AN INTERACTIVE ARCHIVE

Lena Pang — Elements III | Project 2

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Project Definition

The Opportunity

The Porsche 911 has many, many, many variants.

So many that the terms can quickly become overwhelming and confusing. (What's a 992? Is that a 911? What's the difference between a Targa and a Cabriolet? What does 4S mean?)

There are some articles and videos that give general overviews of the generation, but nothing to provide a detailed, comprehensive, chronological comparison.

Enter: the Porsche 911, an interactive archive.

Setting the Scene

ENVIRONMENT

- Porsche museum

- interactive exhibits at car-themed experiences

DEVICE

- 6ft+ tall touchscreen to display cars at scale (inspired by photos at right)

- speakers, ideally in a surround sound setup for a more integrated experience

Goals

EDUCATE

- eliminate the barrier of entry by organizing the material to make it less overwhelming and intimidating

- create one cohesive chronology of all 911 variants, sub-variants, etc throughout time

INSPIRE

- embody the passion and creativity in the 60 years of Porsche 911 variants

- create a visceral experience through scale, interactivity, and sound

Use Cases

THE NEWBIE

- anyone new to the car scene, including children

- appeals to fascination and curiosity

- offer an easy-to-digest, intuitive overview of an iconic vehicle

- sound makes it more real/emotive

THE VETERAN

- anyone with knowledge or experience in the car scene (car enthusiasts, engineers, etc)

- appeals to passion/respect shared by most of the car community for one of the most awed cars in history

- beautiful illustrations to stare at, with the added bonus of thorough facts and more complex, detailed overlays/interactions

- car enthusiasts love the sound of engines

Research

Competitive Analysis:
Porsche Museum

- located in Stuttgart, Germany

- features an interactive touch wall that allows visitors to explore through a collage of various Porsche models throughout history

- the most innovative car museum, as most others opt to feature static models of cars and/or car parts

Photos from the Porsche Museum Website

Competitive Analysis:
911 Video Chronologies

- lacking in visual intrigue and refinement

- a little hard to look at

- ultimately don't do justice in reflecting the true elegance and sophistication of Porsche

- interactivity (and the subsequent ability to freely and independently explore through different layers and factors) would take the educational experience to a whole new level
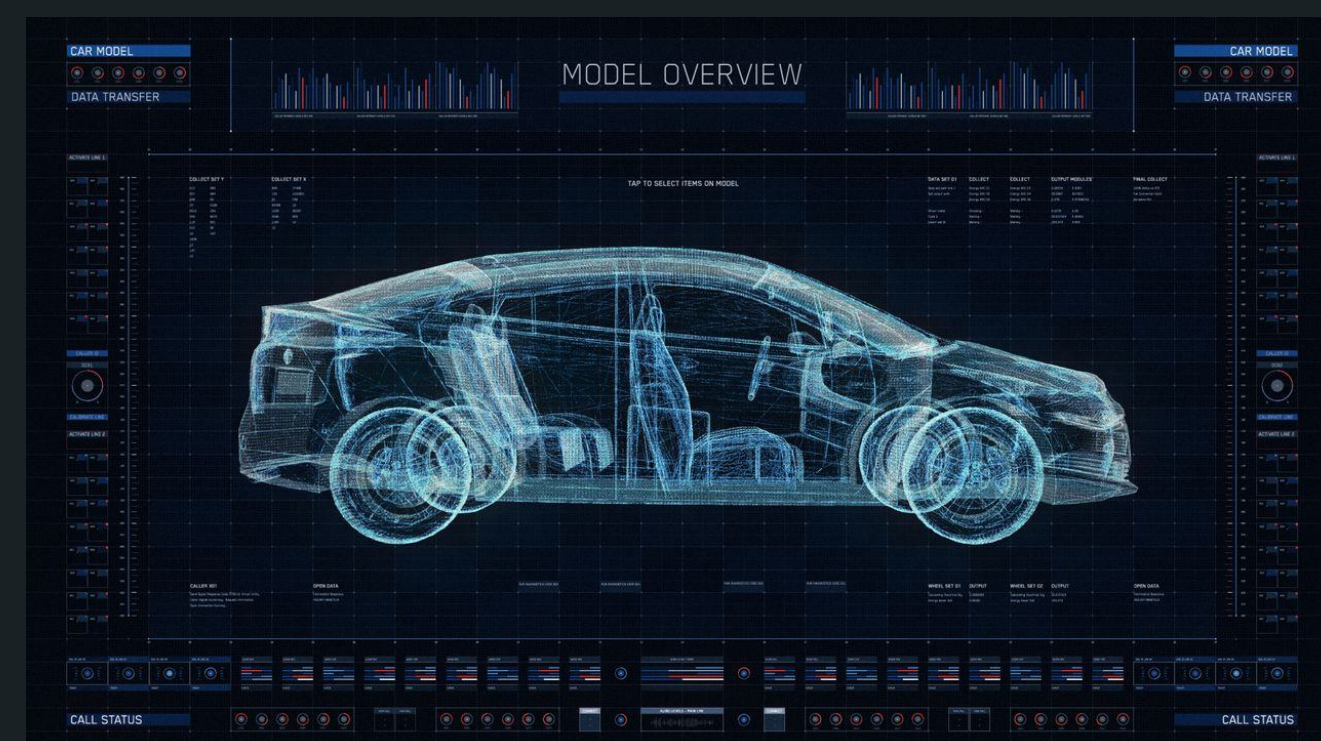

https://youtu.be/b38gHlGENNw

https://youtu.be/pbLO-m8y5oU

UI Trends: Car Facts & Evolution

- utilize negative space to make the car itself more visually impactful; has the potential to be made even more effective through interactivity and animation.

- most (static) evolutions show the variations side-by-side for easy comparison; could be a useful comparison to have in an interactive experience
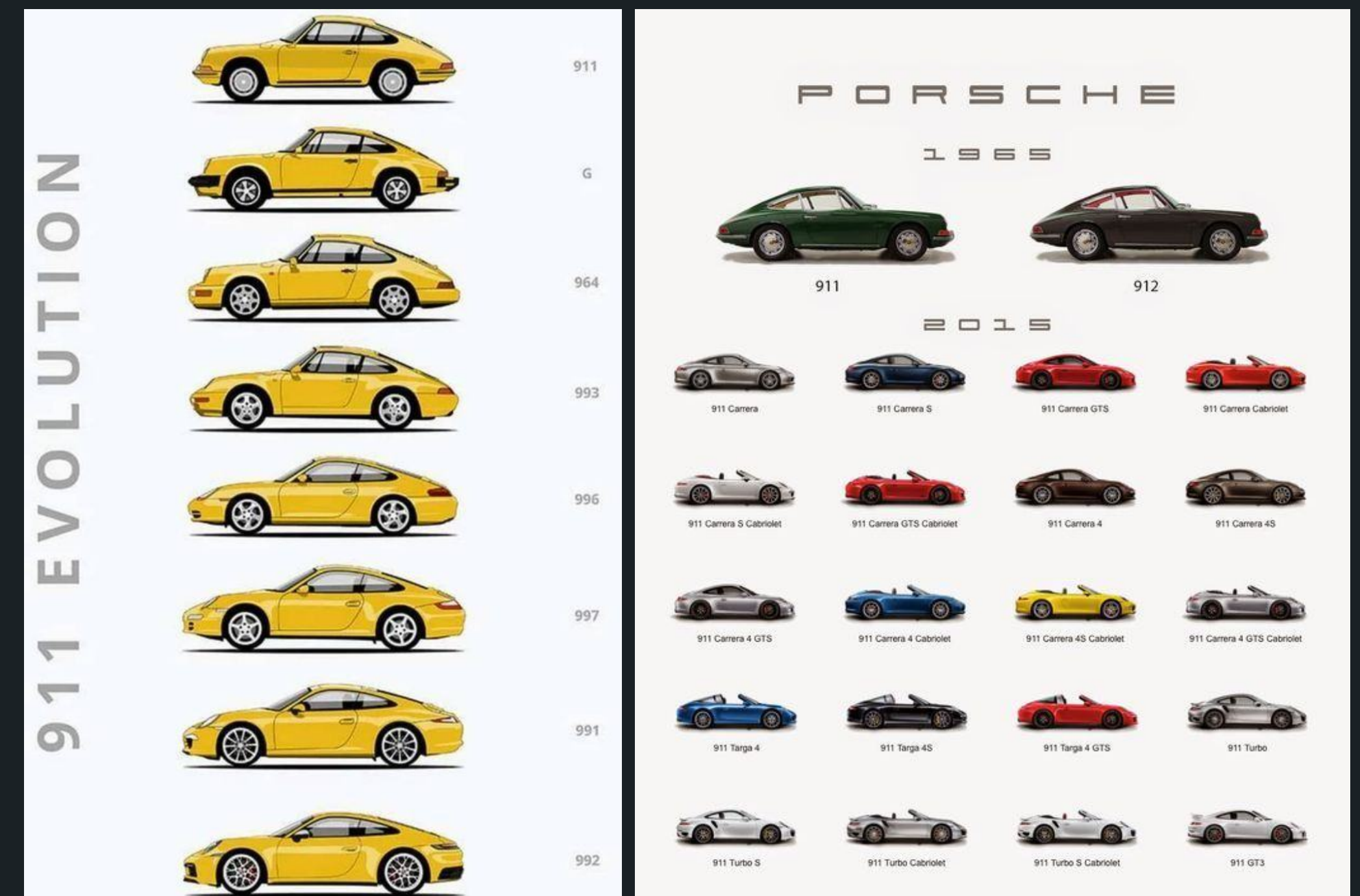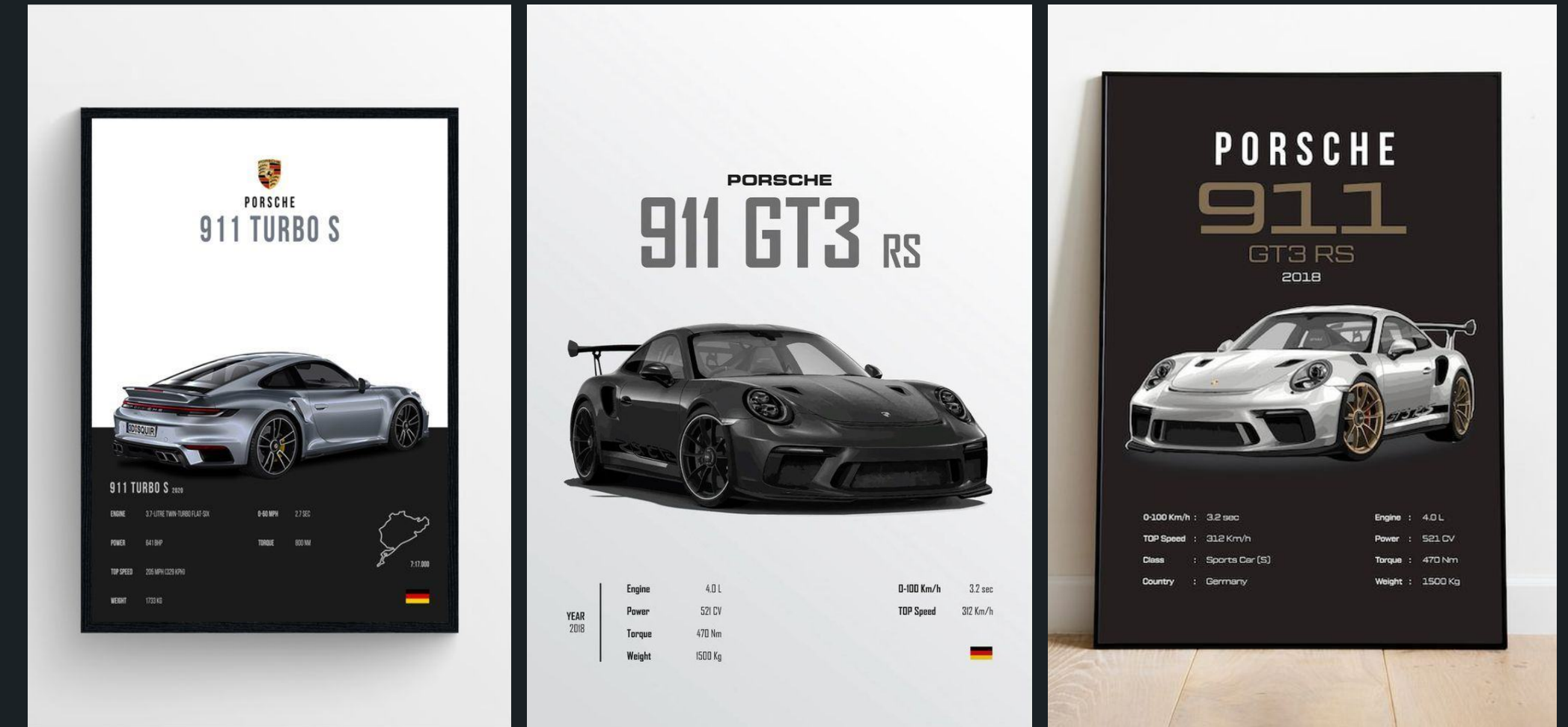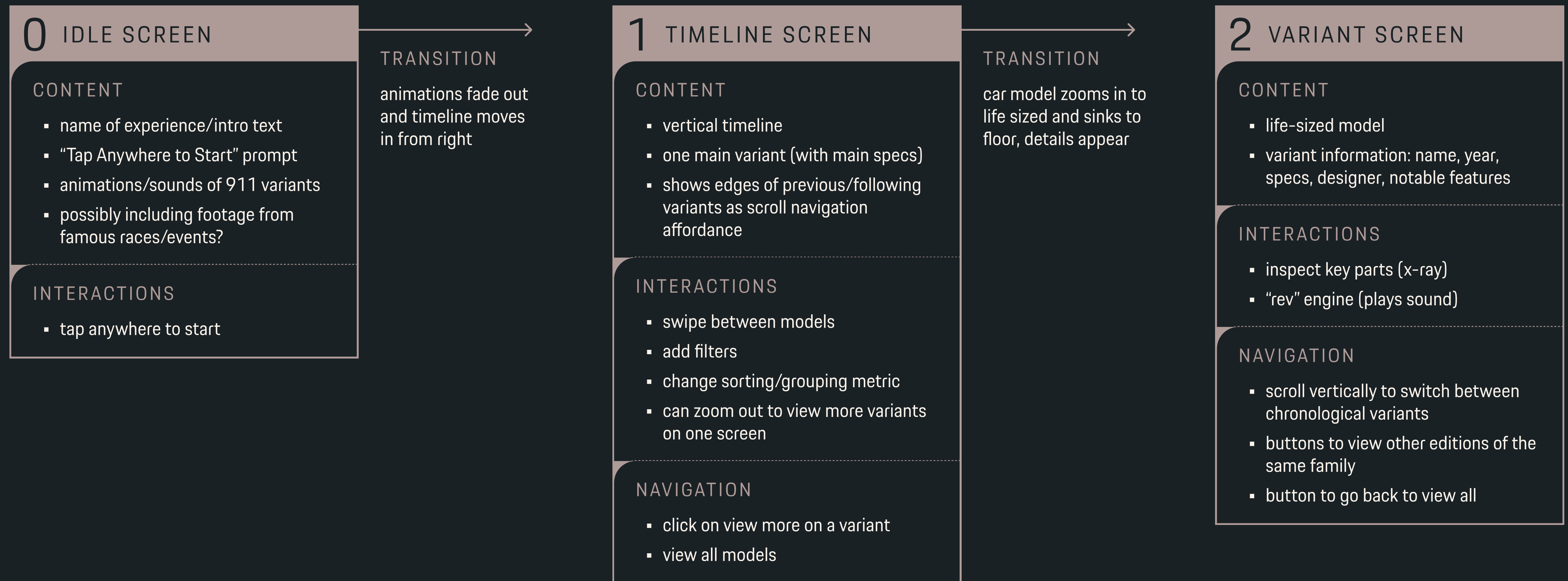
UI Trends: Illustrations & Modeling

- shows the details and technicalities of a mechanical device

- older style: textured, rigid, detailed style reminiscent of blueprints/drafting

- modern style: 3D modeling/animating a see-through version of the device
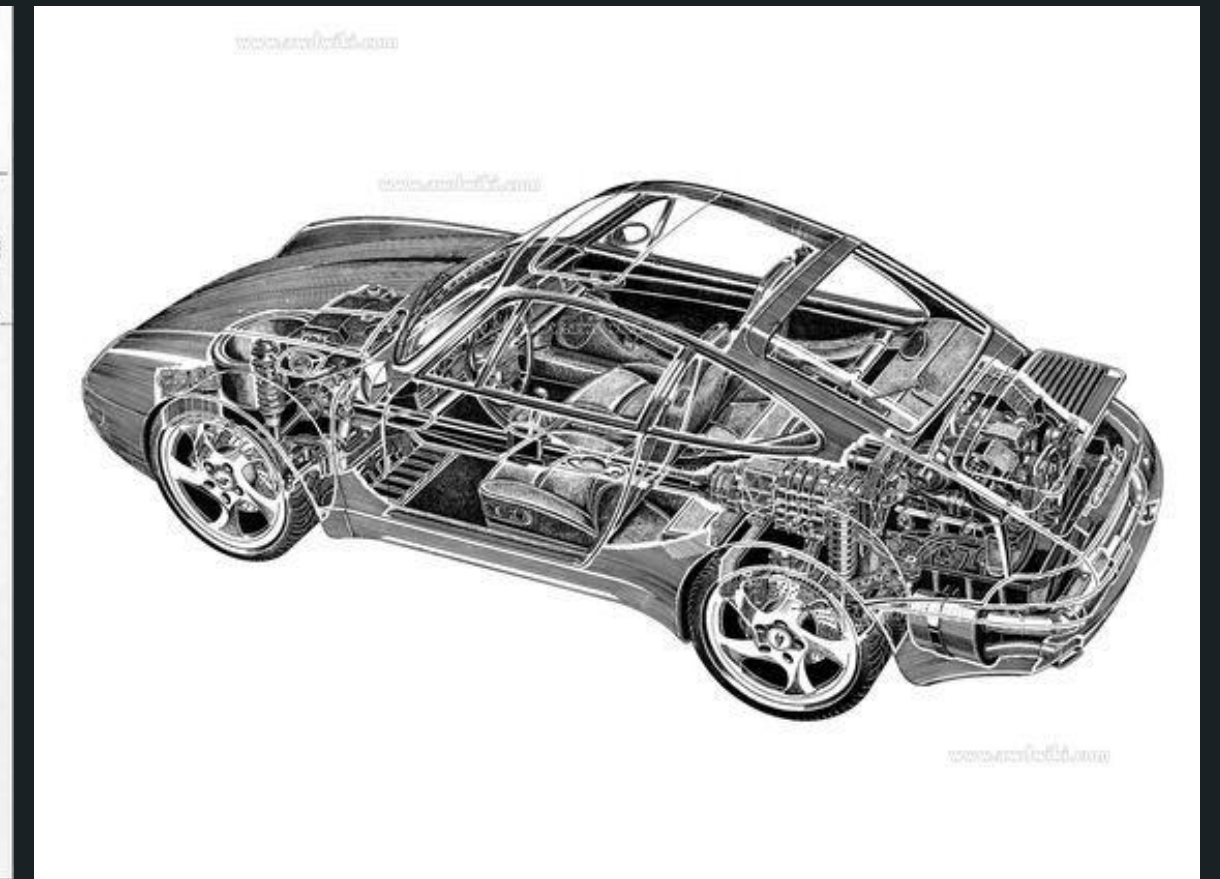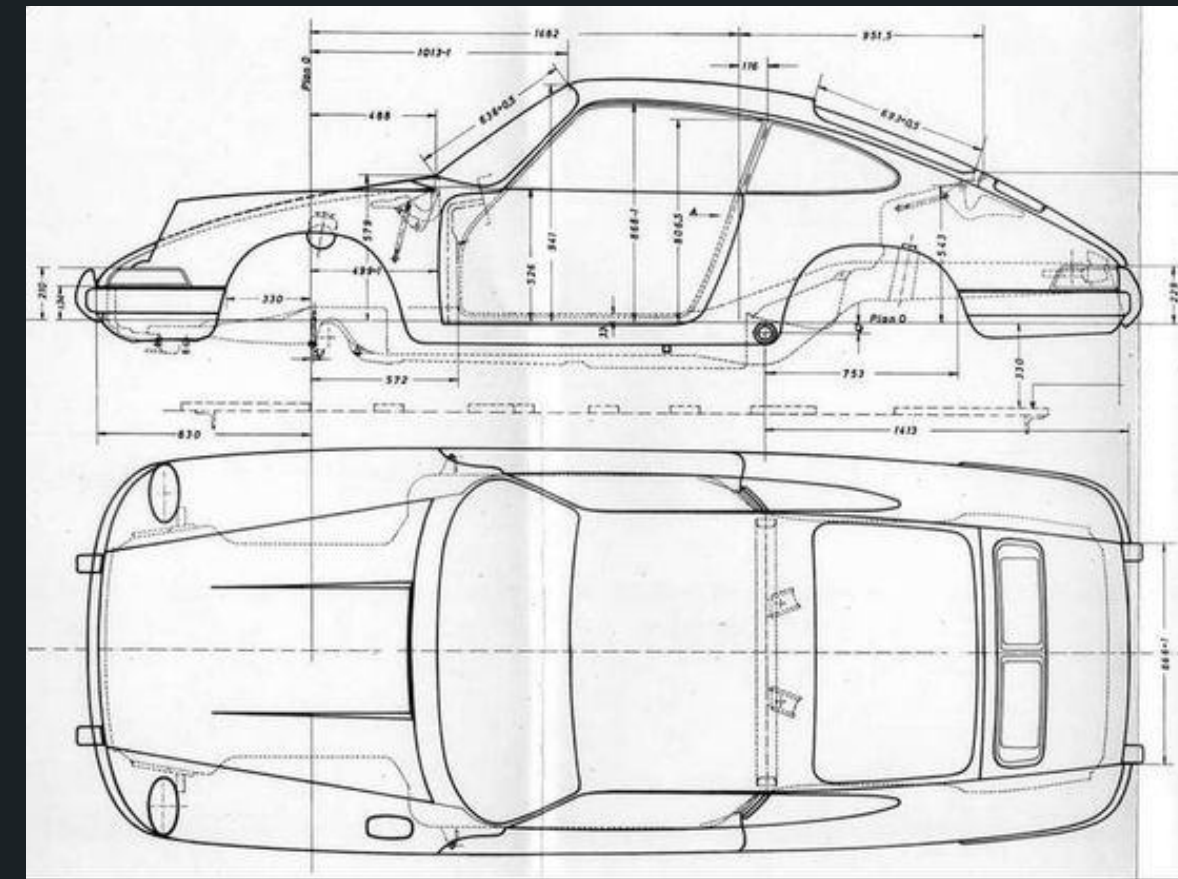
Design Process

Prototype Flow

0 IDLE SCREEN

CONTENT

- name of experience/intro text
- "Tap Anywhere to Start" prompt
- animations/sounds of 911 variants
- possibly including footage from famous races/events?

INTERACTIONS

- tap anywhere to start

TRANSITION

animations fade out and timeline moves in from right

1 TIMELINE SCREEN

CONTENT

- vertical timeline
- one main variant (with main specs)
- shows edges of previous/following variants as scroll navigation affordance

INTERACTIONS

- swipe between models
- add filters
- change sorting/grouping metric
- can zoom out to view more variants on one screen

NAVIGATION

- click on view more on a variant
- view all models

TRANSITION

car model zooms in to life sized and sinks to floor, details appear

2 VARIANT SCREEN

CONTENT

- life-sized model
- variant information: name, year, specs, designer, notable features

INTERACTIONS

- inspect key parts (x-ray)
- "rev" engine (plays sound)

NAVIGATION

- scroll vertically to switch between chronological variants
- buttons to view other editions of the same family
- button to go back to view all

Base Grid

4 px base

- 16px grid shown

- 24px padding

VERTICAL SPACING

- vertically centered

- 24px text spacing

- 48px section spacing
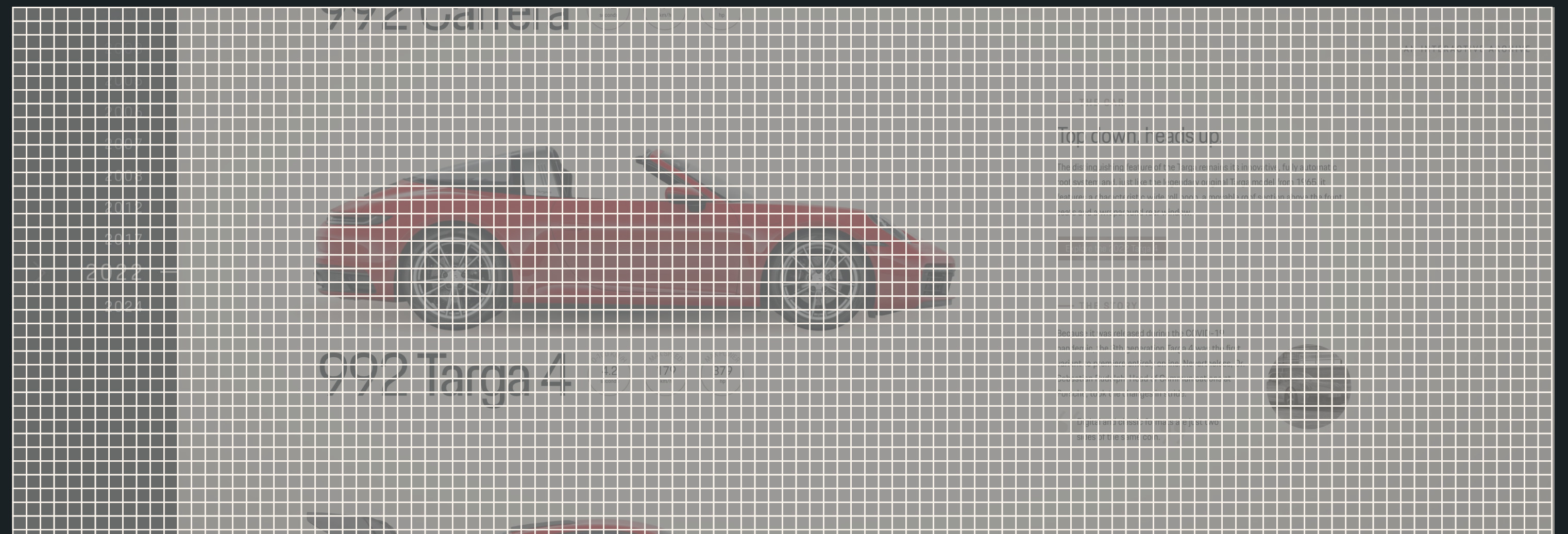
Sketches

1 - Variant Screen: has specs and a menu to "scroll through the years"

2 - Inspect: zoom in on one part, interactive 3D model

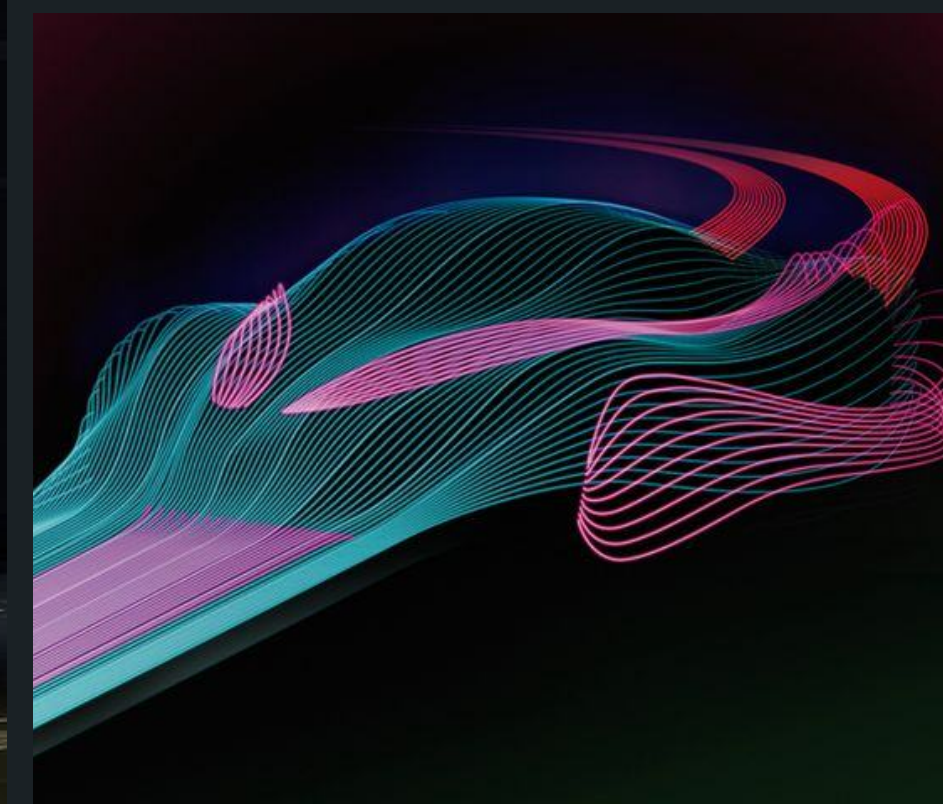3 - Zoom Out: view more variants at one time (still chronological)
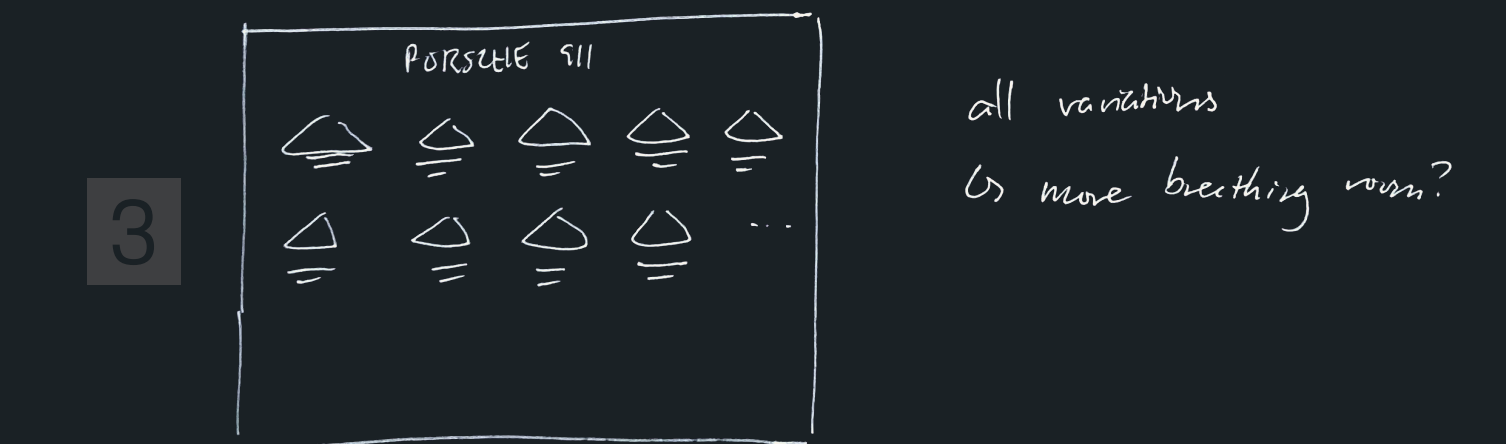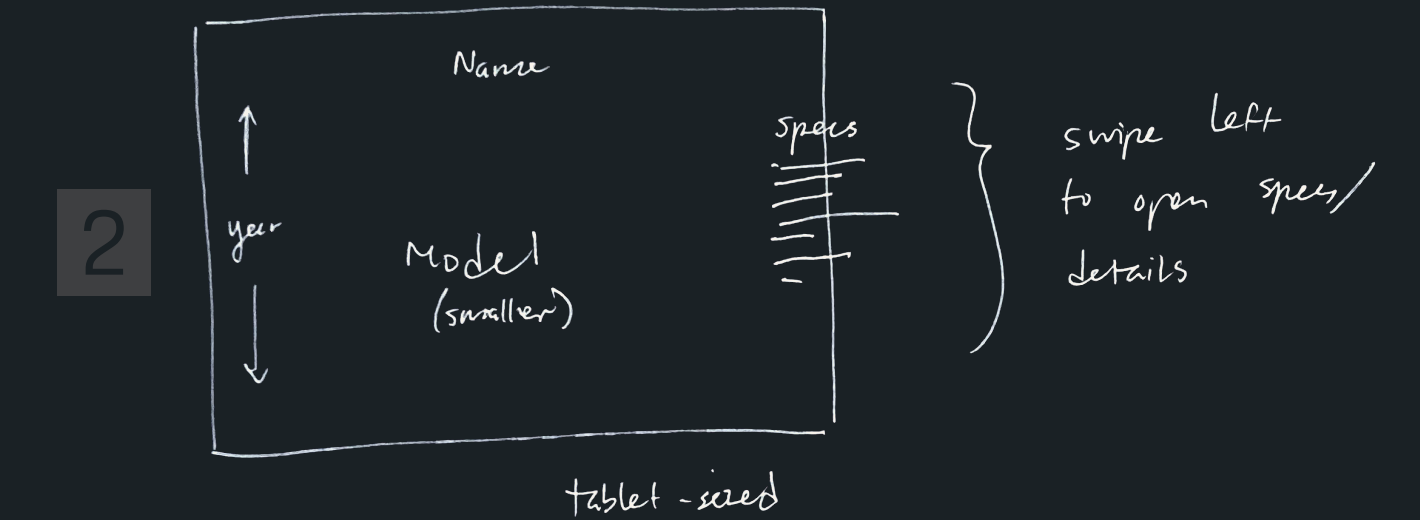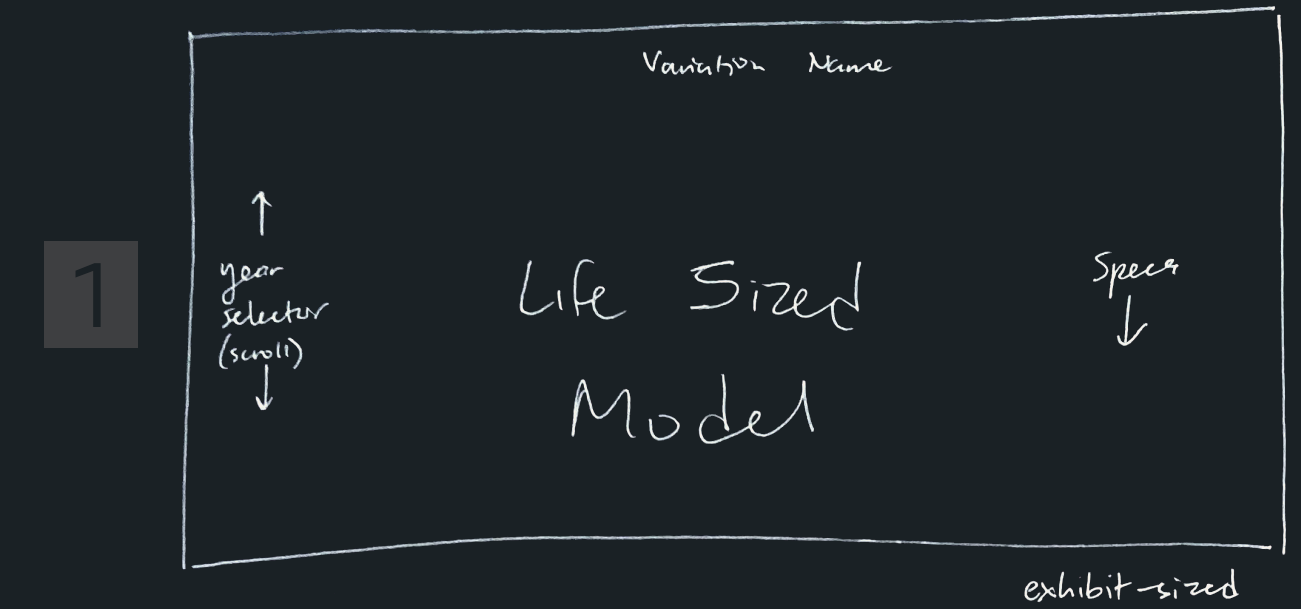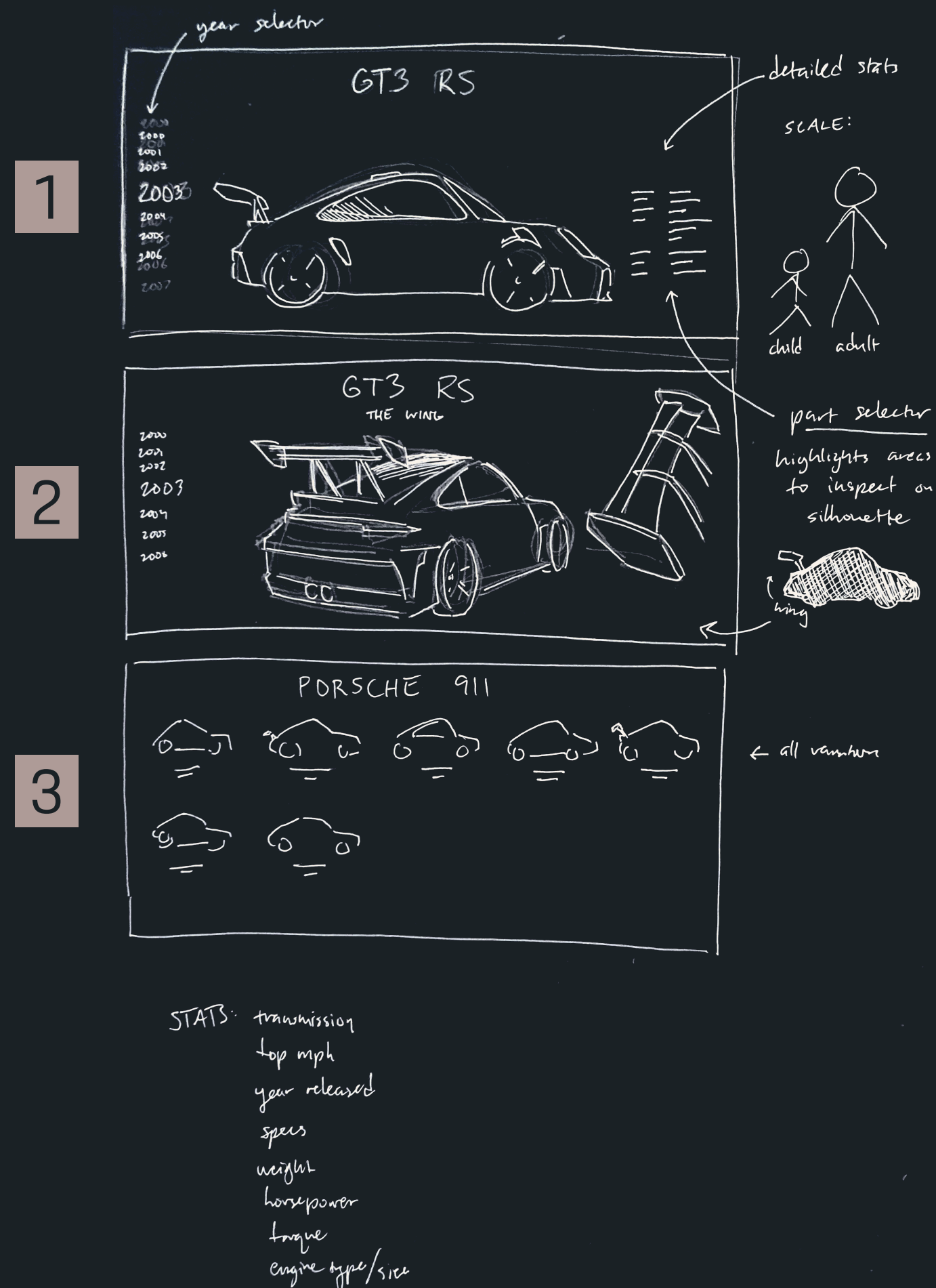
Moodboard 1: Glow in the Dark

Clean, glowing contour lines against a dark background create dimension and depth, easily drawing the eye to the model.

keywords: sleek, hologram, futuristic
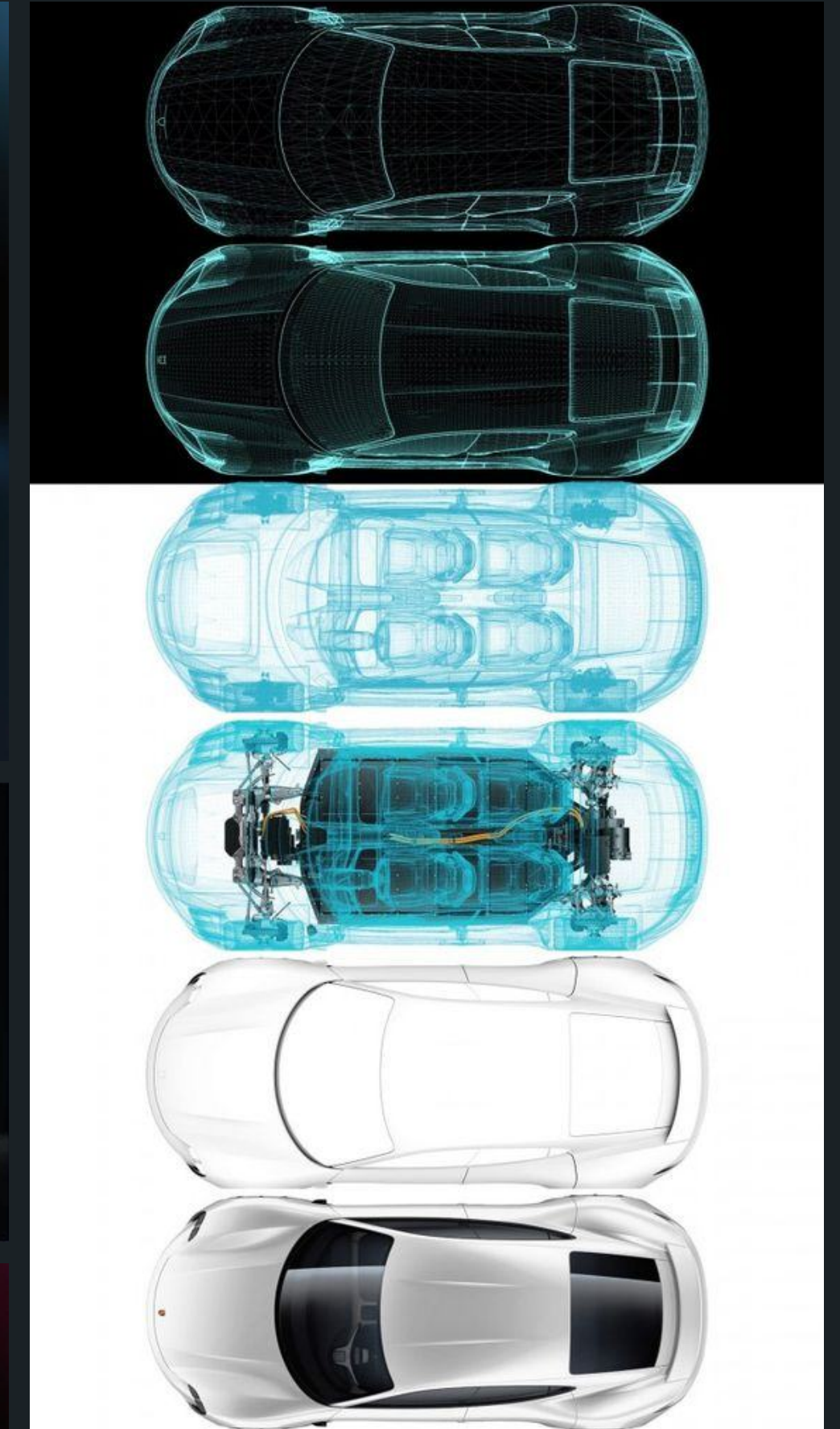
Moodboard 2:
Pen and Paper

Juxtaposing flat, blueprint-esque illustration against realistic 3D models creates visual intrigue in a negative space-heavy layout.

keywords: clean, light, minimalist
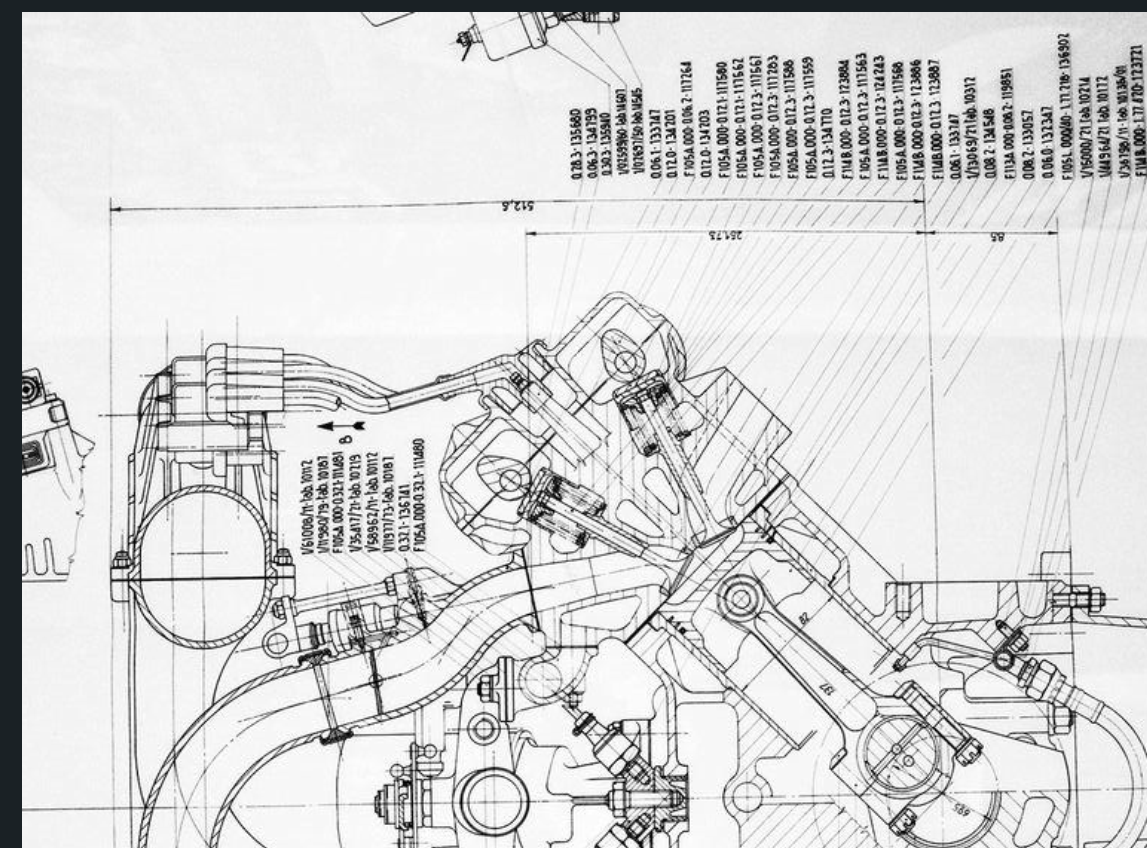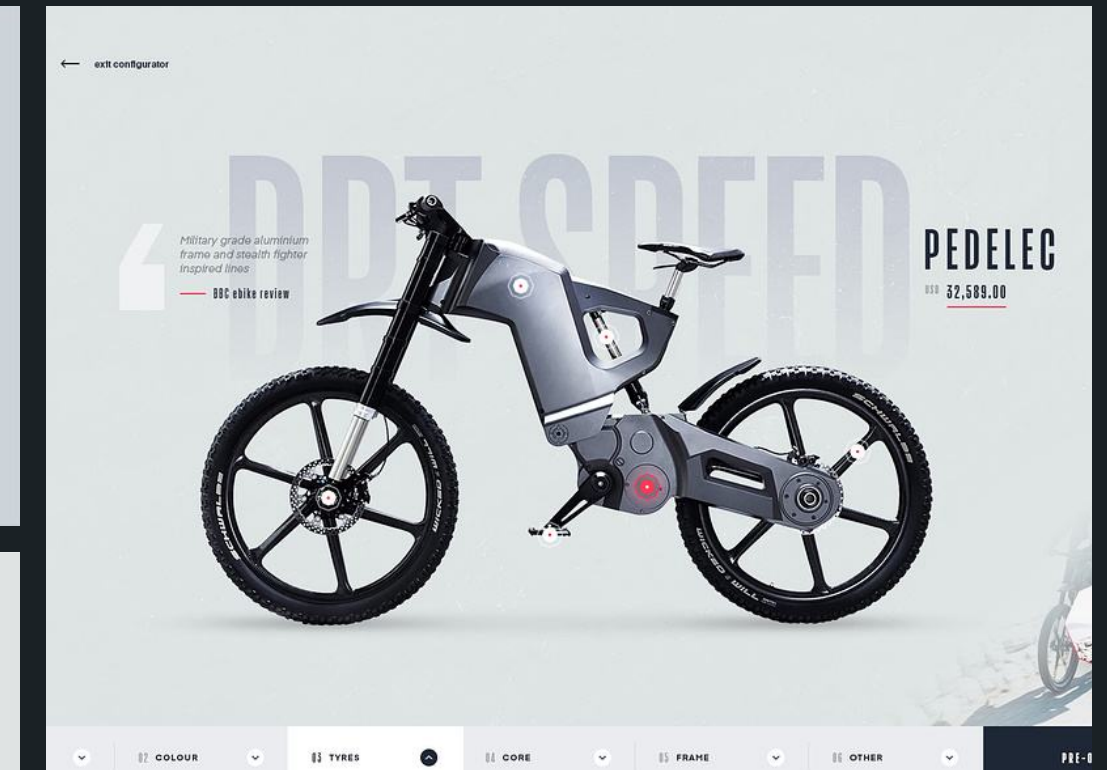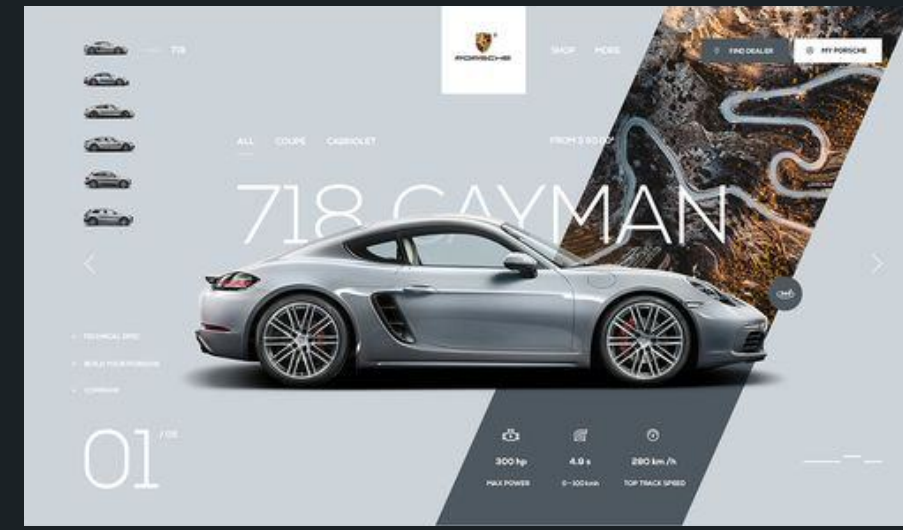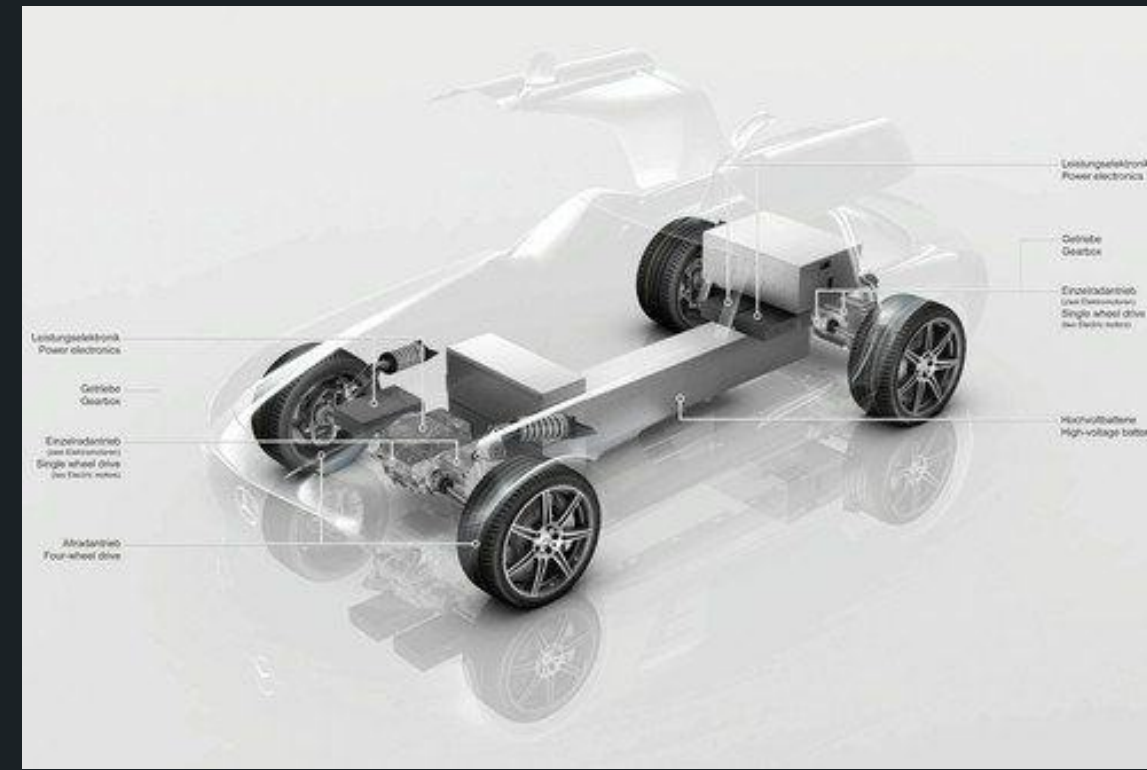
Wireframes 1/2

IDLE SCREEN: plays while not in use; animated to attract attention

VIEW ALL: view more variants at once in chronological format

Wireframes 2/2
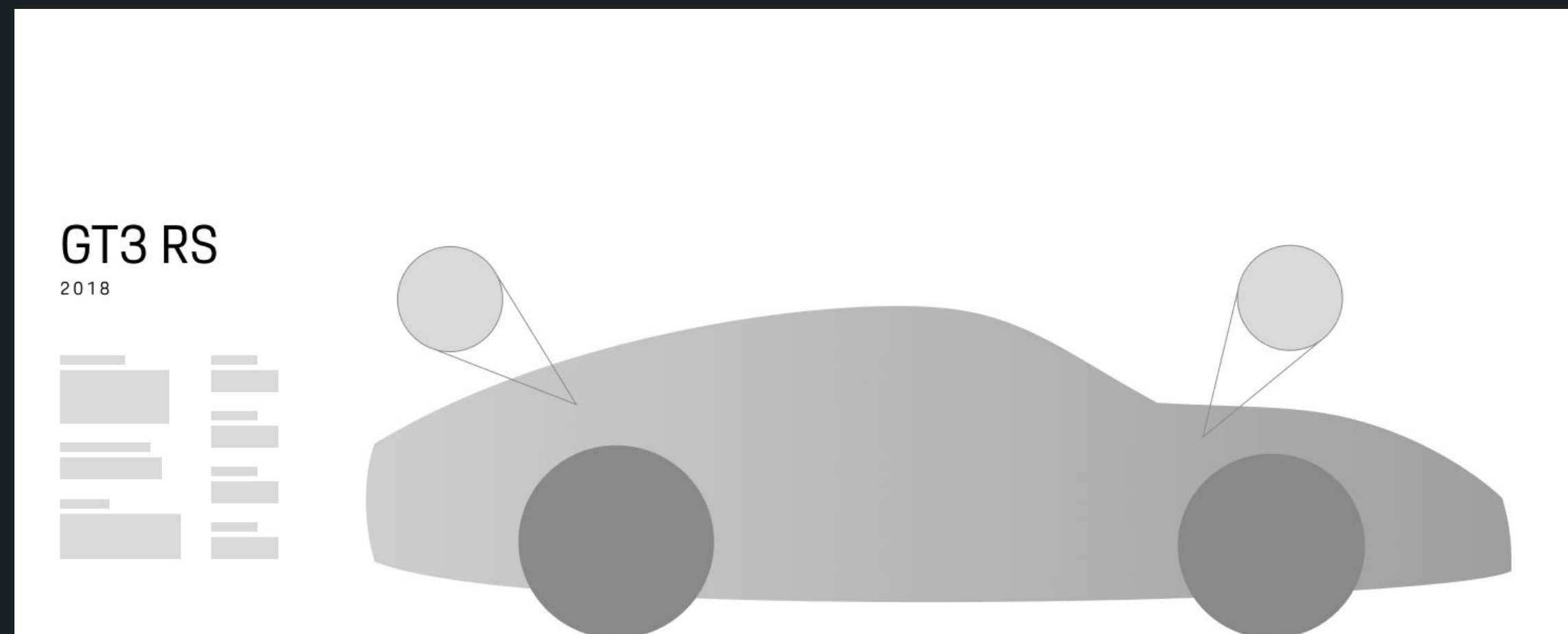
VARIANT SCREEN: shows stats and other information about the variant

INSPECT SCREEN: after clicking on a part, overlay appears (3D modeled)

Visual Composition 1 1/2

- generally very weak but a good start into designing a practical layout

- began implementing timeline feature

- unsure about navigation onboarding

- uninteresting story text layout (very blocky)
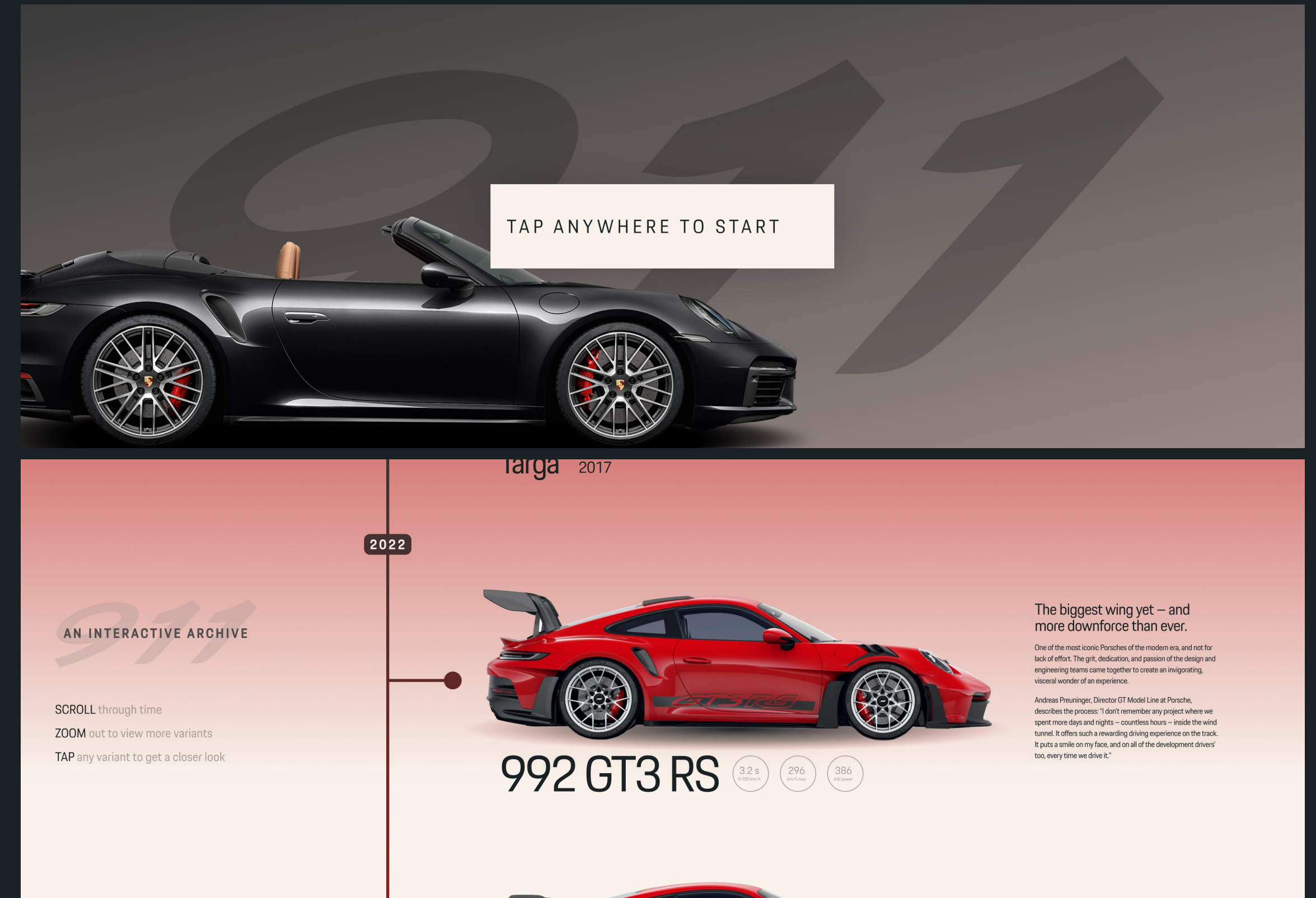
Visual Composition 1 2/2

- minimalist background emphasizes the car itself/creates a center of attention

- began developing mood dichotomy for variant screen and inspect screen through color and value contrast

- still had placeholders for stats

Visual Composition 2

- removed most of the red

- moved timeline and grouping selector to a distinct side menu

- added body copy and statistics on story and variant screens

- implemented first version of 3D model in the inspect screen (it was also at this point where I decide to descope and only use the 3D model on the inspect screen)
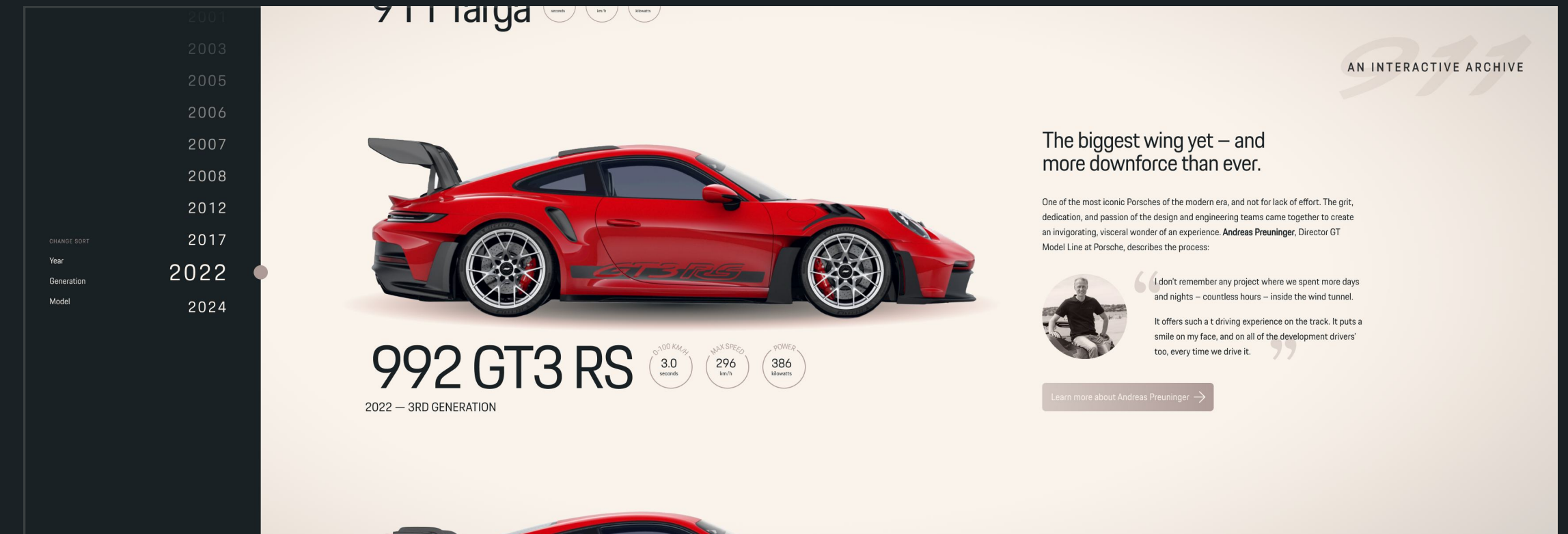
Visual Composition 3 1/2

- more descriptive idle screen

- revamped the menu: grouping selector is hidden by default, but can be accessed by swiping right on the menu

- separated story screen text into distinct sections: "The Car" and "The Body"

- created a secondary story screen
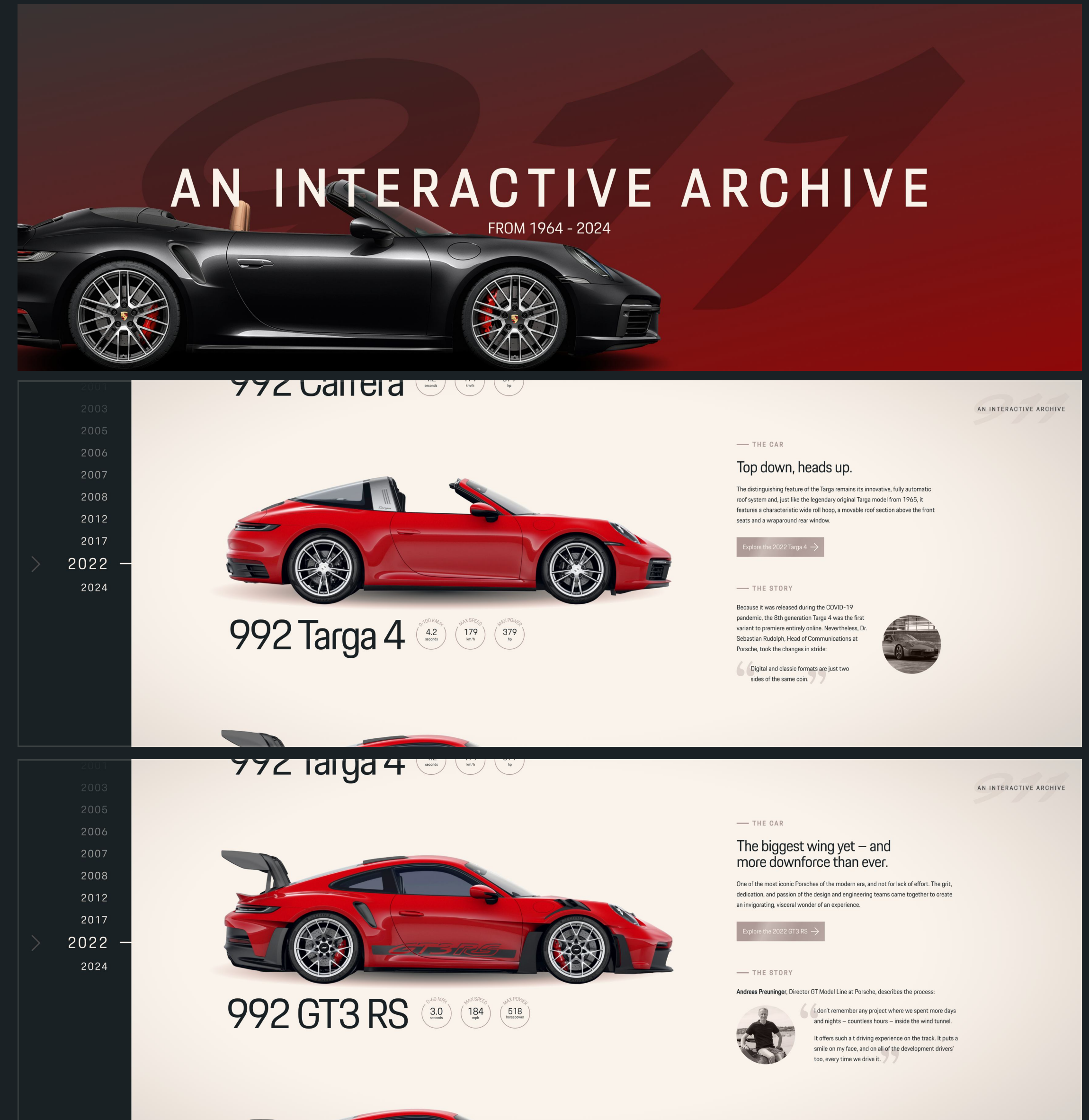
Visual Composition 3 2/2

- revamped menu: opened version

- implemented backwards navigation on variant screen

- implemented more complete 3D model in the inspect screen, added more visual elements for intrigue
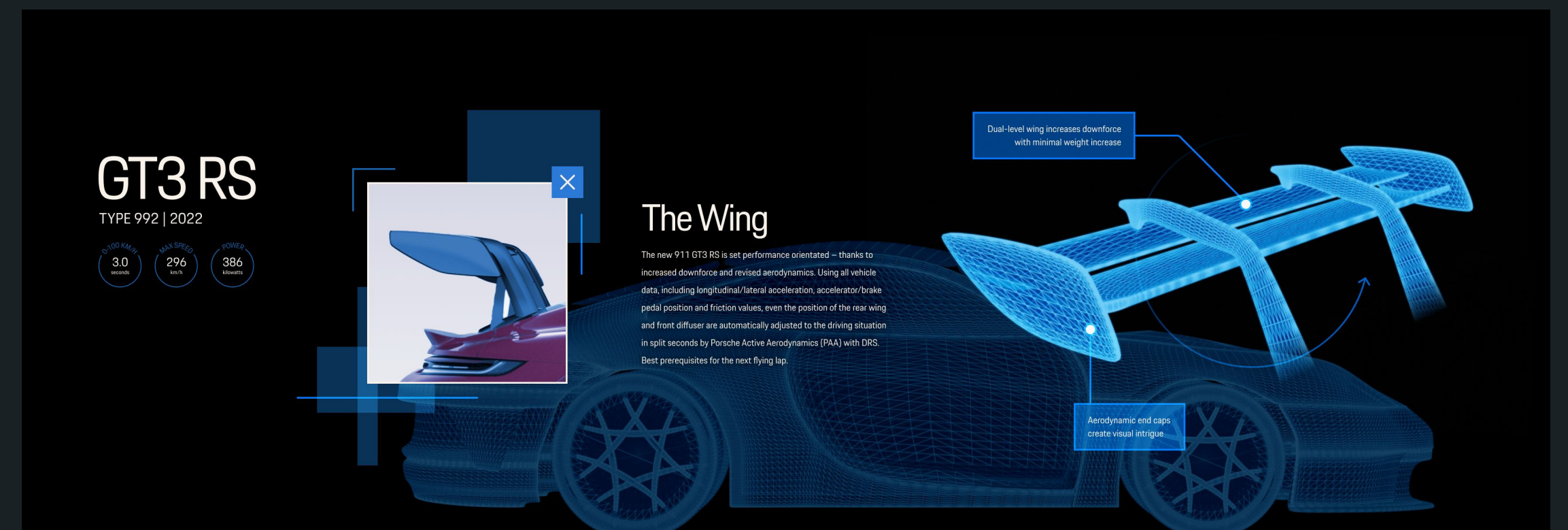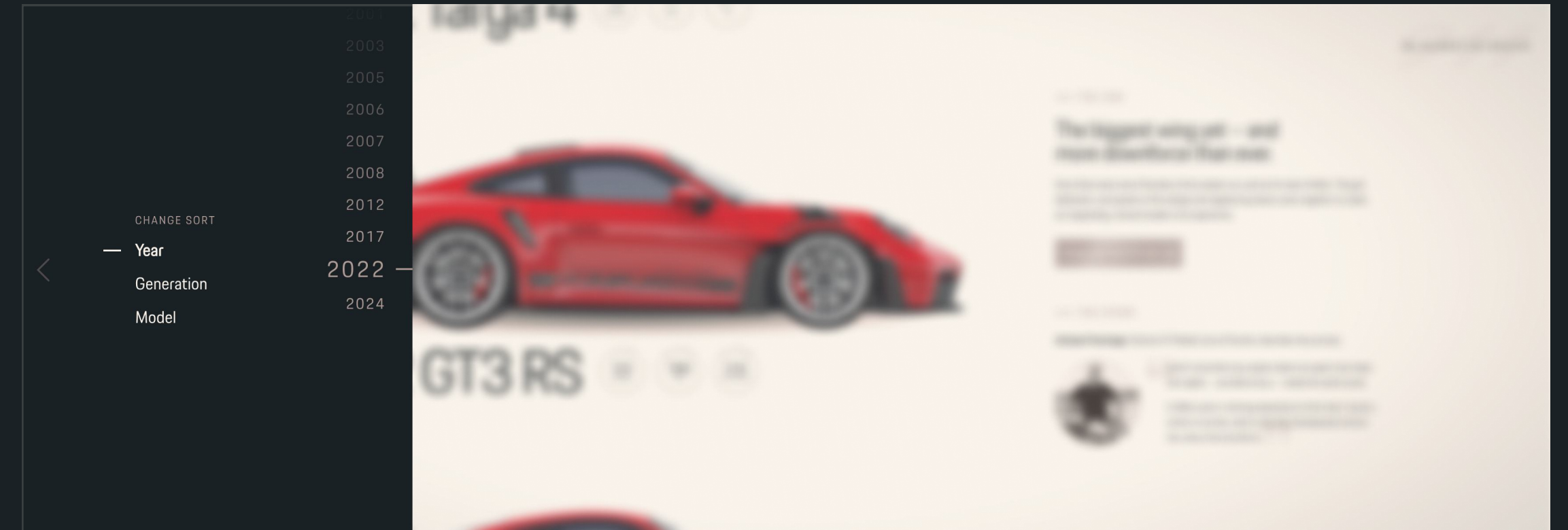
SECTION IV

Final Design

Idle Screen

Story Screen 1

Story Screen 2

Menu

2001
2003
2005
2006
2007
2008
2012
2017
2022 —
2024

CHANGE SORT

— Year
Generation
Model

Variant Screen

Inspect Screen

Animated Prototype

Watch the animated prototype <u>here</u>!

SECTION V

Conclusion

Takeaways

3D modeling is a lot of work.

As such, this was one of my first large projects that, despite the affordable timeline, required heavy descoping. I had intended to 3D model every car that was featured, but the steep learning curve of Blender (a completely new software for me) forced a significant change in plans.

Still, I'm proud of the 3D that I did complete; especially, the material (with a thousand mix shaders) was a feat.

Resources

- all photos, videos, facts, quotes, and font are owned by Porsche

    - photos from Porsche car configurator

    - video 1, video 2, video 3

- 3D model is original (made with Blender)

Thanks for reading!