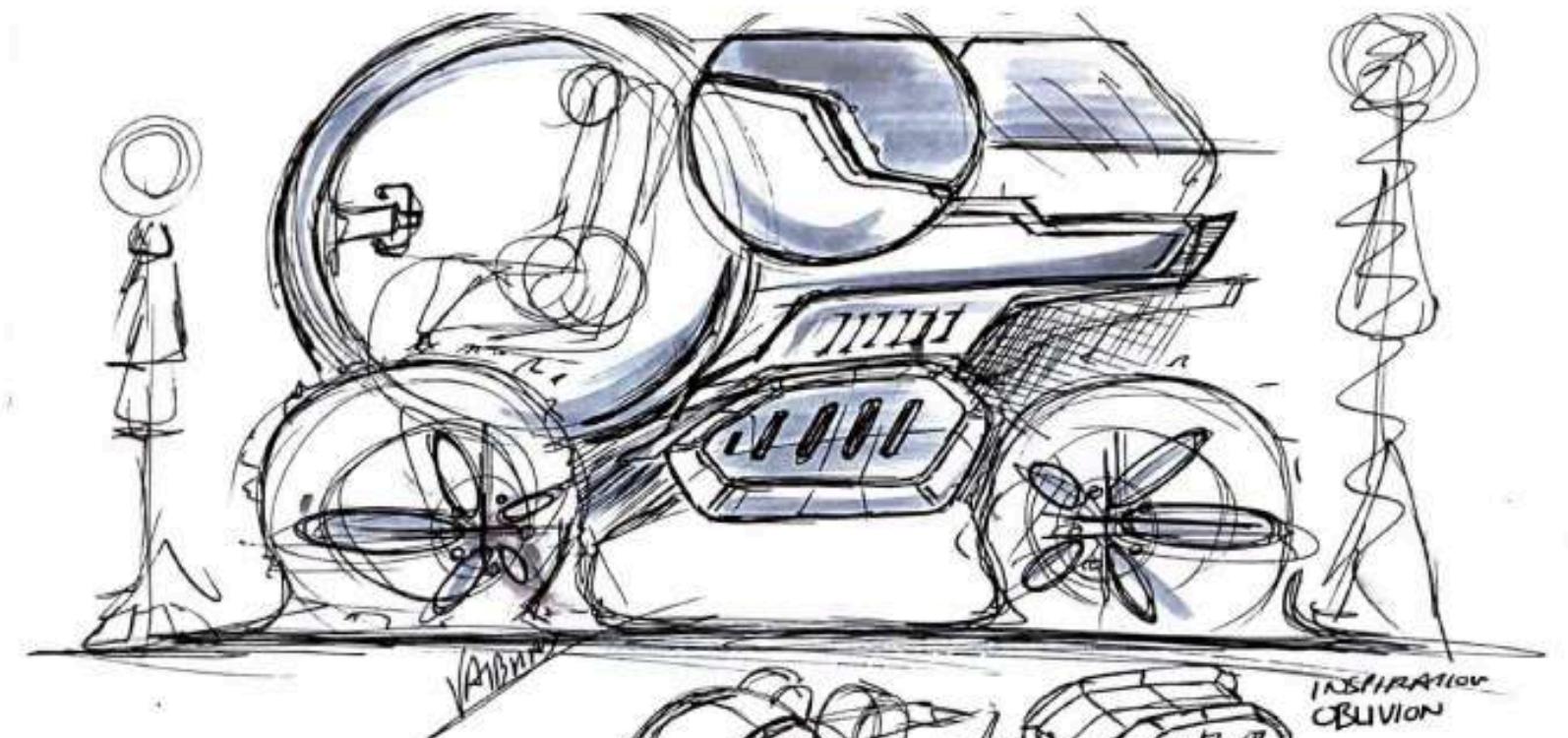
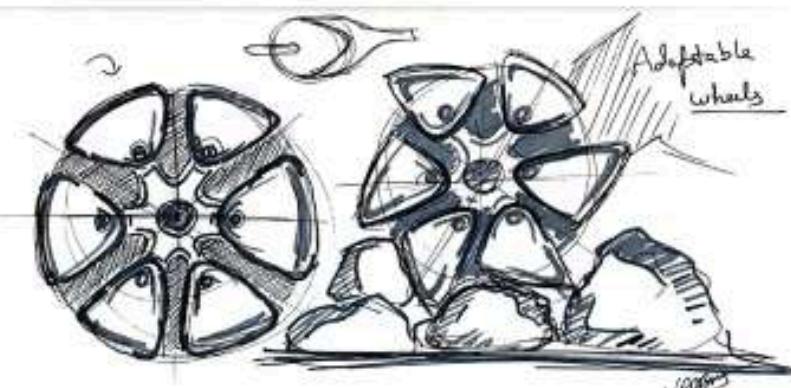
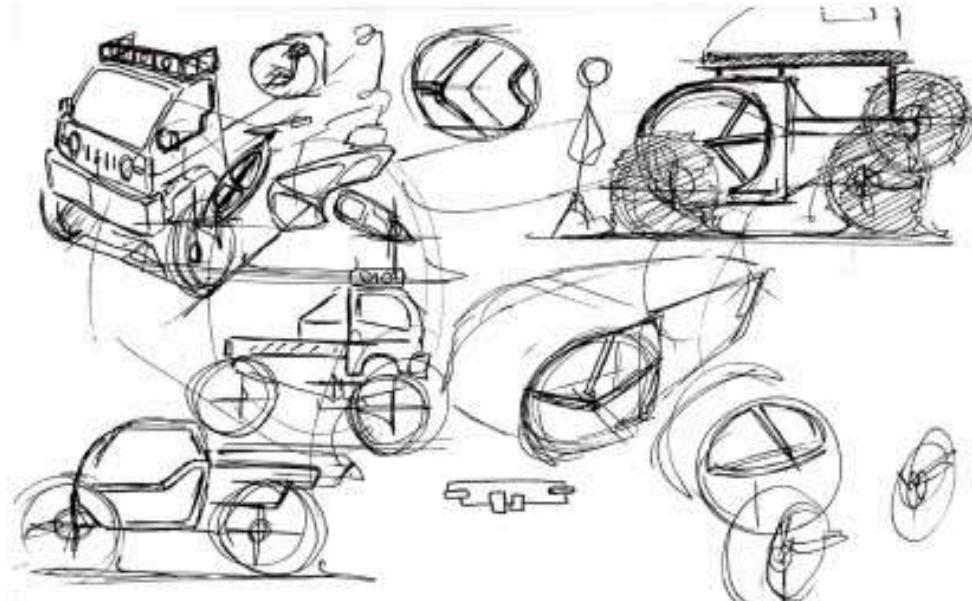


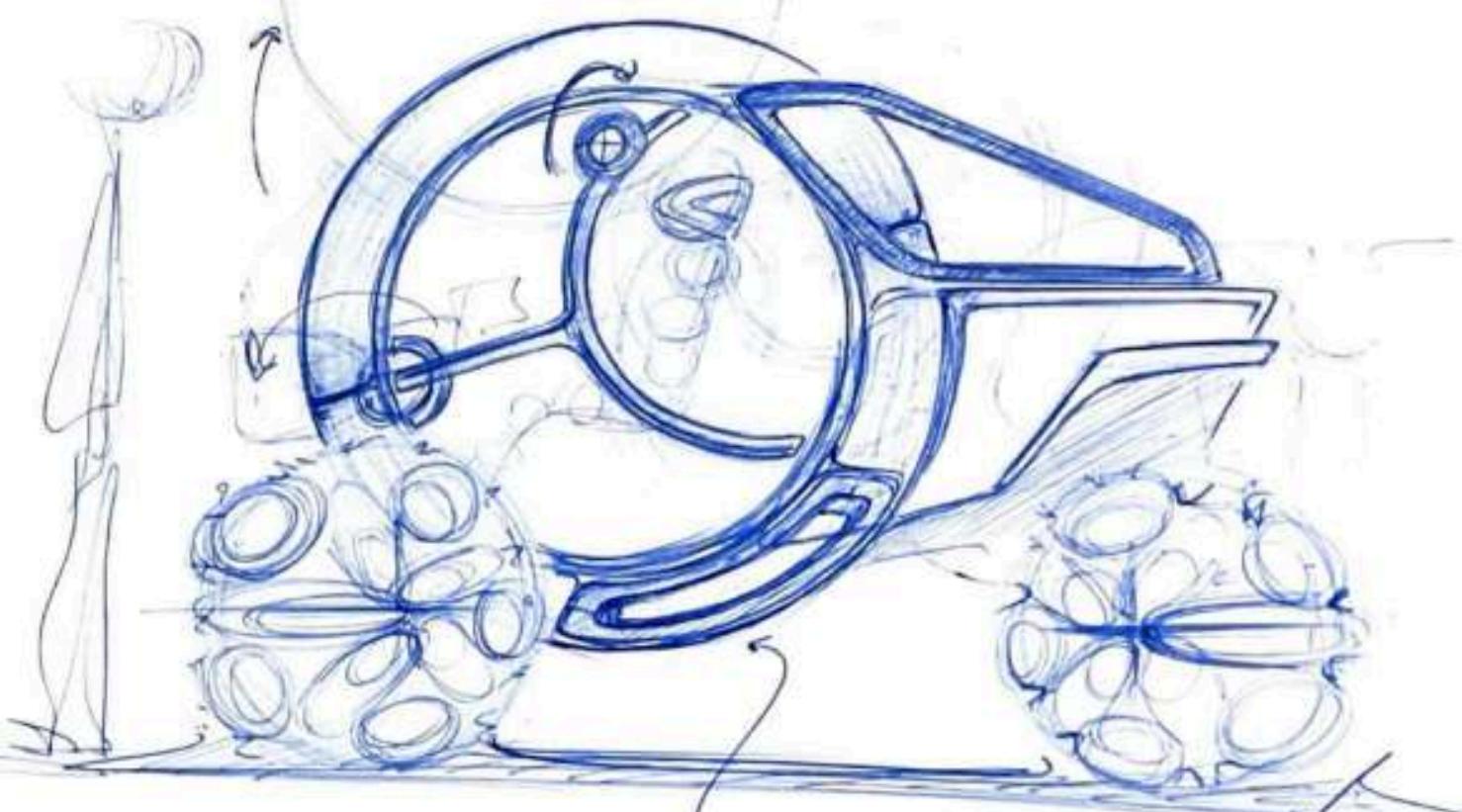
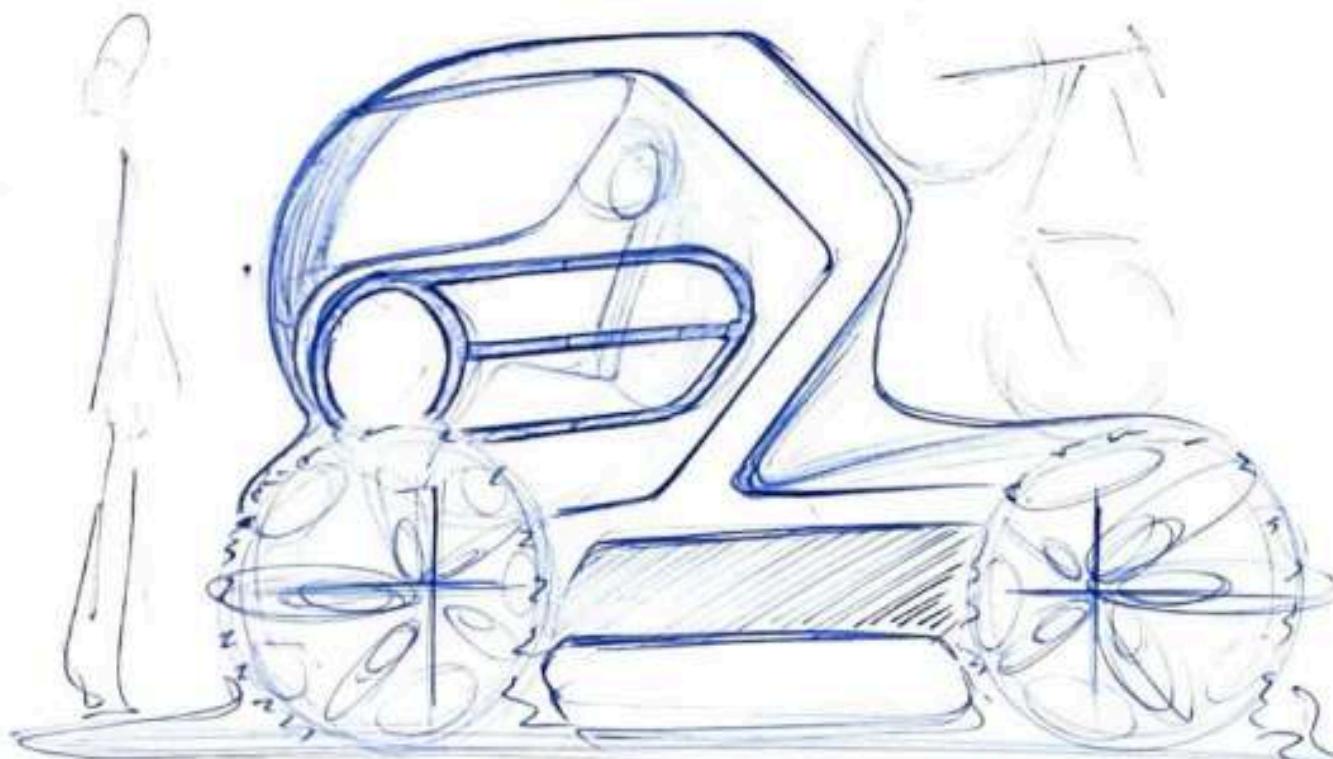
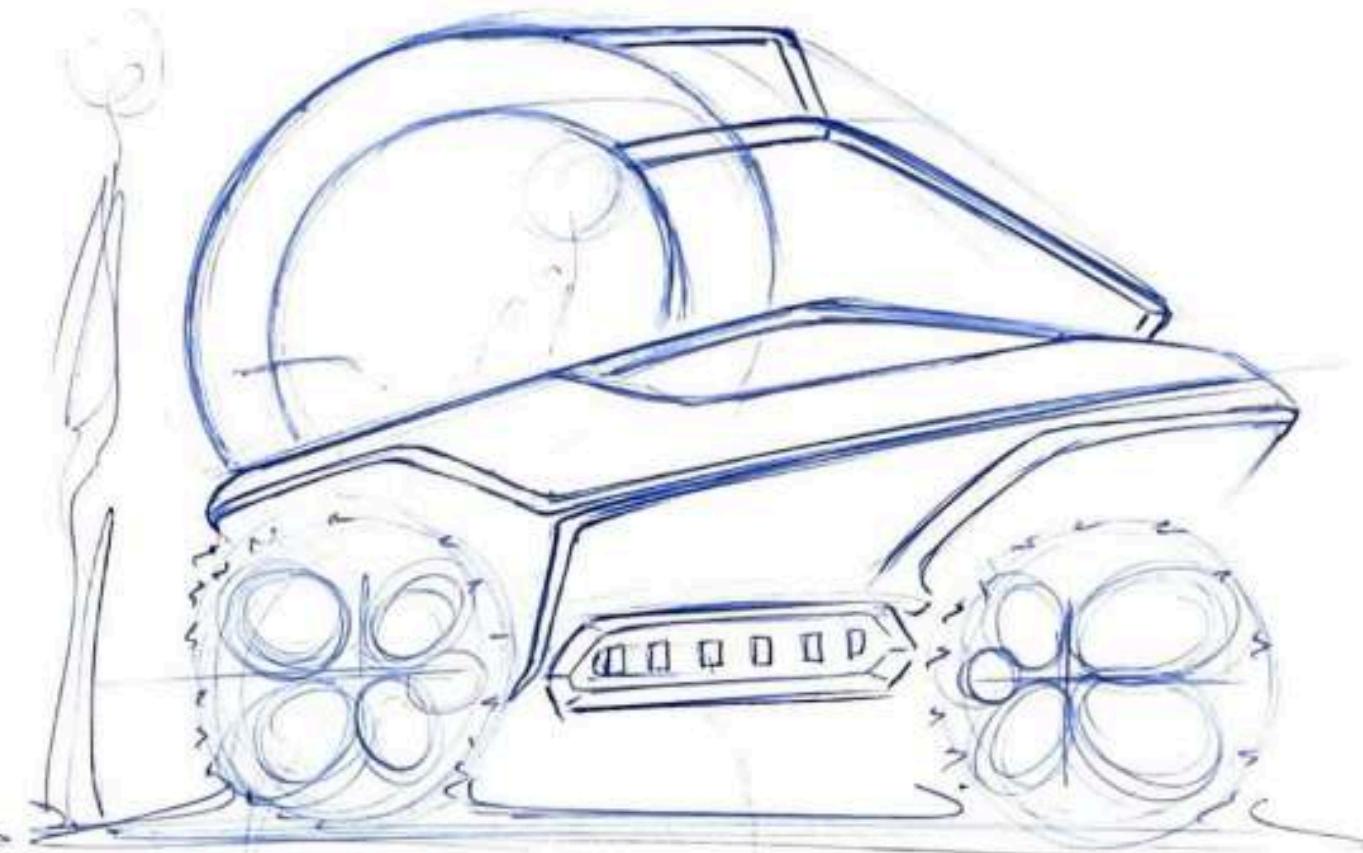
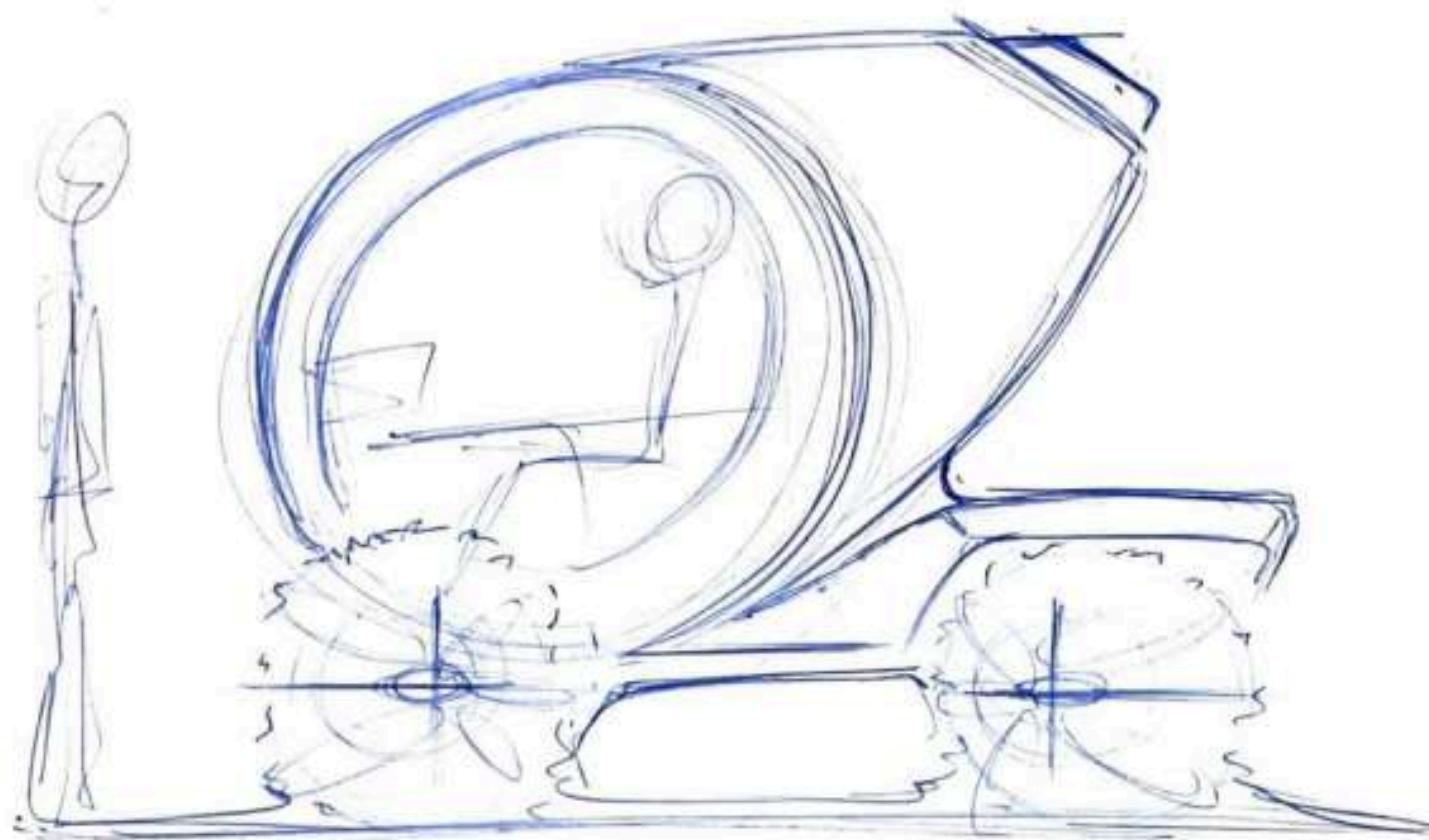
D-01

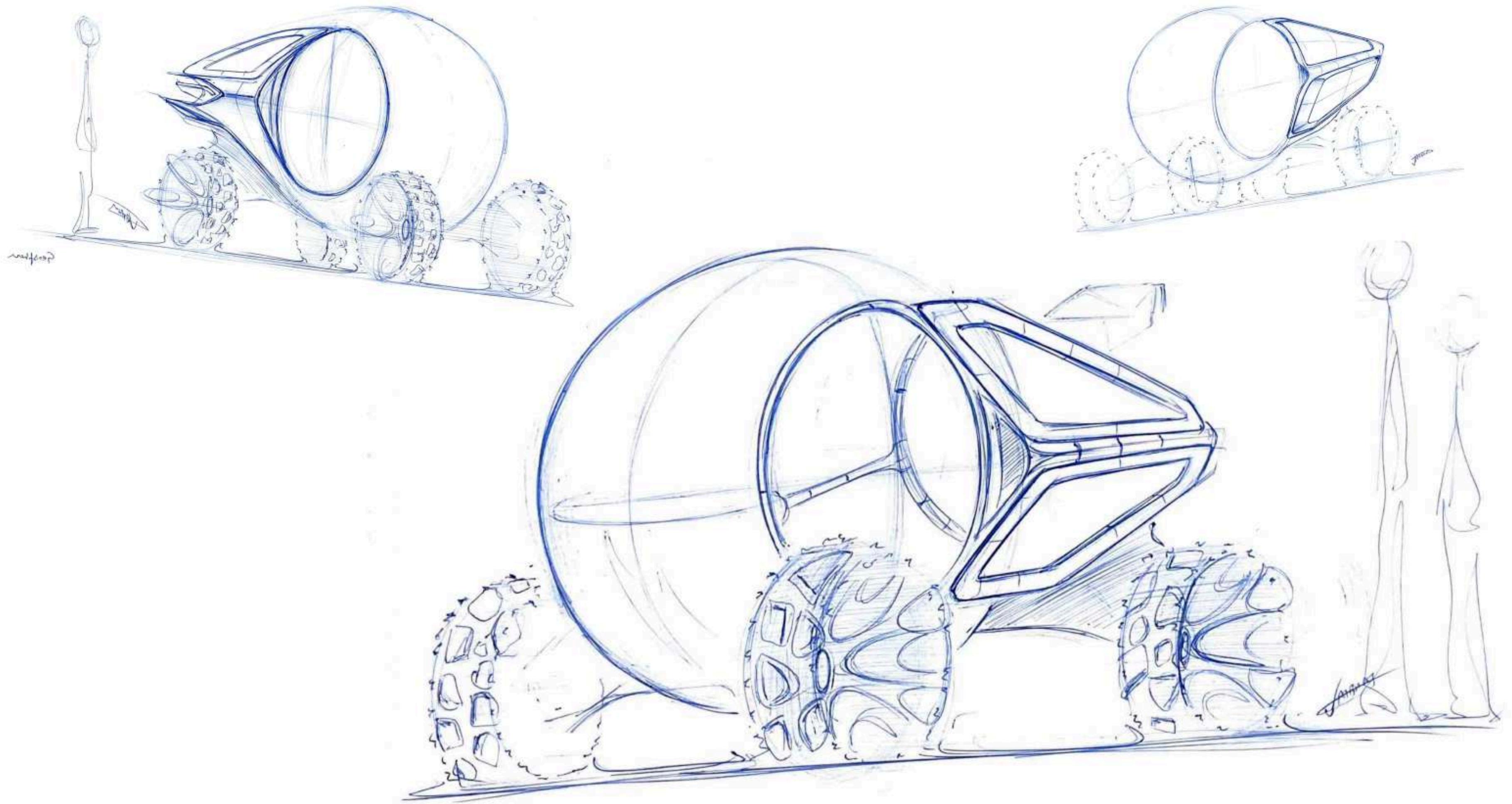


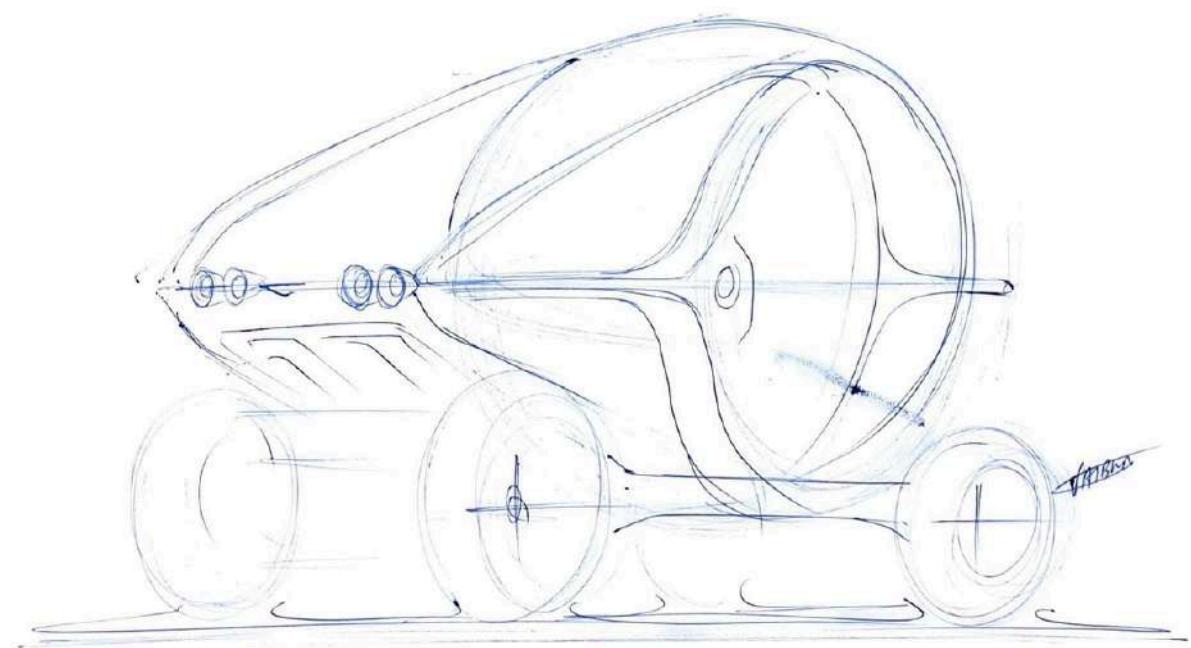
C-01

Potential to explore







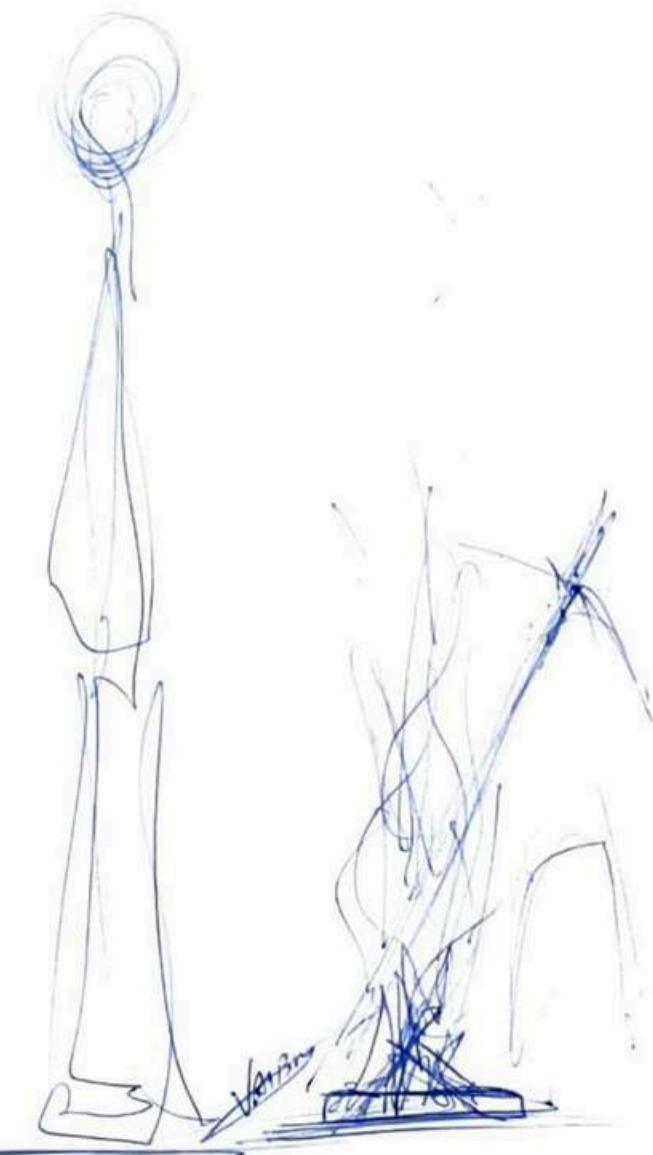
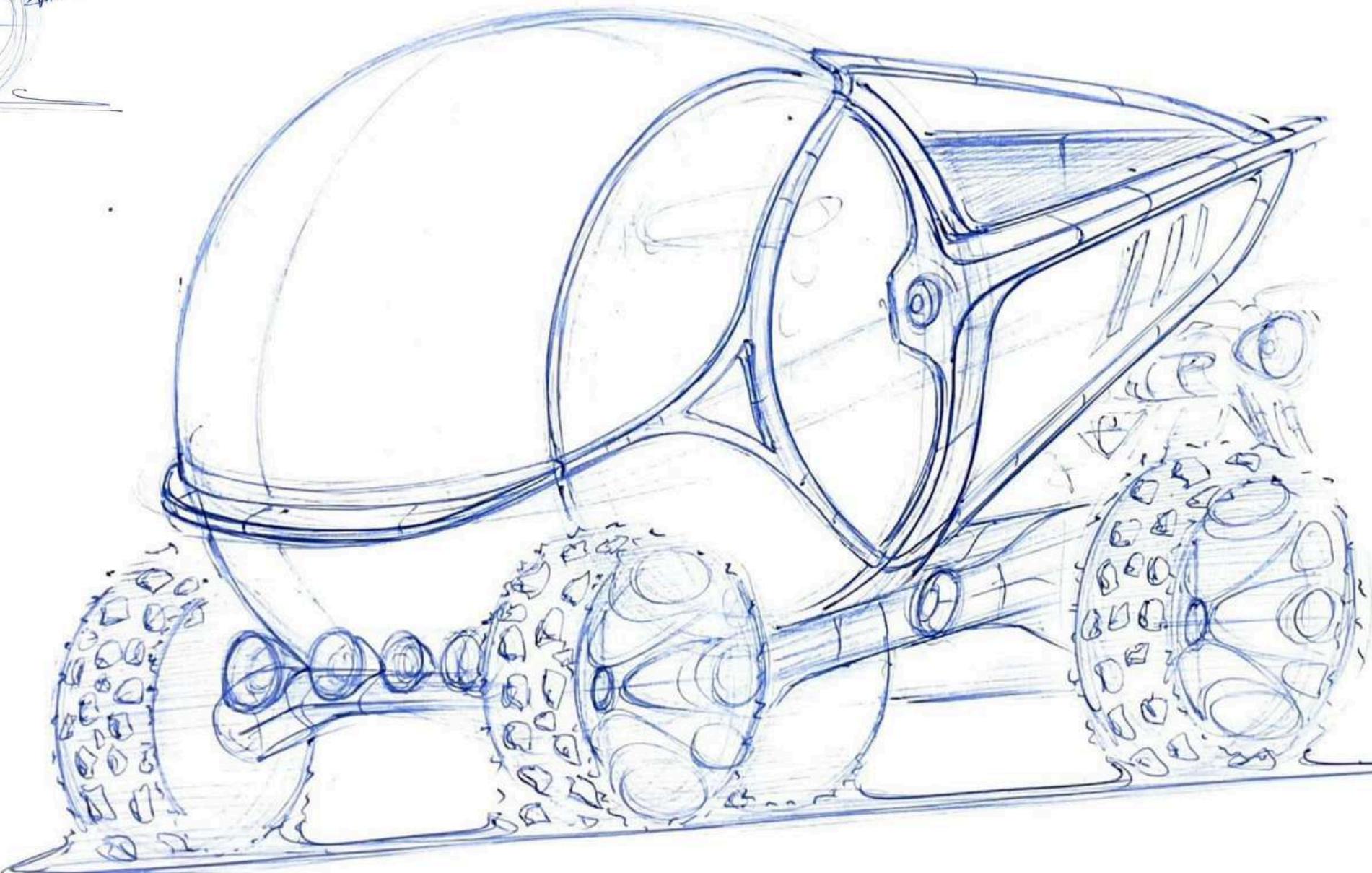


Gyrosphere ship,

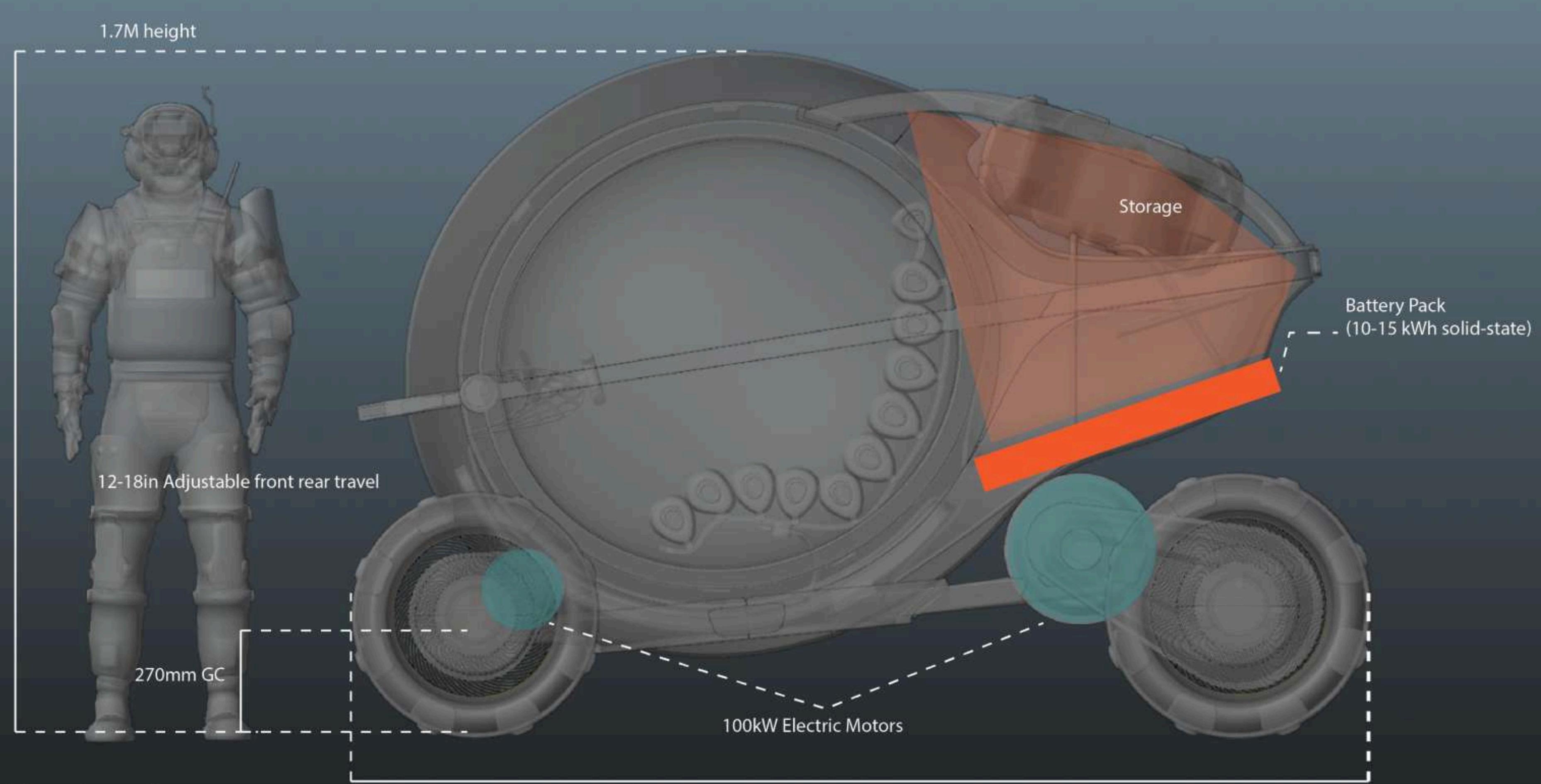
This form maximises the experience
Safety by the exoskeleton.

The design features a bold design
direction that is ready to tackle any
sort of challenge while still being
capable of use in Day-to-Day life.

The footprint of the car is kept small
yet spacious enough to house two
people with all their essentials,
including travel gear and camping
gear, all in on.

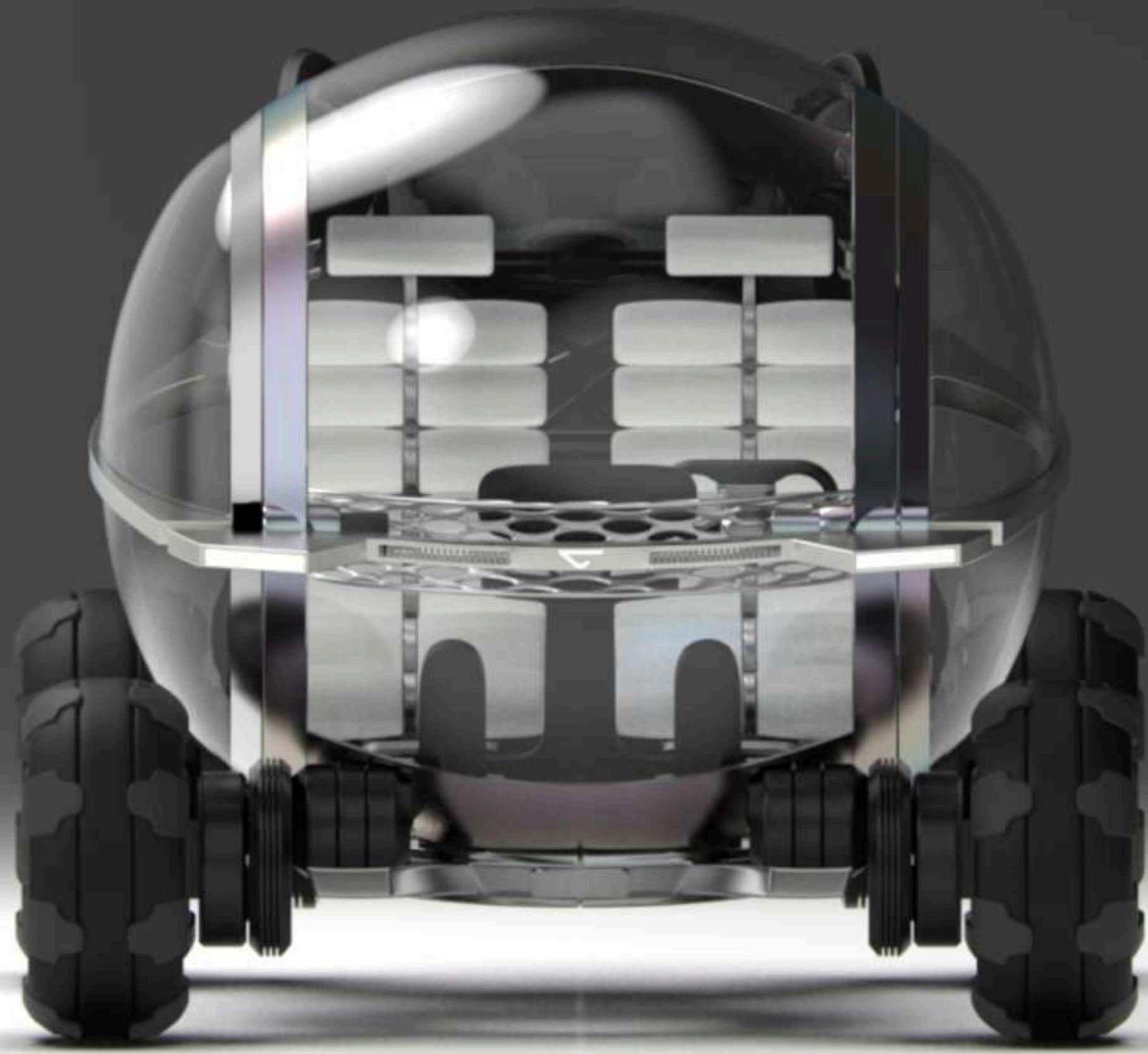


KEY CONCEPT



Final Renders



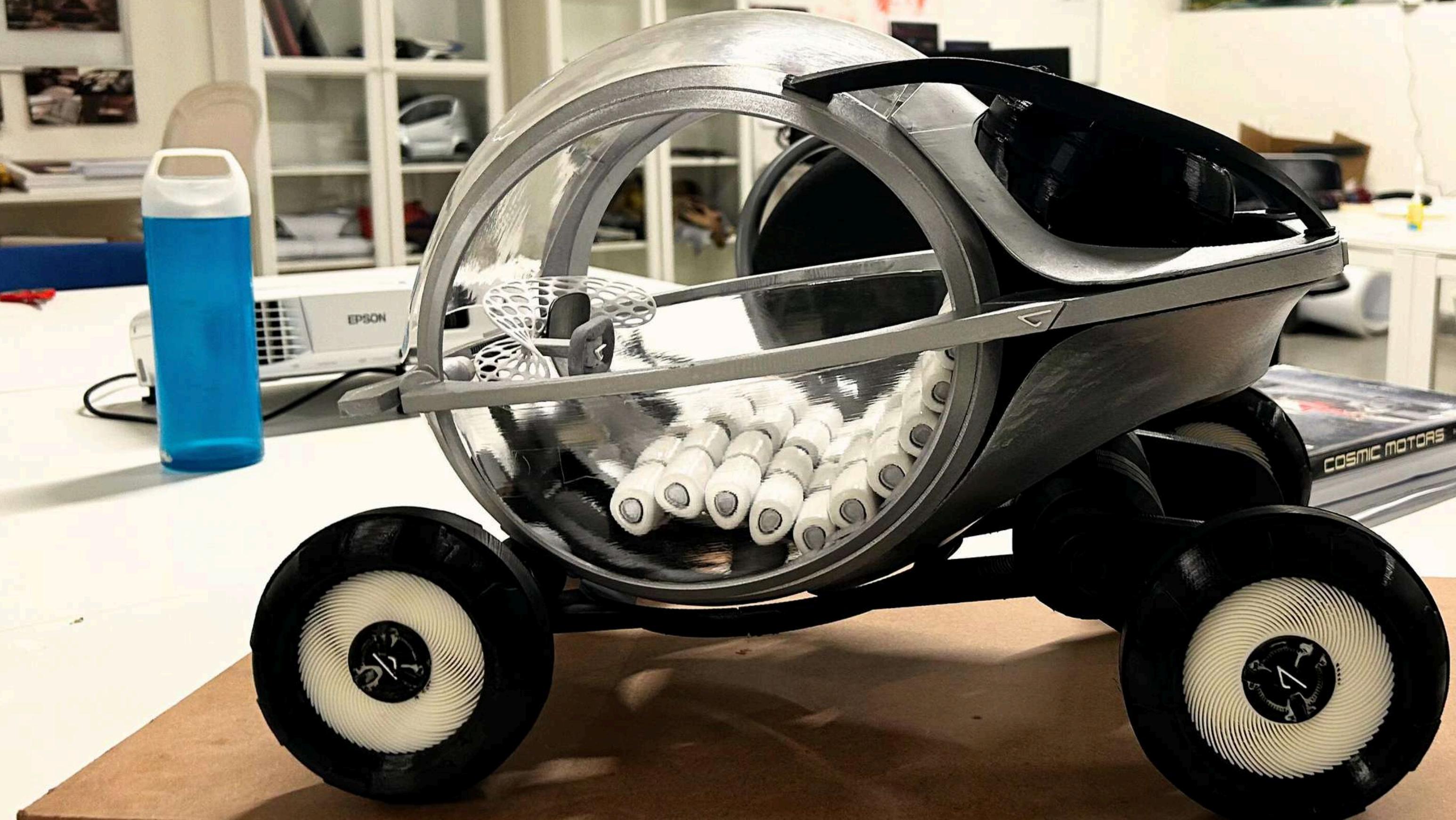










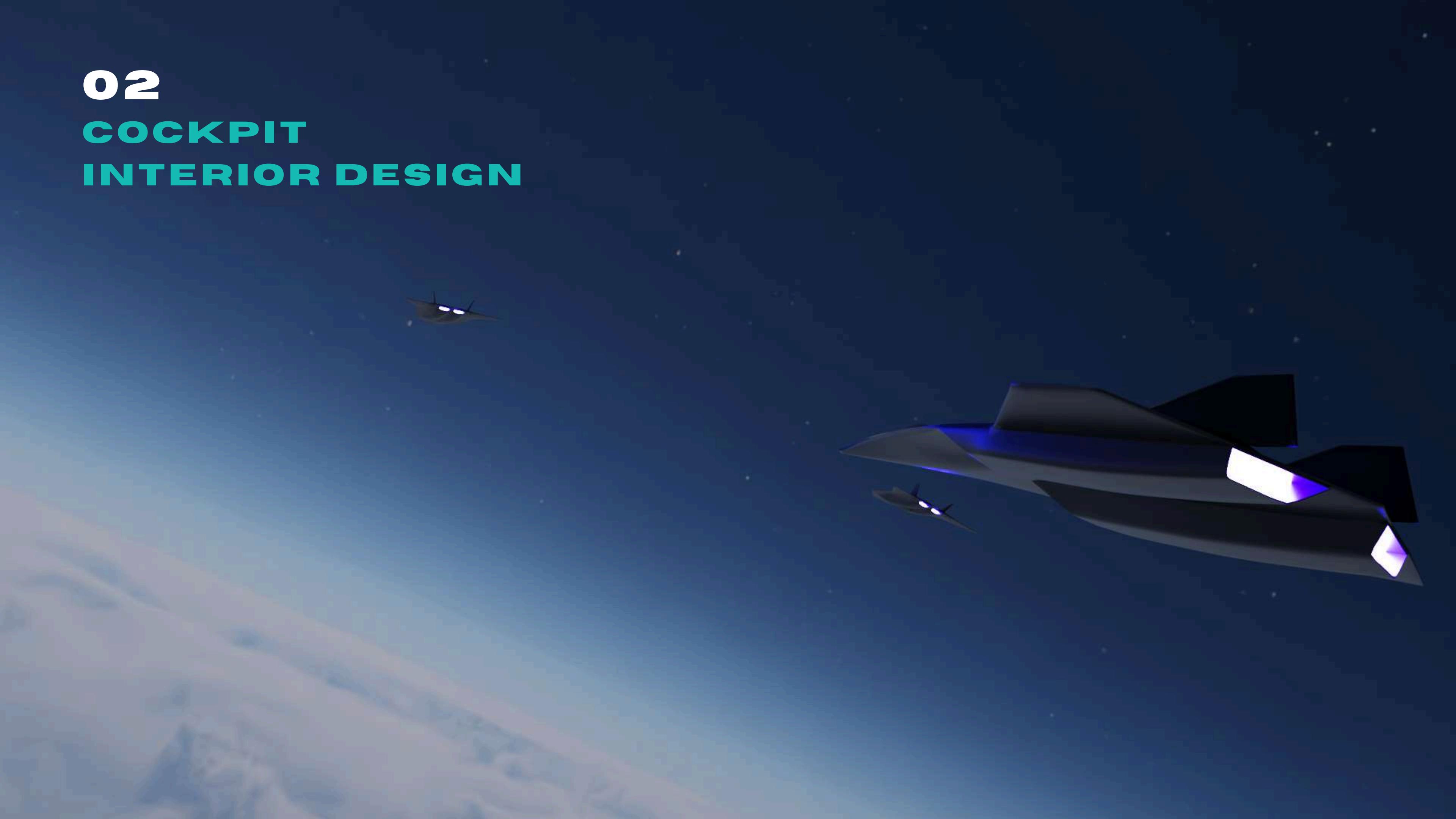


Thank you



02

COCKPIT
INTERIOR DESIGN



DESIGN BRIEF

Objective

The primary objective of this project is to **design and implement a state of the art and aesthetically enhanced cockpit for the Advanced Medium Combat Aircraft (AMCA)** that integrates **next generation technology along with ergonomic design principles to enhance Pilot performance** and comfort, and reduce cognitive load and fatigue.

Approach

Small Changes for Big Impacts. Apply component level changes as an aircraft already is modular and working at smaller levels is more suitable for a cluster of components.

OVERVIEW

Current Advancements

The Current 4.5th & 5th generation fighter jets are defined by stealth, advanced sensors, and network-centric capabilities. These aircraft, like the US' F-22, F-35, China's J-20, and Russian Su-57, prioritize low observability and integrated systems for enhanced situational awareness and combat effectiveness.



The Next Generation Fighters

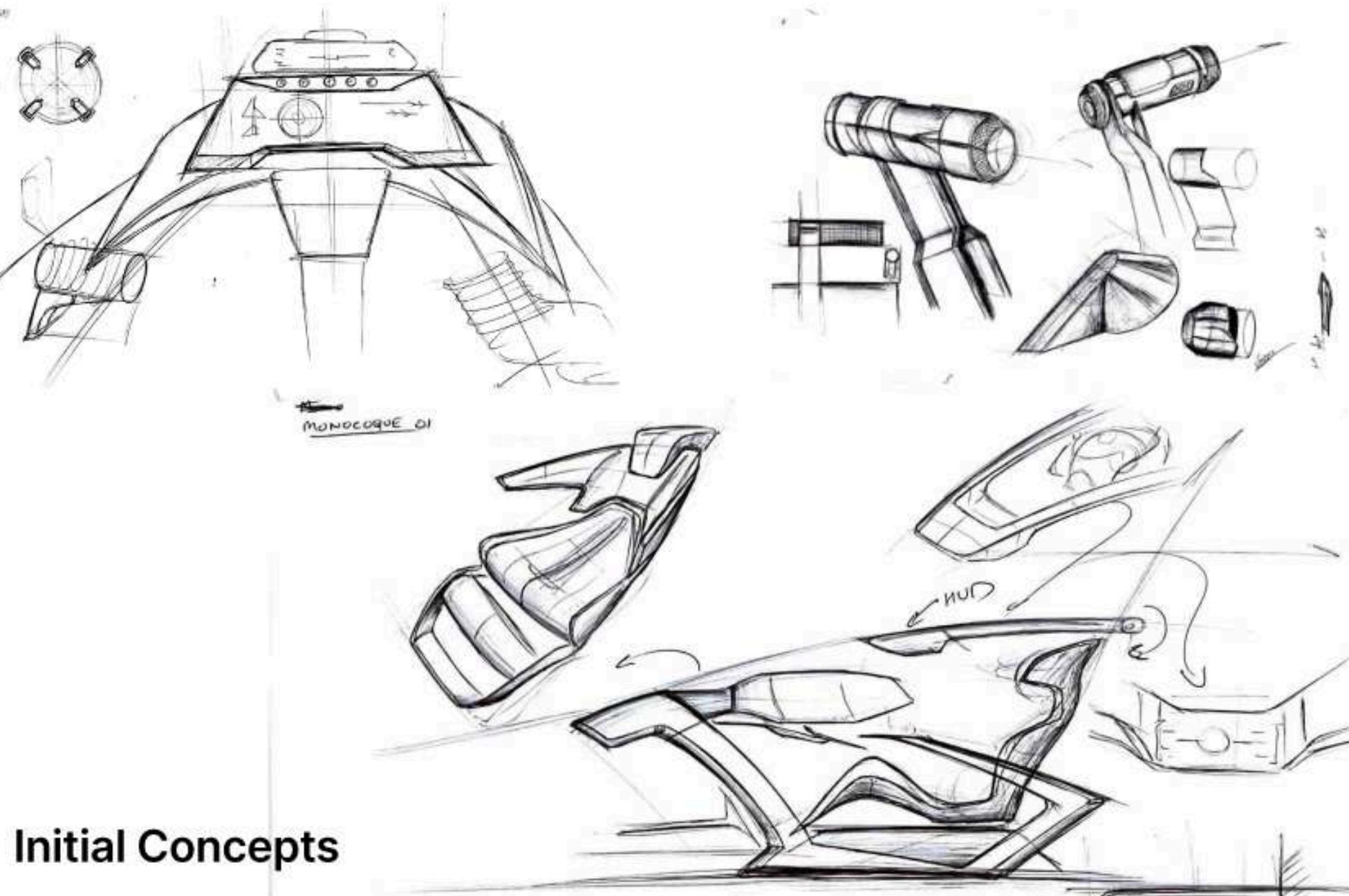
The concept of sixth-generation fighter jets emerged in the late 2000s as fifth-generation fighters like the F-22 and F-35 entered service, aiming to push the boundaries of aerial warfare technology even further. Various nations initiated research and development programs for sixth-generation fighters, aiming to achieve operational status by the 2030s.



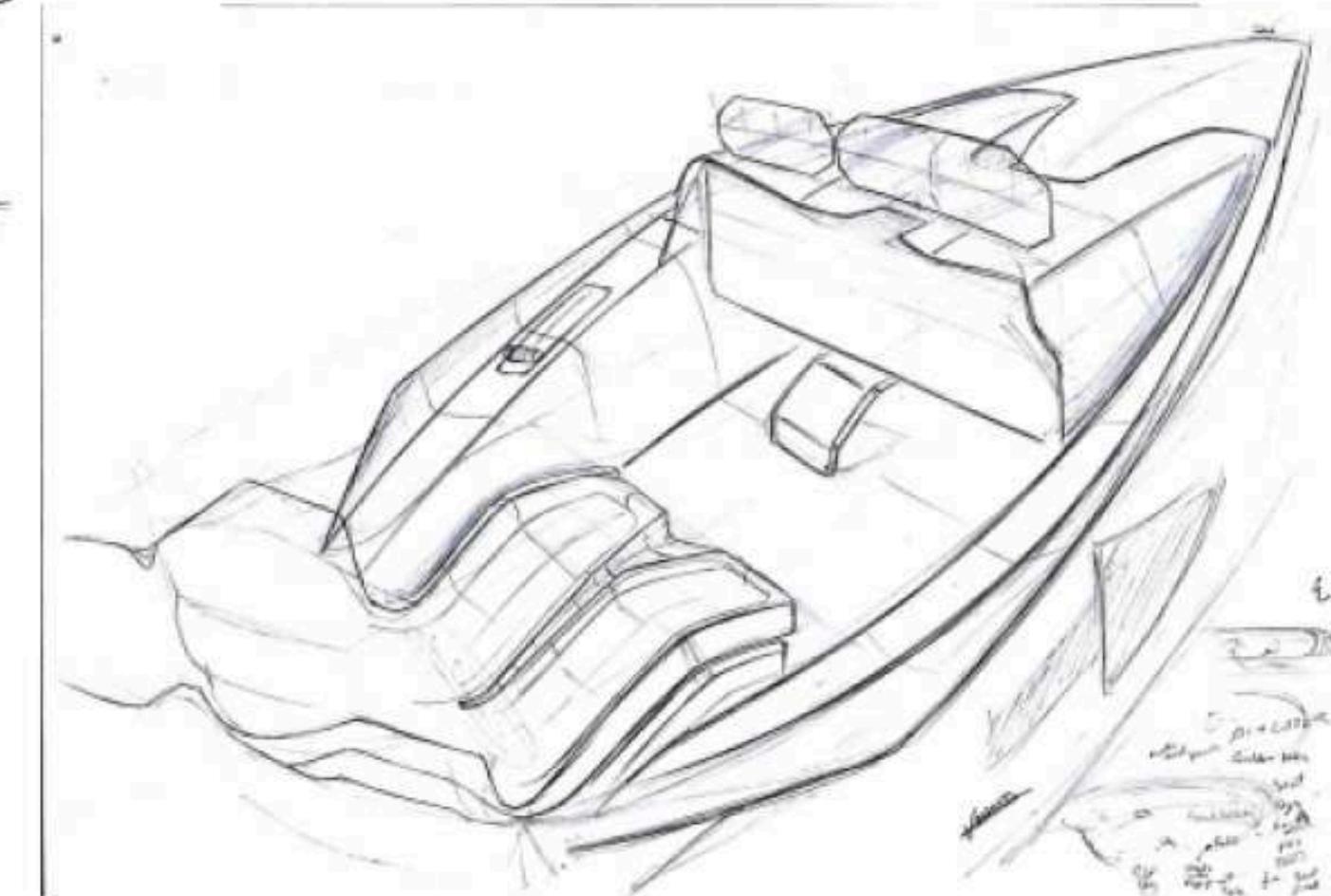
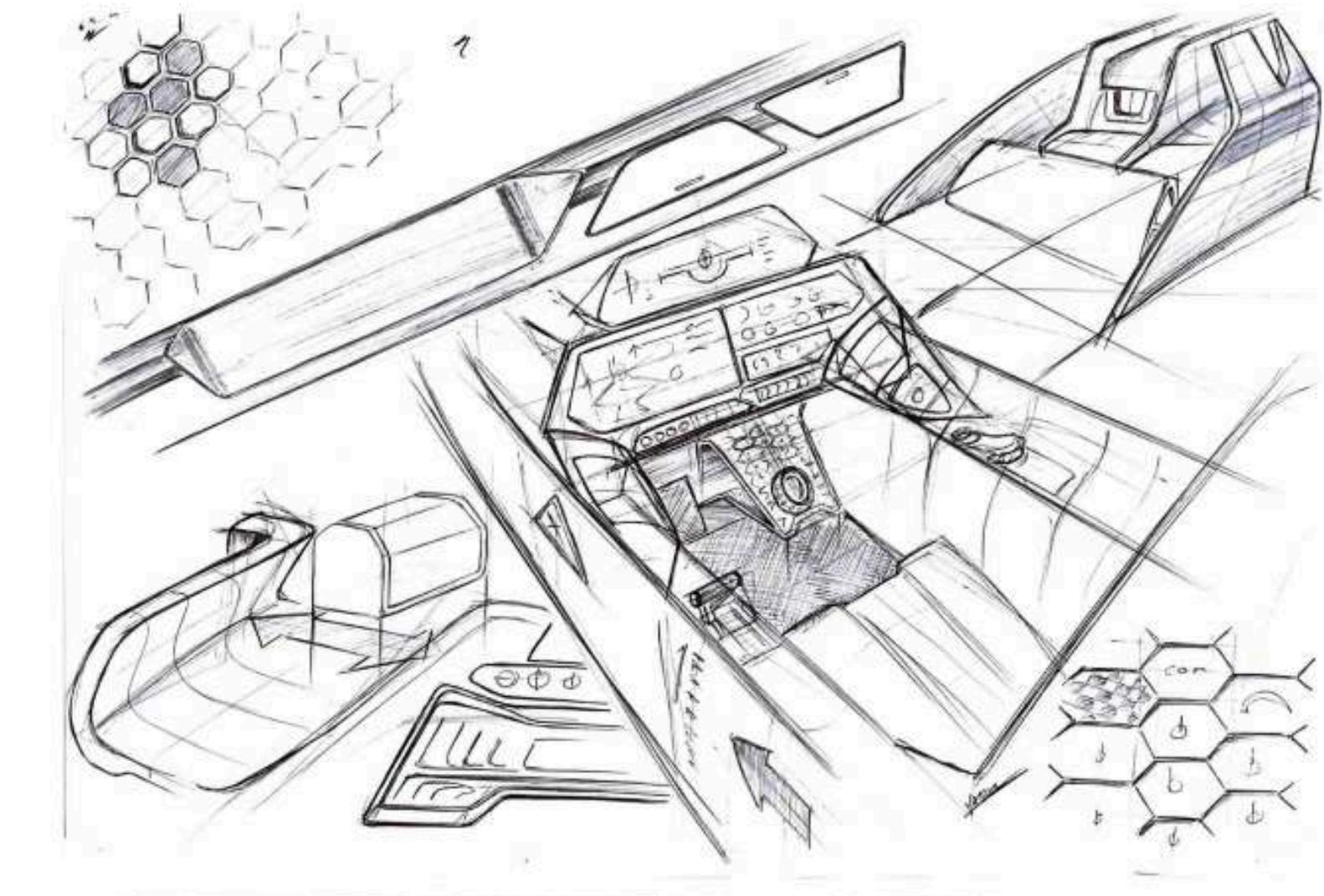
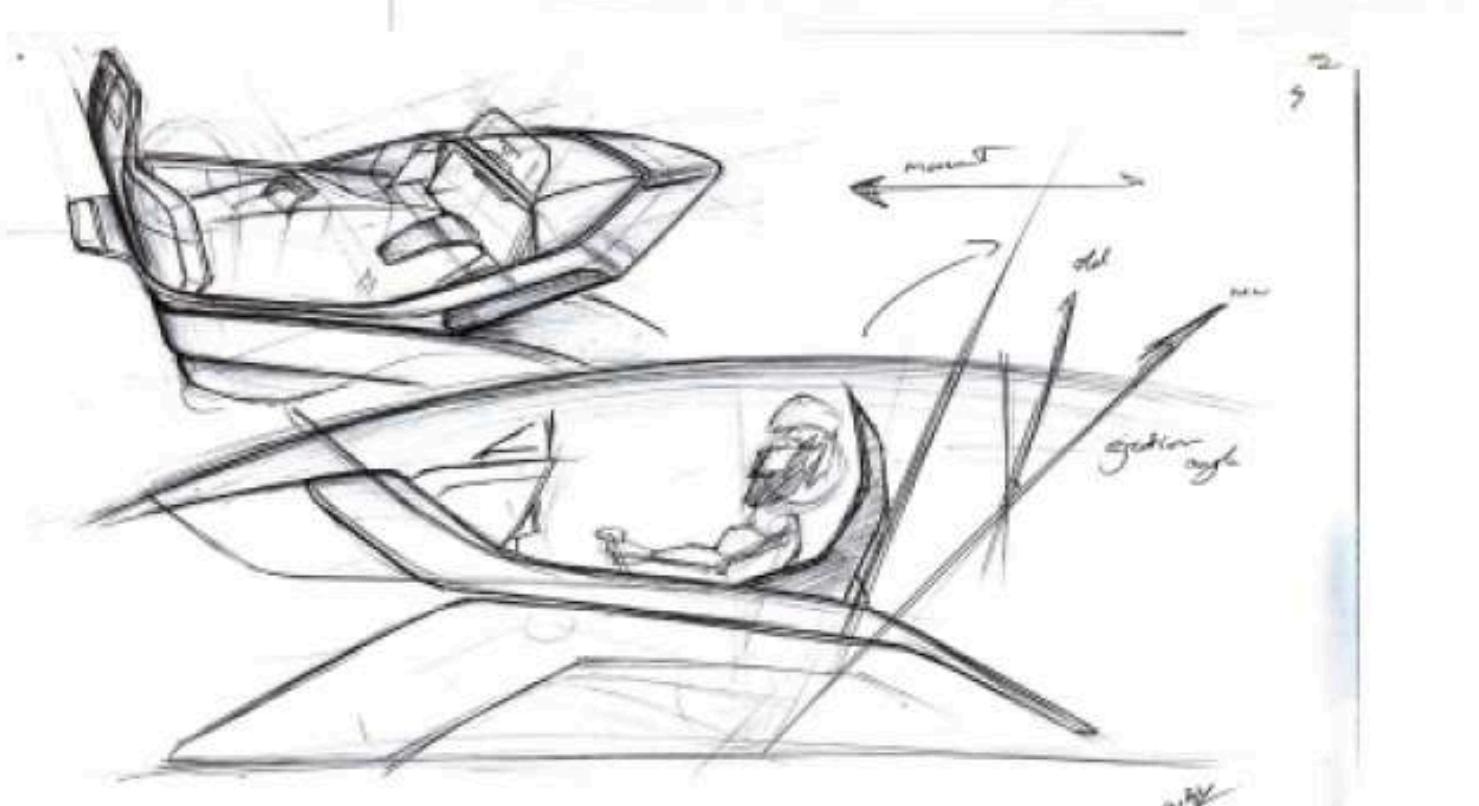
Concept Development

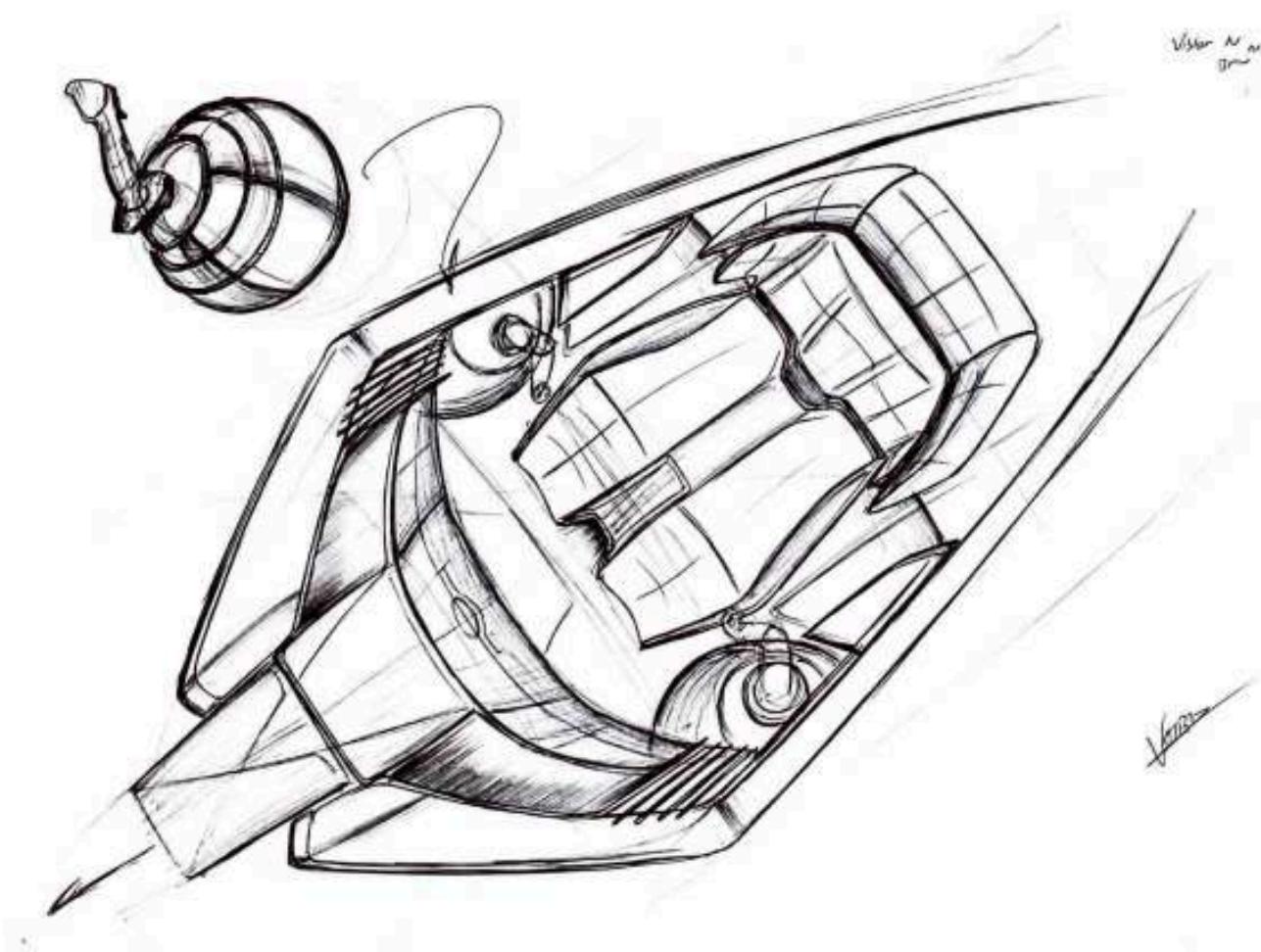
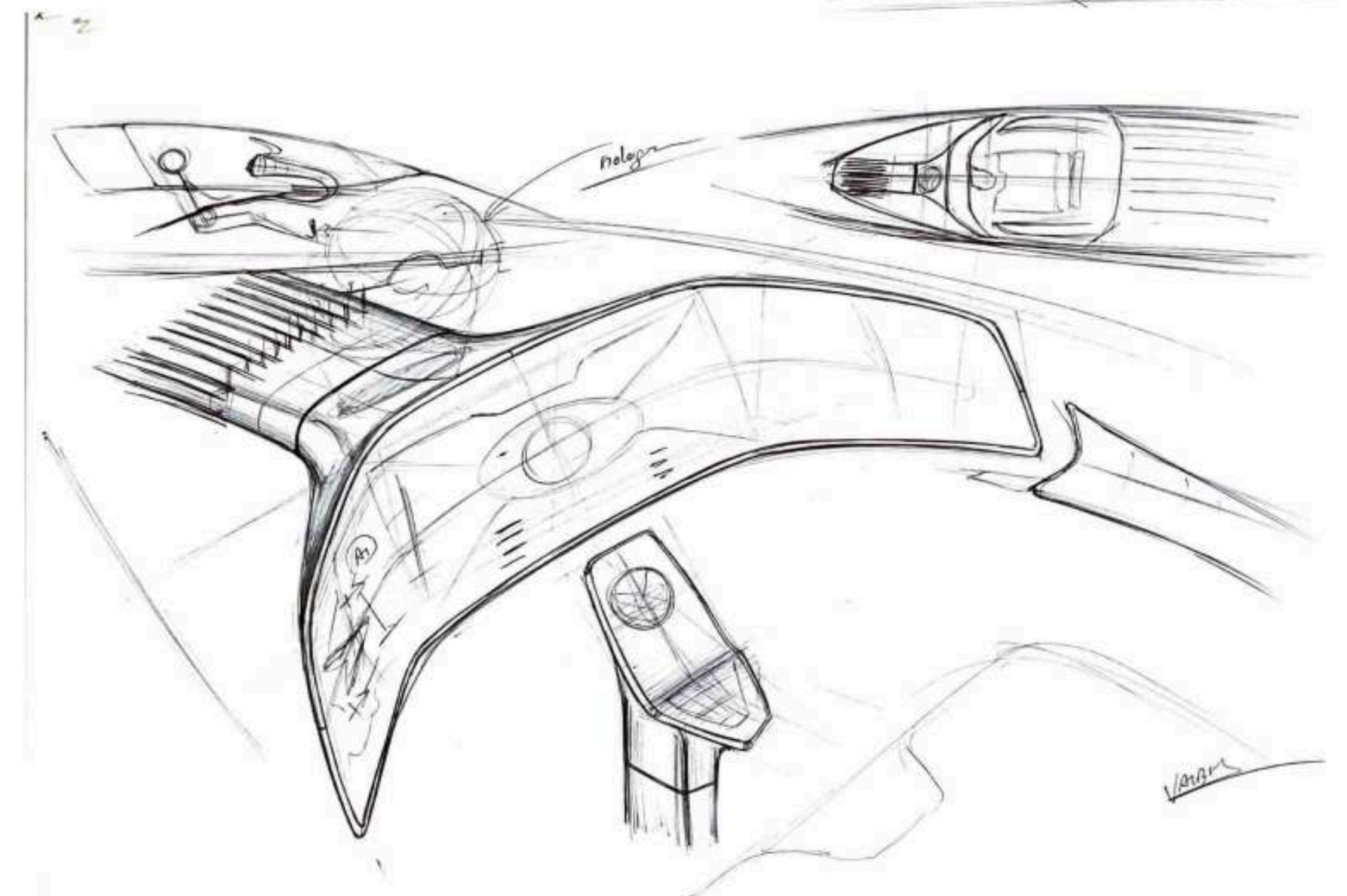
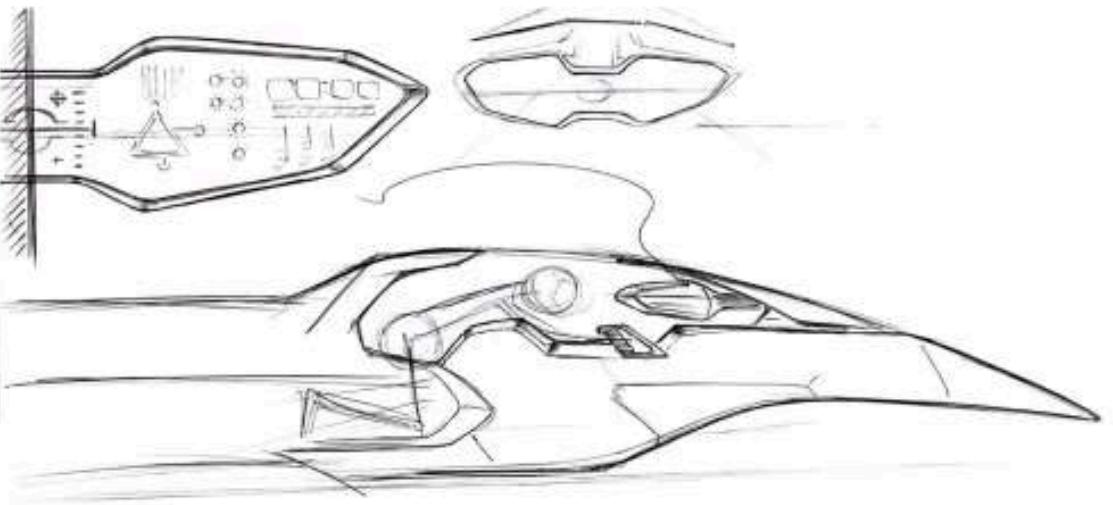
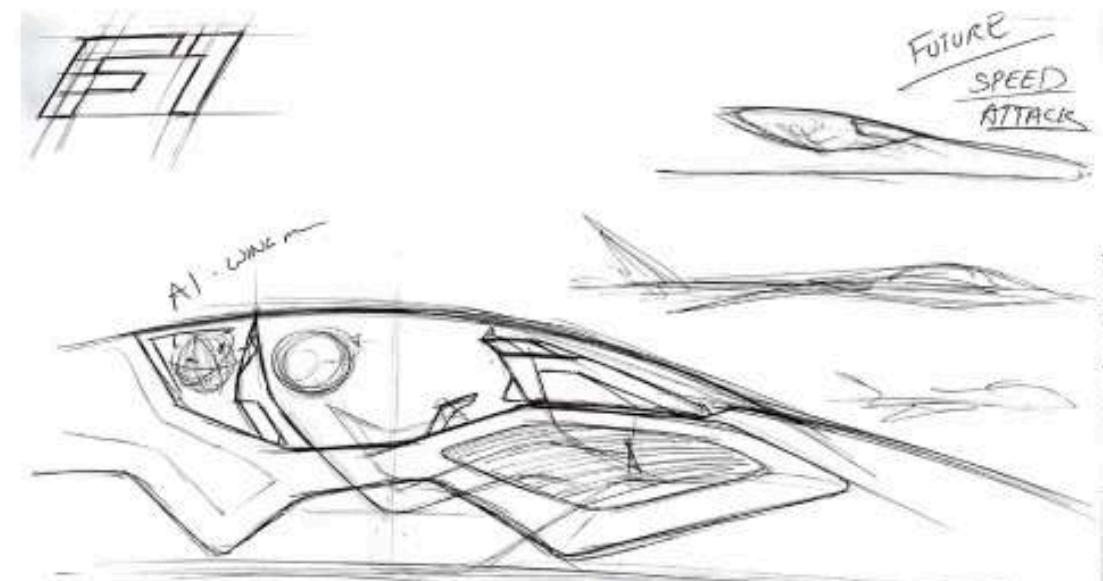
- Creation of Image Boards that captures the aspirations of the Pilots.
- Creative ideation by large number of ideation sketches, (manual/digital) & renderings.
- Faired up Concept renders of the selected key concept sketch based on the feedback from pilots and the team.
- 3-4 Thematic renders that broadly highlight the shape, form color, and aesthetics of the cockpit. This stage will set the ground work for Virtual Mock-Ups.
- Detailed Design, design bezels of switches, controls and displays,
- Color and Graphics, Color schemes and graphics for interiors, switches, and switch clusters.

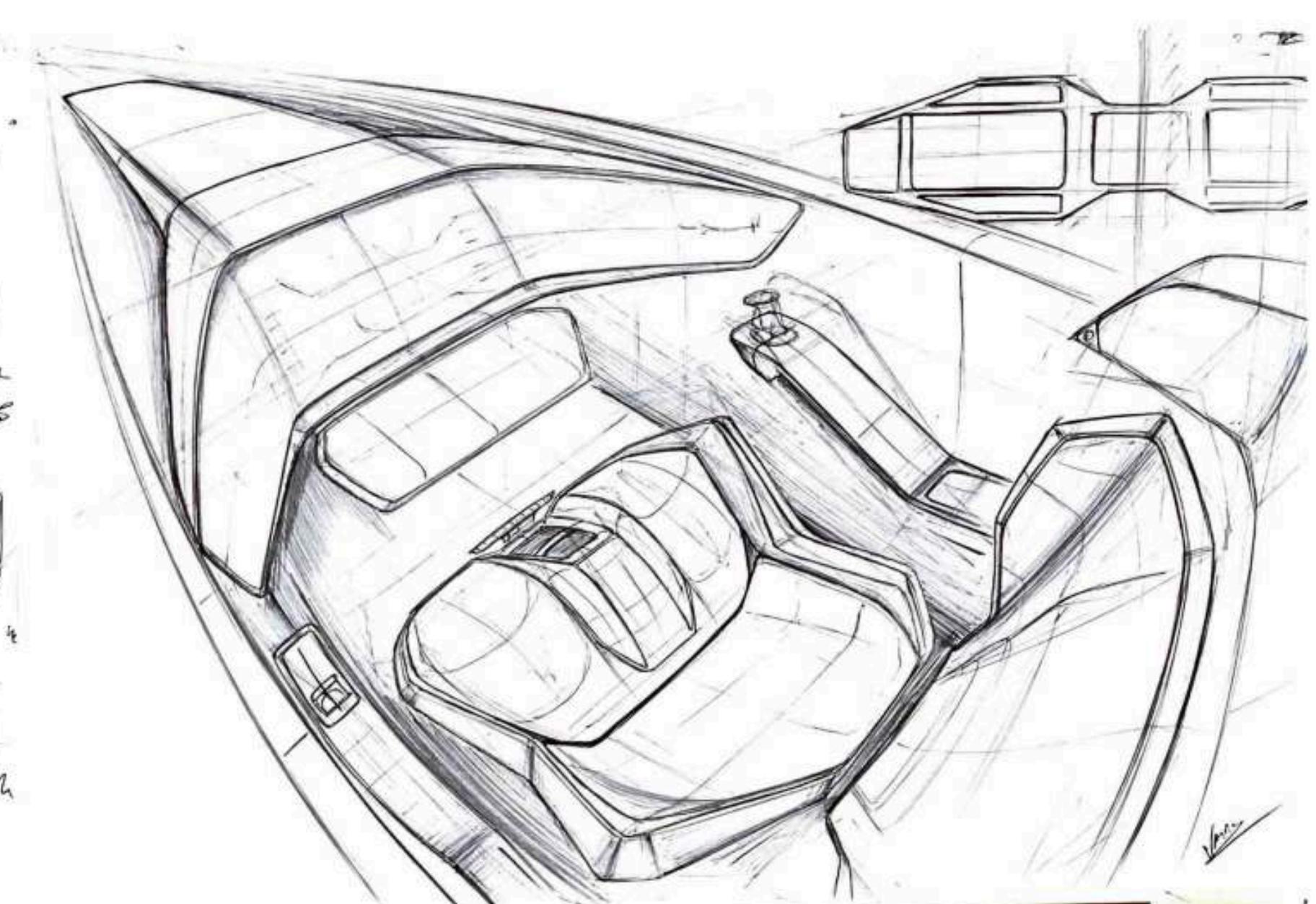
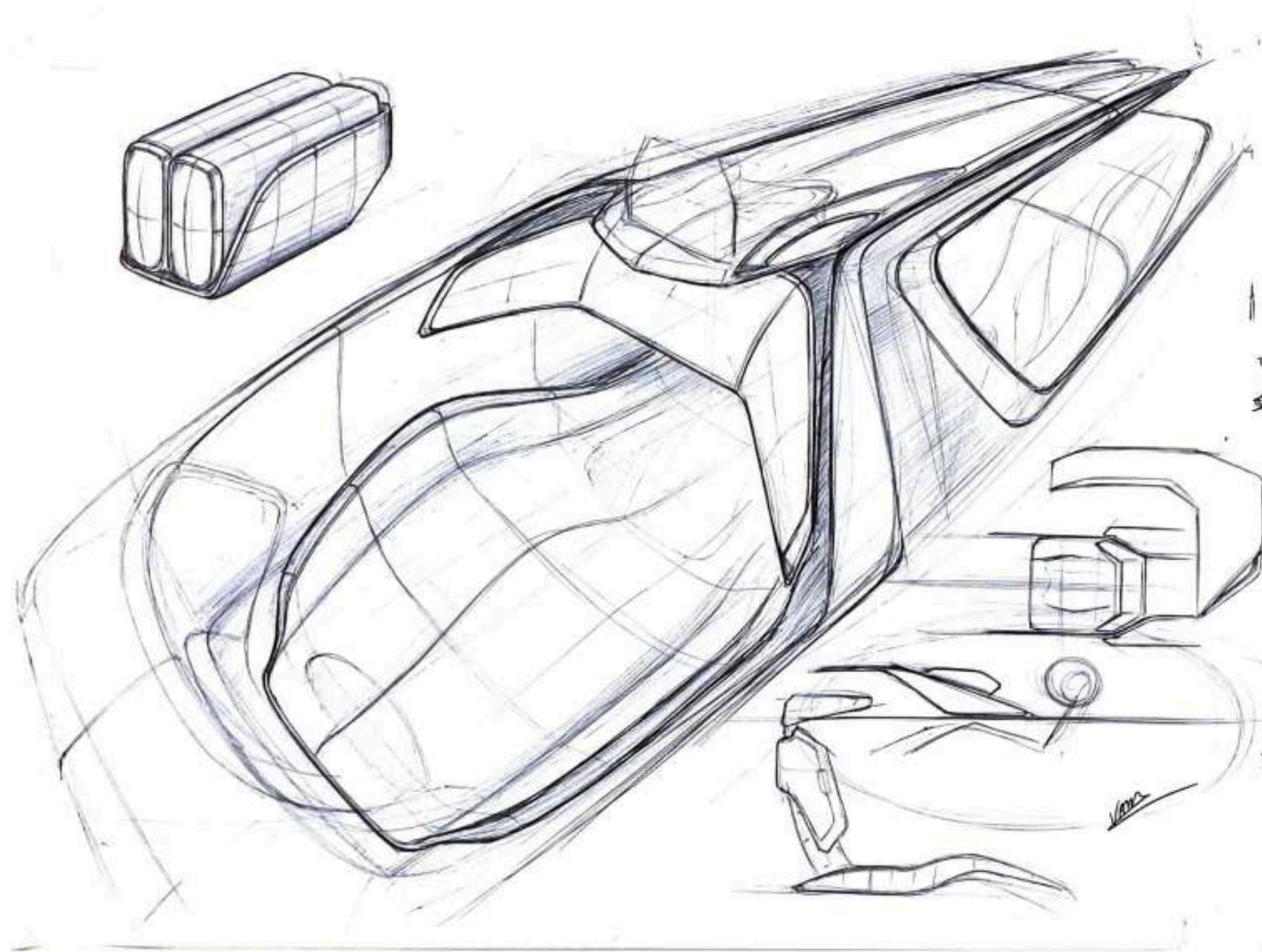




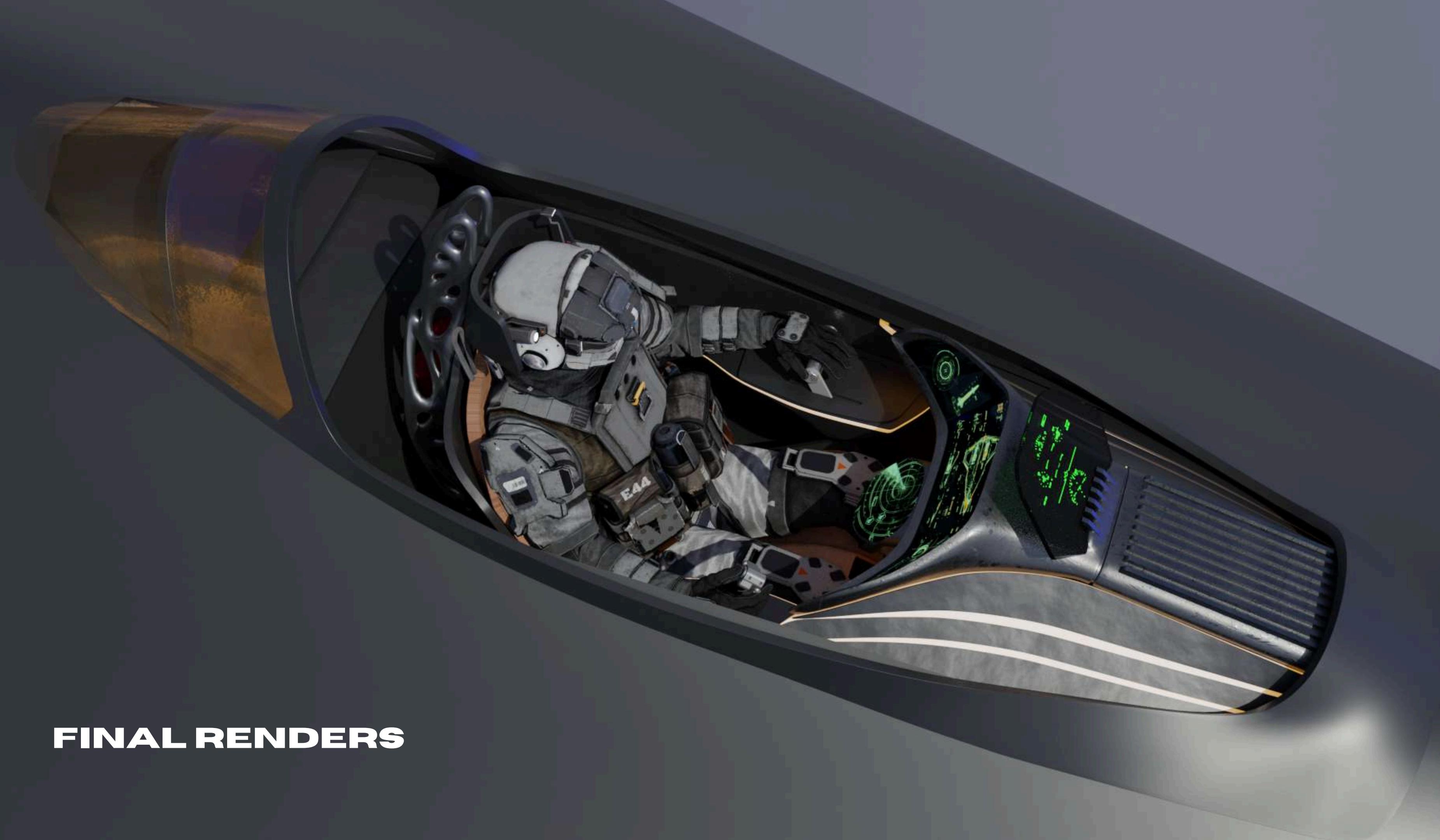
Initial Concepts







Finalized Directions



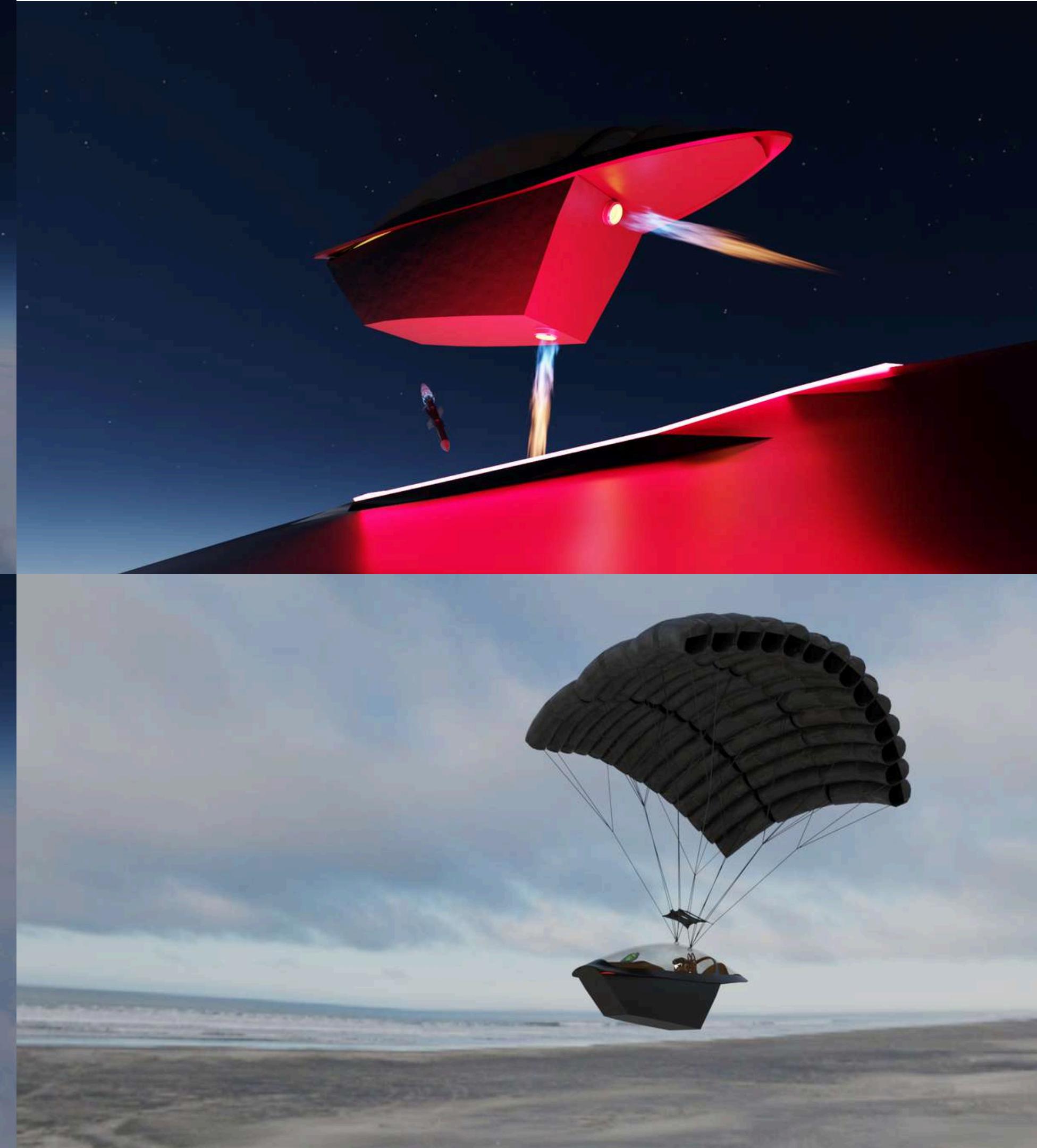
FINAL RENDERS













THANK YOU

03

**WATCH DESIGN
X JAMES BOND**





OVERVIEW

JAMES BOND IS A FICTIONAL CHARACTER CREATED BY NOVELIST IAN FLEMING IN 1953.

A BRITISH SECRET AGENT WORKING FOR MI6 UNDER THE CODENAME 007.

HE IS OFTEN DEPICTED AS A PEERLESS SPY, NOTORIOUS WOMANIZER, AND MASCULINE ICON.

IAN FLEMING, LIKELY DREW HIS INSPIRATION FROM MORE THAN ONE SECRET AGENT HE LEARNED OF FROM HIS EXPERIENCE WORKING WITH BRITISH NAVAL INTELLIGENCE. POTENTIAL REAL-LIFE INSPIRATIONS FOR BOND INCLUDED WORLD WAR II SECRET AGENT F.F.E. YEO-THOMAS AND SERBIAN DOUBLE AGENT DUSKO POPOV.



AUTOMOTIVE LEGACY

THOUGH THE AUTOMOTIVE LEGACY IS DOMINATED BY ASTON MARTIN DB5 BEING BOND'S CAR AND MOST REMARKABLE TILL DATE, THERE WERE FEW MORE ADDITIONS TO THE FRANCHISE OTHER THAN ASTONS LIKE, BMW, LOTUS, BENTLEY, MERCEDES, TRIUMPH, AND MOST RECENT THE MAJOR INVOLVEMENT OF JLR GROUP.

ASTON MARTIN DB5



FIRST DEBUT IN 1964 IN GOLDFINGER, DB5 IS ONE OF THE MOST ICONIC AND IMPORTANT PART FOR BOTH JAMES BOND AS WELL AS ASTON MARTIN FRANCHISE BY SAVING A BRAND AND MARKING A HISTORIC CAR ALL TOGETHER, IT WAS THE FIRST CAR TO BE PACKED WITH TONS OF SPY GADGETS, AND HAS BEEN FAVOURITE SINCE DAY ONE OF THE DEBUT, THIS ONE HAS BEEN FEATURED IN ALMOST 7 BOND FILMS INCLUDING THE LATEST "NO TIME TO DIE" WITH AN OPENING STUNT SCENE.



IDEA

THE IDEA WAS TO DEVELOP A LIMITED EDITION WATCH COLLECTION FOR MARKING THE SUCCESS AND IMPACT OF JAMES BOND AS A CHARACTER AS WELL AS A BLOCKBUSTER FRANCHISE IN HISTORY OF CINEMA.

THE LINEUP WILL BE CREATED FOR THE YEAR 2023, TO CELEBRATE 70 YEARS OF CREATION OF JAMES BOND AS A CHARACTER, CREATED BY NOVELIST "IAN FLEMING" IN 1953.

TARGET MARKET

- A POTENTIAL WATCH COLLECTOR
- A PERSON WHO IS INTO MOVIES AND COLLECTS MEMORABILIAS
- JAMES BOND FANS
- AGE GROUP 30+
- ENTREPRENEUR

HAS A GOOD TASTE IN LUXURIOUS/PREMIUM LIFESTYLE HOUSES CARS

TREND TAKEAWAYS

- COLLABS
- GREENS AND GREYS
- DIVERS
- RETRO
- CAR COLLABS
- SKELETONS

TIMEPIECE

ASTON MARTIN DB5

A HOMMAGE DESIGN FOR THE DB5

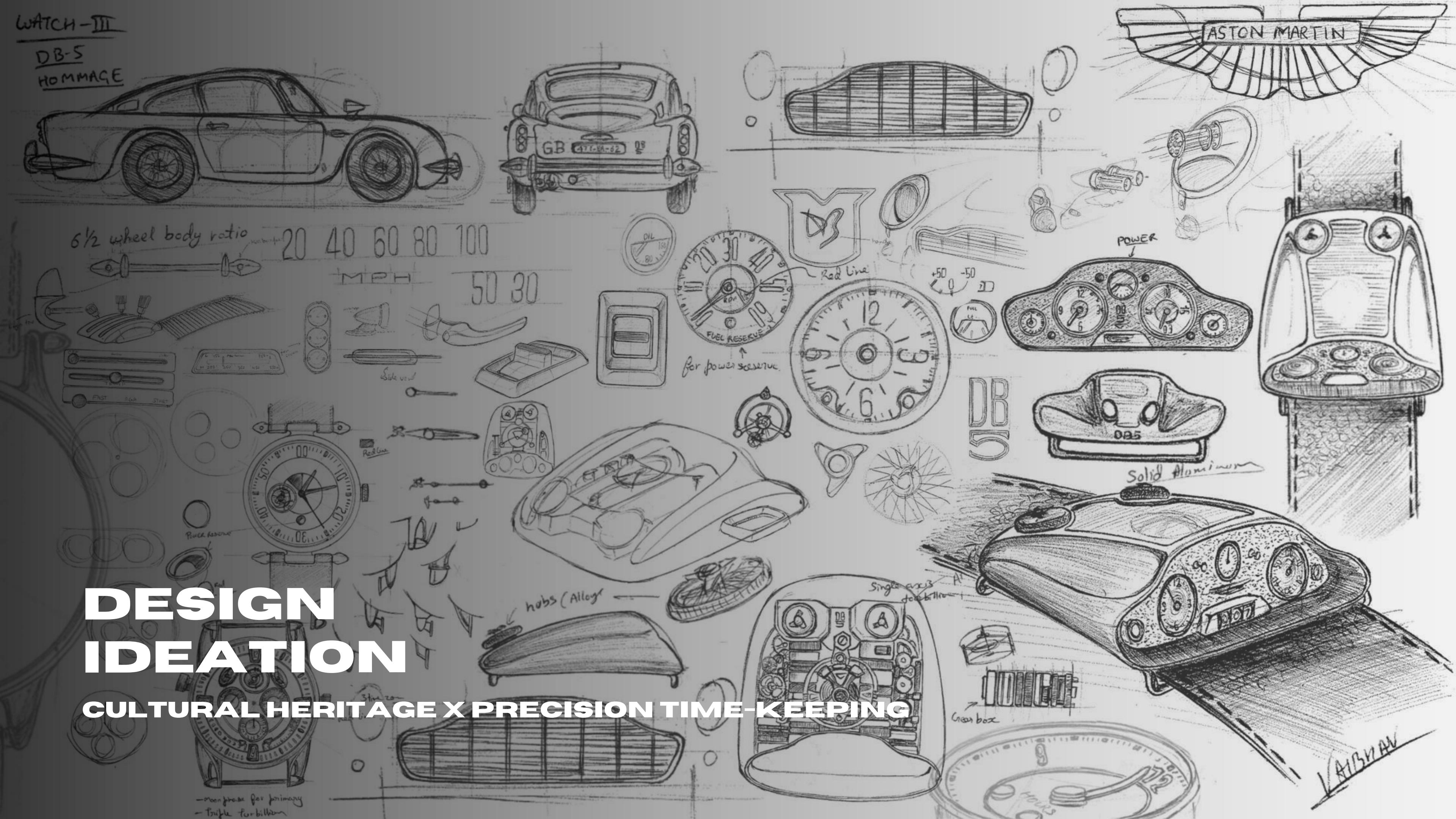


DESIGN INSPIRATION BOARD

DESIGN IDEATION



CULTURAL HERITAGE X PRECISION TIME-KEEPING





FINAL DESIGNS AND RESIN PRINT PROTOTYPES

ASTON MARTIN DB5 LIVERY

SYMBOL OF TIMELESS ELEGANCE AND SOPHISTICATION. ITS SLEEK DESIGN AND POWERFUL ENGINE MADE IT THE PERFECT CAR FOR HIGH-SPEED CHASES AND DARING ESCAPES. THE ICONIC CAR HAS BECOME SYNONYMOUS WITH THE JAMES BOND FRANCHISE AND CONTINUES TO CAPTURE THE HEARTS OF FANS WORLDWIDE.



OPEN HEART MOVEMENT

RESEMBLING THE DOHC OF DB5'S STRAIGHT 6 WITH A FUSION OF CABESTAN AND JACOB&CO'S INSPIRED MOVEMENT, THE OPEN HEART MECHANISM IS DESIGNED WITH CYLINDRICAL GEARS AND HANGING TOURBILLION IN THE CENTER.



THE CROWNS

INSPIRED FROM THE SPOKED WHEELS, WHICH WERE A POPULAR DESIGN ELEMENT IN THE 1960S WHEN THE CAR WAS FIRST INTRODUCED. THE SPOKED WHEELS ON THE ASTON MARTIN DB5 ARE A UNIQUE AND RECOGNIZABLE FEATURE THAT ADDS TO THE CAR'S OVERALL AESTHETIC APPEAL.





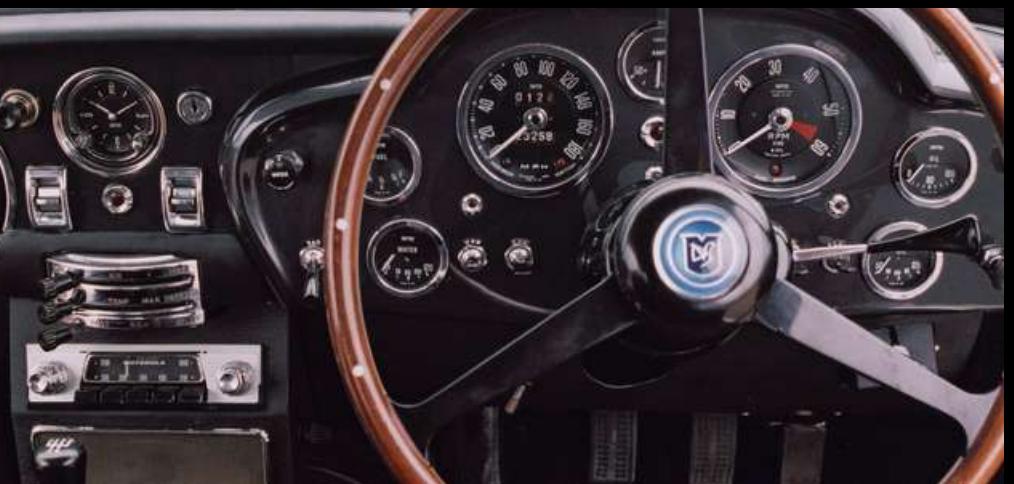
CROWN



**OPEN
HEART/ENGINE**



**SPOKE
WHEELS**



GRILLE IDENTITY



**DASHBOARD
STYLED**



RESIN PRINTED PROTOTYPES

**QUICK PROTOTYPING OF
THE COLLECTION OF FOUR
007 THEMED WATCHES
CONSISTING OF POCKET
WATCH, DIVERS WATCH, A
MOVIE MEMORABILIA
AND THE DB5.**



A QUICK
VISUALIZATION OF THE
TIMEPIECE AND HOW
IT'LL REFLECT IT'S
ELEGANCE AND
CULTURE IN REAL LIFE.





**WITH THE OPEN HEART
MOVEMENT AND FRONT DASH
DIAL REPRESENTATION, DB5
IS A PERFECT LIVERY FOR THE
LEGACY OF 007.**

**COMPLETE COLLECTION
SHOWCASED ON THE WEBSITE.**

04
HI.VI



SUB-4M SUV DESIGN PROJECT

A COLLABORATIVE GROUP PROJECT WITH THE HELP OF DEEPTI SHETTY AND SHUBHAM CHAUHAN.

THE PROJECT IS ABOUT EMPOWERING AND ENRICHING THE LIVES OF WOMEN IN INDIA, CELEBRATING THEIR VALUES, AND DELIVERING A DRIVING EXPERIENCE THAT'S JOURNEY OF SELF-DISCOVERY. IN EVERY DETAIL, FROM ITS STYLE AND FUNCTIONALITY TO ITS UNWAVERING FOCUS ON WELL-BEING, THIS SUV IS MORE THAN A VEHICLE - IT'S A COMPANION, A CONFIDANT, AND A TRUE REFLECTION OF YOUR DESIRES.

MARKET UNDERSTANDING

HERE WE TRIED TO UNDERSTAND ON WHAT MARKET WE'LL BE WORKING, WHAT IS THE AUDIENCE, WHAT ARE THEIR NEEDS, WHAT ARE THE CURRENT TRENDS, AND WHAT IS GOING TO BE THE FUTURE PREDICTION FOR THE AREA WE ARE WORKING IN.

THE BUYERS

32 Years Old
Aryan Makheja
Stays in Delhi
Does Marketing Management
Married with one child

Aryan is a mid-level marketing professional who lives in Delhi with his wife and young child. He needs a reliable and practical vehicle for his daily commute to the office. Aryan enjoys weekend trips to the nearby hill stations with his family and occasionally goes on off-road adventures with his friends.

NEEDS & GOALS
Urban Commuting
Family Adventures
Off-Roading
Techy
Safety
Status

CHALLENGES
Budget
Parking
Traffic
Vehicle size

29 Years Old
Riya Sharma
Pune
Graphic Designer
Single

Riya is a young, independent graphic designer living in Pune, a city known for its blend of urban and natural beauty. She enjoys exploring the city, taking weekend trips to the nearby mountains, and occasionally goes camping with her friends.

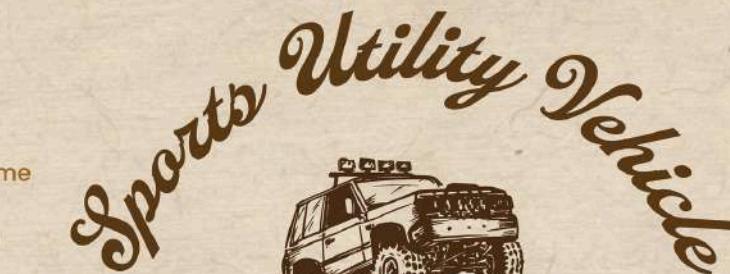
NEEDS & GOALS
Urban Commuting
Adventure and Nature love
Fuel Efficiency
Stylish and Trendy
Techy

DEEPTI SHETTY | SHUBHAM CHAUHAN | VAIBHAV CHAWLA
23M2287 23M2289 23M2286

STUDY DONE TO UNDERSTAND THE MARKET CONDITIONS AND FUTURE OPTIONS IN THE MARKET PRESENTED IN A POSTER FORMAT.

WHAT IS SUV?

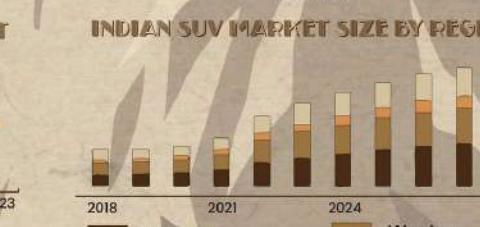
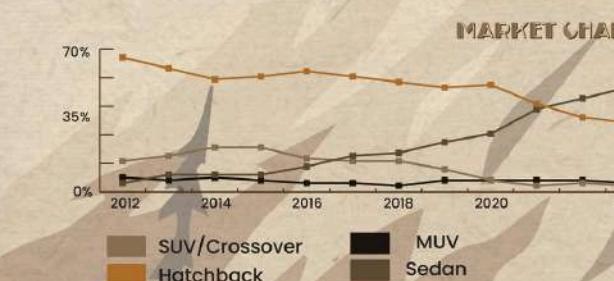
Goes where no other car can
Can carry you as well as your home
Dominates like a Bull on Road
Probably can take weather down
Ready to Attack
Stronger than Promises



WHAT ALL ARE THERE?

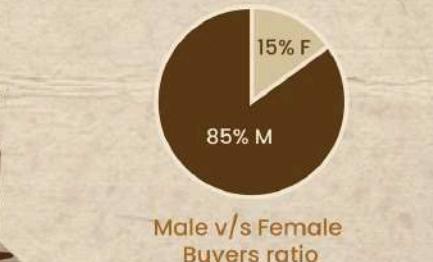
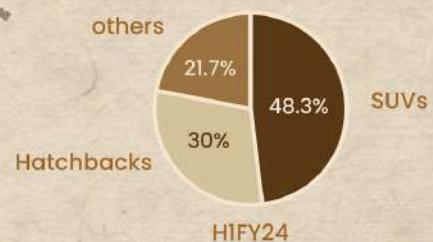
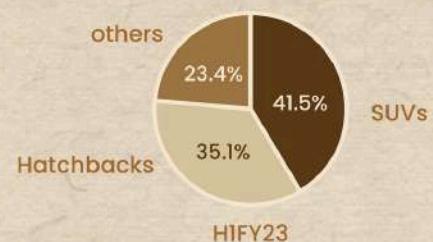


715K Jan-Sept '23
Total sales of SUVs in India



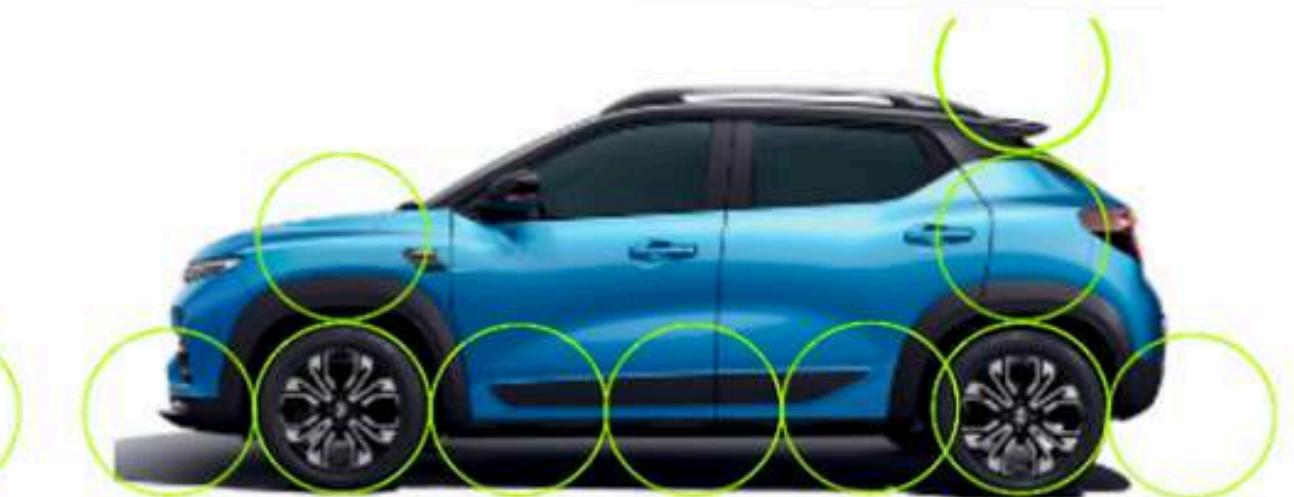
WHY SUV?

Big Bold Car
Dominating road presence
Dominates like a bull on road
Ultra spacious
Feature packed
Much Safer



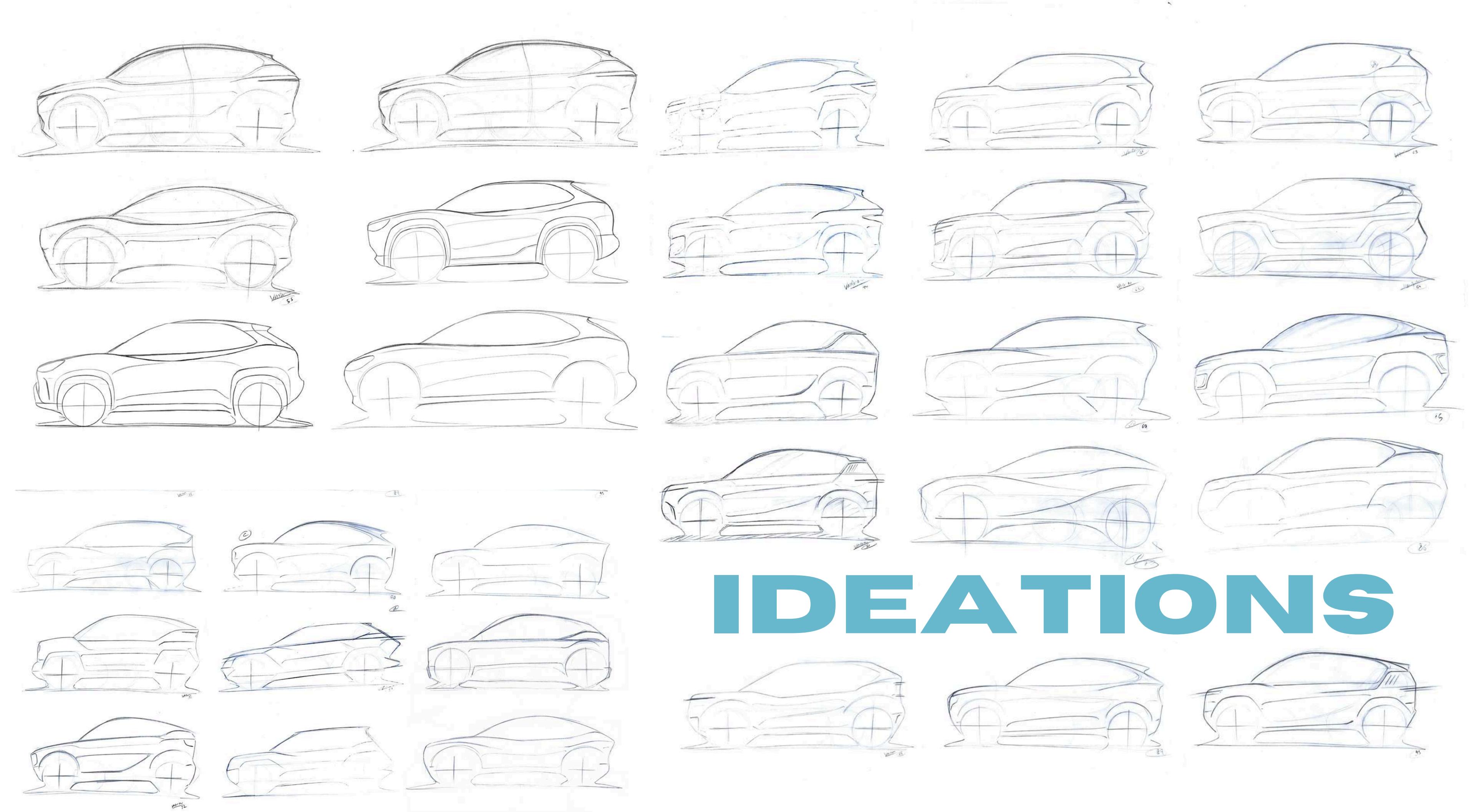
RATIOS & PROPORTIONS

2.8 wheel, wheelbase was fixed

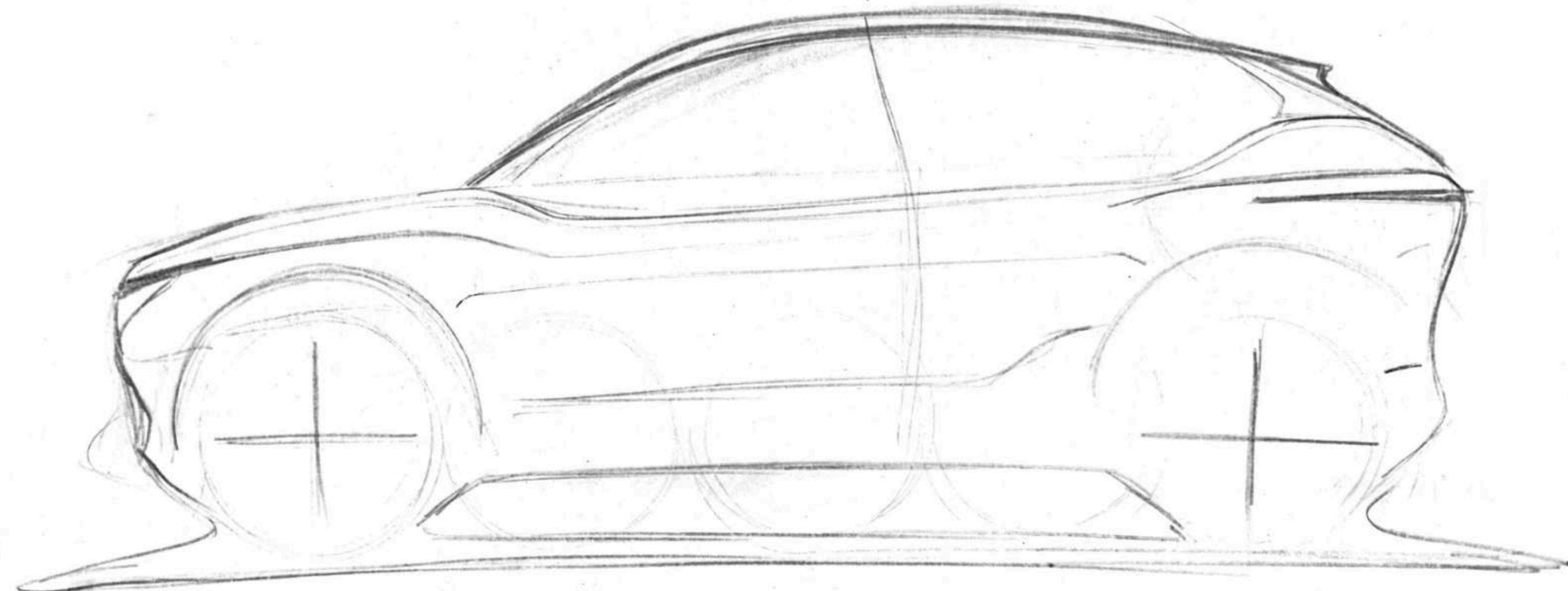


2.8 wheel

2.8-3

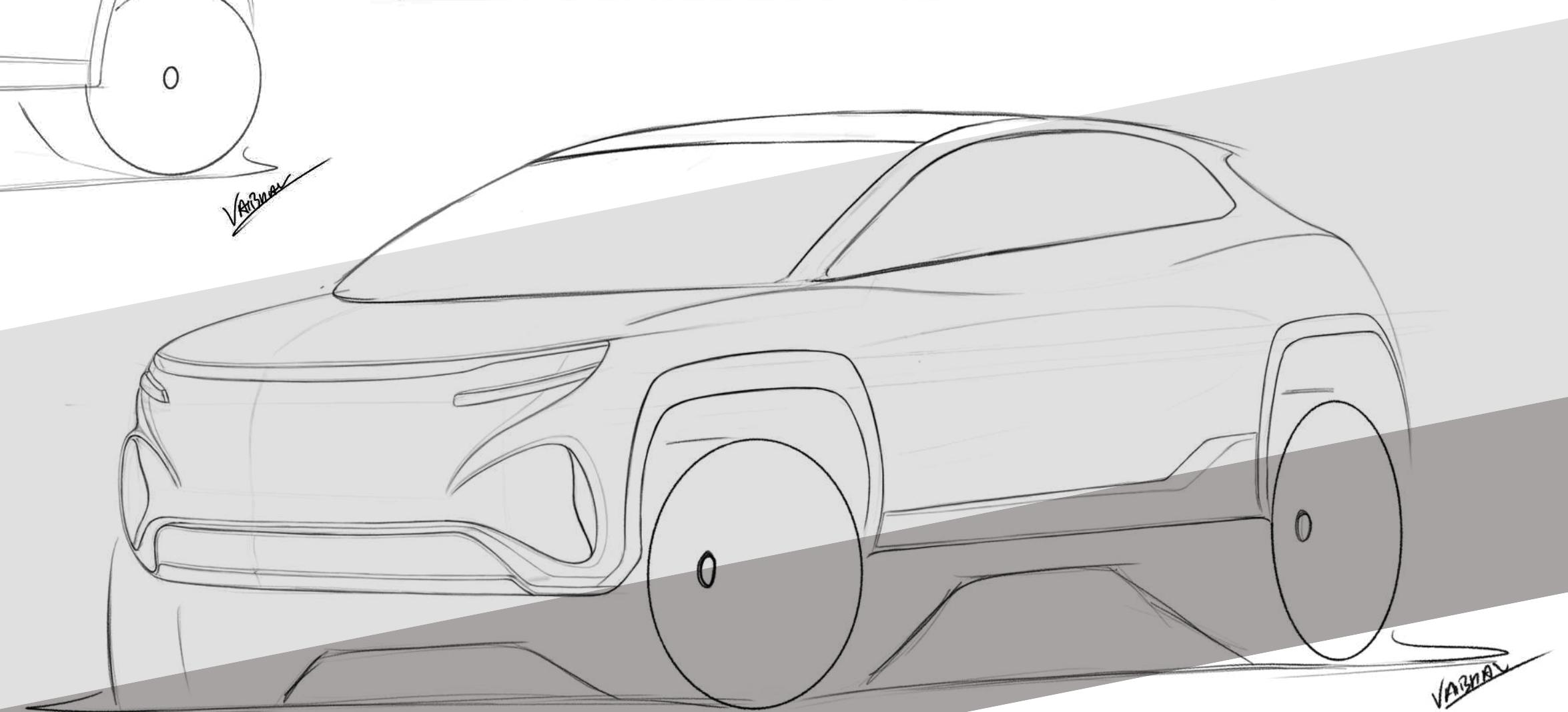
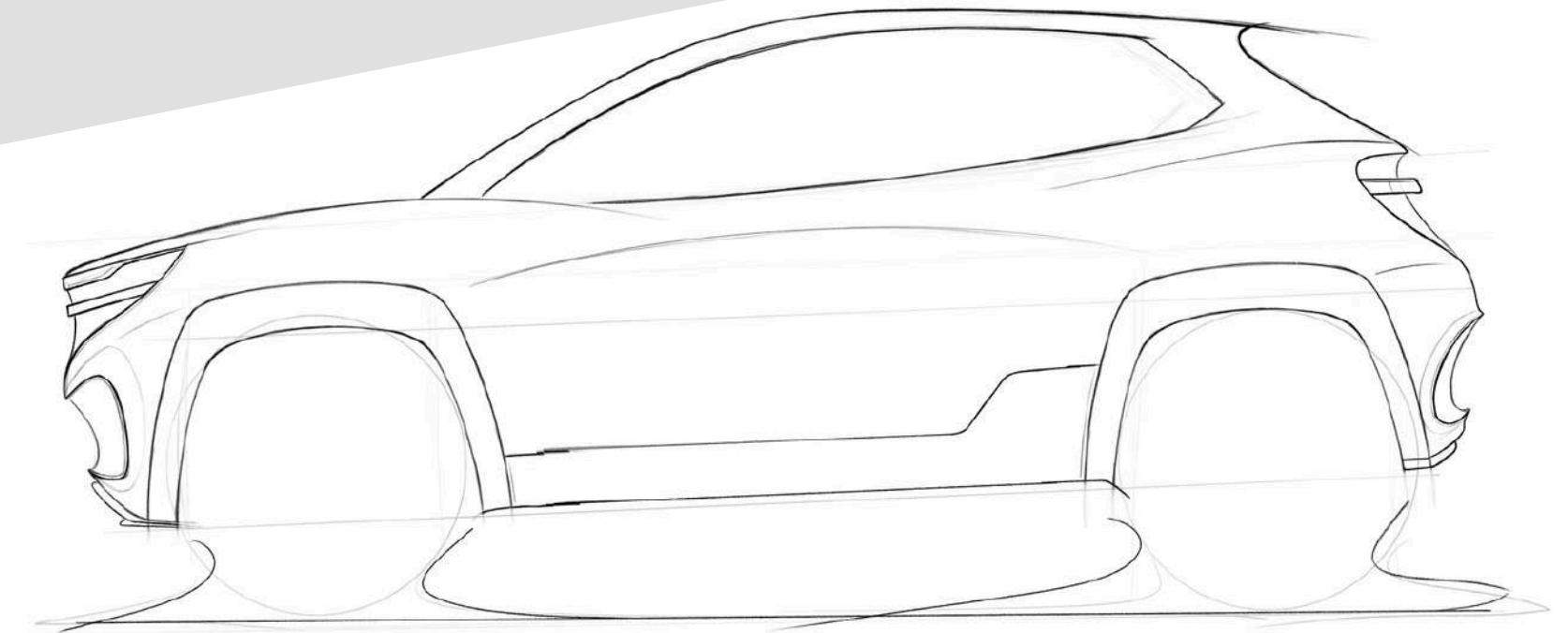
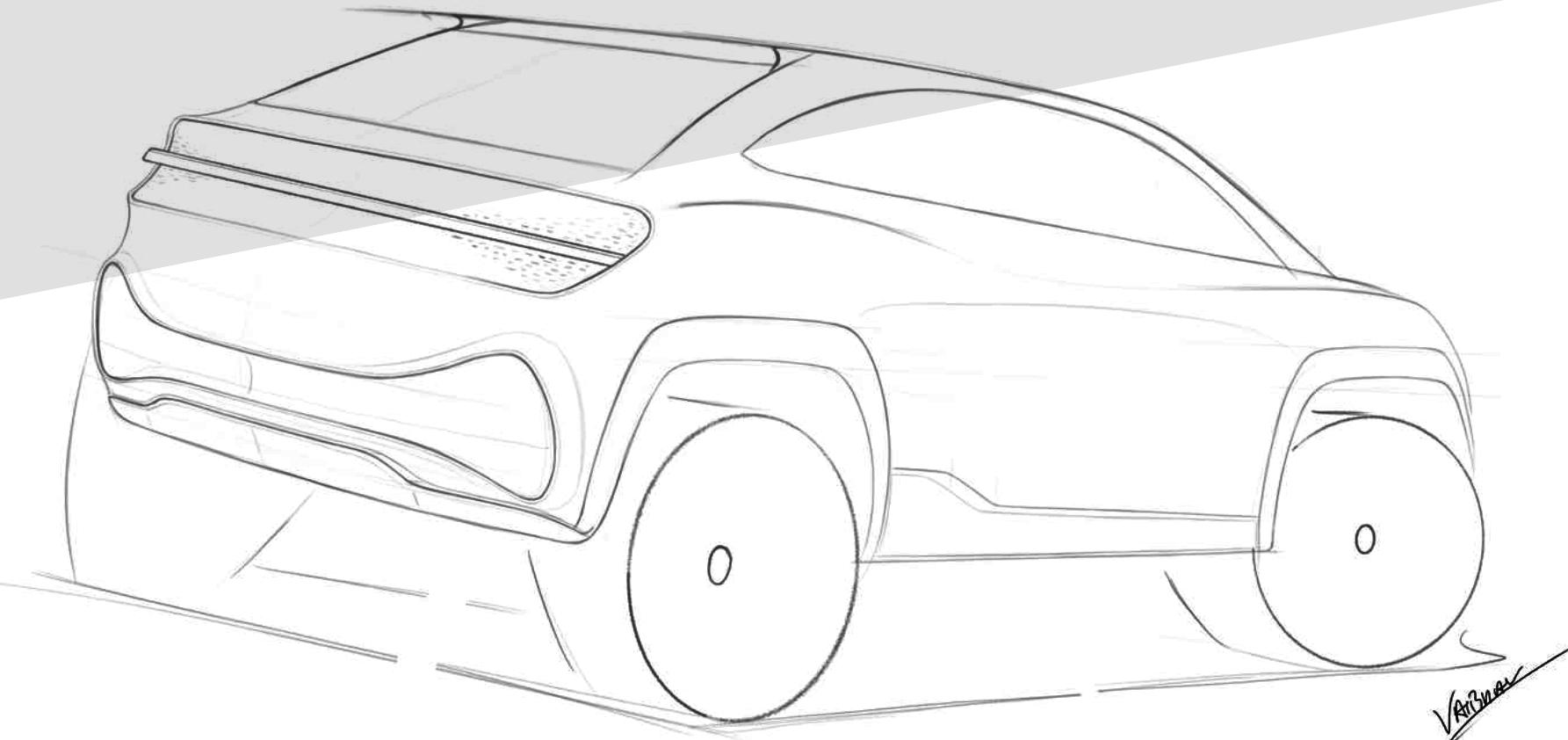


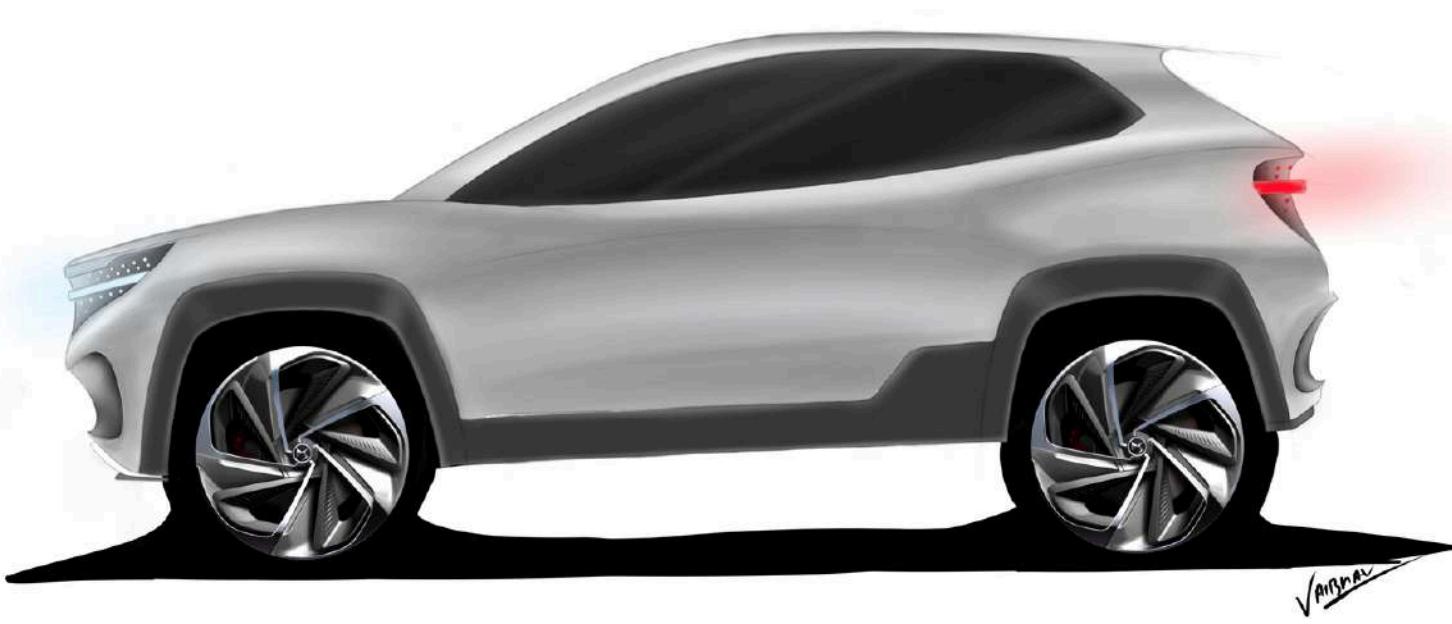
IDEATIONS



FINAL DIRECTION TO FURTHER DEVELOP THE CONCEPT

FINAL FORM

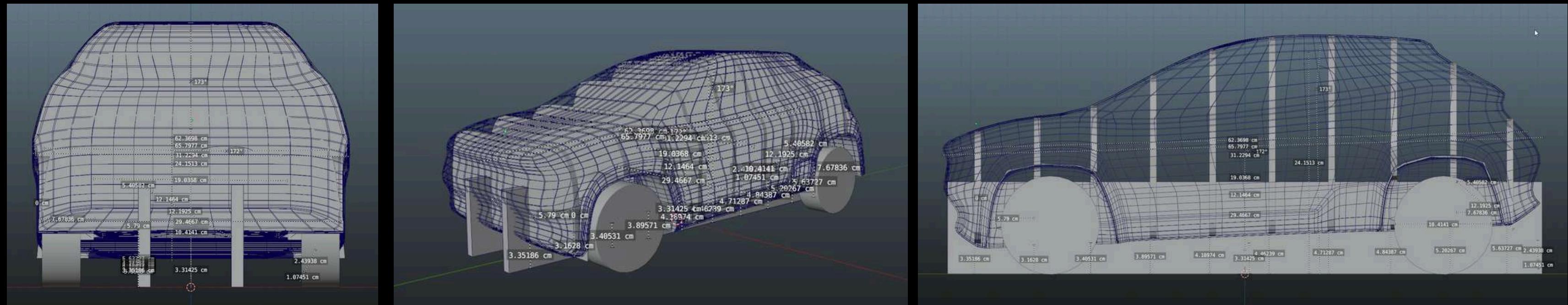




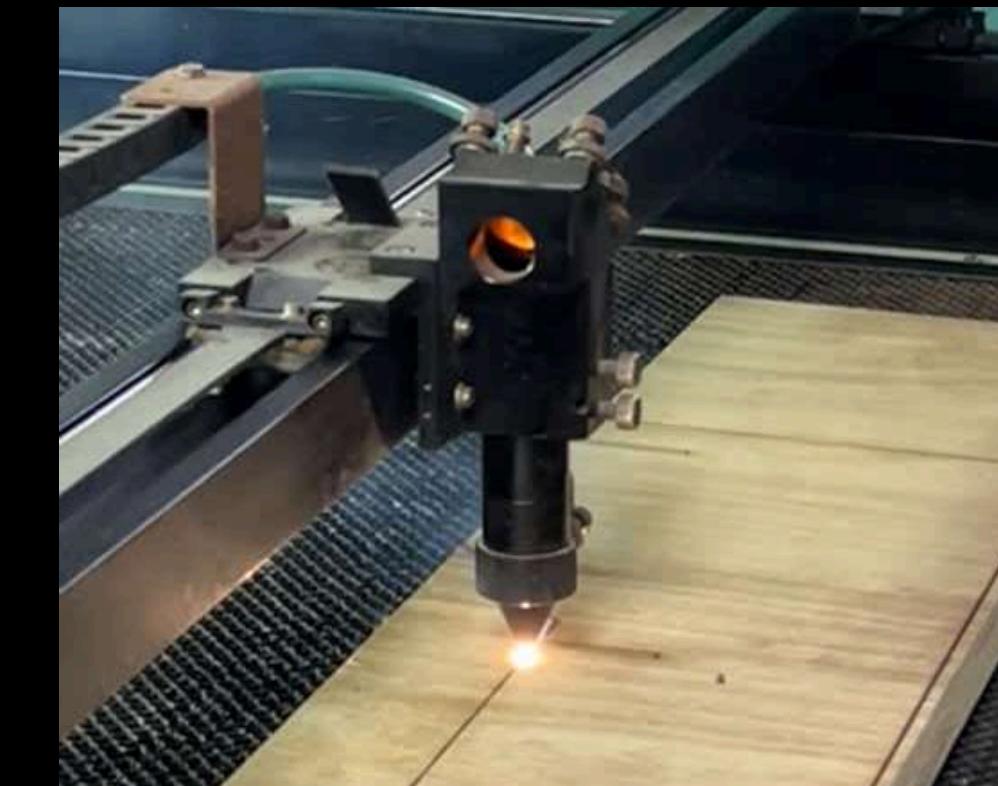
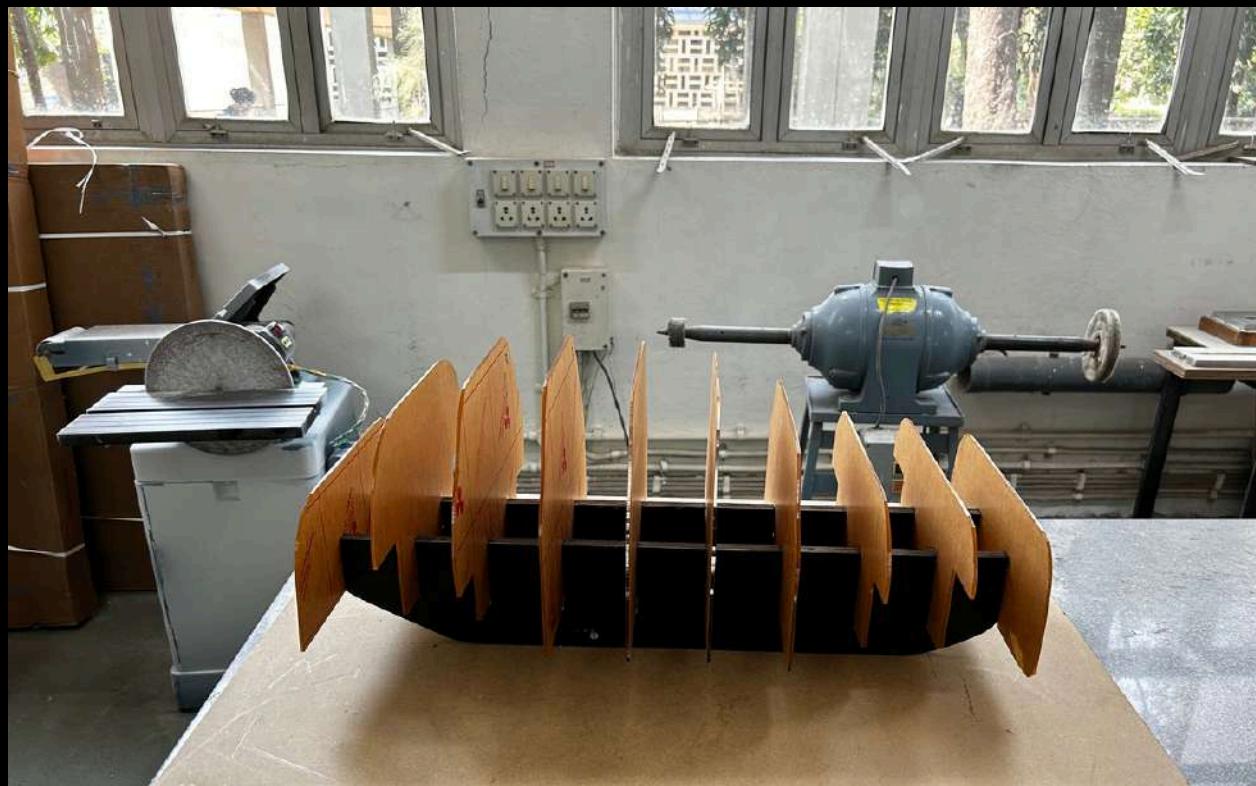
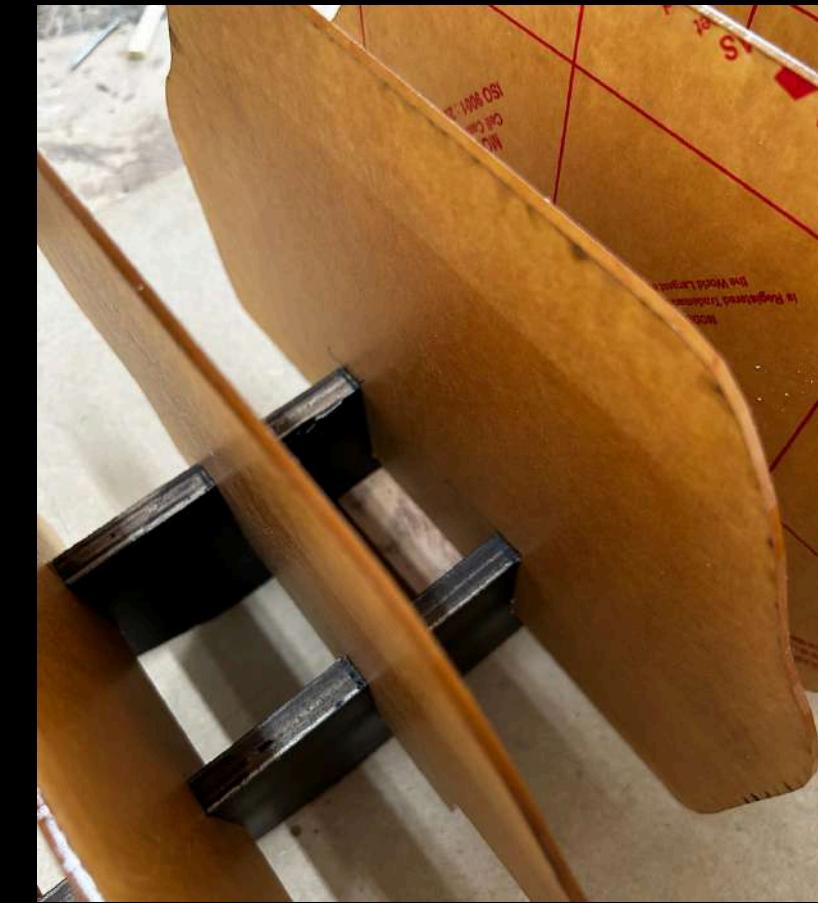
03

CLAY SCULPTING

**A WORK IN PROGRESS FOR THE SUV DESIGN DONE IN AN EARLIER PROJECT.
A GROUP PROJECT BACKED UP BY DEEPTI SHETTY AND SHUBHAM
CHAUHAN.**



PREPARING ARMATURE FOR LAZER CUTTING USING BLENDER



PREPARE LAZER CUT ARMATURE AND A SOLID BASE TO WORK FOR FURTHER STAGES LIKE THERMOCOL SECTIONS AND CLAY DEPOSITION.



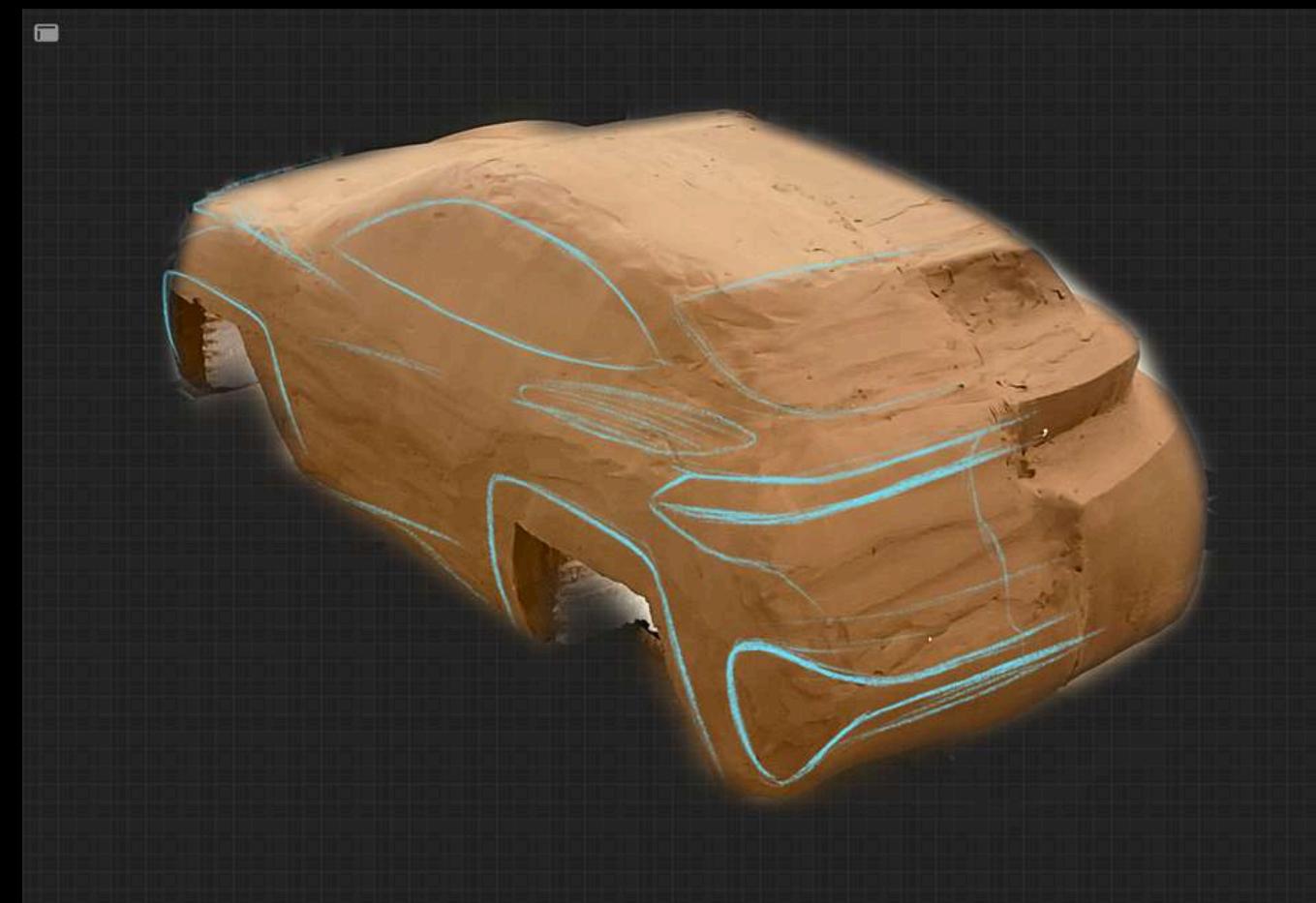
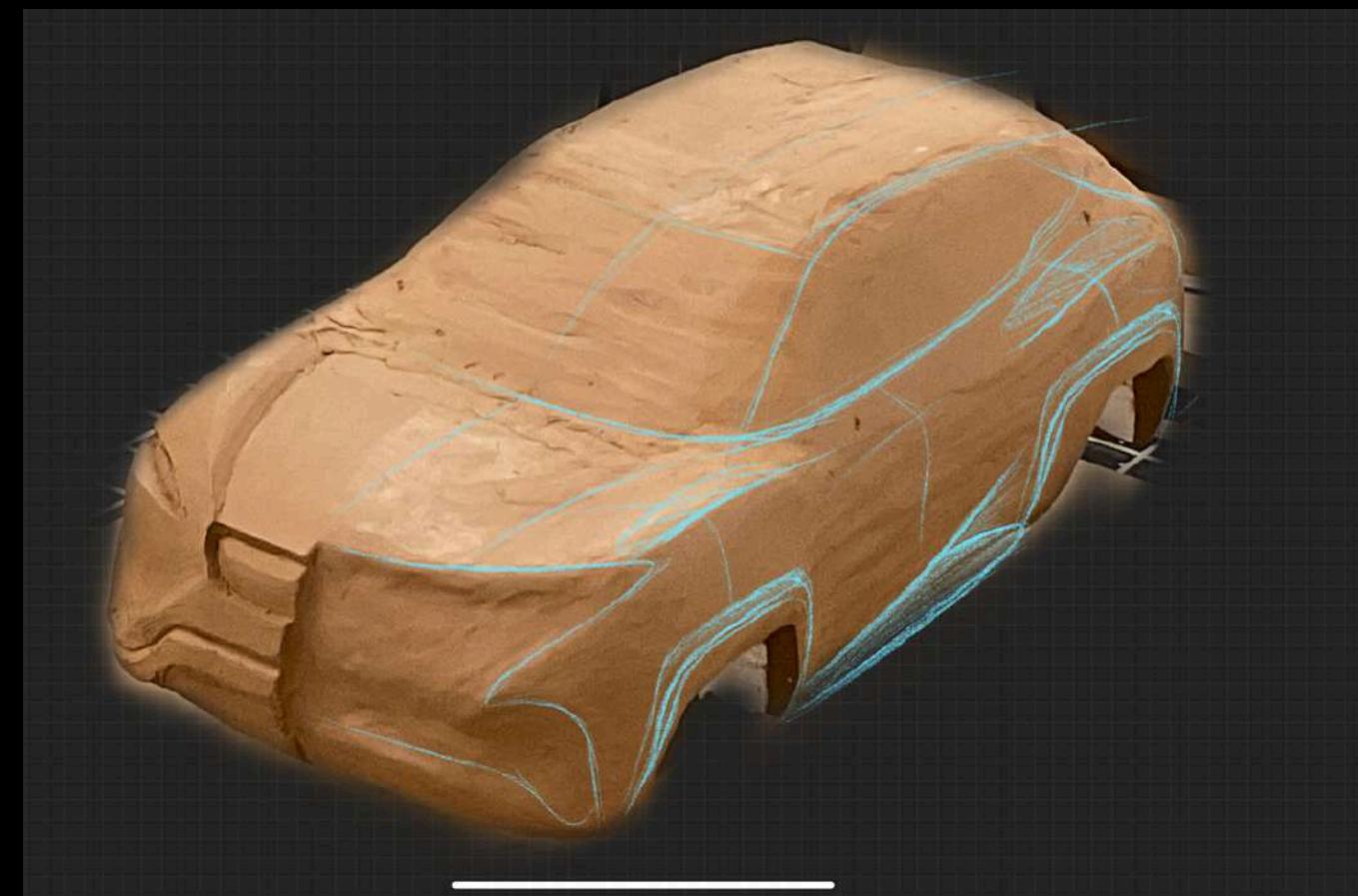
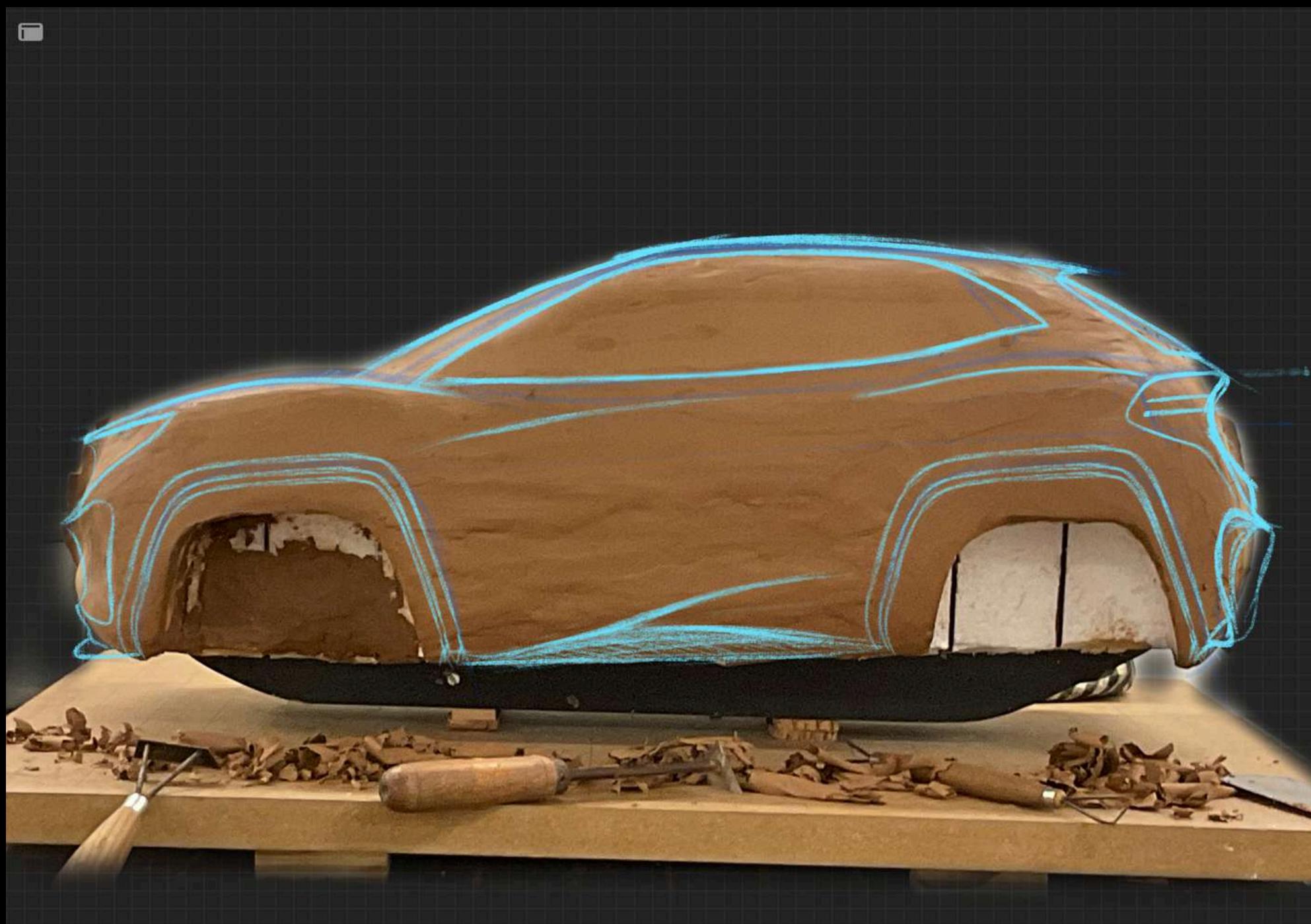
STAGE 01



STAGE 02



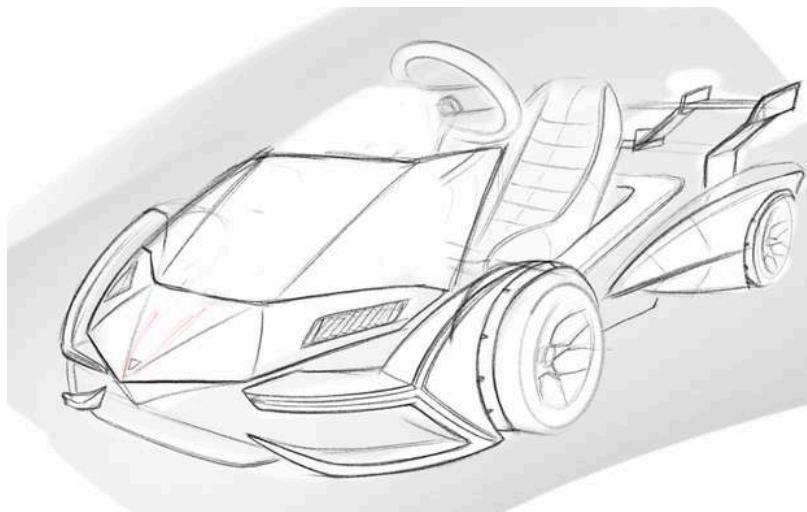
CLAY SKETCHOVERS



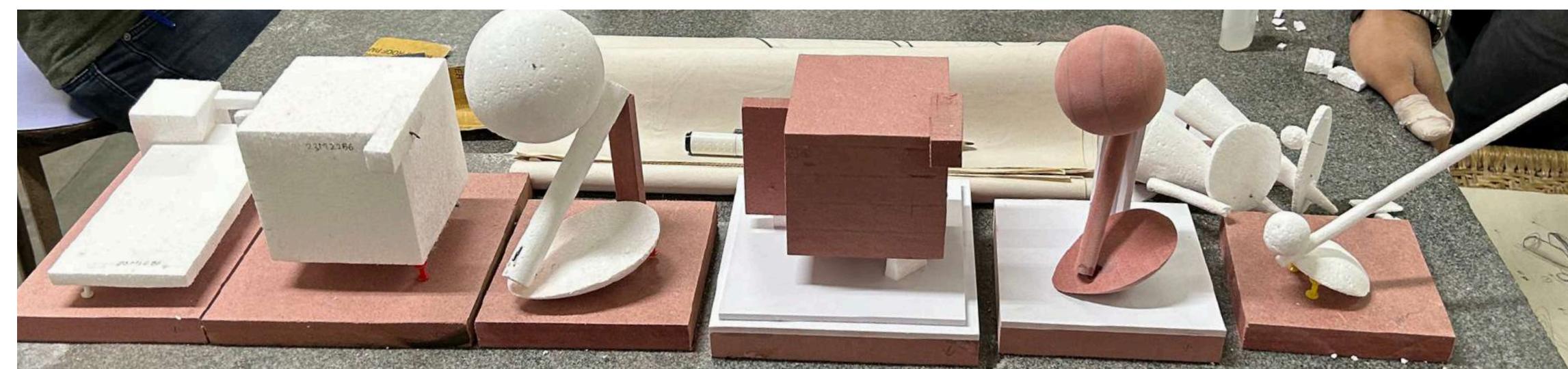
06

**SKETCHING &
RENDERING &
MISC.**

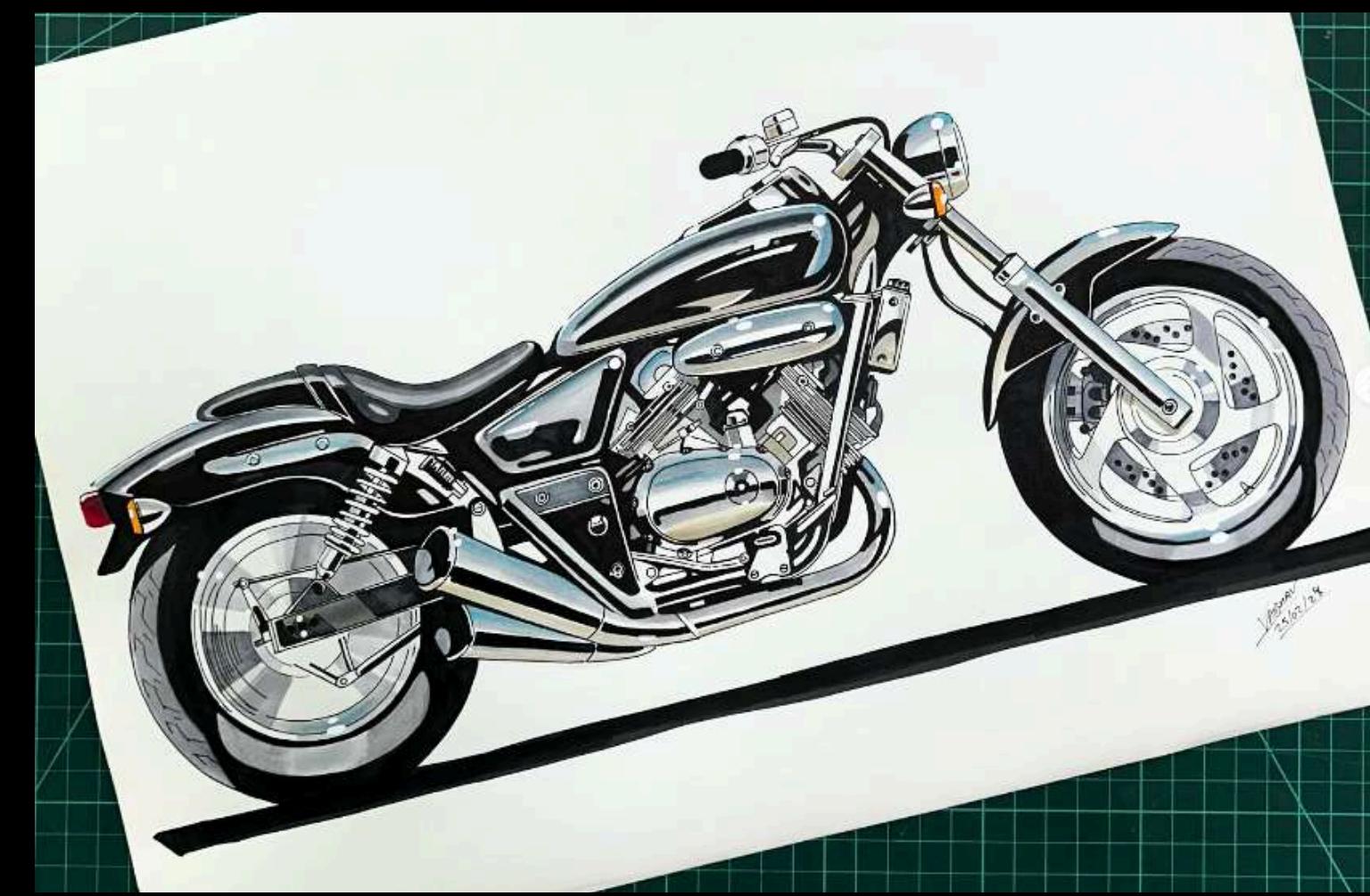
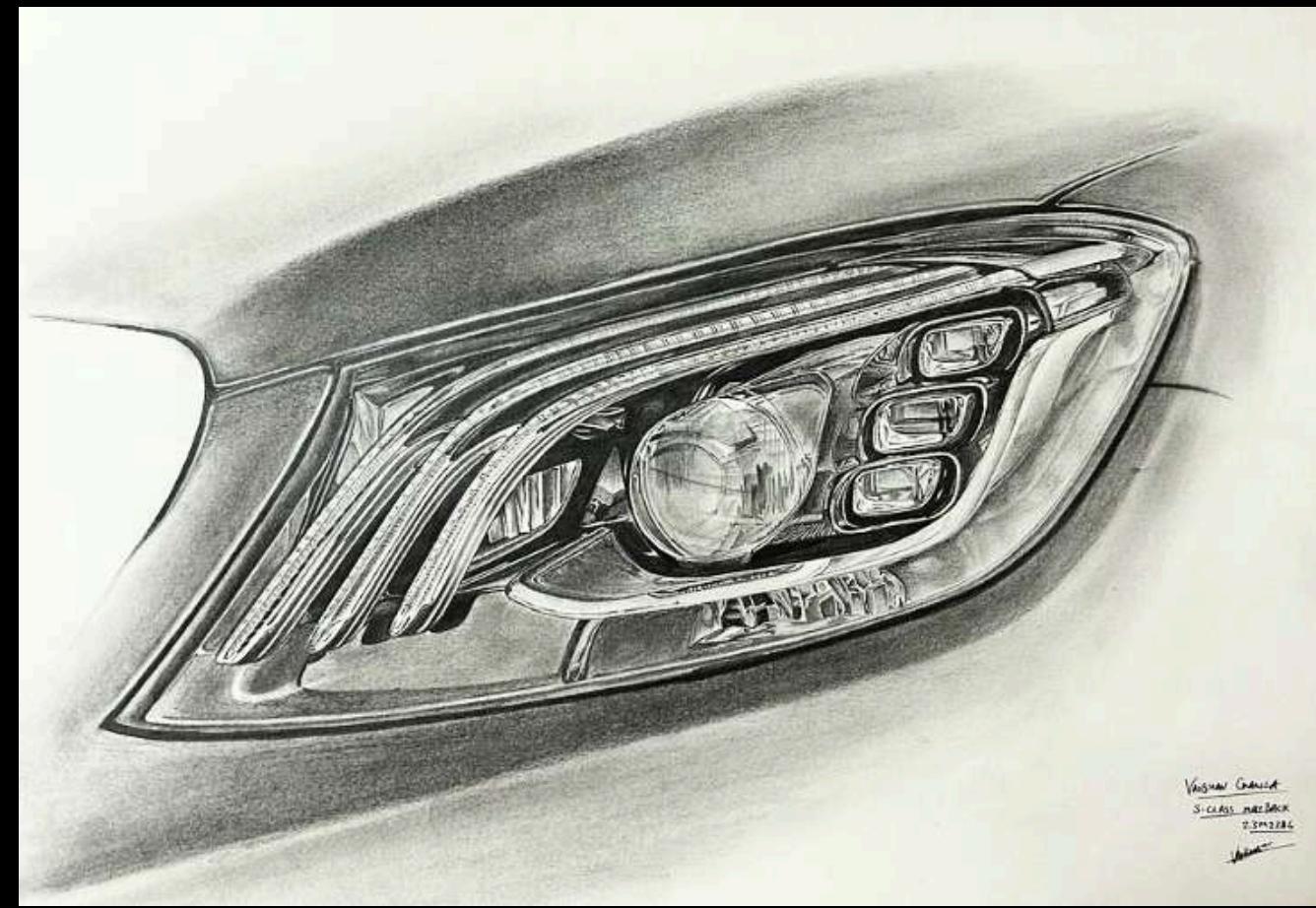
GO-KART DESIGN

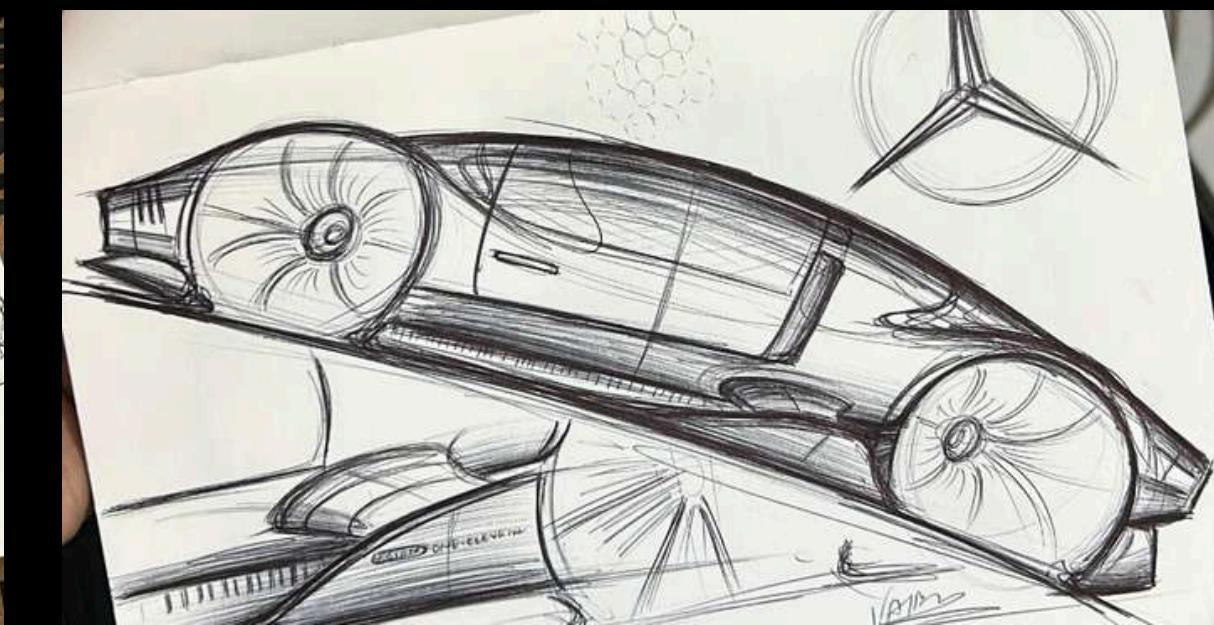
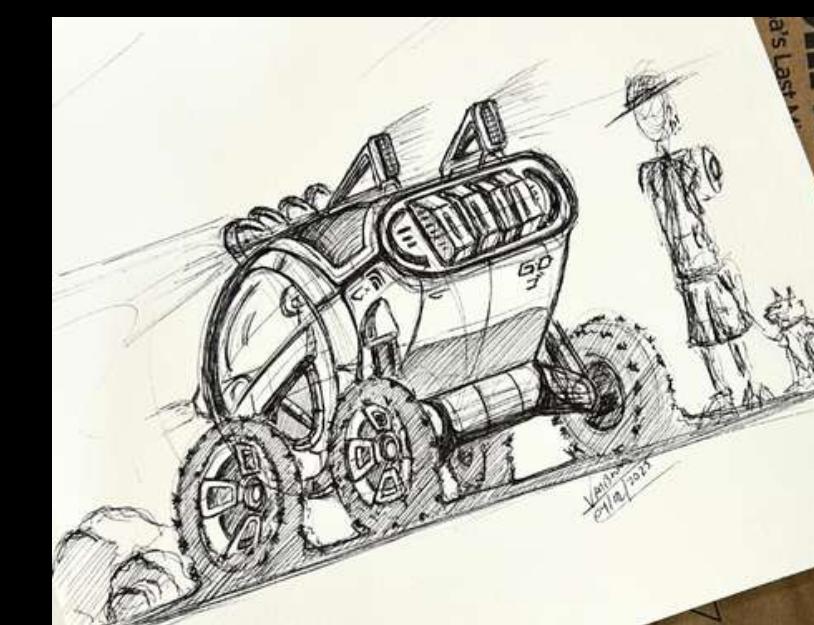
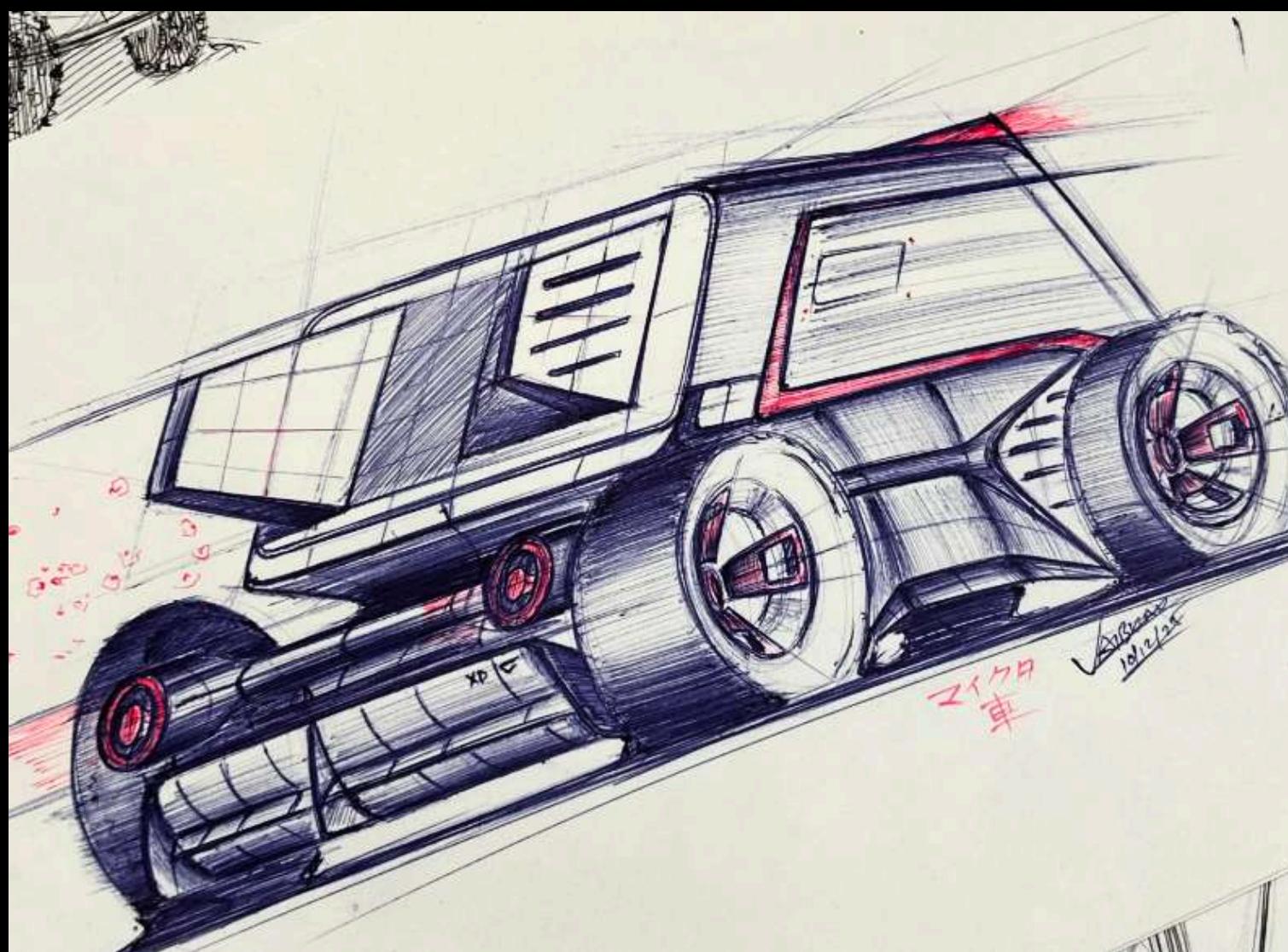
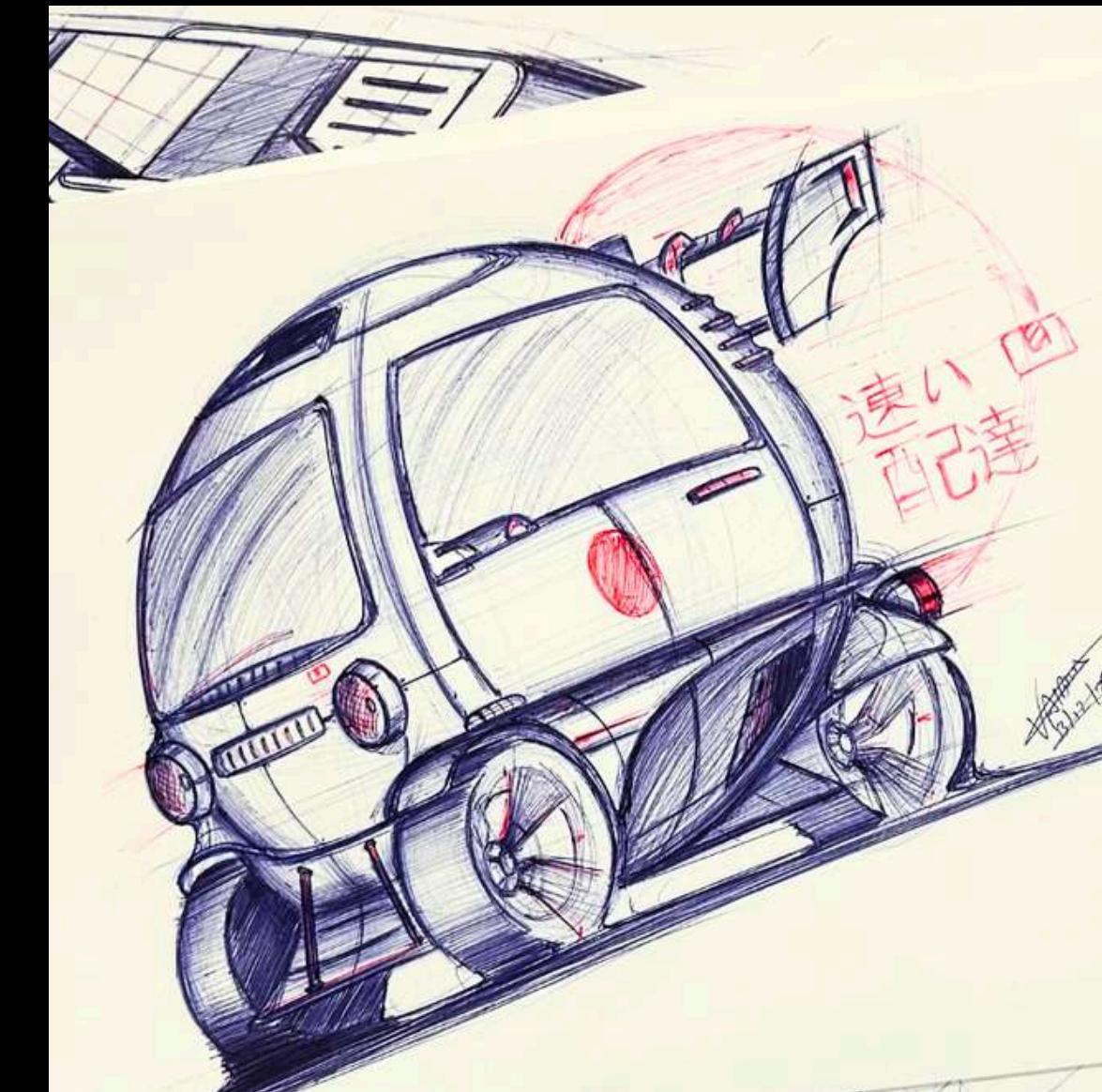
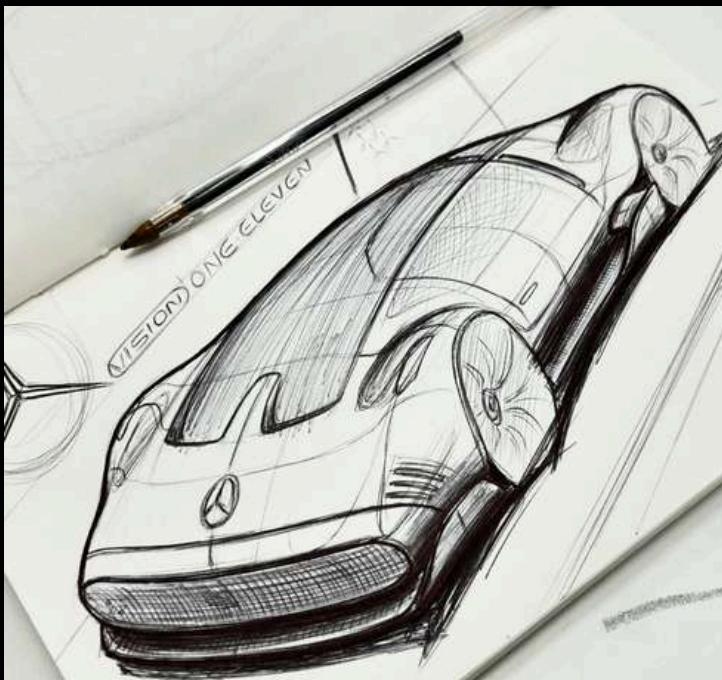
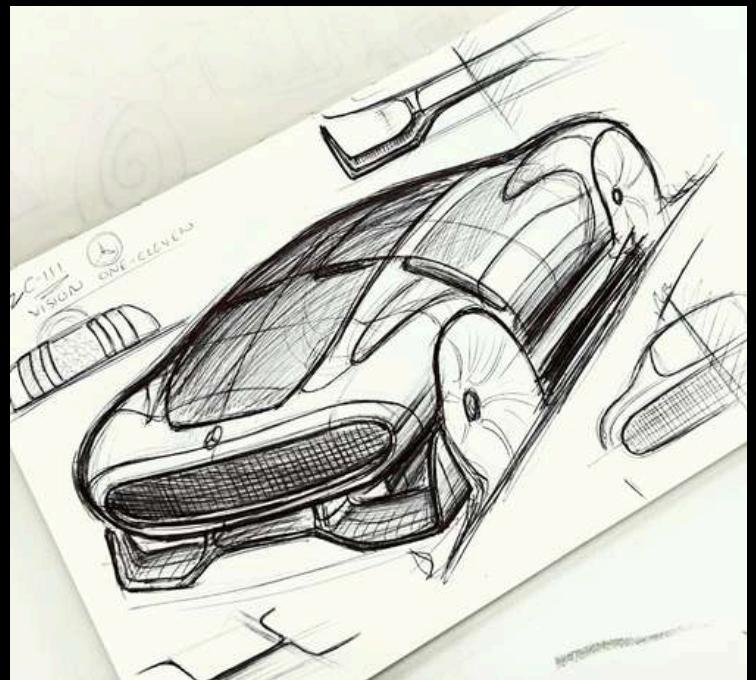


FORMS EXERCISES & SOME PROTOTYPING

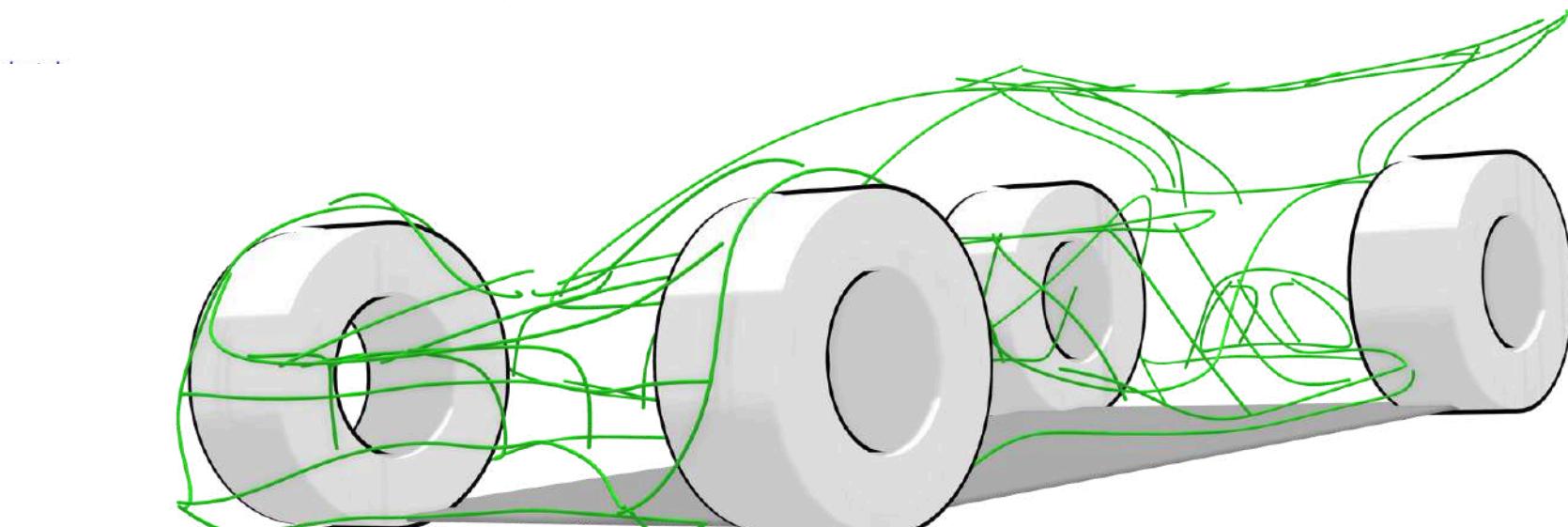
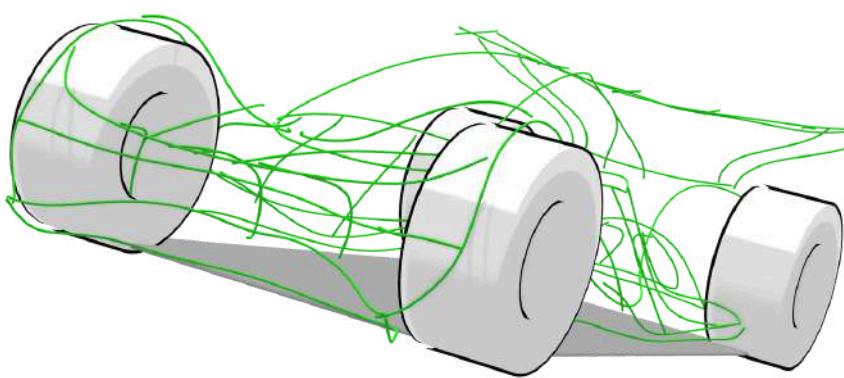
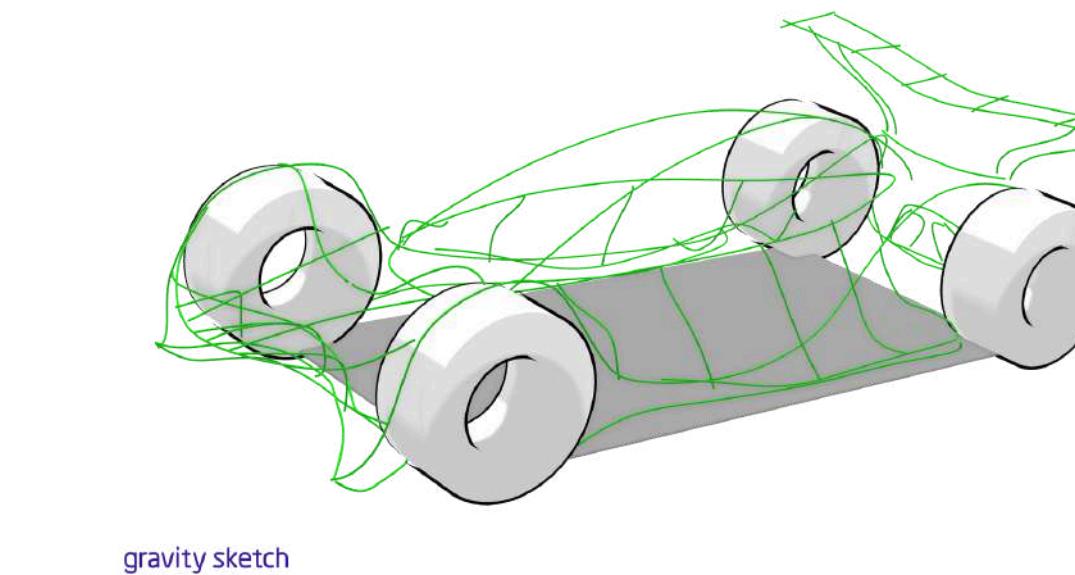
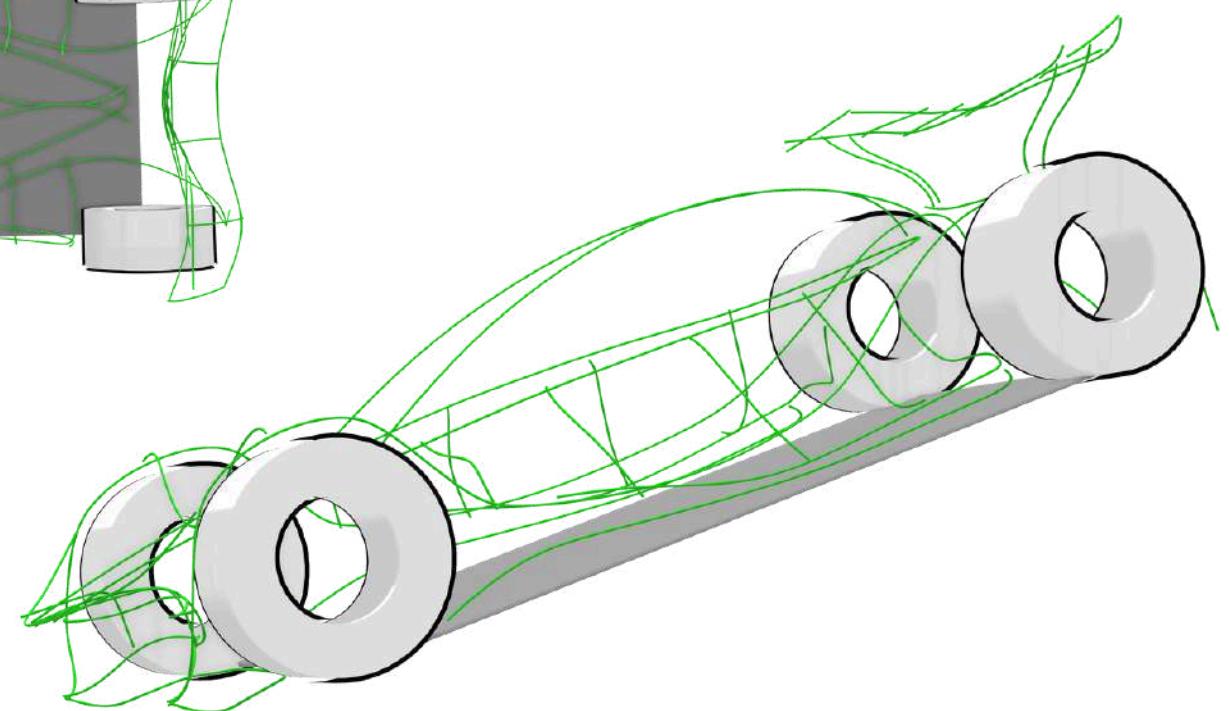
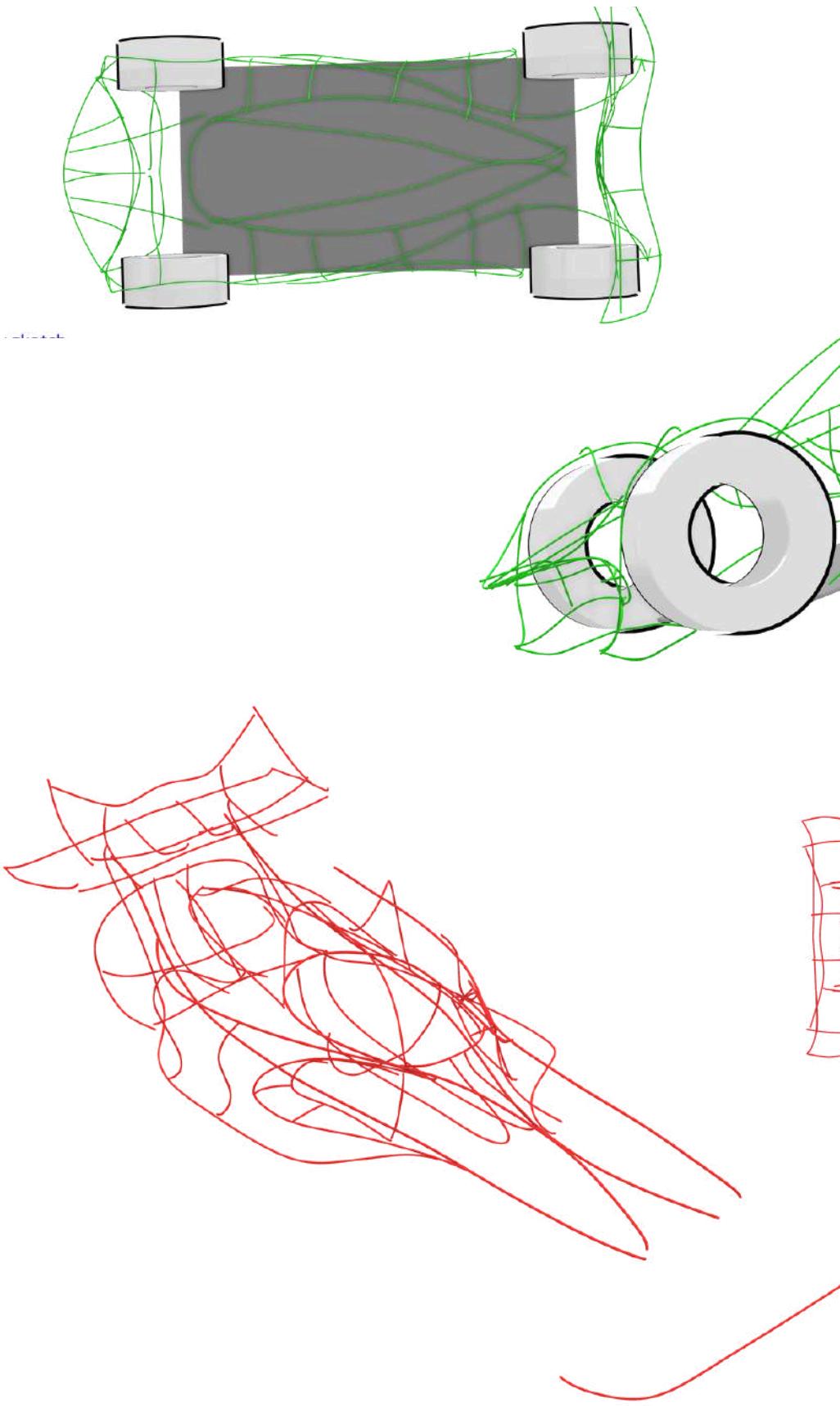








GRAVITY SKETCH EXPLORATIONS



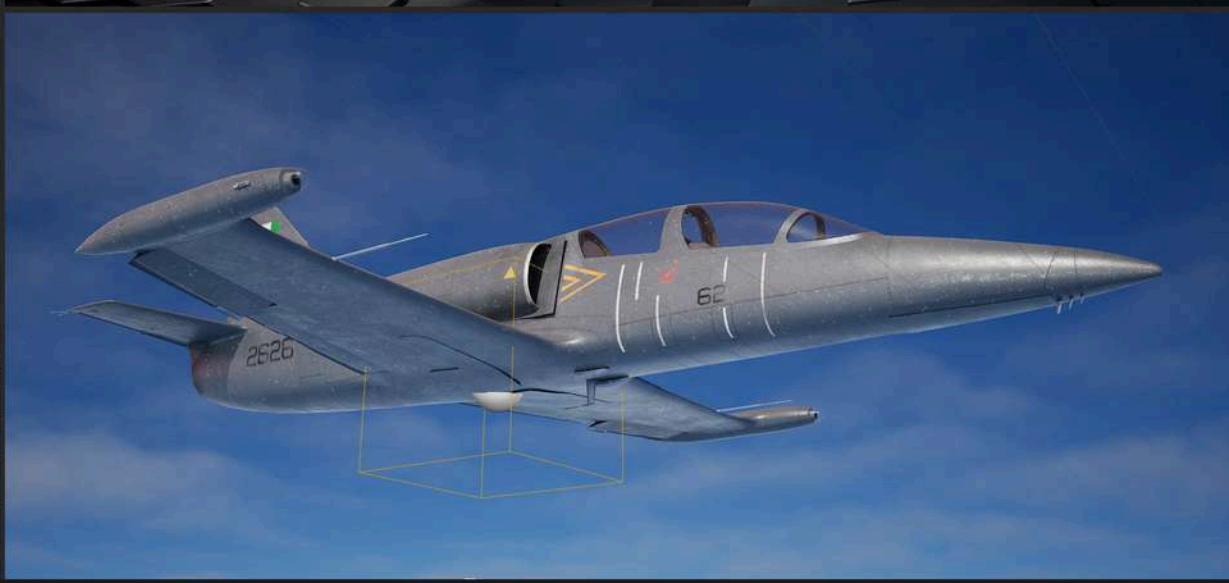
gravity sketch

07

3D MODELLING & RENDERING









**COCKPIT MODELLING &
RENDERING**

THANK YOU