

California Mobile Driver's License

02 • LENA PANG 2024

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O3 · SECTION 1/4 · LENA PANG 2024

Project Definition

Competitive analysis and UI trend research.

O4 • **PROJECT DEFINITION** • LENA PANG 2024 **The Opportunity**

Many physical cards–credit cards, plane tickets, even vaccine cards–have gone digital, but driver's licenses remain behind. Digital identification cards are a more convenient, portable, and accessible alternative. (And they can't be lost!)

This app unlocks the untapped potential of digital driver's licenses.

05 • **PROJECT DEFINITION** • LENA PANG 2024

Defining Goals

functionality 1

maintain the security and authenticity of physical IDs, while keeping the app intuitive and easy to use

2

personality

create a beautiful and memorable experience that is representative of California

06 · PROJECT DEFINITION · LENA PANG 2024 Scope

This project is intended for mobile, as the most versatile and transportable form of technology in our current era is our phones.

Additionally, the application is currently only intended to serve as:

- **1. Age Verification** for efficiency in confirming age when participating in activities like purchasing alcohol
- **2. Full License** for replacing the full physical license (including all identifying information like characteristics, license number, restrictions, and a scannable barcode)

Potential future extensions could include integration of other types of licenses (like boating licenses, permits, et cetera) or broader forms of identification such as passports.

or · section 2/4 · lena pang 2024

Competitive analysis and UI trend research.

O8 · **RESEARCH** · LENA PANG 2024

Competitive Analysis

09 · RESEARCH: COMPETITIVE ANALYSIS · LENA PANG 2024

California (Physical) Driver's License

The California driver's license, like those of many other states, is a typographic disaster. The layout is cluttered, jam-packed with extremely dense information.

There are, however, notable features in terms of security: there is a variety of watermarks and iconography that makes the physical card difficult to replicate, and thereby guarantees security as form of identity verification.



Image from the California DMV

10 · RESEARCH: COMPETITIVE ANALYSIS · LENA PANG 2024

California DMV Wallet (Pilot)

A current alternative to the physical card is the pilot MDL app, but it's not the best. (Design aside, it can only be used at two airports in California; not at bars, not with police.)

Most of the effort was put into the illustrations. They're certainly fun, but they're very generic corporate illustrations. They fail to capture the personality and character of California.

Everything else is lacking: readability is hard given dense line height and inconsistent indentation; the main page feels bland and empty; the overall presentation is boring.

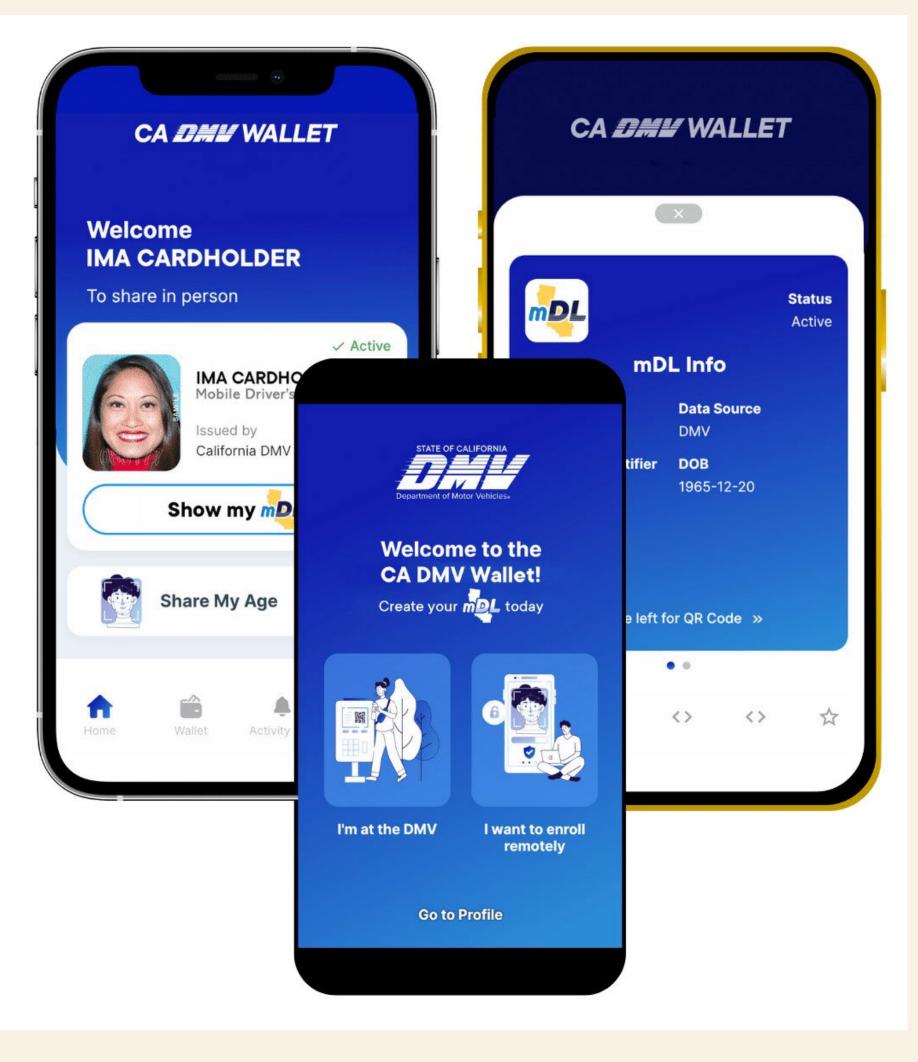


Image from the California DMV

11 · RESEARCH: COMPETITIVE ANALYSIS · LENA PANG 2024

Other State Mobile IDs

Many states with a digital driver's license have opted to simply recreate the physical card in the digital space.

This fails to utilize the benefits of digital identification. Designing in a different environment comes with new opportunities for accessibility and flexibility, so the content should aptly reflect that.

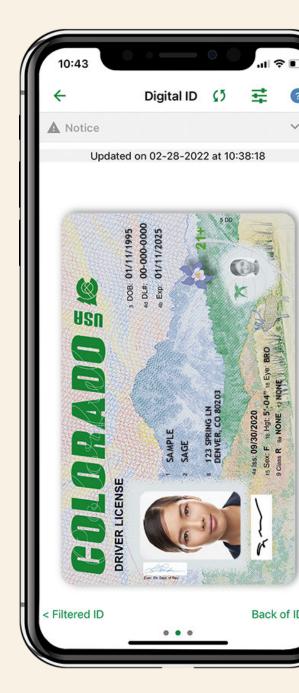


Image from mycolorado.gov

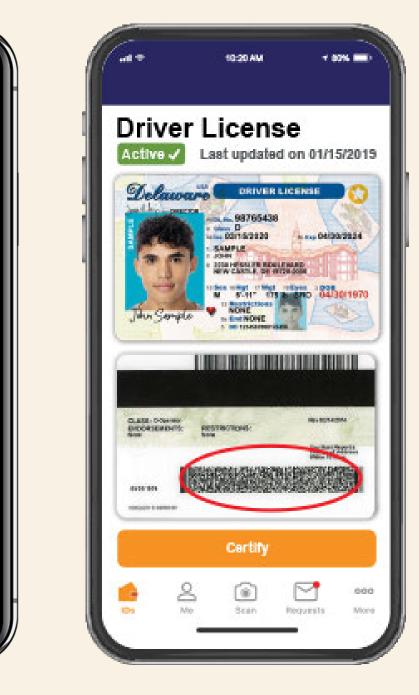


Image from dmv.de.gov



Image from lawallet.com



Image from iowadot.gov



12 · RESEARCH: COMPETITIVE ANALYSIS · LENA PANG 2024 Developer ID's

Apple, Google, and Samsung have all begun implementing state identification cards into their native wallet apps.

They take a more creative approach to emphasize the state, using the cards more for tap-verification than for displaying information (opting to just contain the state name, user name, and a state seal).

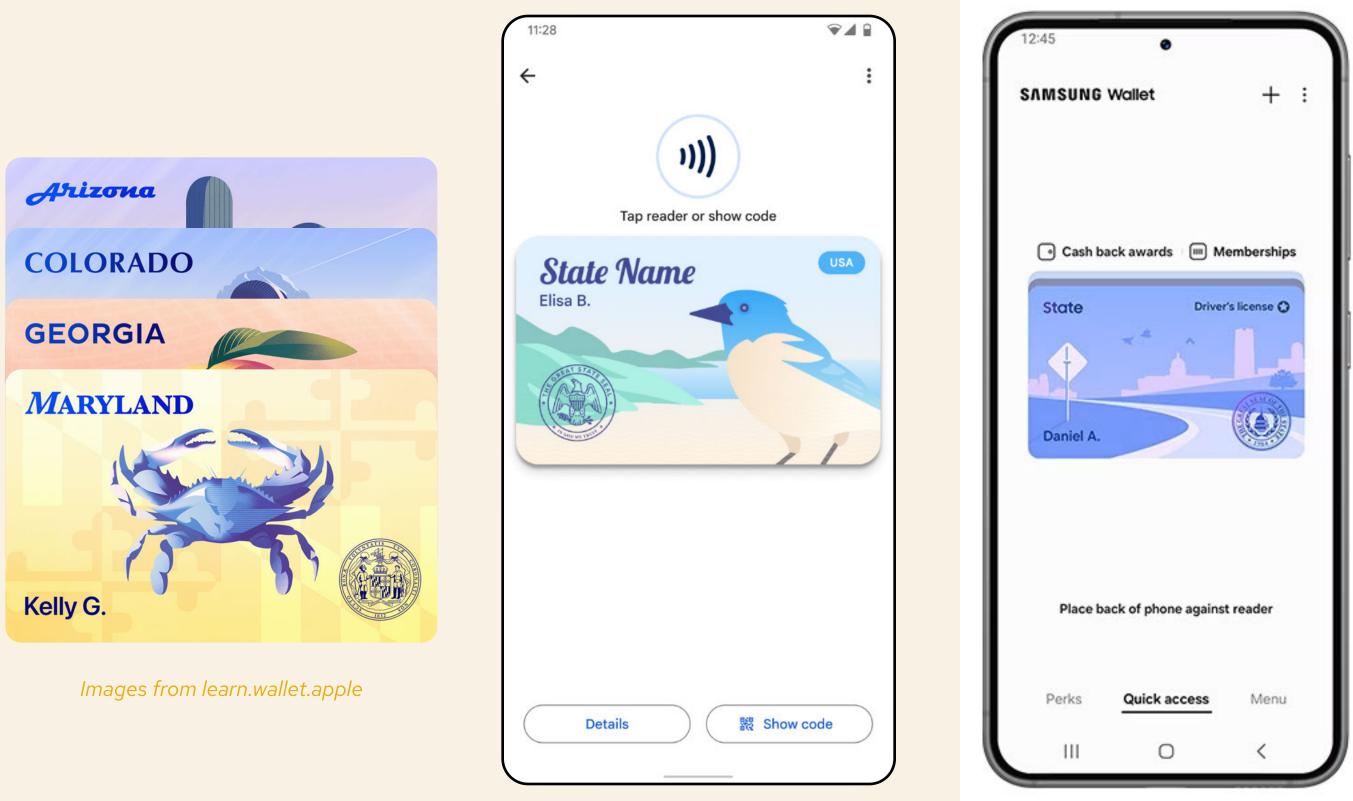


Image from wallet.google

Image from samsung.com

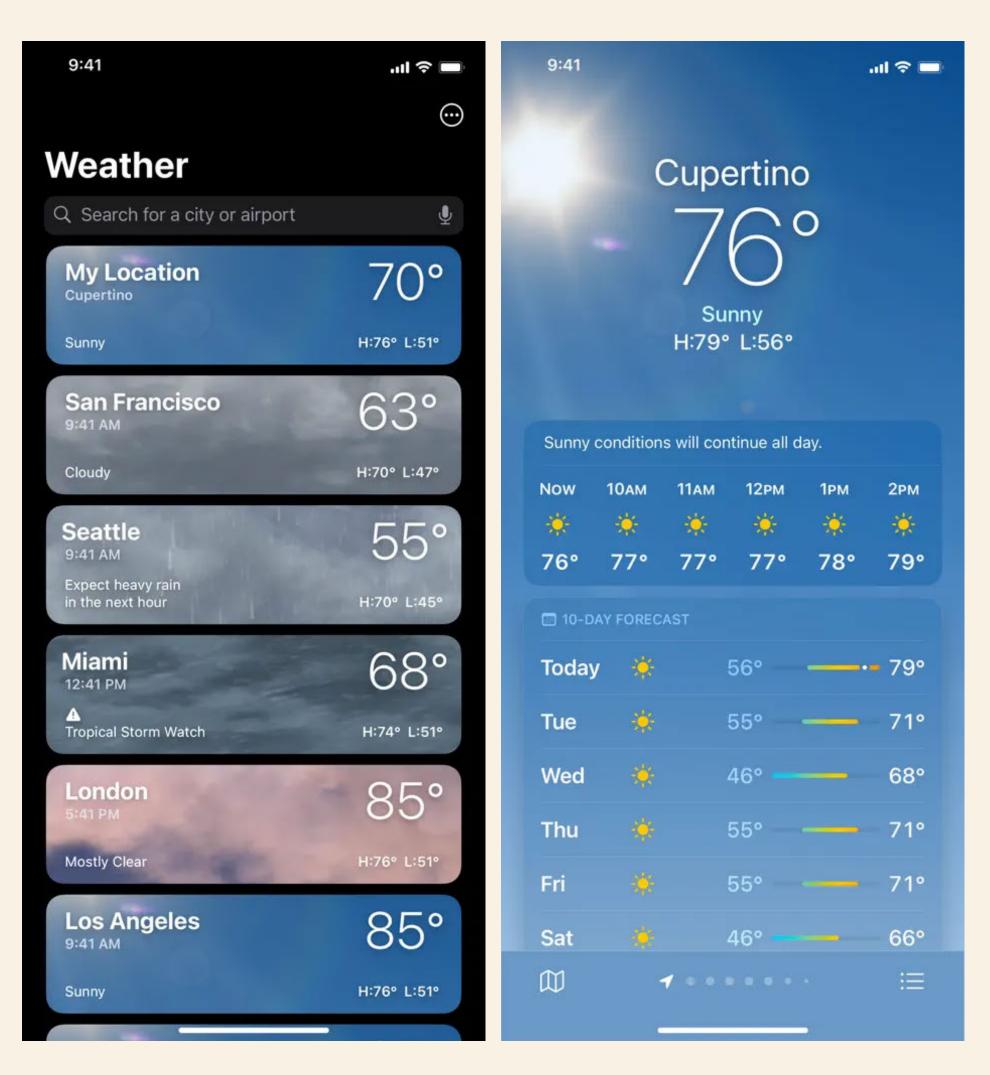
13 · RESEARCH · LENA PANG 2024

Design Trends

14 · RESEARCH: DESIGN TRENDS · LENA PANG 2024 Cards: Swipe, Scroll, List

Apple's weather app exemplifies this perfectly: with a dozen different locations, you can swipe between detailed views, or you can get a overview of all the cards at once.

This is an effective way to organize and condense information for a variety of distinct subjects. (But not so great when you have a small number of subjects, which I will soon discover in my second design iteration.)



Images from the Apple App Store

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Powerful Profiles

While many of these examples are not necessarily profiles, they all share two common features: a portrait, and a label (which can easily be a name).

Creating a dynamic profile begins with a simple composition with strong contrast and natural flow. This was essential in approaching how to design a visually intriguing Age Verification page.

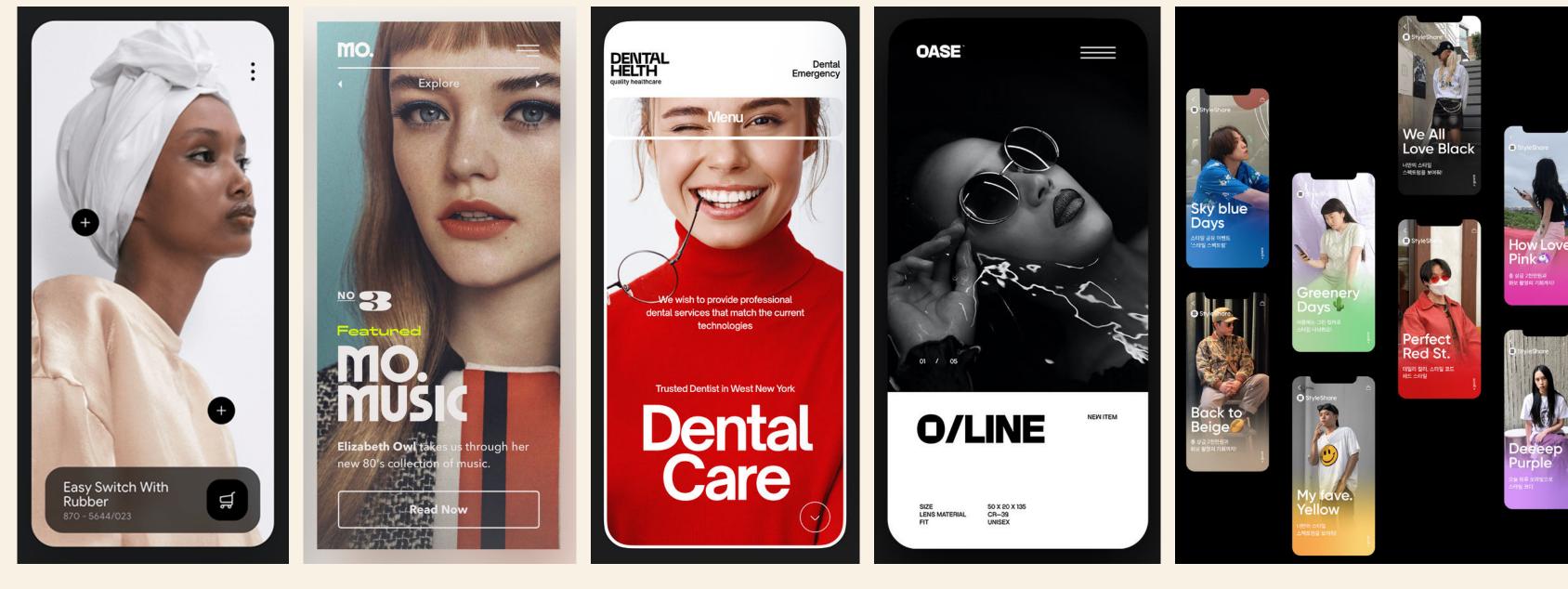


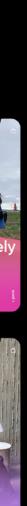
Image from Yuliia *Mei (Behance)*

Image from Johan Adam Horn (Dribbble)

Image from Bogdan Nikitin (Dribbble)

Image from Jurica *Koletic (Dribbble)*

Image from Behance



16 · RESEARCH: DESIGN TRENDS · LENA PANG 2024 Details

Displaying a detailed profile can be hard to manage: balancing the photo, name, and individual details.

Many designers, in these examples and more, draw attention first to the photo, then use size, weight, and color hierarchy to guide the eye through the rest of the information.



Find your pefect match

Adipisicing elit sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.

Image from Rajesh Rajput (Behance)

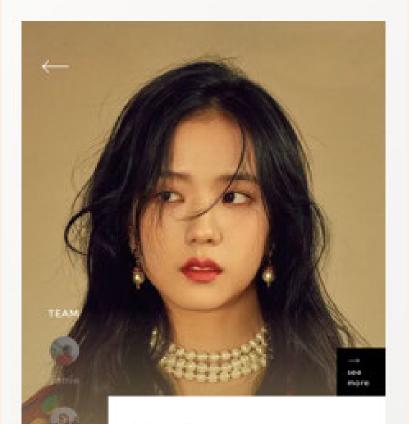
Concept Jewellery Helena Stathom

Hannah Baker



Baavri

Eiusmod tempor incididuntut laboreaeet dolore magna aliqua. Bjpenim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip exea commodo conseguat. Duis aute irurewer in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum. Sed ut tempor nostrud commode perspiciatis.



Kim Ji-Soo Seoul, Korea

1995.1

A

Singer

MUSIC TYPE

K-pop, Dance pop, Hip-hop

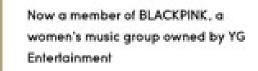
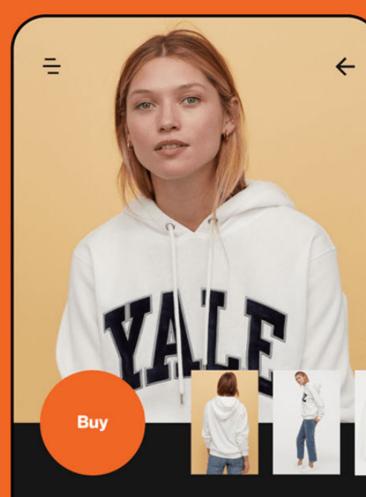


Image from Yisuriyo (Dribbble)



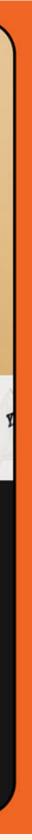
Hoodies & Sweatshirts

Graphic Hoodie 🛷 \$24.99

Long-sleeved sweatshirt with a design at front, drawstring hood, and ribbing at cuffs and hem. Soft, brushed inside.

Choose your size	~ (

Image from Alexander Starinsky (Behance)



17 · SECTION 3/4 · LENA PANG 2024

Development

Sketches, wireframes, and iterations.

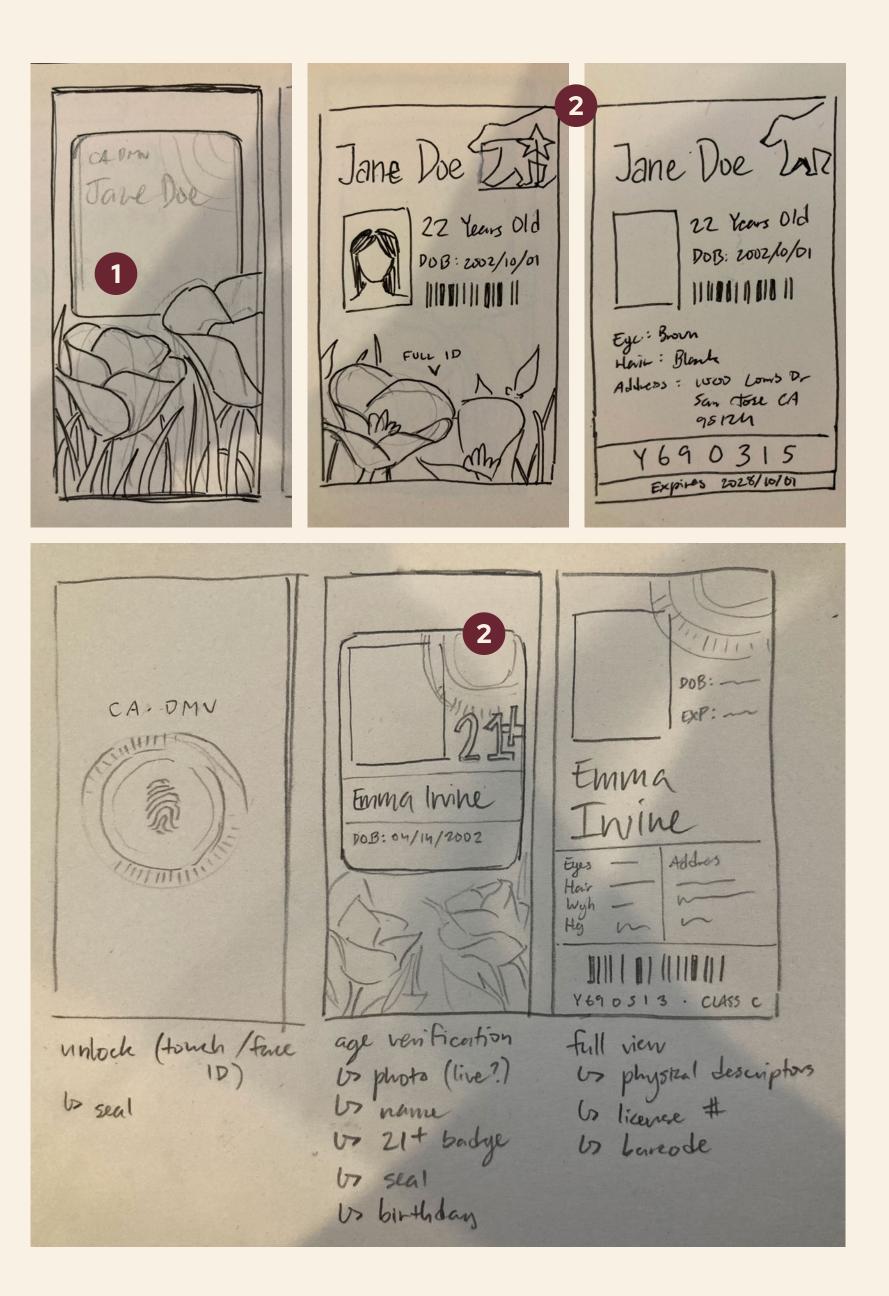


Sketches: Exploring Movement

One of the recurring challenges throughout this project was considering navigational elements and transitional movement between different pages.

In my sketches, I explored various methods of information transition: expanding cards, scroll reveals, dropdowns, and collapsing tabs.

- 1 experimenting with illustration and card integration
- 2 a card-less navigation system that used hid the detailed information behind flowers
- 3 a card-based navigation system that zooms in and expands into the detailed, full-screen view

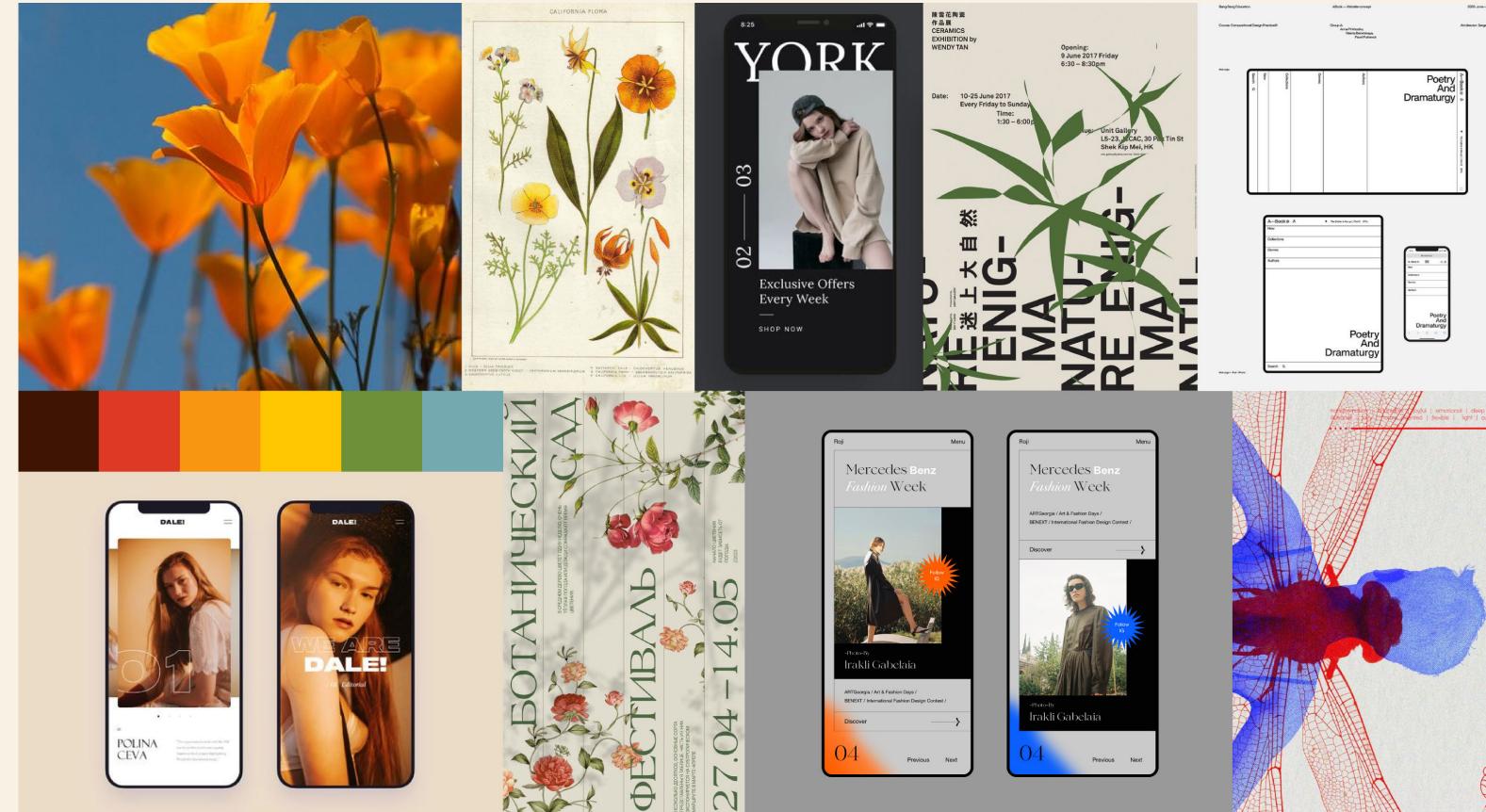


Inspiration Board A

Peaceful Poppies

Inspired by the state flower, a stylized, floral design offers more personality and a friendly touch—true to the California spirit—while the content and user interface remains practical, functional, and secure.

keywords: muted, floral, illustrative, calming



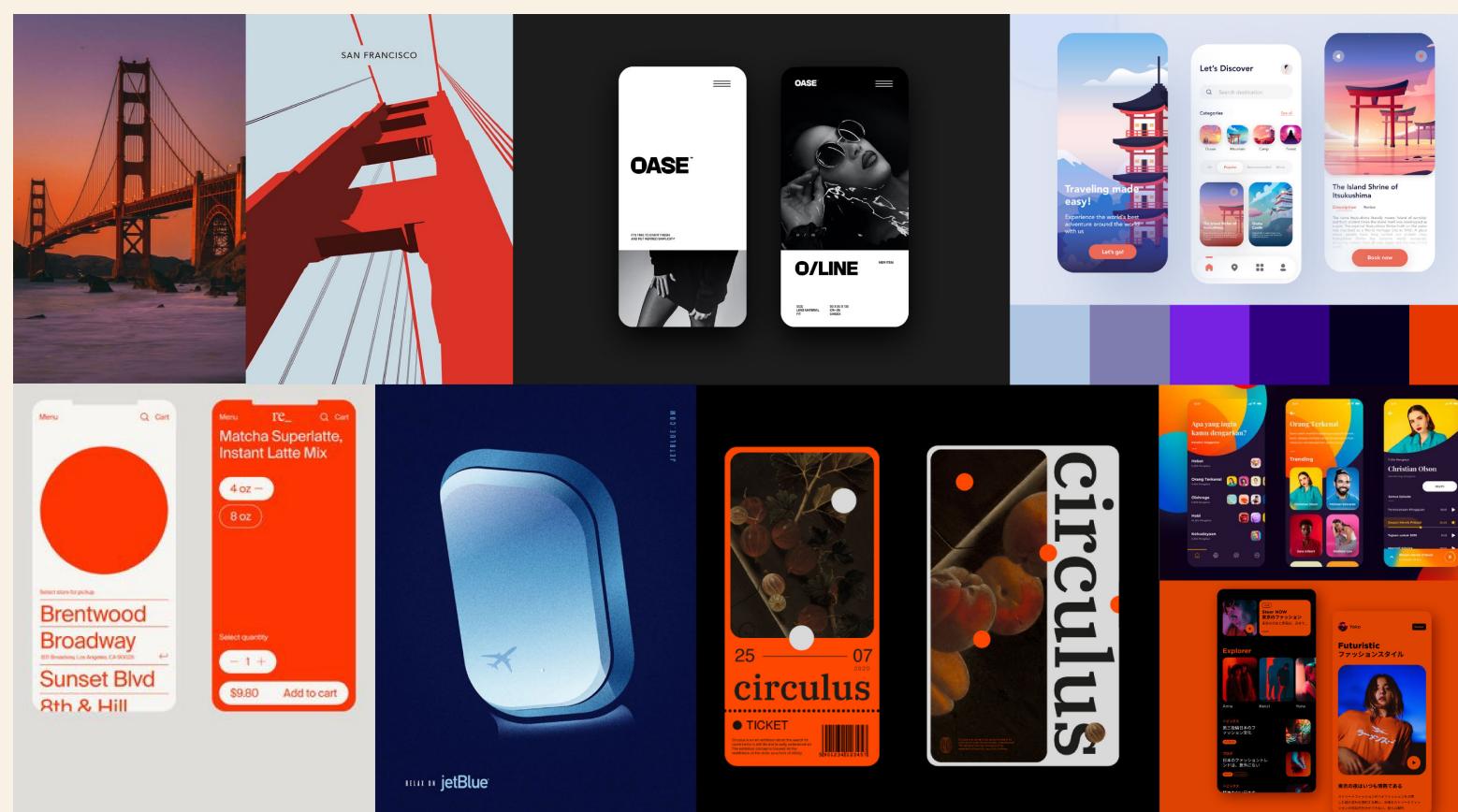


Inspiration Board B

City Nights

Dark, crisp graphics with vibrant accents represent the liveliness of city, echoing the app's purpose of identity verification via the night-life color palette.

keywords: modern, night life, vibrant, moody







21 · DEVELOPMENT · LENA PANG 2024 Wireframes 1

My first round of wireframes utilized expanding and contracting cards and dropdowns on one main screen; keep the user on one page and they can't get lost, right?

- having already logged in, the main screens upon launch: age verification, which expands to full view, which can expand to barcode scan view
- the onboarding process, which includes scanning your ID (2) and checking identification against a real-time selfie



As stated previously, this design project is all about movement. Naturally, I quickly created an interactive mockup of my first round of wireframes to test whether the transitions and flow would be up to par.

While the movement was smooth and natural, this design combined too many features into one, so many subsections got lost or buried within other sections.

In terms of aesthetics, this iteration took direction from Inspiration Board A (Peaceful Poppies).

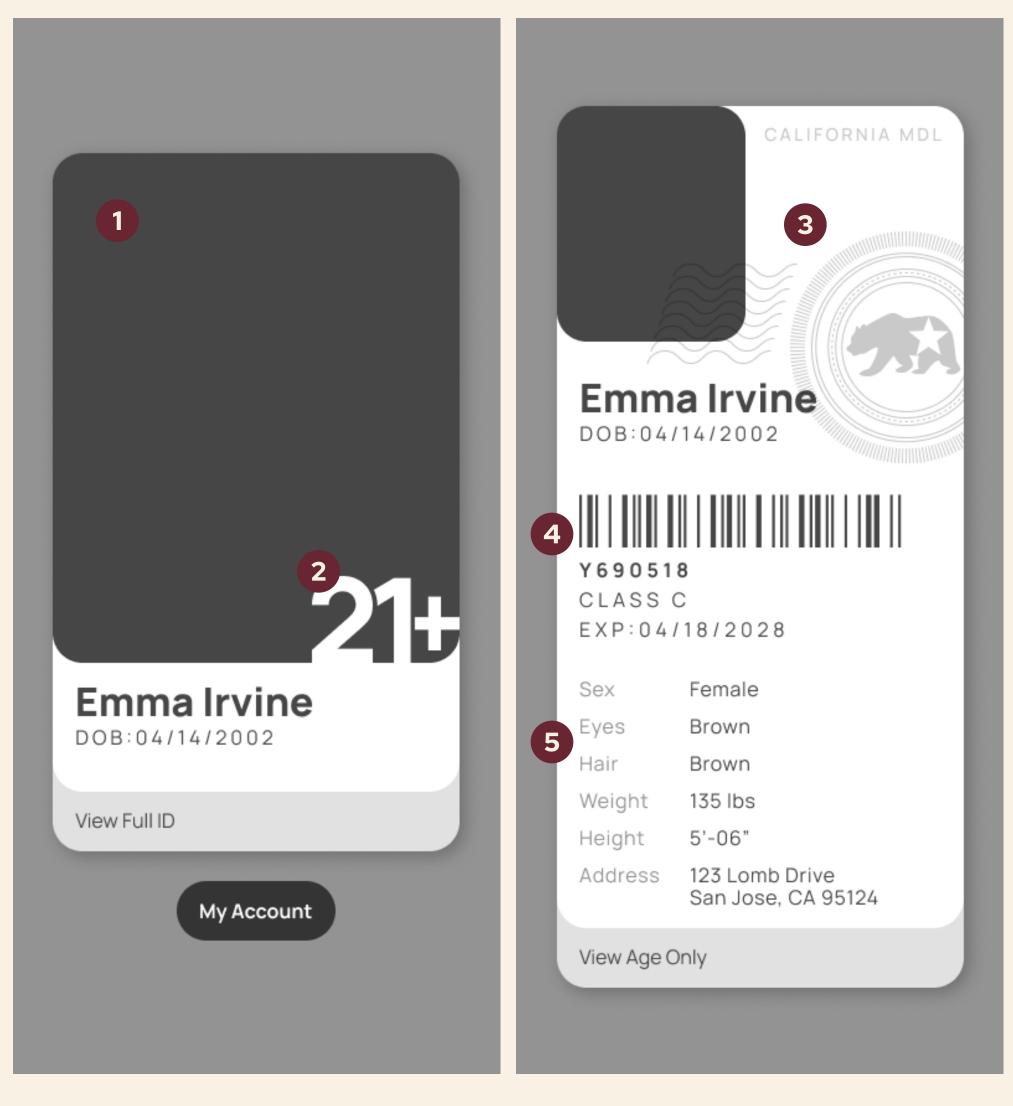




23 · DEVELOPMENT · LENA PANG 2024 Wireframes 2

The second iteration of wireframes was more simple, but still used an expanding card to get from age view to full view. It was easier to navigate, but lacked a little in personality and strikingness.

- 1 a picture of the user (shrinks upon switching to full license view
- 2 a 21+ badge appears for users who are of age (for quick verification purposes)
- 3 various seals and overlays help to guarantee authenticity
- 4 driver's license barcode and information
- **5** user identification information



Age Verification

Full License

24 · DEVELOPMENT · LENA PANG 2024 **Iteration 2**

Iteration 2 helped me define the visual direction I wanted by taking Wireframes 2 and implementing the respective styles from Inspiration Board A and Inspiration Board B.

I determined that Direction A felt much more personal and warm, whereas Direction B was still strong but felt less like California.



Inspiration Board A





Emma Irvine DOB: 04/14/2002

View Full ID



Emma Irvine

DOB: 04/14/2002

• DONOR

Sex	Female
Eyes	Brown
Hair	Brown
Weight	135 lbs
Height	5'-06"
Address	123 Lomb Drive San Jose CA 95124



Class C

Restrictions: None

View Age ID

R

Inspiration Board B

R



25 · DEVELOPMENT · LENA PANG 2024 **Iteration 3**

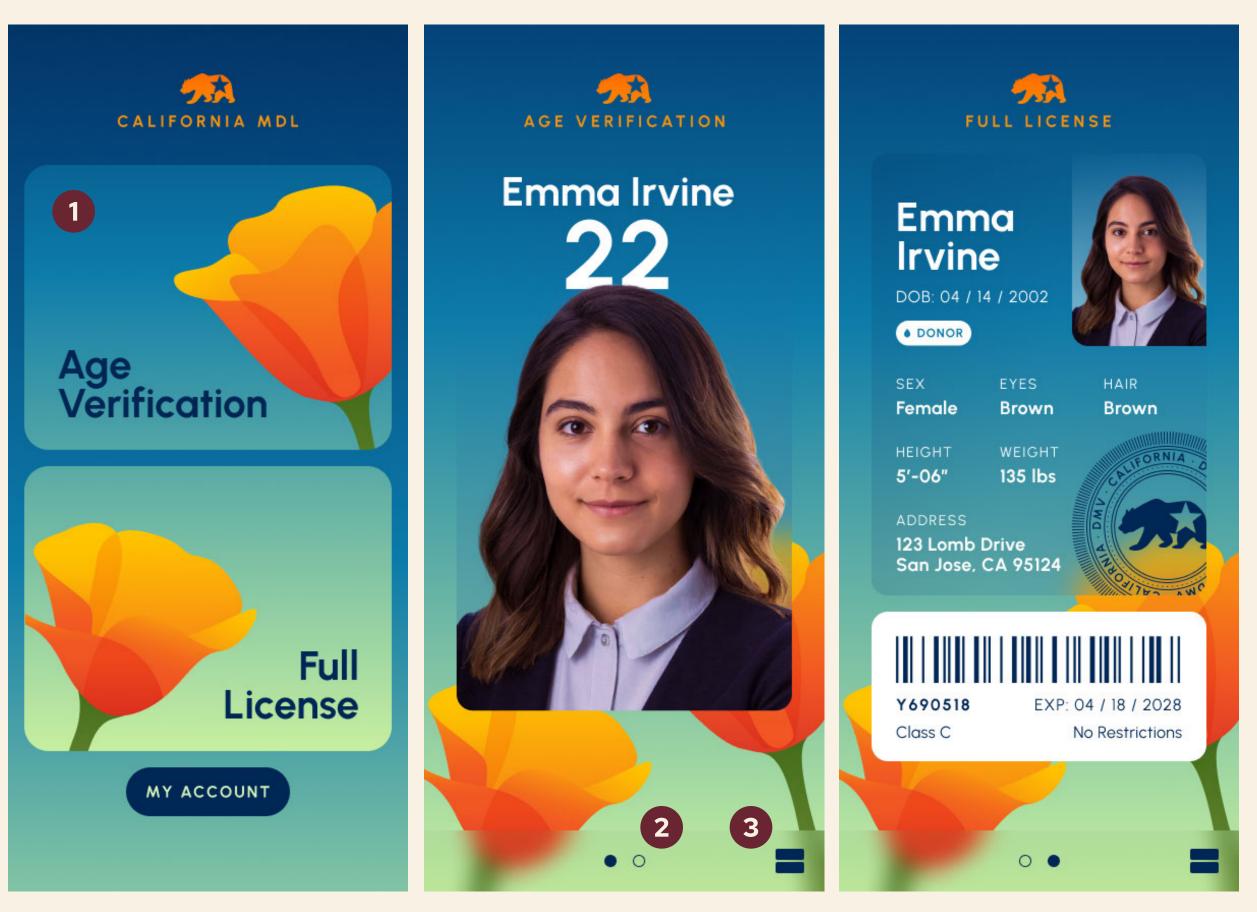
This third round of designs consolidated the illustrative aspects of Iteration 2A with the rich colors and minimalism of Iteration 2B.

I also experimented with card-based navigation, implementing a view to swipe between cards and a view with all cards at once. While useful for apps with many pages, it was a bit overwhelming and excessive for an app with only two main features.

- cards expand into individual screens
- option to swipe between screens 2
- return to all-card view (3)



CALIFORNIA MDL



Launch ScreenAge VerificationFull License

26 · DEVELOPMENT · LENA PANG 2024 **Iteration 4**

My fourth iteration played with expanding and contracting cards, staying on one page to keep the user centered and comfortable. This version also contained an independent card for the QR scan, which was useful as it could be accessed at all times from all other screens.

The execution of glassmorphist cards (in both "light" and "dark" mode) was not as effective as expected, leading to a crowded and overly busy appearance. As such, this design style was ultimately scrapped.



Light Version

California Mobile Driver's License

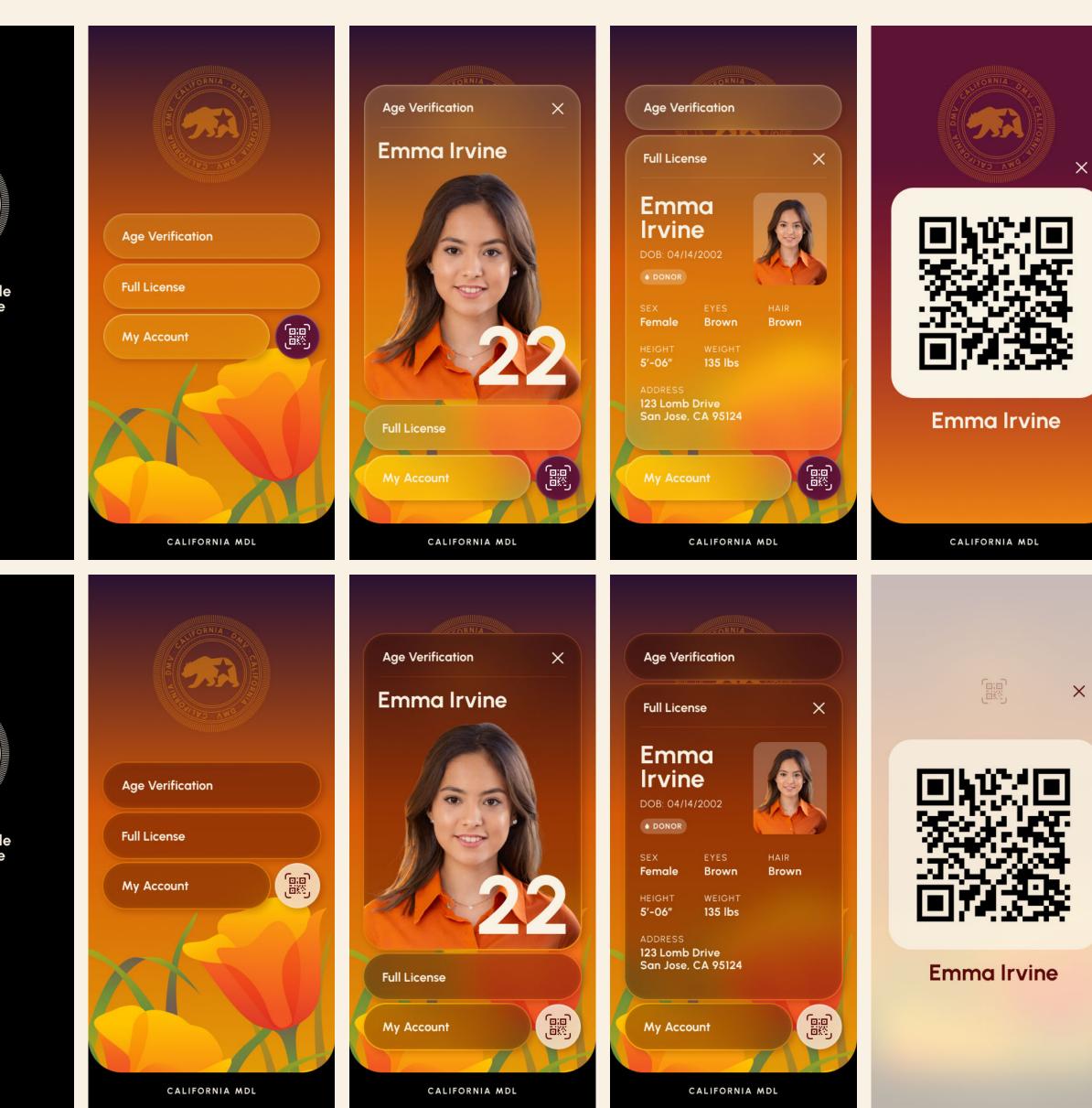
FACE ID UNLOCK

Dark Version



California Mobile Driver's License

FACE ID UNLOCK





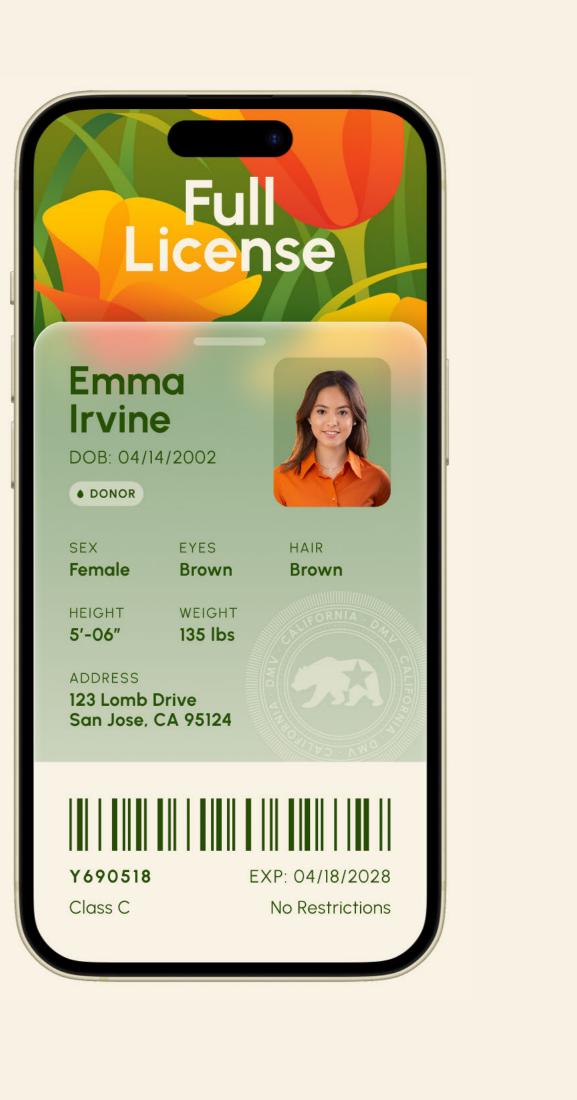
27 · SECTION 4/4 · LENA PANG 2024 Find Design

Final frames, style guide, animated prototype, and designer reflection.









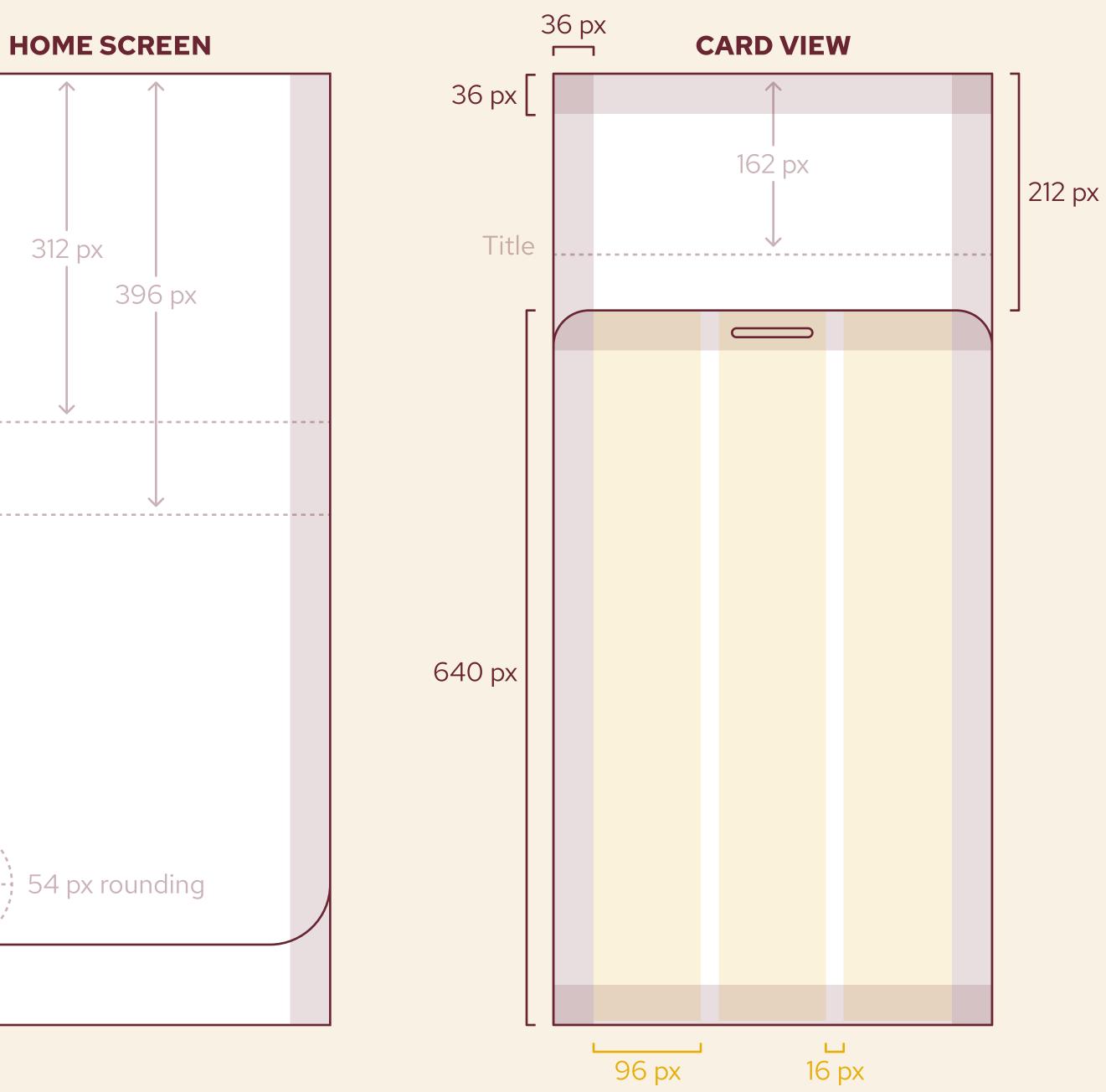
The Grid

Intended for mobile; created as a 393x852 pixel prototype.

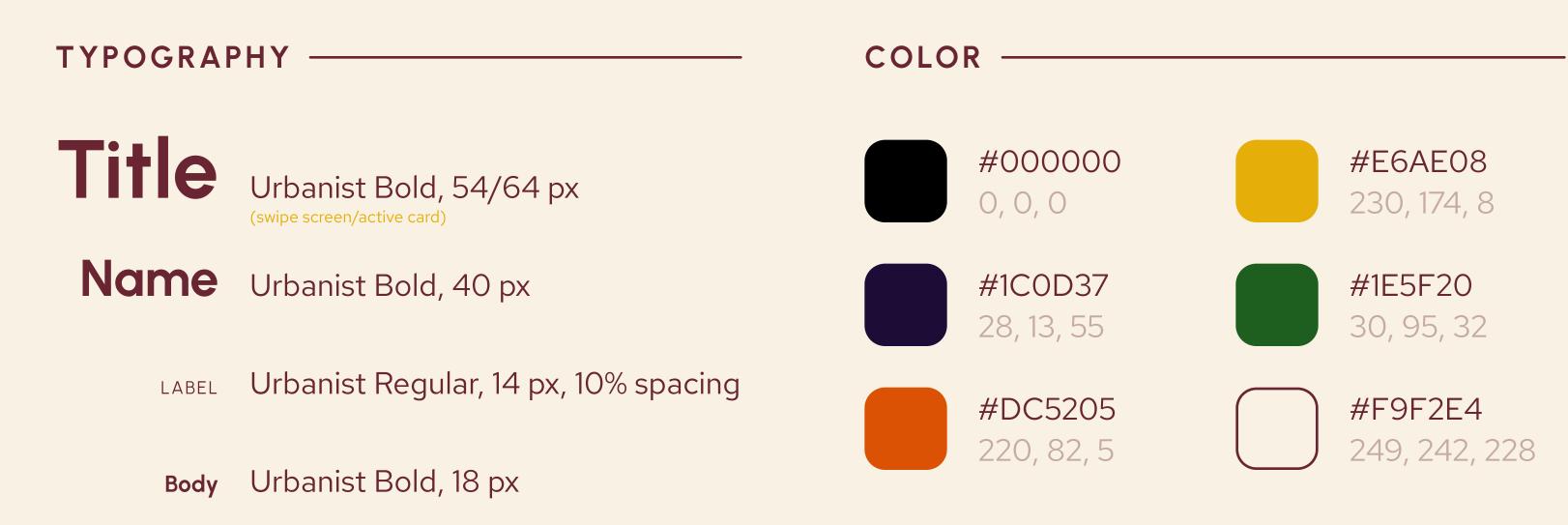
base: 4 px

- padding: 36 px
- column width: 96 px
- column gutter: 16 px
- row gutter (between sections): 36 px

	31	2
Title	 	-
Subtitle		
72 px	52 	1



Style Guide



BRANDING Urbanist Bold, 16 px, 16% spacing

ASSETS -





The launch screen is minimalist, displaying information about the app and instructions for Face ID (or Touch ID, depending on the device hardware) unlock.

If Face ID fails, the user is sent to a password-based login screen.



32 · FINAL DESIGN · LENA PANG 2024 Age Verification

The swipe screen contains the page title and paginated navigation along with written directions to show the user where they can go. The bar at the bottom of the swipe screen serves as branding, as style cohesion element, and account access.

The age verification card shows only name, age, and profile picture, along with the app seal.

Age Verification

Swipe Up to View

Age Verification

Emma Irvine

CALIFORNIA MDL



33 · FINAL DESIGN · LENA PANG 2024 **Full License**

The full license swipe screen uses a different color palette from the age verification swipe screen, helping the user to differentiate where they are in the app.

The full license card shows everything a physical license shows, including the user's identifying characteristics, donor status, and the license barcode.



Full License \circ

Swipe Up to View

CALIFORNIA MDL

 \bigcirc

Fu License

Emma Irvine

DOB: 04/14/2002

• DONOR

SEX

EYES Female Brown

HEIGHT 5'-06"

WEIGHT 135 lbs

ADDRESS 123 Lomb Drive San Jose, CA 95124



HAIR Brown

Y690518

EXP: 04/18/2028

Class C

No Restrictions

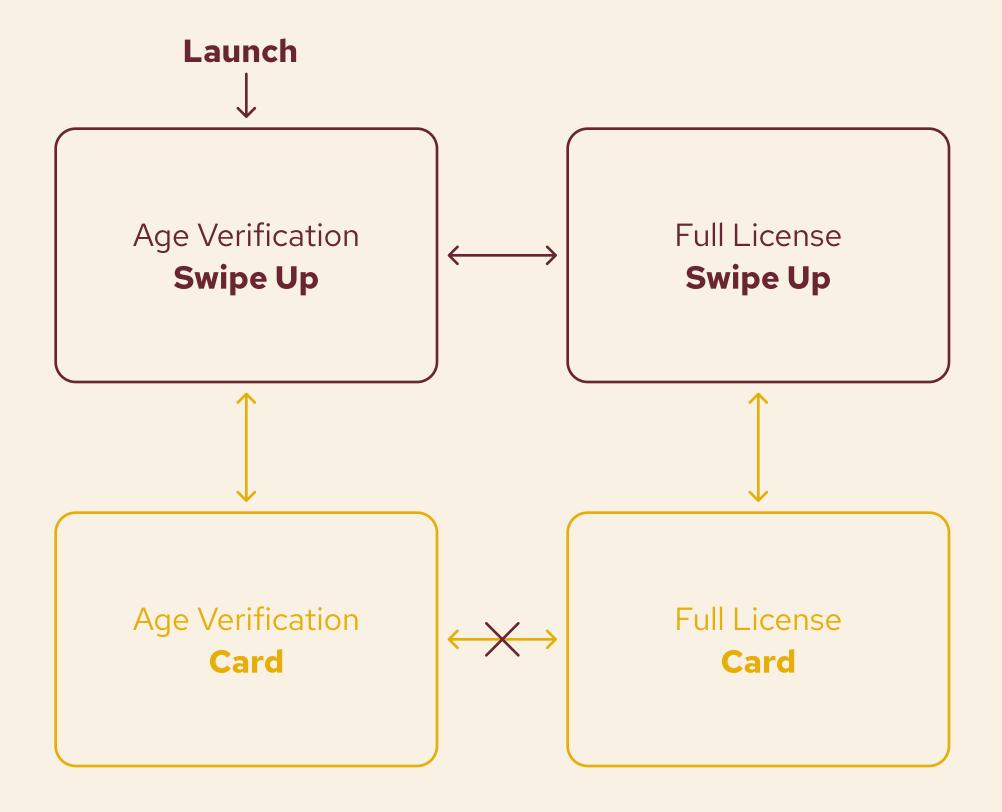
34 · FINAL DESIGN · LENA PANG 2024 Navigation & Privacy

The navigation is not traditional—but that's for a reason.

Upon launch, the app uses face or touch identification technology to verify access. If that fails, the app turns to a user-set password unlock.

Then, the user is met with the Age Verification swipe screen, upon which they must swipe up for any personal information to appear. Same goes for the Full License swipe page.

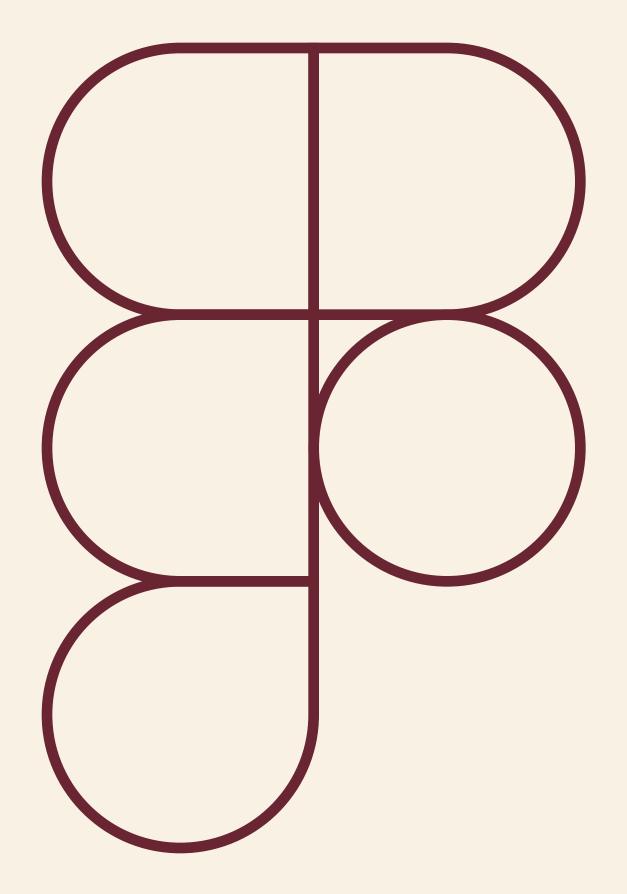
This secondary action helps guarantee that, upon first access, the user will not show any private information they do not wish to show. It also removes any chance of accidentally switching from Age Verification to Full License.



35 · FINAL DESIGN · LENA PANG 2024 The Prototype

Experience the Figma prototype yourself!

Or watch the animated recording <u>on Vimeo</u>.



36 · FINAL DESIGN · LENA PANG 2024 Designer Reflection

I learned how important it is to not only learn from others' designs, but to truly examine why their designs work accordingly to their content. Along the same lines, it's important to recognize that what works for someone else's content might not work for your own, regardless of how effective and lovely the original implementation may be. Learn from others, but don't forget to take everything with a grain of salt.

Along those lines, it is also essential to experiment with a variety of flows and interaction styles so that you, as a designer, can determine whether or not certain design structures work effectively in your specific context.

All in all-analyze what others do, experiment, and adapt. Just keep in mind that your project is exactly that: *yours*. What works for your will not always be what works for others, so keep iterating until you get there.

37 · FINAL DESIGN · LENA PANG 2024 Special Thanks

Special thanks to my fellow Elements III classmates and my professor, Hye-Jin Nae, without whom I would never have pushed myself and this design to its fullest potential.



Adobe Firefly for portraits.

39 • **THE END** • LENA PANG 2024 Thanks for reading!

California Mobile Driver's License Elements III, Spring 2024