

PORTFOLIO PRESENTATION
HOWIE WANG
MAR. 2022



I. PROJECTS

NMAAHC Museum App *DESIGN

Snap App *DEVELOPMENT

Animated conversation feature *DESIGN X DEVELOPMENT

II. FEEDBACK

Q&A • Discussion

DESIGN

PURPOSEFUL · INCLUSIVE · INNOVATIVE



CONTEXT

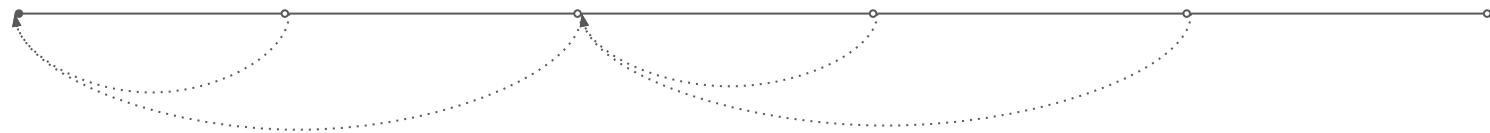
PERSONAS

USER FLOW

WIREFRAMES

PROTOTYPING

DELIVERY



CONTEXT

ENHANCE visitors' museum experience

Meet existing app's prospects

A **COMPLEMENT** to onsite experience

DISCOVER stories found in collections

An **INTEGRATION** of multiple features

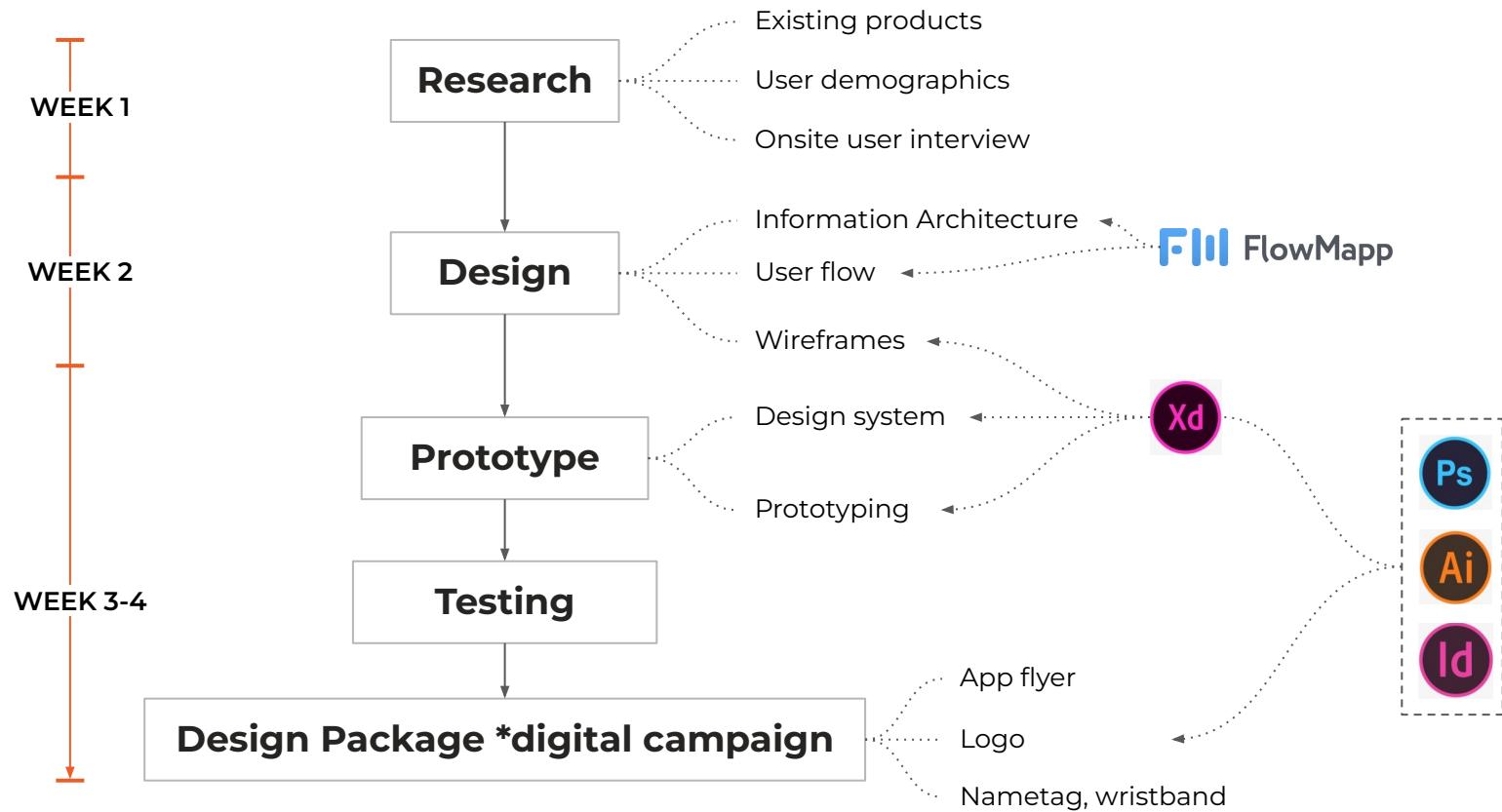
Reflect the museum vision

Explore history through **INTERACTIVE** exhibitions

See Americans' stories through the **GLOBE LENS**

SHARE American values - resiliency, spirituality

ENGAGE new audiences outside DC.



UNDERSTANDING EXISTING PRODUCTS

PORTFOLIO PRESENTATION
MUSEUM APP - CONTEXT



Existing App

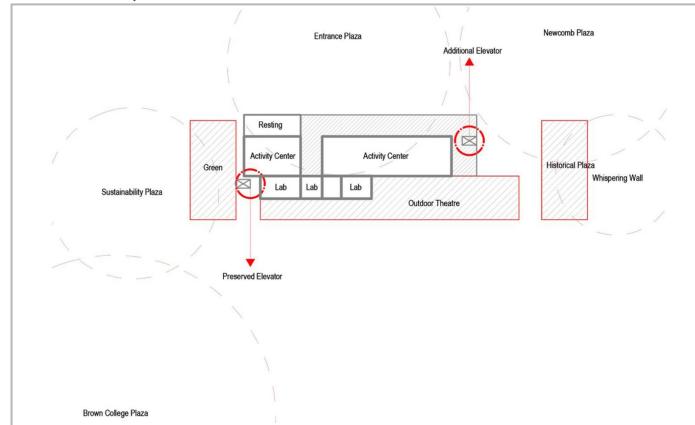
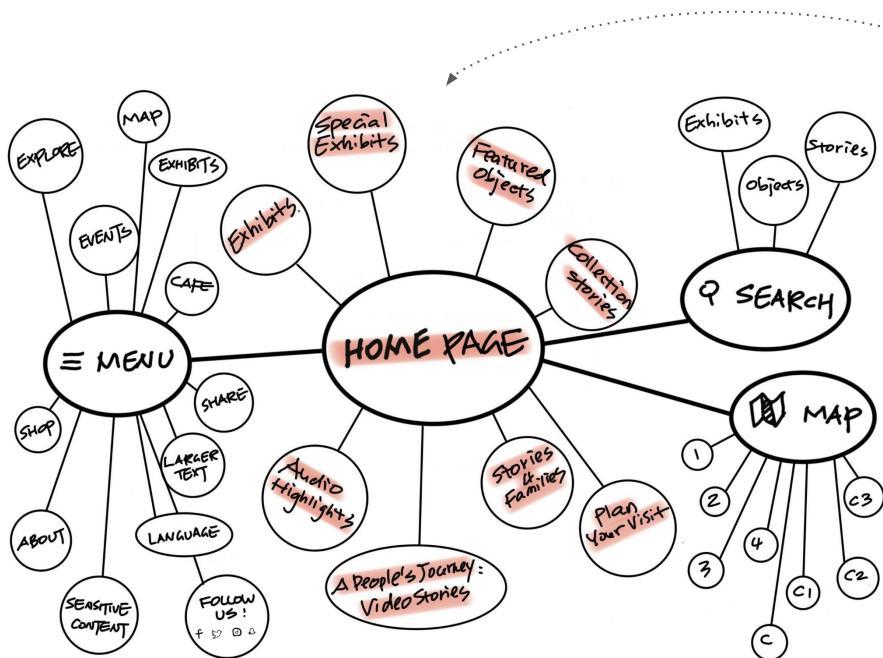
The collage includes several screenshots of the app's interface:

- A pinned note titled "Because of Harriet" with a message about Harriet Tubman.
- "Upcoming Events" section showing an event for "NMAAHC Kids: Classroom Connections" on Thursday, March 10, 2022.
- "Recent News" section showing an article about "Three Sculptures from Aedial Cutlett Coming to National N American History and Culture".
- A "Share your email for updates" page with "Become a Member" and "Make a Donation" buttons.
- "Explore Stories" section showing categories like Exhibitions, Special Exhibitions, and Featured Objects.
- "Search & Map" section showing a search bar and a map with location markers.
- "Level C3: History Galleries" section showing a grid of images and a large central image.
- "Slavery and Freedom" exhibition page showing a grid of images and a large central image.
- "Nat Turner's Rebellion" exhibition page showing a grid of images and a large central image.

home & menu

search & map

explore



Bubble Diagram Example
*[Inclusive Center](#) by Howie Wang

Online statistics →

	App Store	Google Play
Rating *5.0	3.9	4.4
Review No.	42	148
Comments No.	12	55

User research

Onsite interview *31

Top 3 reasons of using

Top 3 reasons of NOT using

Features popularity ranking;
Content/Feature I wish could exist ...

Audio feature

Search events

Handy information of exhibits

Is there such a thing?

I only need a map

Download is time-consuming

PERSONAS

Primary - Chris

Bio: 43; Theatre manager in DC.

Attributes:

1. Work in a mid-sized local theatre for more than 10 years;
2. Appreciate rapid change of technology and how it affects daily life;
3. Visionary and willing to try new technology;
Love visiting museum in DC;
4. Detail-oriented, organized and focus on the life quality.

Goals:

1. Use app to plan his visit ahead;
2. Get museum special exhibitions, events and tours notification;
3. Share his memories to other medium.

Primary - Alex

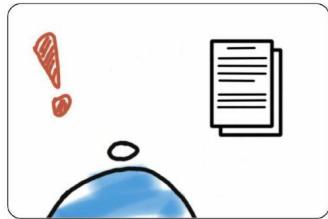
Bio: 24; Graduate student from Seattle.

Attributes:

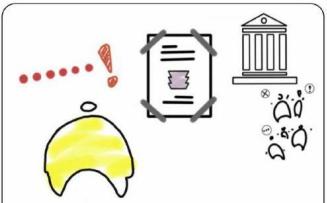
1. Major in education and history;
2. Love technology and dedicate his efforts to combine his profession and technology in the future;
3. Adventurous and love travelling;
4. Social and proactive in community.

Goals:

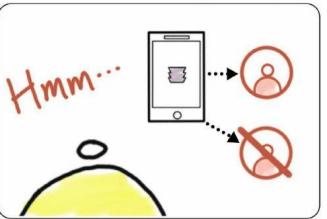
1. Enhance his museum experience not limited to a comprehensive understanding of history through multiple mediums;
2. Learning knowledge through the app;
3. Find like-minded people through the app.



- Alex plans his visit to NMAAHC^{1.} for his history research;
- He finds his needed information through NMAAHC's website.

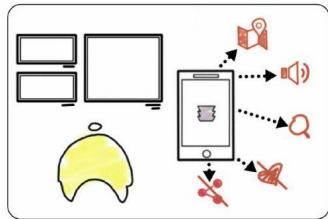


- Alex sees the promotion of NMAAHC's mobile app while waiting in line;
- He is intrigued by its content: enrich your museum experience and MORE!

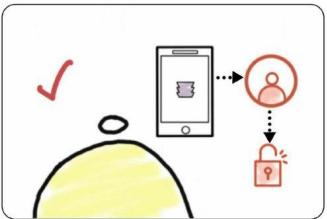


- 2. • Download the app helps to kill waiting time for Alex;
- He decides to use it as an amateur without creating a profile.

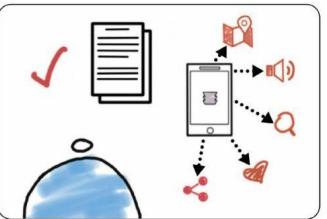
3.



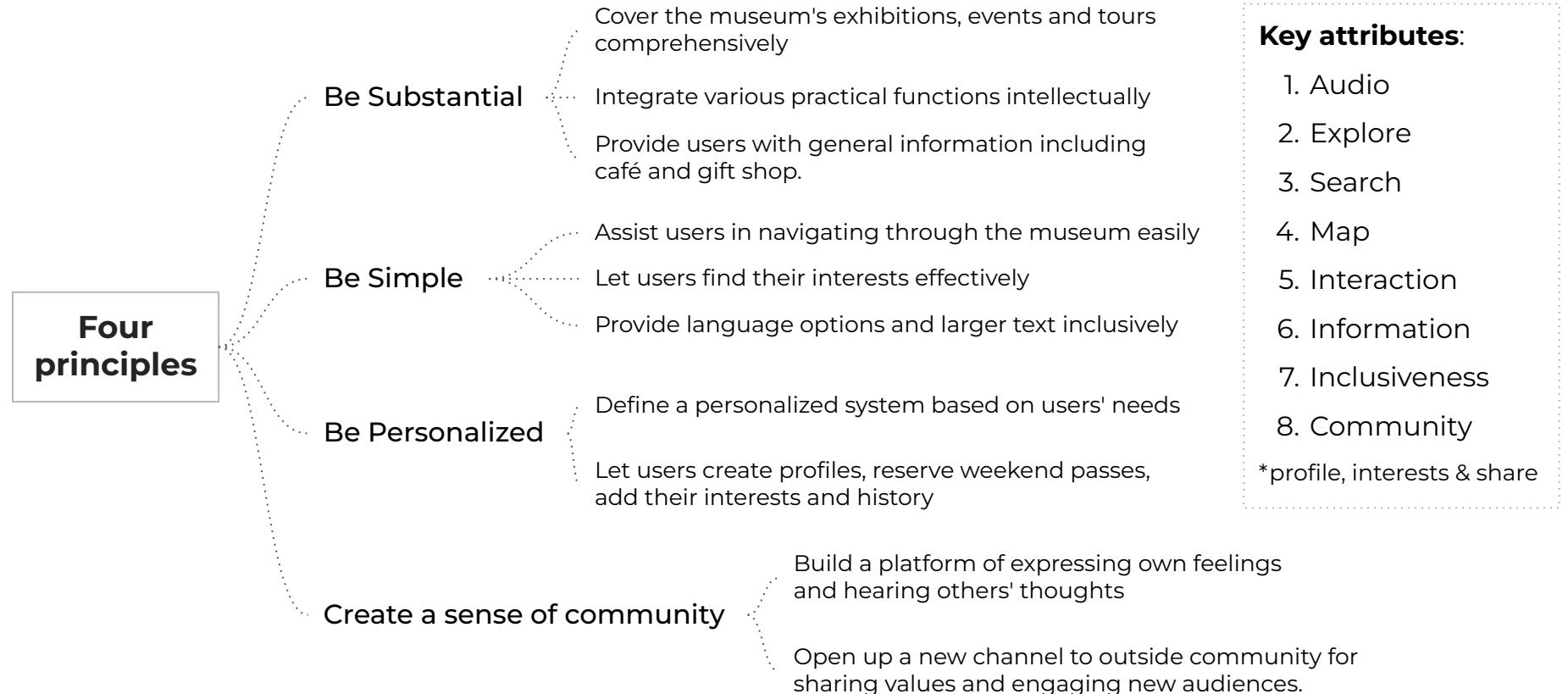
- 4. • Alex quickly becomes familiar with how to use this app due to its user-friendliness;
- He enjoys the museum under the help of this app;
- However, some features only work for profiled users.

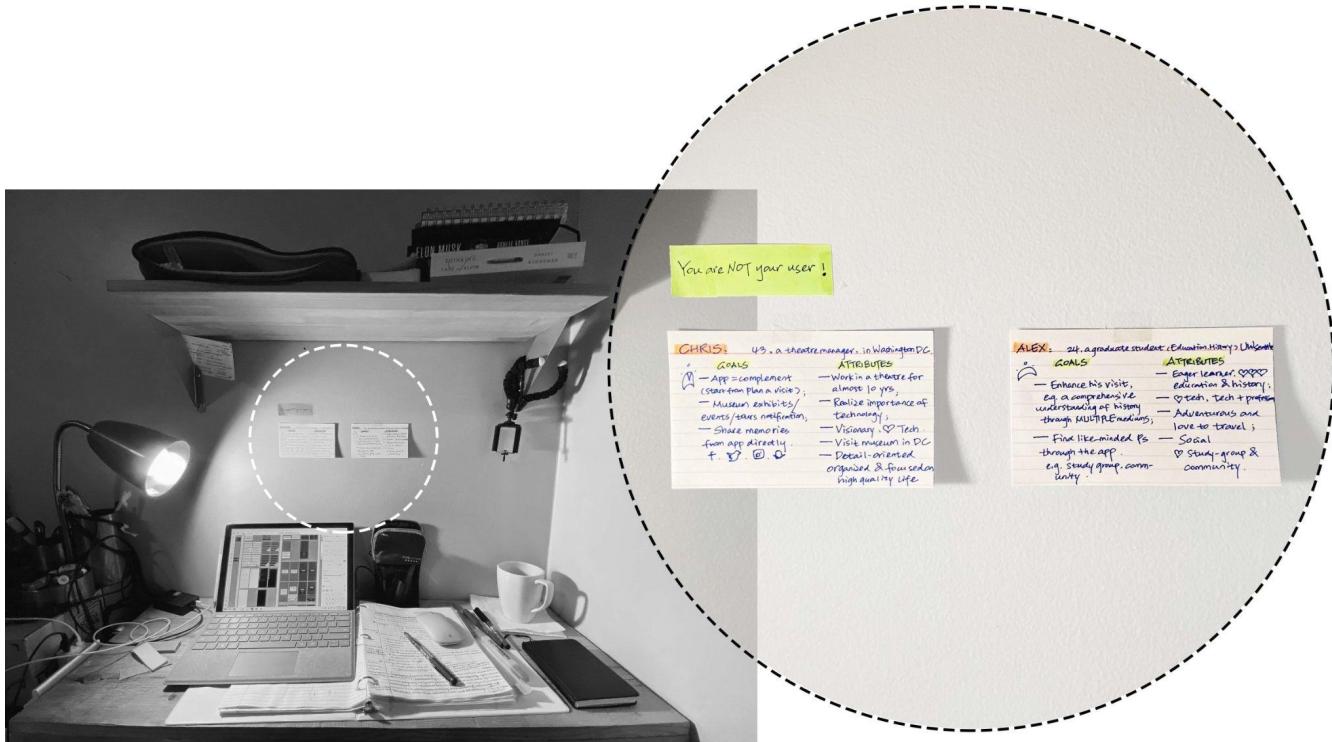


- 5. • Alex likes this app and believes it can help with his research;
- He is curious and interested in its community feature;
- He finds some time to create his profile.



- 6. • Alex has a great visit and flies back to Seattle.
- He joins the community and gets inspirations from others' sharing;
- He shares his thoughts with others and keeps doing his research.





CHRIS: 43, a theatre manager, in Washington DC

GOALS

- App complement (search + plan a visit);
- Museum exhibits/ events/tours notification;
- Share memories from app directly.

+ ☺ @ ☺

ATTRIBUTES

- Work in a theater for almost 10 yrs;
- Realize importance of technology;
- Visionary, ❤ Tech.
- Visit museum in DC
- Detail-oriented, organized & focused on high quality life

ALEX: 24, a graduate student, Education/History; University

GOALS

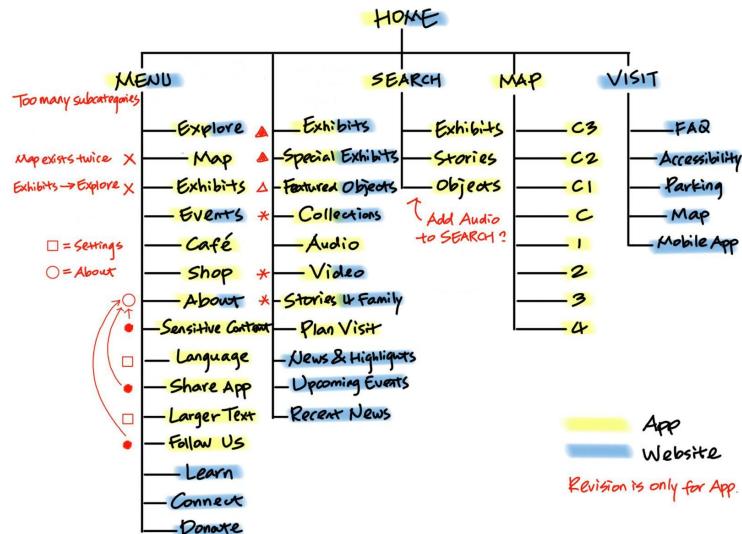
- Enhance his visits;
- Get a comprehensive understanding of history through MUSEUM Explorers;
- Find like-minded peo. through the app.

e.g. Study group, community

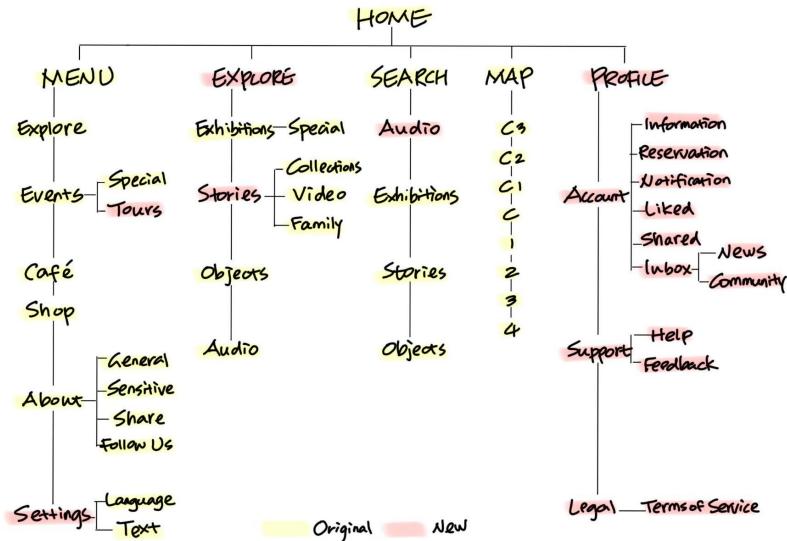
ATTRIBUTES

- Eager learner, ☺ ☺ ☺ ☺ ☺
- Education & history;
- ☺ Tech, Tech + problem
- Adventurous and love to travel;
- Social
- ▷ Study-group & community

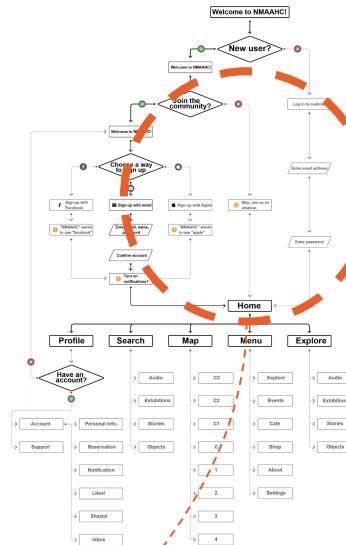
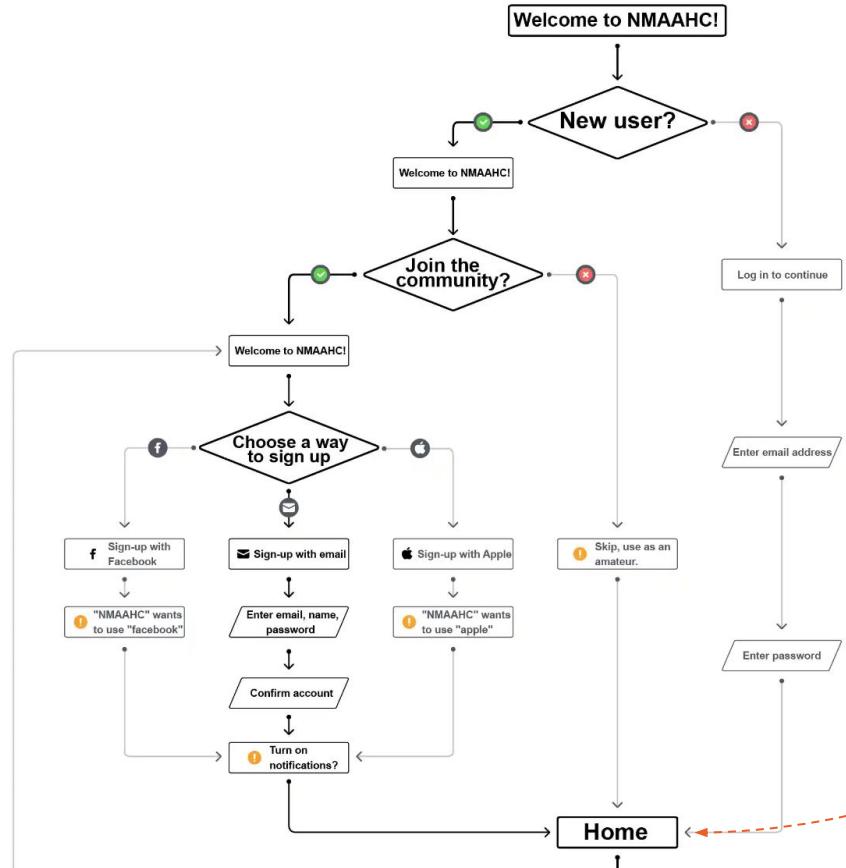
USER FLOW



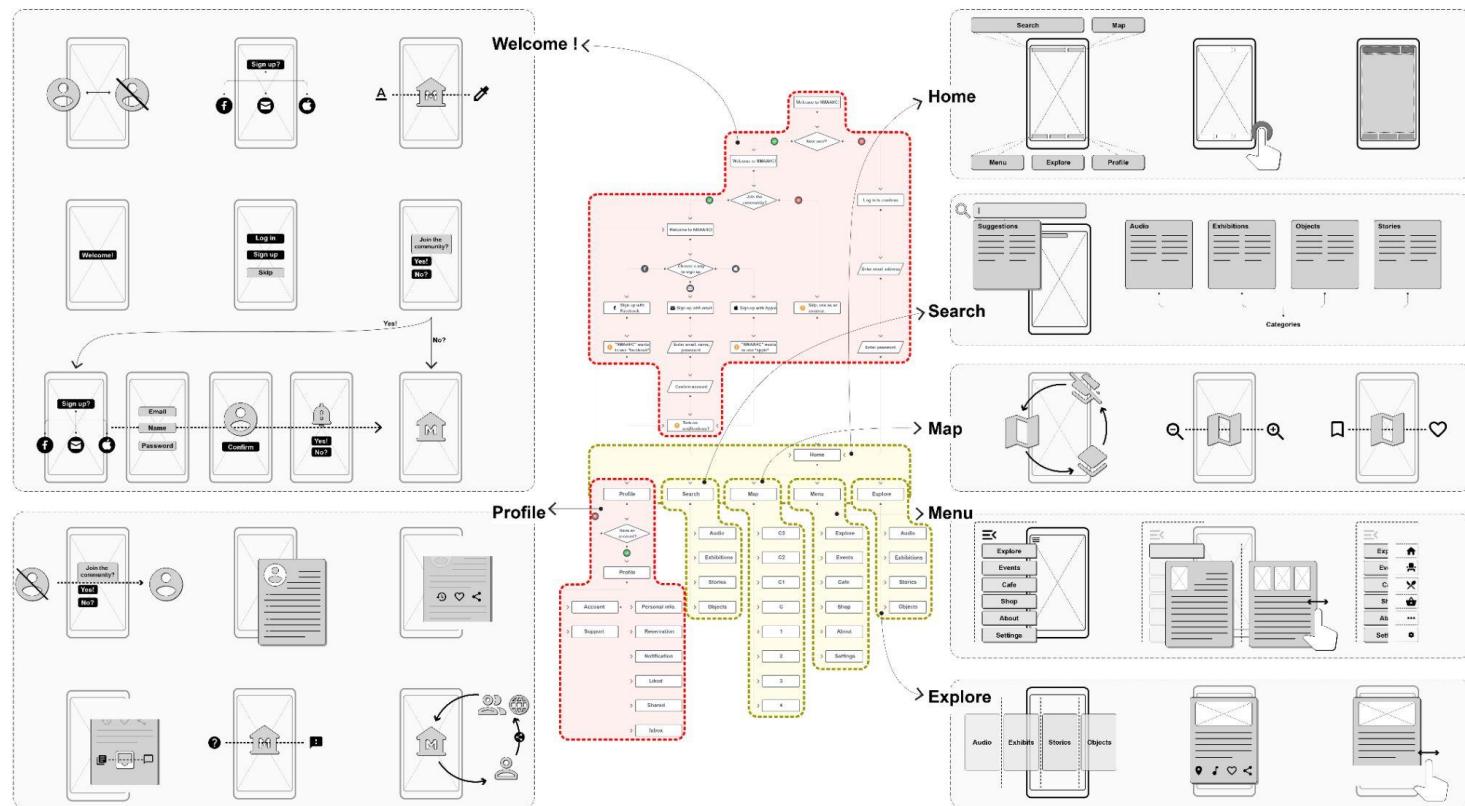
before



after

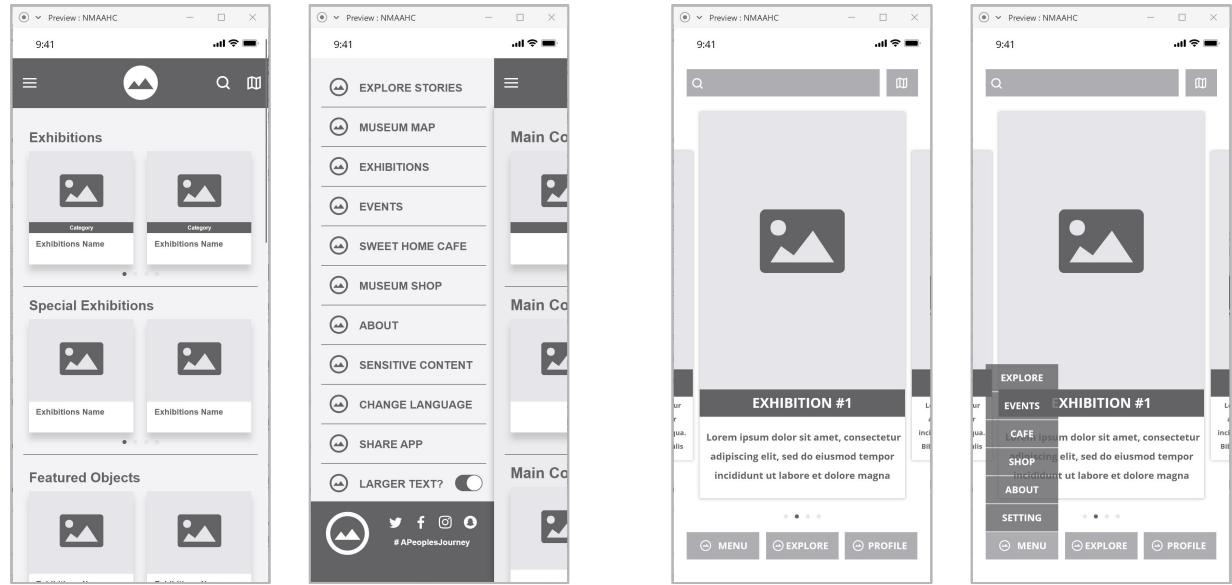


WIREFRAMES



Guides:

1. Main features - clear & visible;
2. One-hand Navigation;
3. Simple Interface layout - grid;
4. Menu - substantial & concise;
5. Tailored content for each submenu;
6. Self-explanatory Icons.

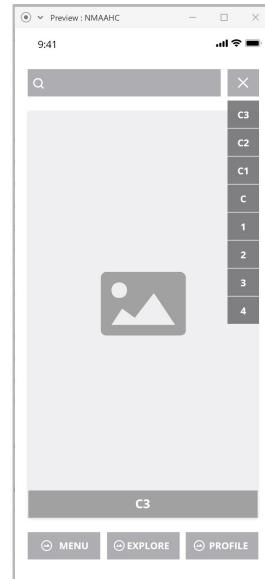
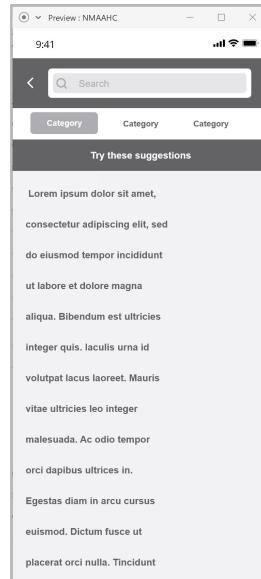


before

after

Guides:

1. Categorized suggestions for users' search;
2. Maps - simple & accurate;
3. Easily zoom in/out;
4. Show favourite marks for members.

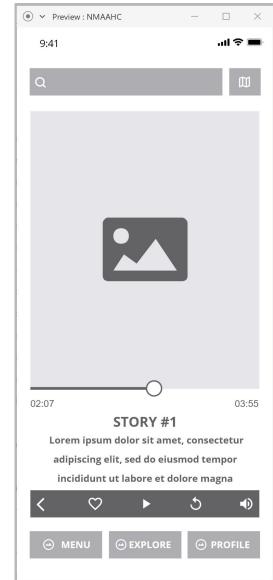
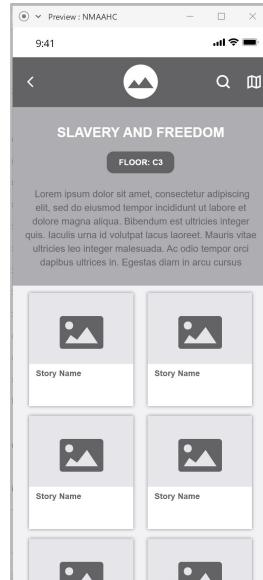


before

after

Guides:

1. Categories are shown orderly;
2. Each artwork shows location, brief, audio (if it has) and "like/share";
3. Simple interface and easy navigation.

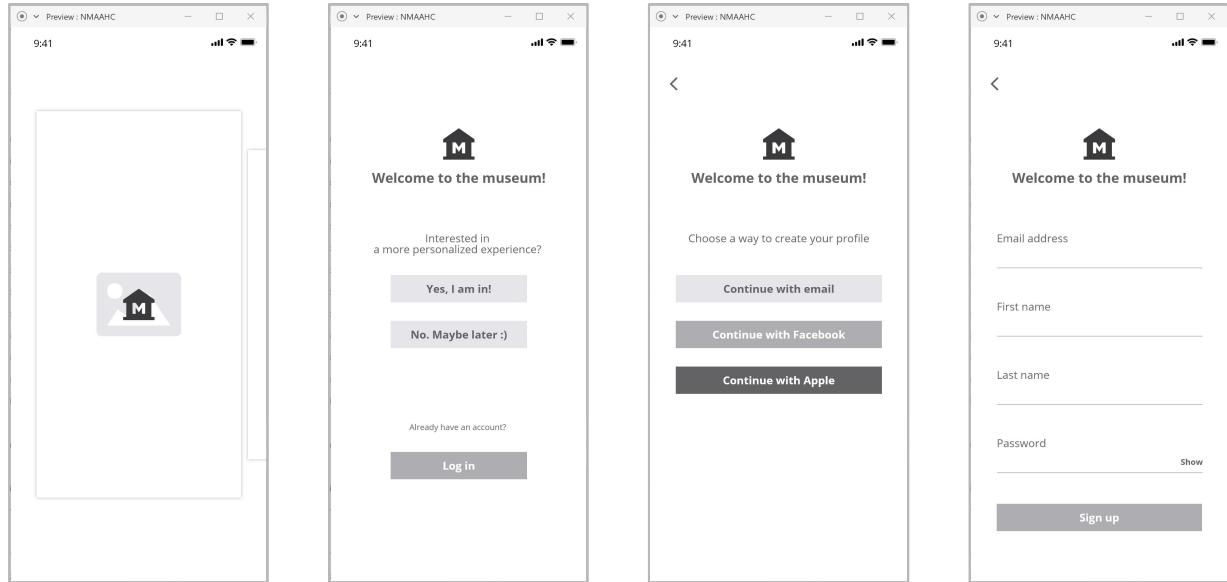


before

after

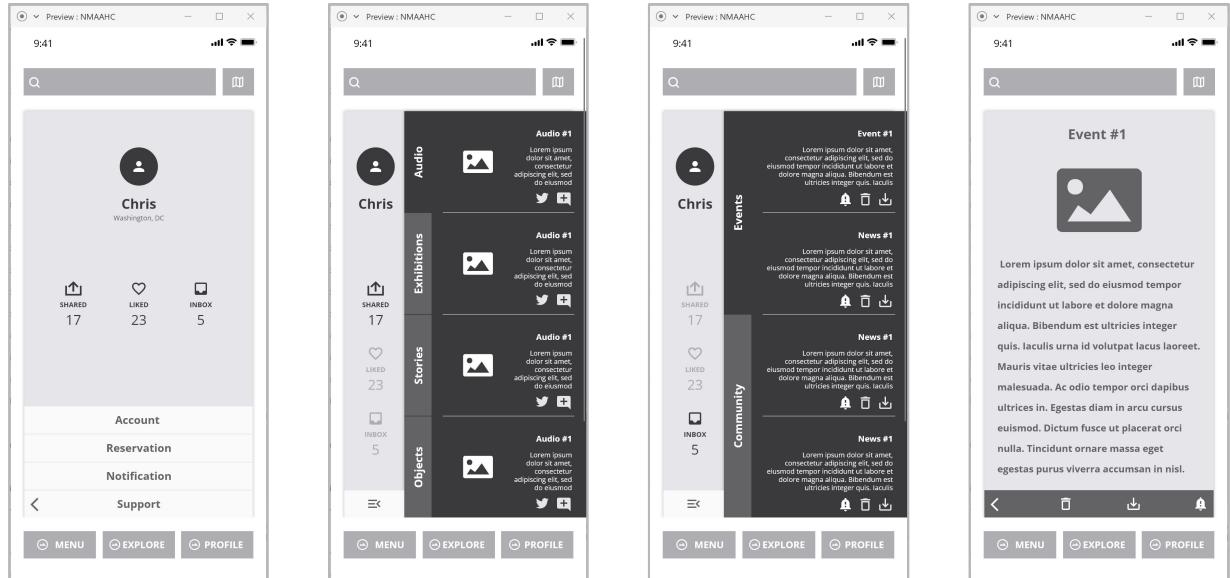
Guides:

1. Let users decide whether they want to join the community;
2. Multiple ways of signing up;
3. Assist users in creating their profile step by step;
4. Reflect the characteristics of the museum.



Guides:

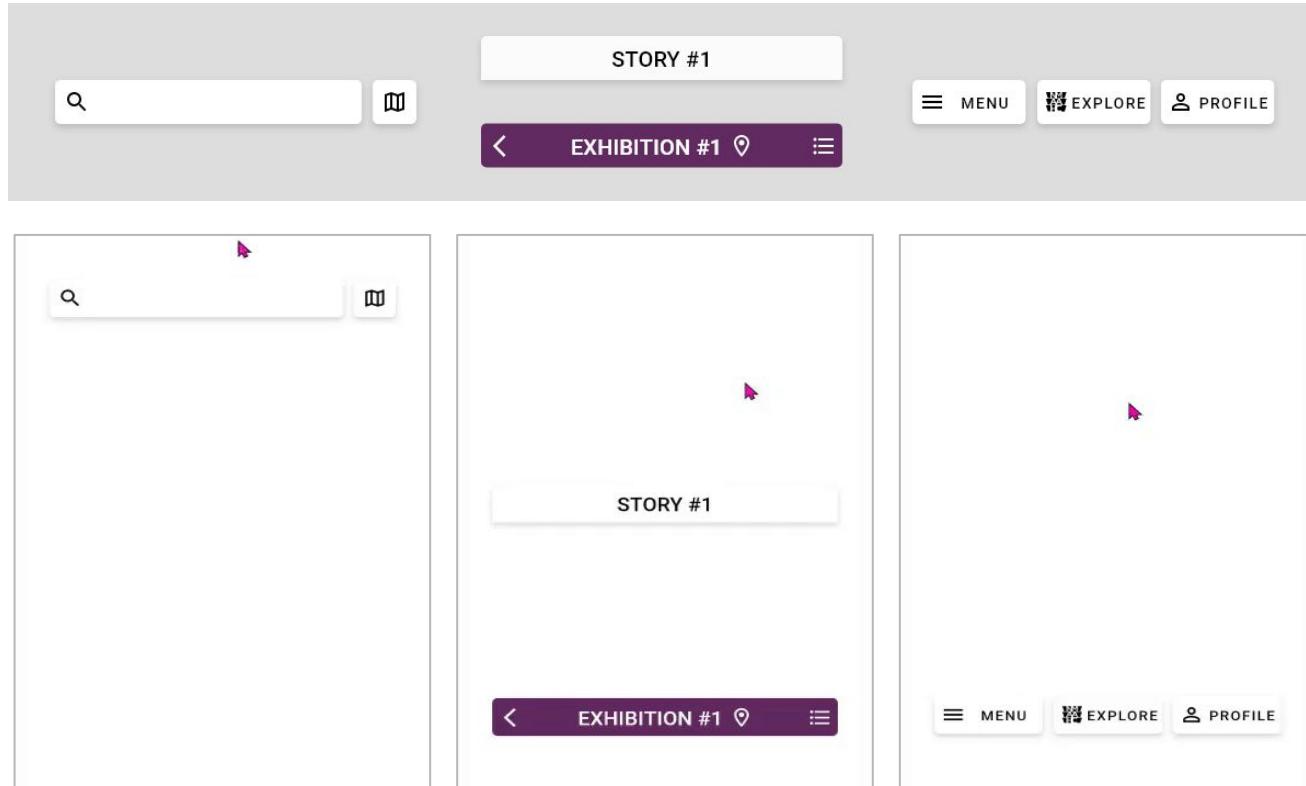
1. Direct NOT-yet-sign-up users to Welcome section;
2. Clear and structured information;
3. Easily retrieve history for users;
4. Access to get help and feedback support;
4. Enhance personal experience by community feature;



PROTOTYPING



Color Palette		Typography		Iconography	
Primary Hex #934292	Primary Variant Hex #612A60	Headline Roboto Medium 20	Explore Home	Iconography	
Secondary Hex #DA4926	Secondary Variant Hex #A8351A	Subtitle 1 Roboto Regular 16	Room Search	Map Map	Account Account
on primary	on secondary	Subtitle 2 Roboto Medium 14	list grid	grid arrow	audio volume
1	2	Body 1 Roboto Regular 16	play movie	replay medium	
on background	on surface	Body 2 Roboto Regular 14	events events	shop cafe	about about
3	4	BUTTON Roboto Medium 14 CAPS	settings settings	zoom in +	zoom out -
		Caption Roboto Regular 12	clear x	zoom zoom	
		OVERLINE Roboto Regular 10 CAPS	Profile like	share notification	comment share
			delete delete	save reservation	support inbox
					add add



- ✓ Welcome animation
 - *highlighted photos / exhibition
- ✓ Log in
 - *amateur option available
- ✓ Sign up
 - *various options



- ✓ Home
 - *personalized feeds, i.e. exhibition, events
- ✓ Menu
 - *structured menu; easily access by one hand
- ✓ UI Cards



- ✓ Search
 - *suggestions
- ✓ Map
 - *zoom in/out; mark favourites



- ✓ Browse exhibitions / events
 - *structured
- ✓ Details
 - *location, brief, audio, like/share
- ✓ One hand navigation



- ✓ Personal profile
- ✓ See saved liked / exhibitions / events
- ✓ Connection to community
 - *share to other platforms



DELIVERY

APP FOR NMAAHC

MAKE YOUR MUSEUM EXPERIENCE BETTER

Download on the App Store GET ON Google Play

Rich contents

- Well-documented digital contents
- Useful information on café, gift shop, and more

A handy map

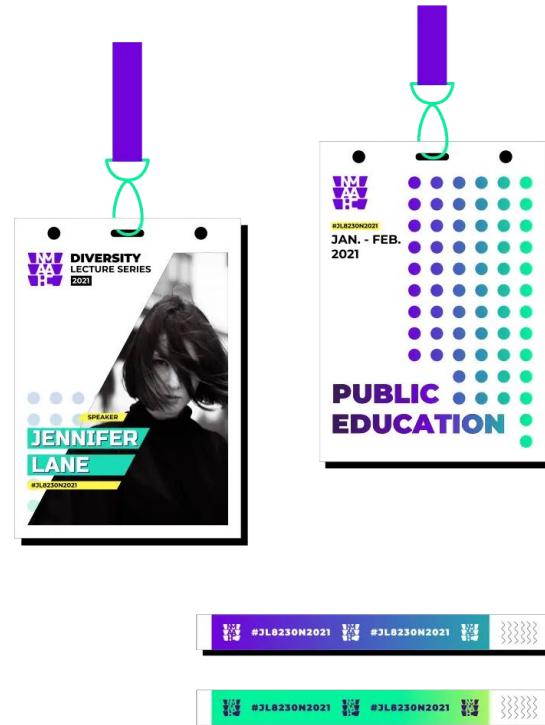
- Easily and intuitively navigate
- See your favorites' locations

Explore through multi-medium

- Text
- Audio
- Video

Built-in community

- Like and save your favorites
- Share your favorites
- Interact with other visitors



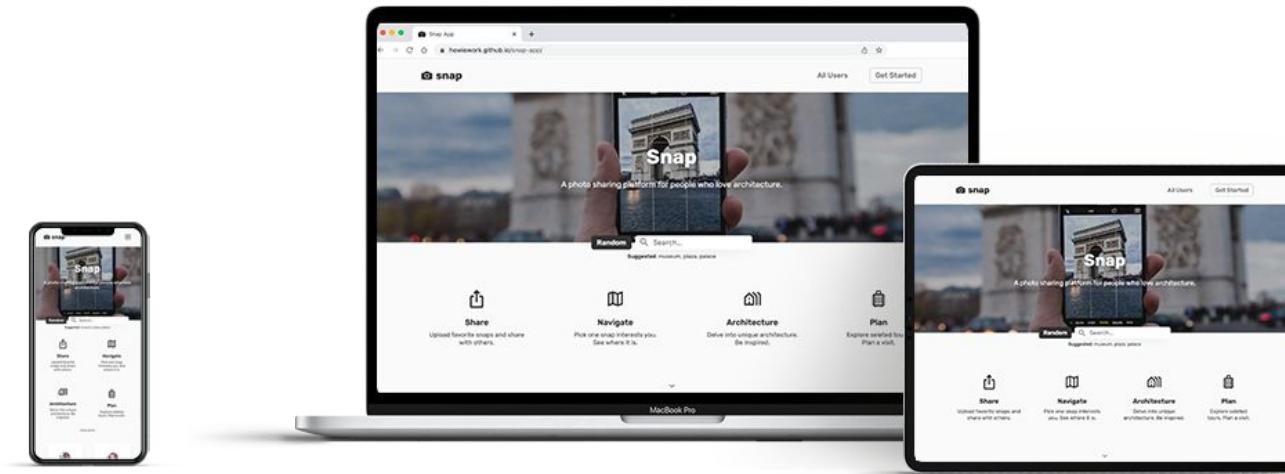


+ NMAAHC



DEVELOPMENT

FUNCTIONAL · CREATIVE · EVOLVING



PLANNING

DESIGN

IMPLEMENTATION

DEPLOYMENT



PLANNING

"I believe I saw this building somewhere before... but I couldn't think of where it is."

"I want my project look like that building. Hmm... let me think what that is."

Clients in Design Mtg.

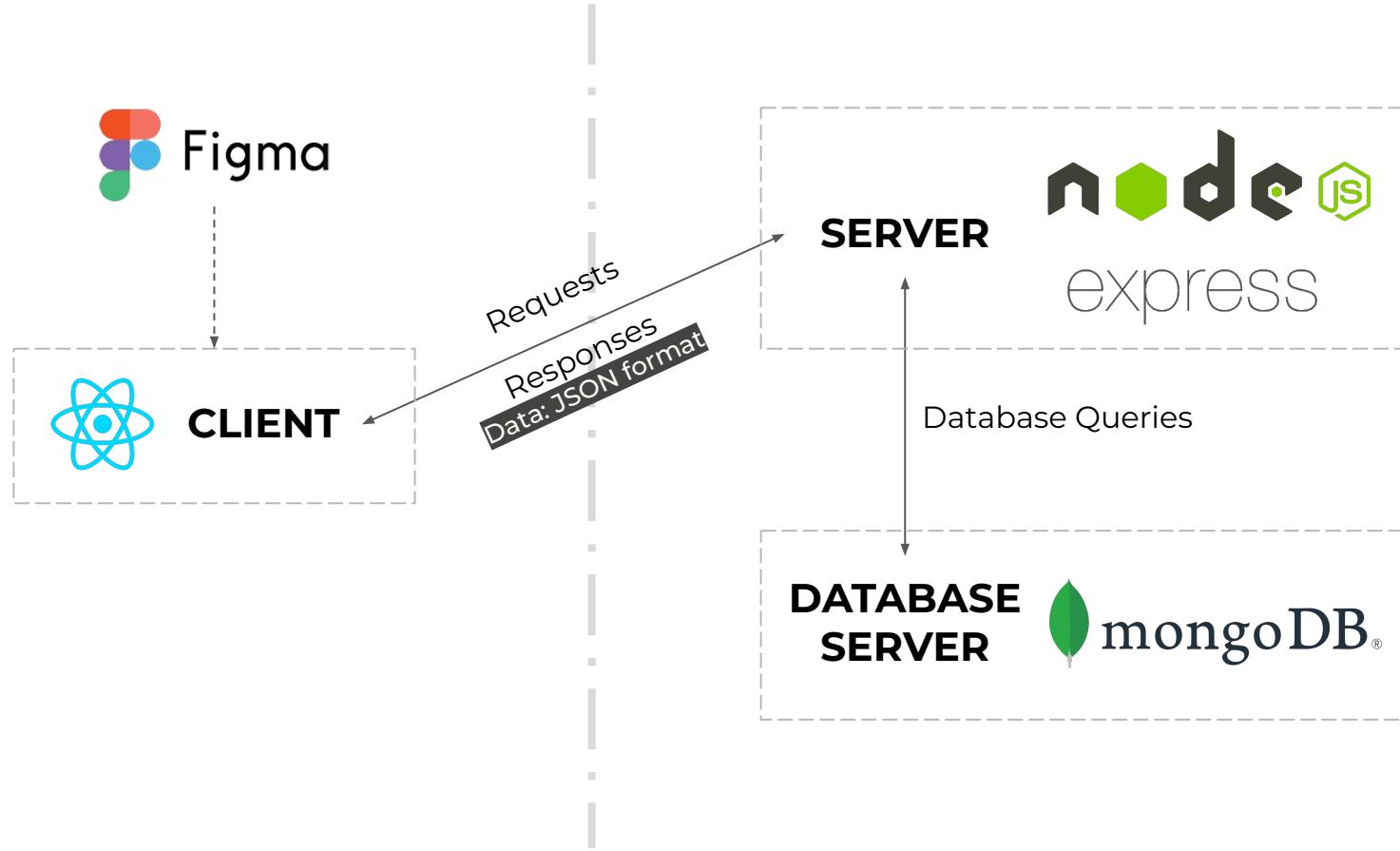
Having trouble articulating which building is in their mind

One place to store your memory

& SHARE

- 1. Content
 - o What's this app about?
Snap is a sharing platform for architecture enthusiasts / people who love architecture.
 - o What are main features?
 - o Why naming Snap?
Main features:
 - share : upload your favorite architecture ~~photos~~ & share with others
 - navigate : pick one snap interests you & see where it is
 - architecture : ~~explore unique architecture around the world & get inspired.~~
Shared by others & Be
 - plan : explore selected tours & plan a visit

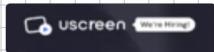
- **WHAT** A photo sharing platform
- **TARGET USER** People who love Architecture
- **MAIN FEATURES**
 - SHARE** Upload a snap and share with others
 - NAVIGATE** Pick one snap and see where it is
 - ARCHITECTURE** Be inspired by Architecture
 - PLAN*** Explore selected tours; Plan a visit



DESIGN

2. Design

- Logo / Fashion

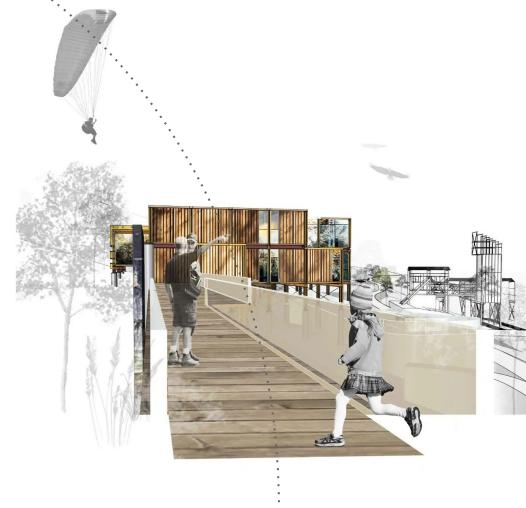
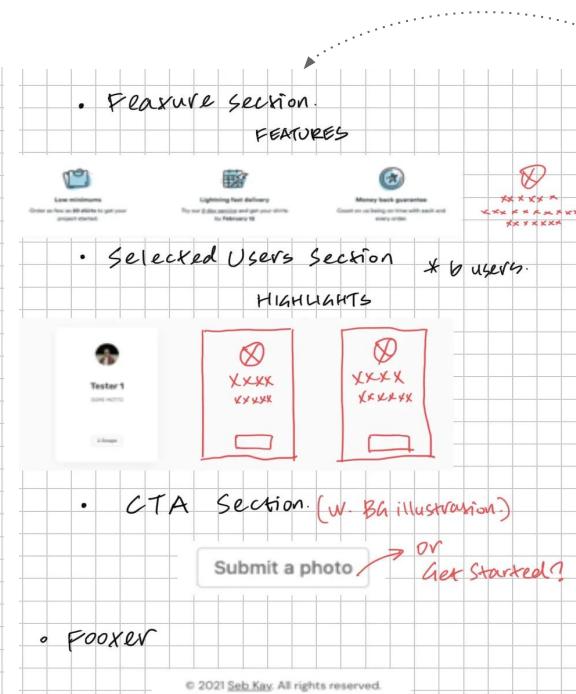
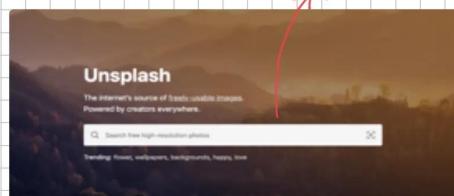


- Navigation



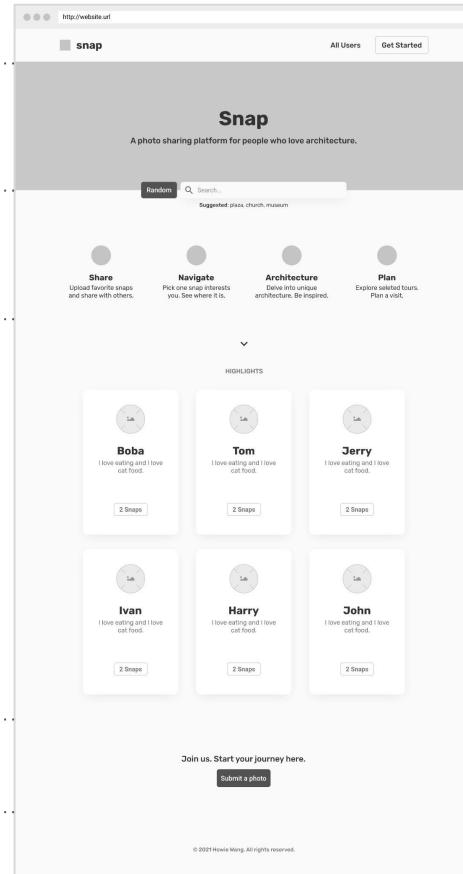
- Sections.

- Hero Section.


Collage Example

*[Appalachia 2017](#) by Howie Wang

Navigation



Hero

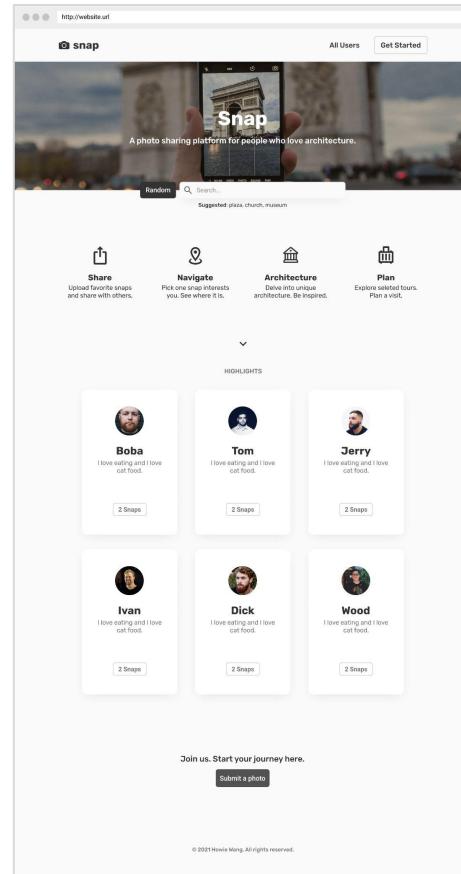
Features

Highlights

CTA

Footer

Minimal → Viable



TYPGRAPHY

FONt FAMILY

Nunito

FONt SIZES

font sizes (px) reference

10 / 12 / 14 / 16 / 18 / 20 / 24 / 30 / 36
/ 44 / 52 / 62 / 74 / 86 / 98

examples

title 44PX
 sub-title 20PX
 text 20PX
 Button title 18PX

responsive settings

Web (1024px / 64em): 10px / 62.5%
 Tablet (768px / 48em): 9px / 56.25%
 Mobile (384px / 24em): 8px / 50%

FONt WEIGHT

ExtraLight: 200
 Light: 300
 Regular(default): 400
 Medium: 500
 SemiBold: 600
 Bold: 700
 ExtraBold: 900

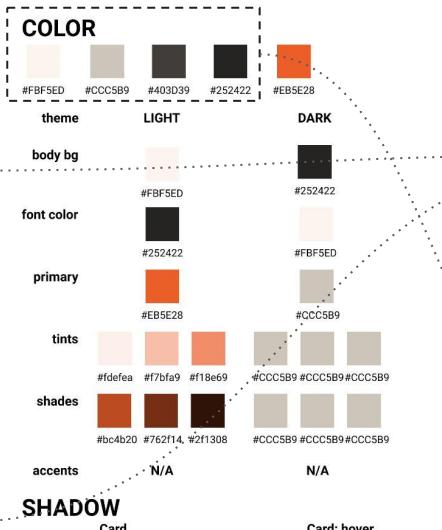
LINE HEIGHTS

Tiny: 1
 Small: 1.05
 Medium: 1.2
 Paragraph default: 1.6
 Large: 1.8

LETTER-SPACING

tight-letter-spacing: -0.5 px
 default-letter-spacing: 0 px
 medium-letter-spacing: 0.5 px
 large-letter-spacing: 0.75 px

COLOR



theme: #FBF5ED, #CCC5B9, #403D39, #252422, #EB5E28

LIGHT: #FBF5ED, #252422

DARK: #252422, #EB5E28, #CCC5B9

body bg: #FBF5ED, #252422

font color: #FBF5ED, #252422, #EB5E28, #CCC5B9

primary: #FBF5ED, #252422, #EB5E28, #CCC5B9

tints: #fdefea, #f7fa9, #f1e69, #ccc5b9, #ccc5b9, #ccc5b9

shades: #bc4b20, #762114, #2f1308, #ccc5b9, #ccc5b9, #ccc5b9

accents: N/A

SHADOW

Card: 0 7px 30px -10px rgba(150, 170, 180, 0.4)
 Card: hover: 0 7px 30px -10px rgba(150, 170, 180, 0.9)

BORDER RADIUS

Tiny: 4px / 0.4rem
 Small: 6px / 0.6rem
 Regular: 9px / 0.9rem
 Medium: 11px / 1.1rem
 Large: 14px / 1.4rem

WHITE SPACE

spacing system (px)

2 / 4 / 8 / 12 / 16 / 24 / 32 / 48 / 64 / 80 / 96 / 112 / 128

RESPONSIVE

*responsive settings

Web: 1024px / 64em
 Tablet: 768px / 48em
 Mobile: 384px / 24em

```

2 --- 01 TYPGRAPHY SYSTEM
3
4 - Font sizes (px)
5 10 / 12 / 14 / 16 / 18 / 20 / 24 / 30 / 36 / 44 / 52 / 62 / 74 / 86 / 98
6
7 - Font weights
8 Default: 400
9 Medium: 500
10 Semi-bold: 600
11 Bold: 700

```

```

64 --- 07 WHITESPACE
65
66 - Spacing system (px)
67 2 / 4 / 8 / 12 / 16 / 24 / 32 / 48 / 64 / 80 / 96 / 112 / 128

```

```

121 --background-color: #fcf7f1;
122 --font-color: #252422;
123 --font-color--secondary: #403d39;

```

```

100 @media (max-width: 48em) {
101   html {
102     font-size: 56.25%;
103   }
104 }

105 @media (max-width: 24em) {
106   html {
107     font-size: 50%;
108   }
109 }

110

```

```

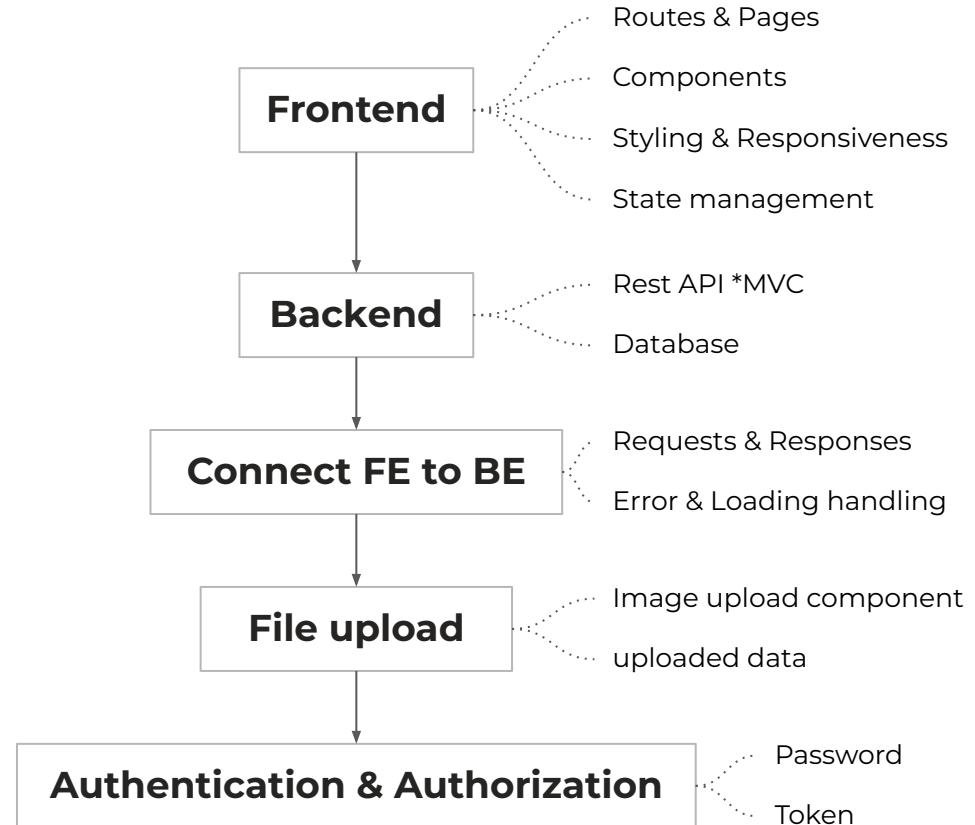
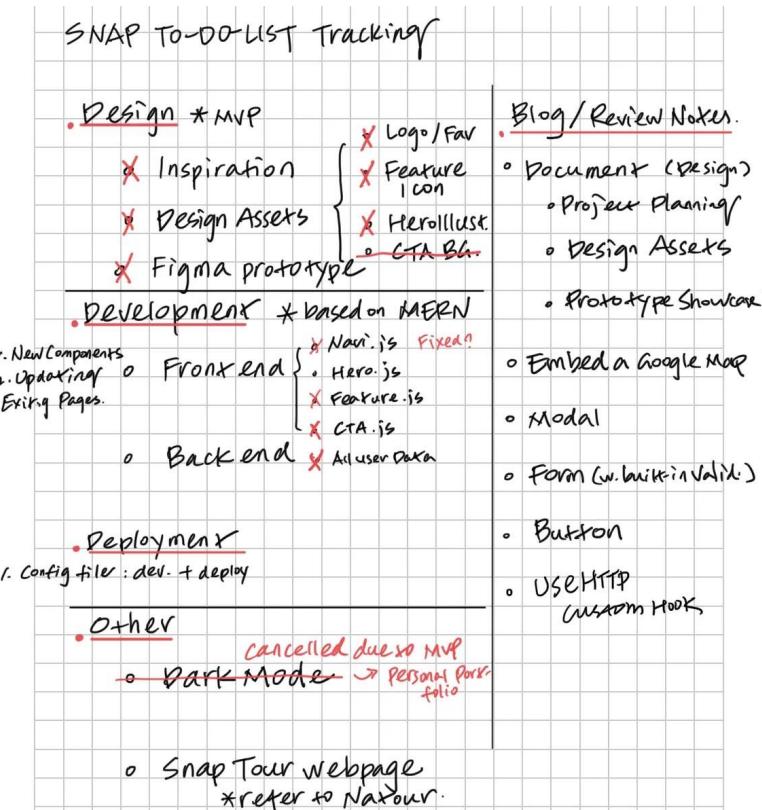
77 * {
78   padding: 0;
79   margin: 0;
80   box-sizing: border-box;
81 }

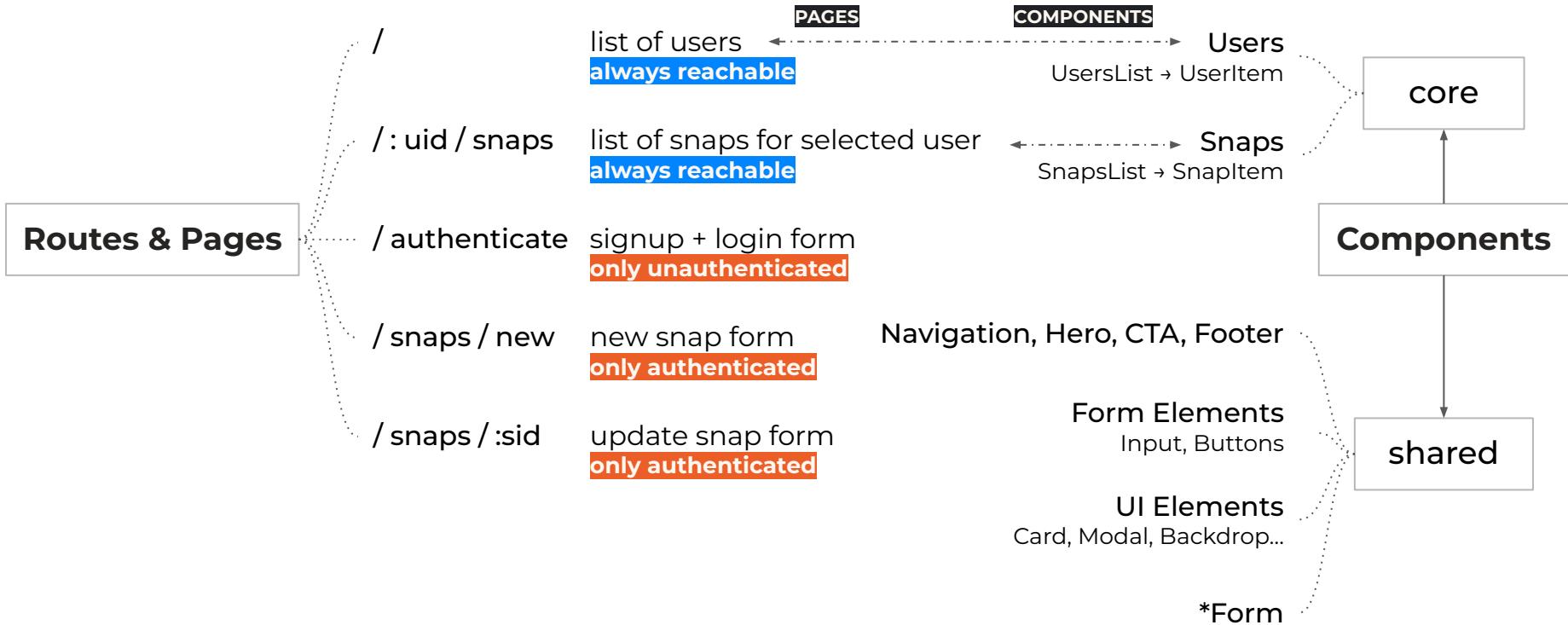
82 html {
83   font-size: 62.5%;
84   font-family: 'Rubik', sans-serif;
85   overflow-x: hidden;
86 }

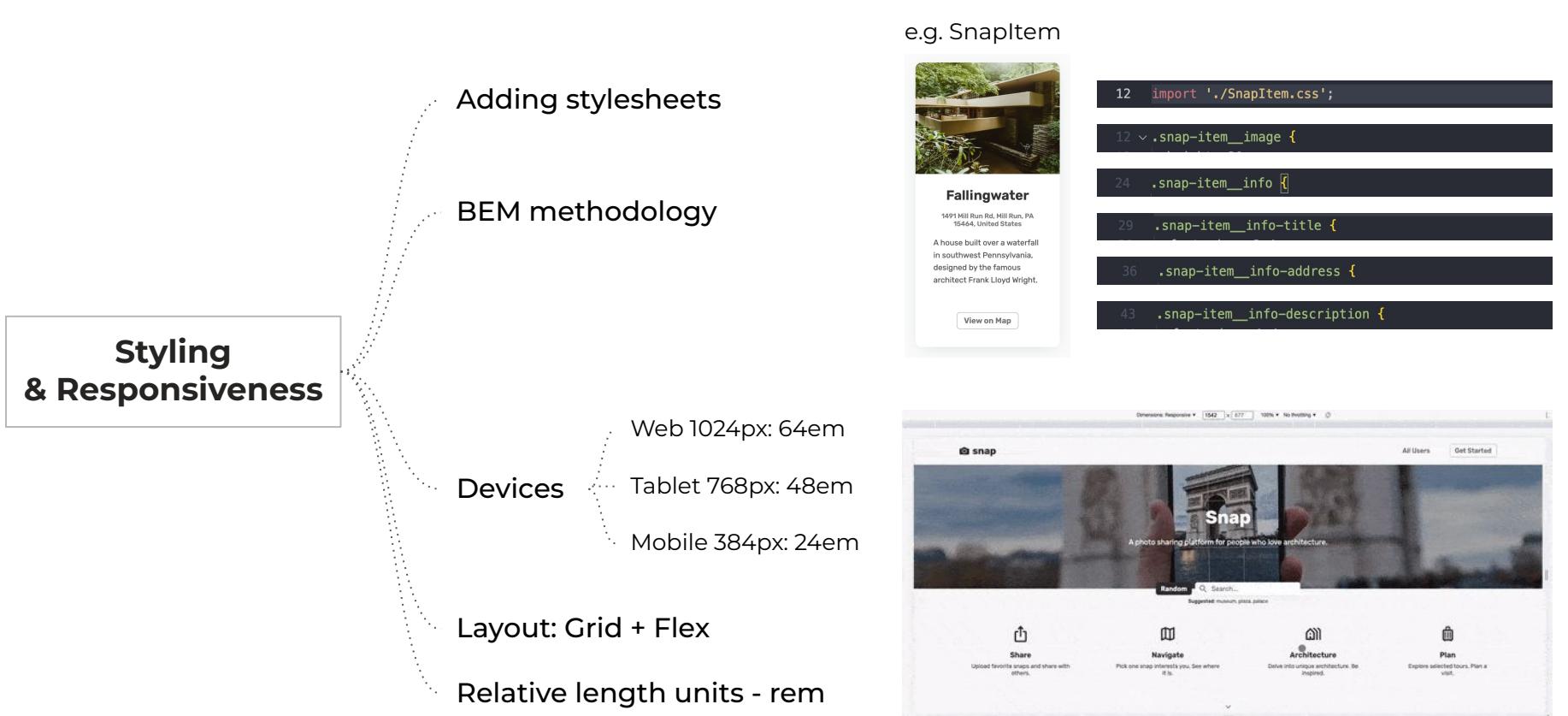
87

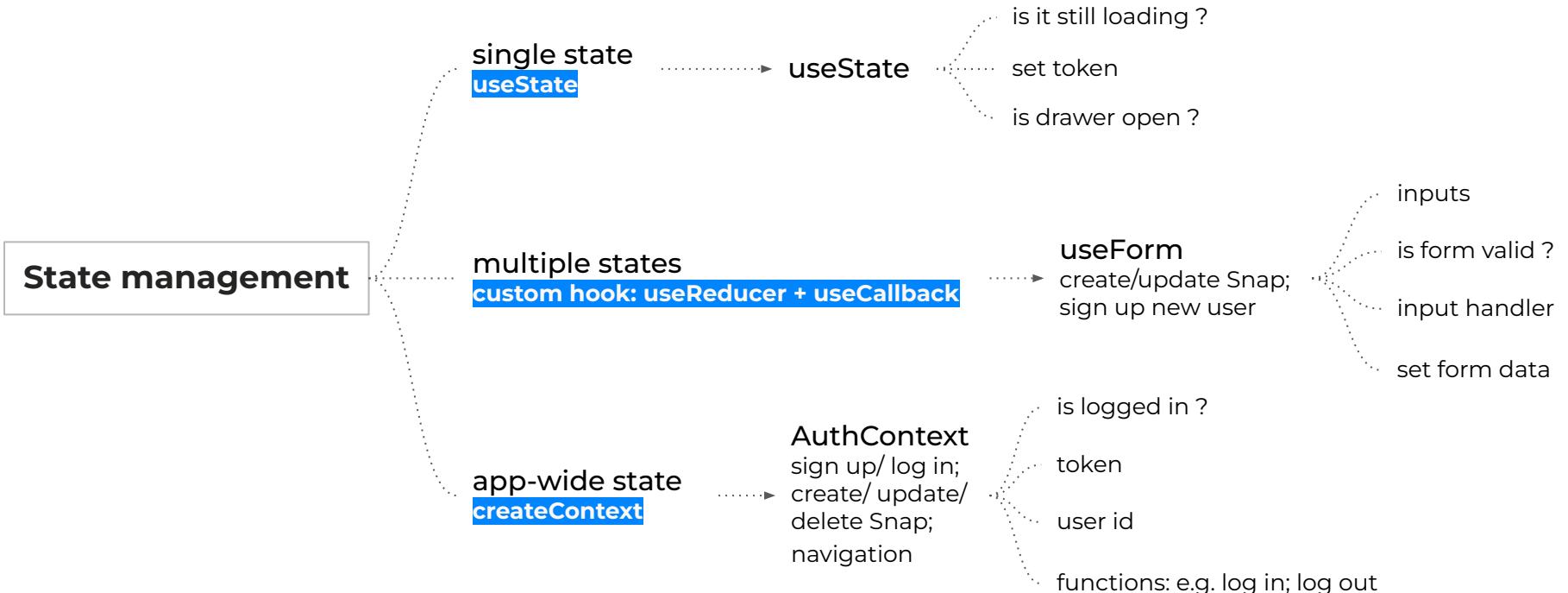
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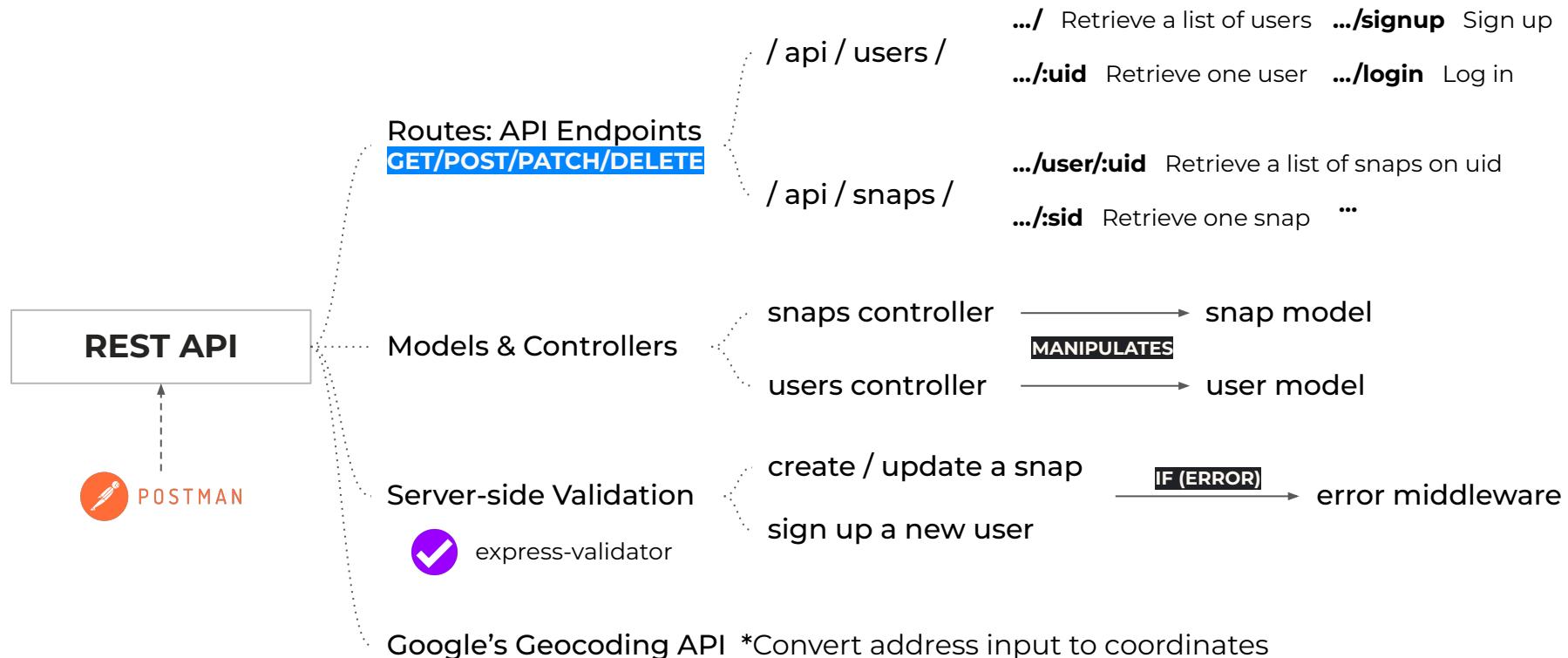
IMPLEMENTATION

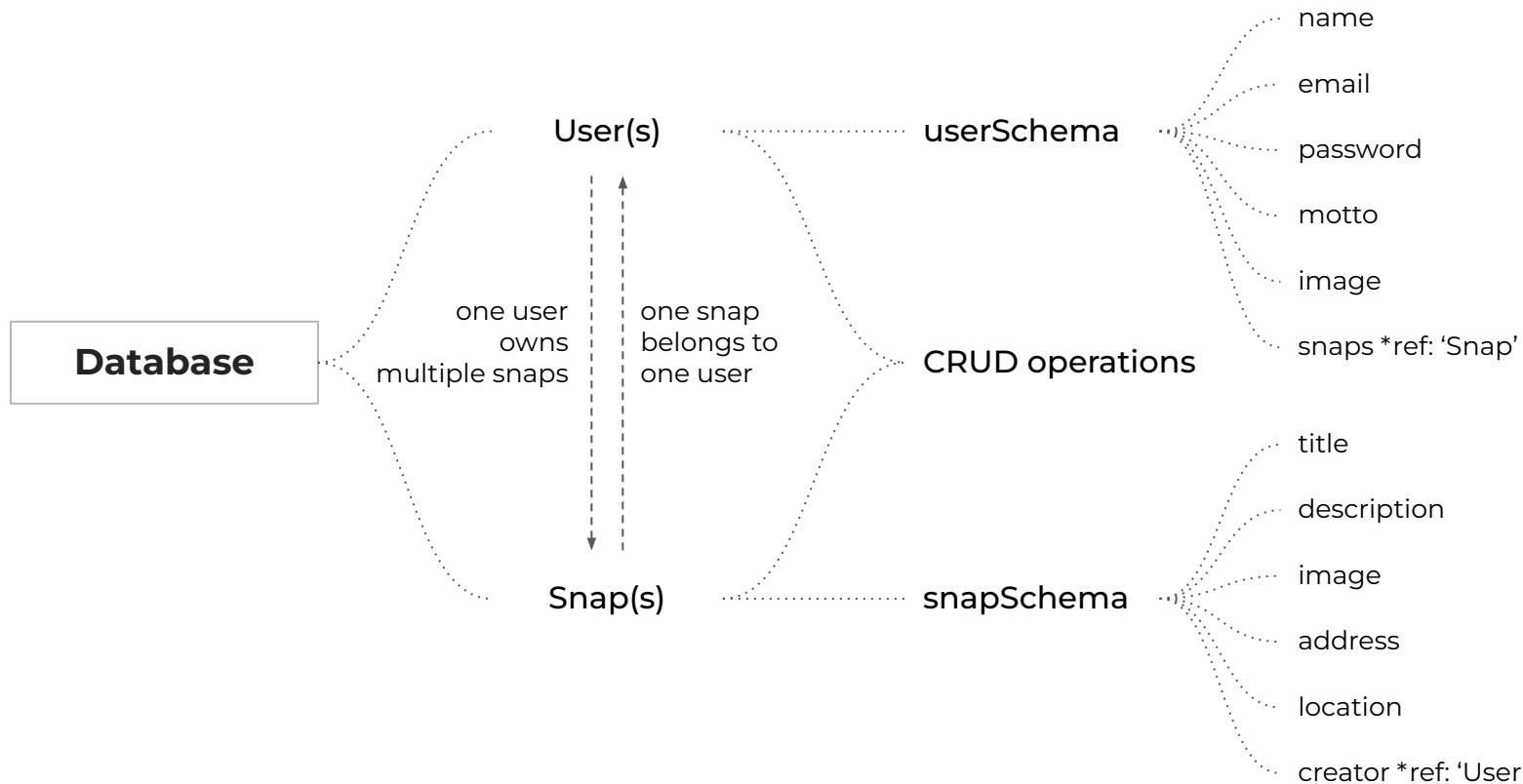


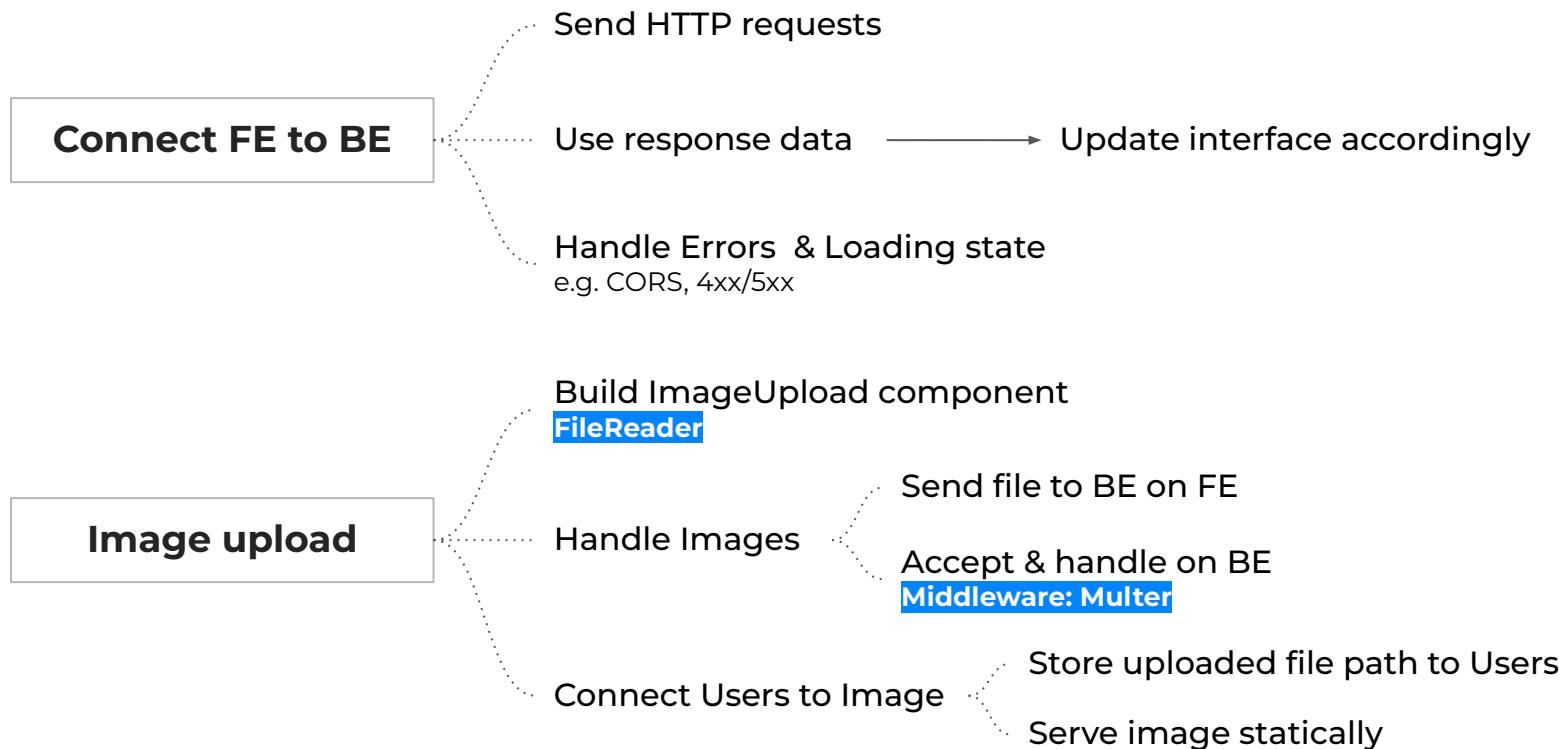


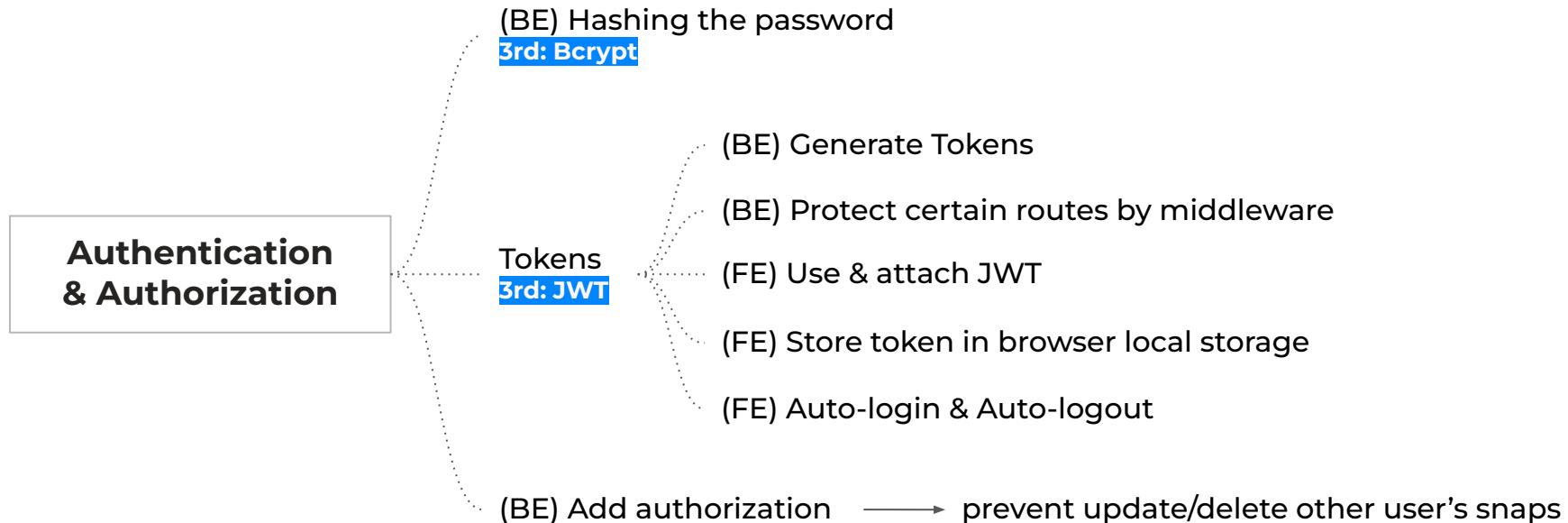




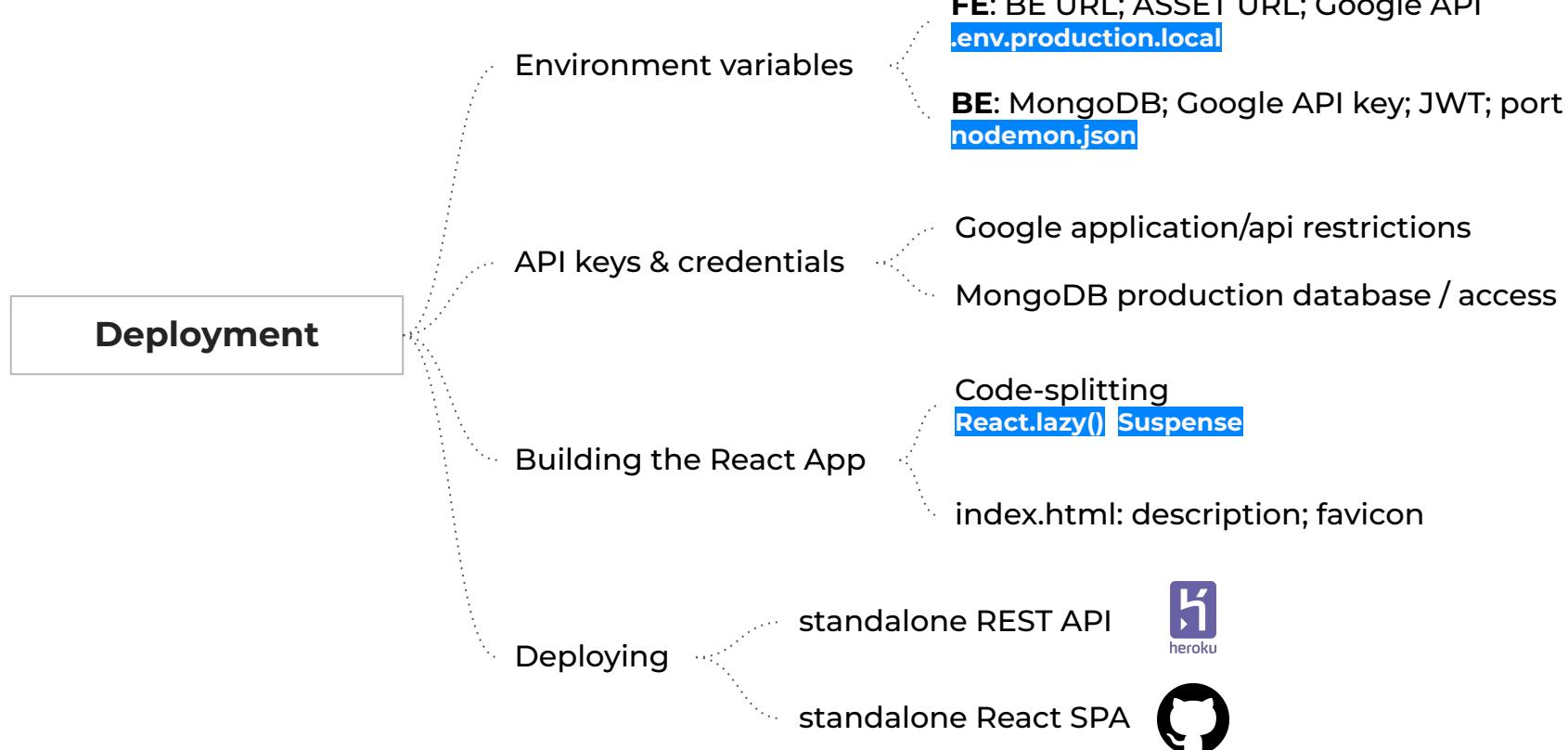








DEPLOYMENT





Share · Navigate · Architecture · Plan



DESIGN x DEVELOPMENT

COLLABORATIVE

a **MORE ENGAGING** conversation with the audience



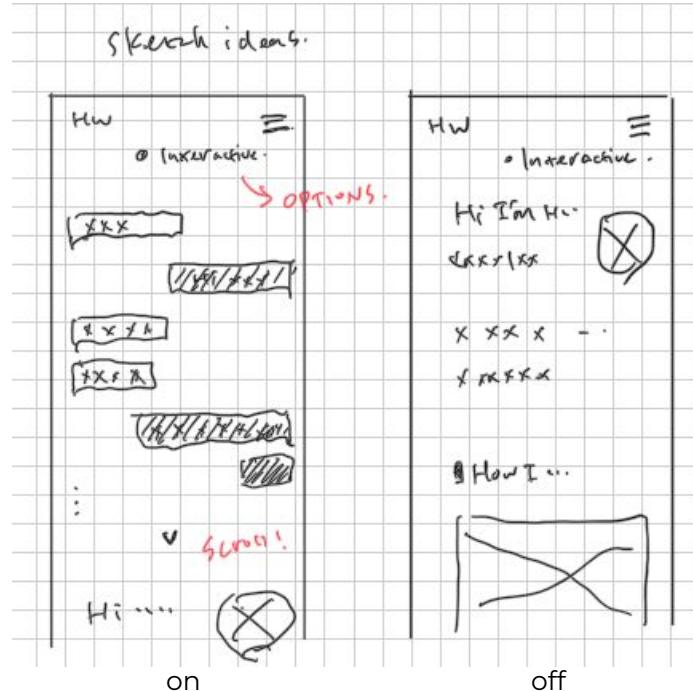
The screenshot shows a portfolio page for 'Howie Hao Wang'. At the top, there's a header with the name and a small profile picture. Below the header, a large heading says 'Hi, I'm Howie' with a subtitle 'Developer | Designer'. To the right of the text is a stylized orange and yellow portrait of a person. The main content area contains a bio: 'Howie is a full-stack web developer based in US with a background in architecture.' It includes a link to a self-introduction video. The text continues with details about Howie's background in architecture, his work at WeWork, and his transition to tech, mentioning courses like Data Visualization and Grasshopper. It also describes his work on an interior project involving VR and self-taught web development. The bio concludes with information about his diverse background equipping him with design and development skills, and his current work on Repeat App.

without animation

- ## • Messages

► Optional

“Play” messages
& hyperlinks



Messages

Optional

Component: Checkbox

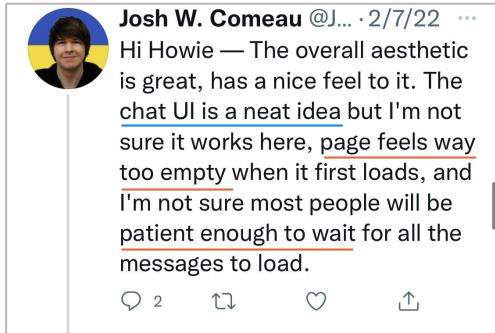
State: isChecked? → Transition between states → ease-in-out; 0.6s

“Play” msg & hyperlinks

Design msg



Animate → Set up reasonable intervals → animation-delay



- Set initial state to OFF
- Update Naming

Interactive → Watch a conversation



 Howie Hao Wang

Watch a conversation

Hi, I'm Howie

Developer | Designer



Howie is a full-stack web developer based in US with a background in architecture.

* [Watch a self-introduction video](#)

He is always willing to embrace new technology. At school, he took 'programming' courses like [Data Visualization](#) and [Grasshopper](#). His professional experience in tech started at WeWork. Working with people from different backgrounds opens his mind and reveals more opportunity and potential. Later at SOM, he worked on [an interior project involving VR](#). He [self-taught web development](#) and gradually realized his true passion.

[His diverse background](#) equips him with both design and development skills. Currently, he is

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THANK YOU !

Q&A · Discussion