Assignment 5
Low-Fi Prototyping

Designing for Movement Team 3

Our Team

Emily Liang

‘25

Science, Technology and Society

Oakland, CA

Interviewer

Ilaria Chen

‘26

Symbolic Systems

Rome, Italy

Interviewer

Kenneth Bui

‘25

Science, Technology, and Society + Computer Science

Hayward, CA

Notetaker

Tyler Huang

‘26

Computer Science

Brunswick, GA

Recorder

Problem

- People suffer from the “***cold start problem***” of trip planning where they don’t know where to start.
- In addition, people struggle to manage different plans across platforms.

Solution

- Draw from a template of **peer-sourced** and **curated** itineraries
- Consolidate all your planning in one place

Value Proposition

"**revisit**" captures the essence of what we're trying to do: using not just your own plans when visiting a place, but other ones as well. Further, using a lowercase, short, and snappy name is usually the mark of a platform catering to younger crowds.

revisit

get your plans out of the groupchat.

Our main **value proposition** is adding *personalization*, *community,* and *consolidation* to trip planning.

We chose this **tagline** because we wanted a short, catchy, phrase that played on a younger audiences' common frustration with travel planning.

Comparison Chart

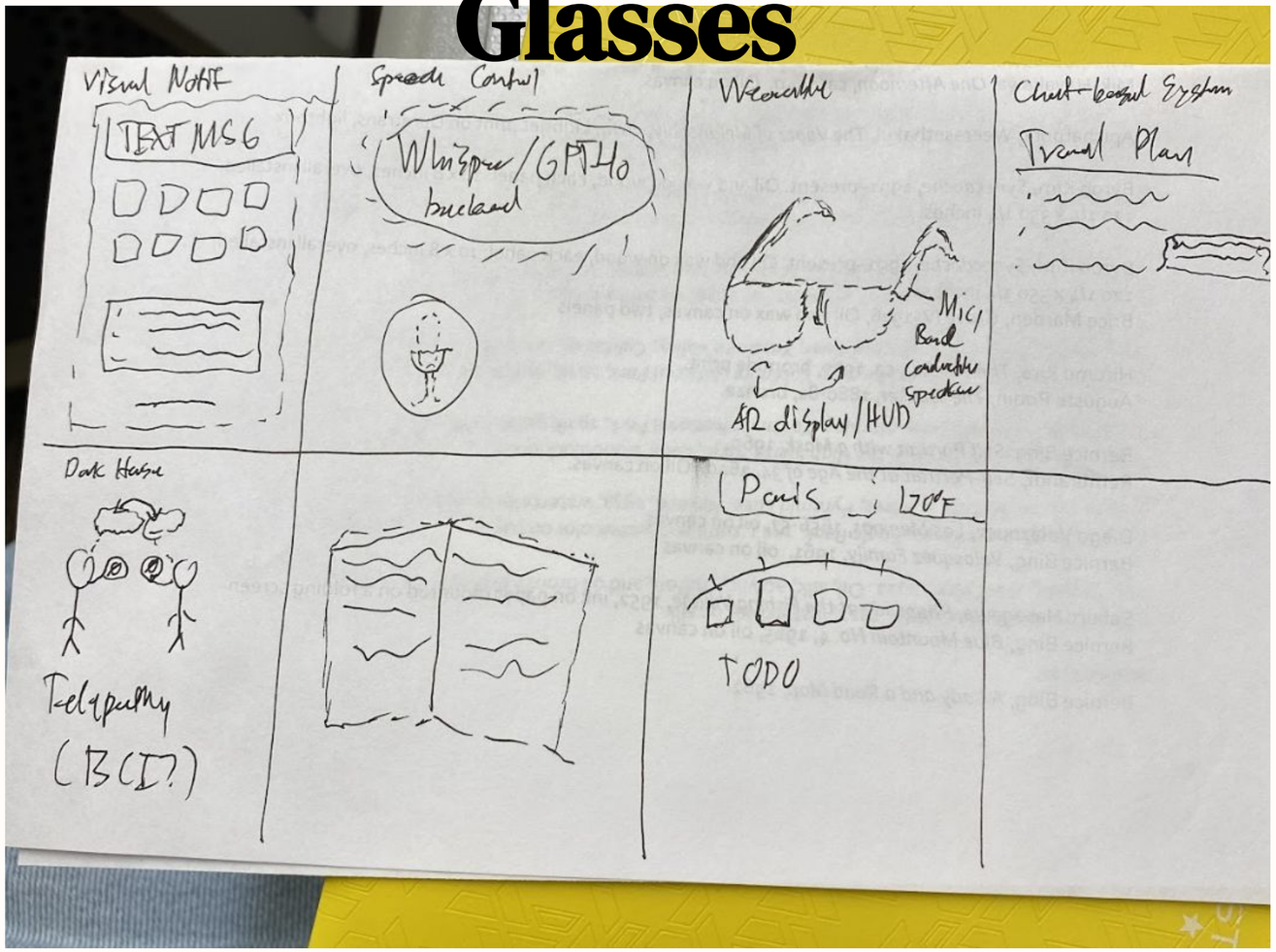
Features	Expedia	TripAdvisor	TripIt	Frienzy	revisit
Expense Tracking	✗	✗	✓	✓	✓
Price Comparison	✓	✓	✗	✗	✓
Custom Itinerary	✗	✗	✓	✓	✓
Trip Organization	✗	✗	✓	✓	✓
Booking Integration	✓	✗	✓	✗	✓
Destination Reviews	✗	✓	✗	✓	✓
Flight Tracking	✓	✗	✓	✓	✓
Offline Access	✗	✗	✓	✗	✓
Activity Suggestions	✗	✓	✗	✓	✓

Table of Contents

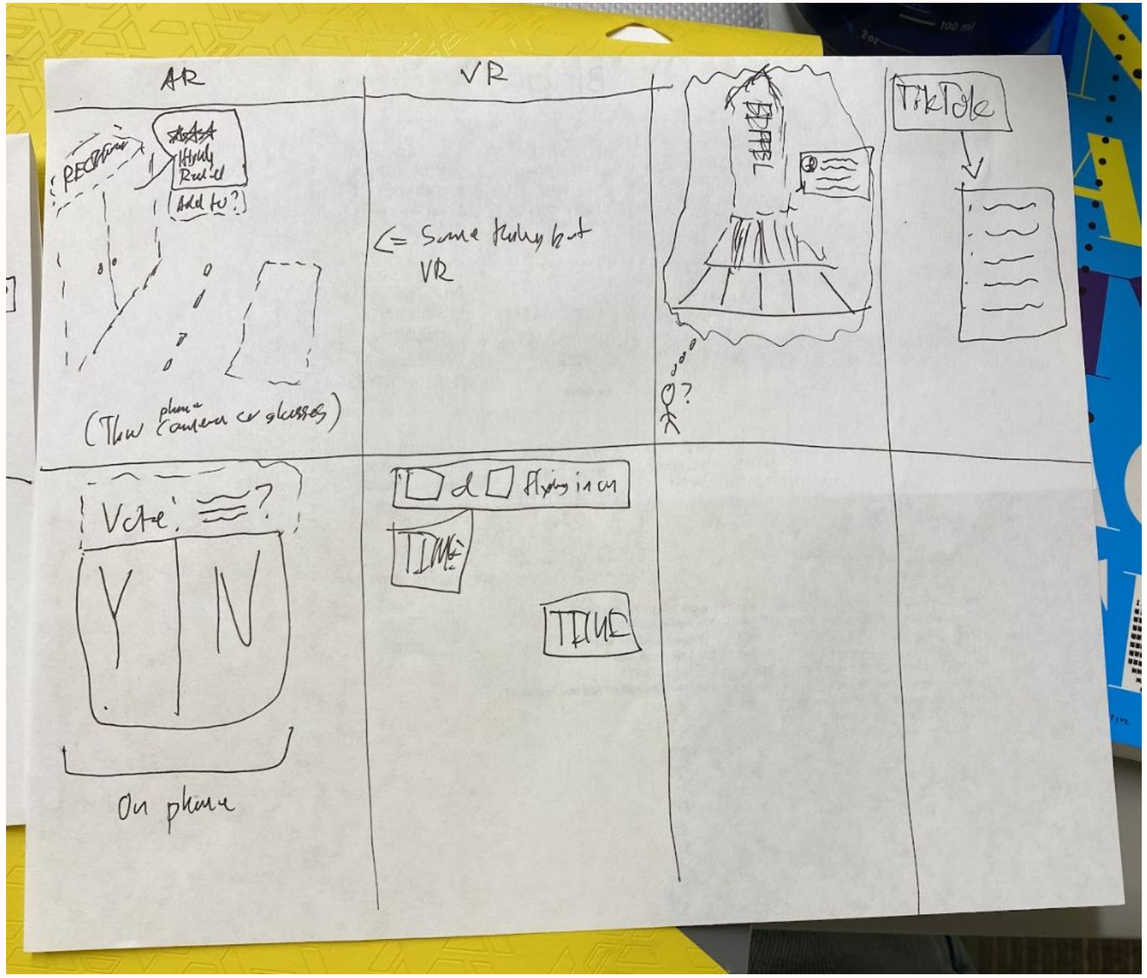
1. Concept Sketches
2. Realization prioritization
3. Low-Fi prototype construction
4. Task flows
5. Testing methodology
6. Testing results
7. Discussion

Concept Sketches

Wearable Glasses



VR & AR



VR

- live the itinerary before going on trip to see if you'd like it

AR

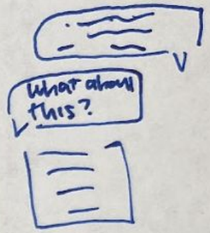
gamify traveling
→ gamify to create own itinerary

Reddit

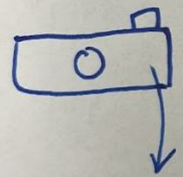
~~Start~~. I'm going to Bay Area. What should I do

→ takes all reddit and makes itinerary

Message app



- edit directly on messages

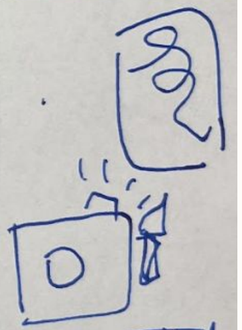


pictures to tell an itinerary

VR

check in on your phone when you've been to the location, follows your itinerary & tells you when you're off path

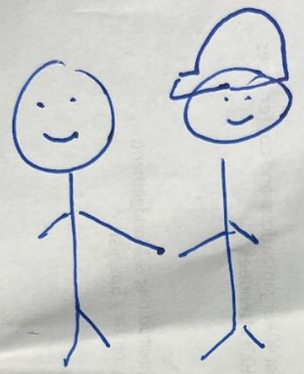
→ dating app style to choose itinerary



~~Edit~~ ~~Delete~~
~~Export itinerary~~

notif for other possible itineraries

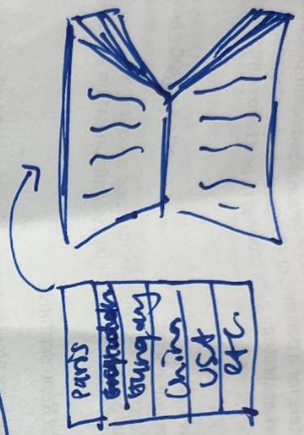
Dark Horse



Travel w/ a local

Free

collection of physical books

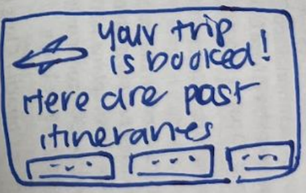


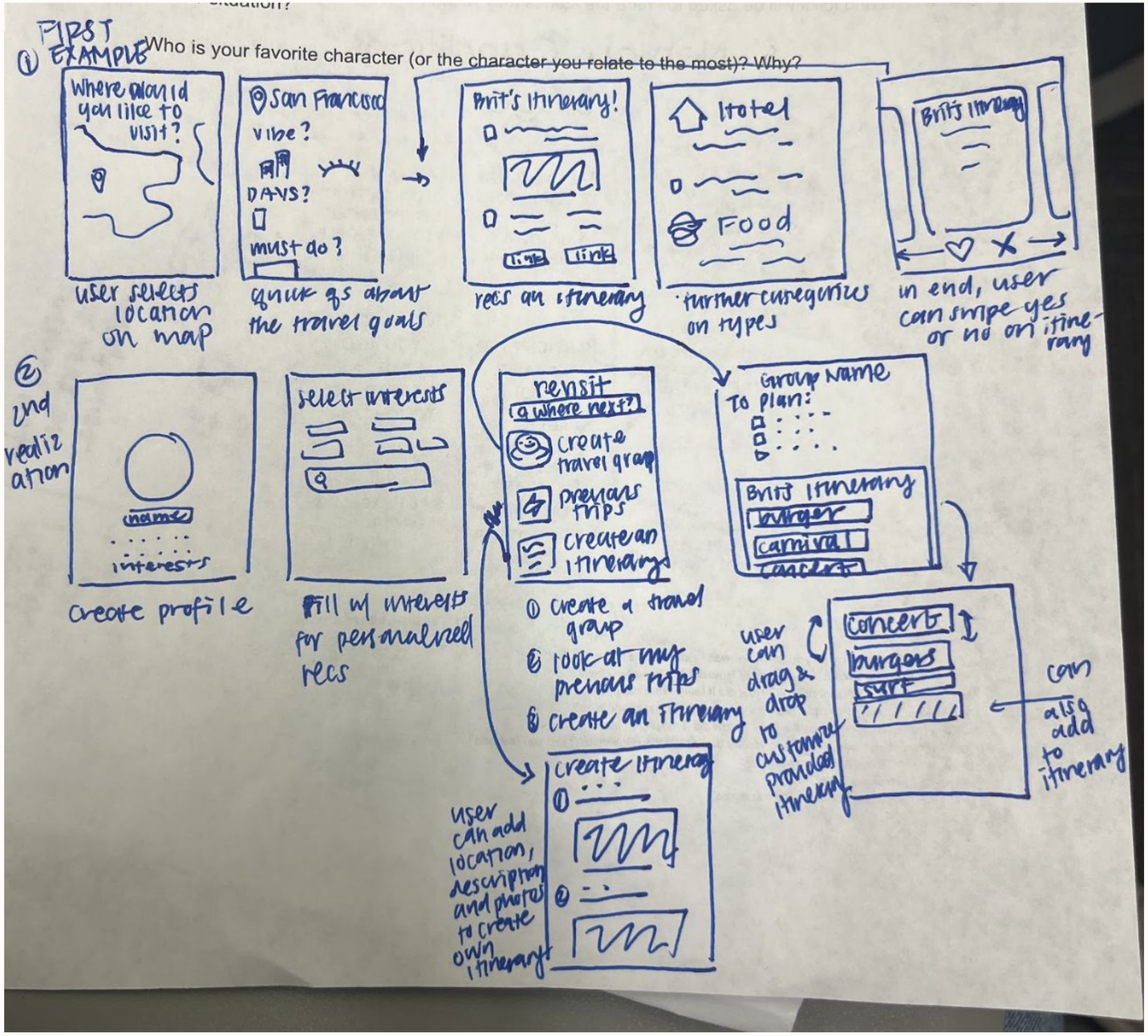
Free

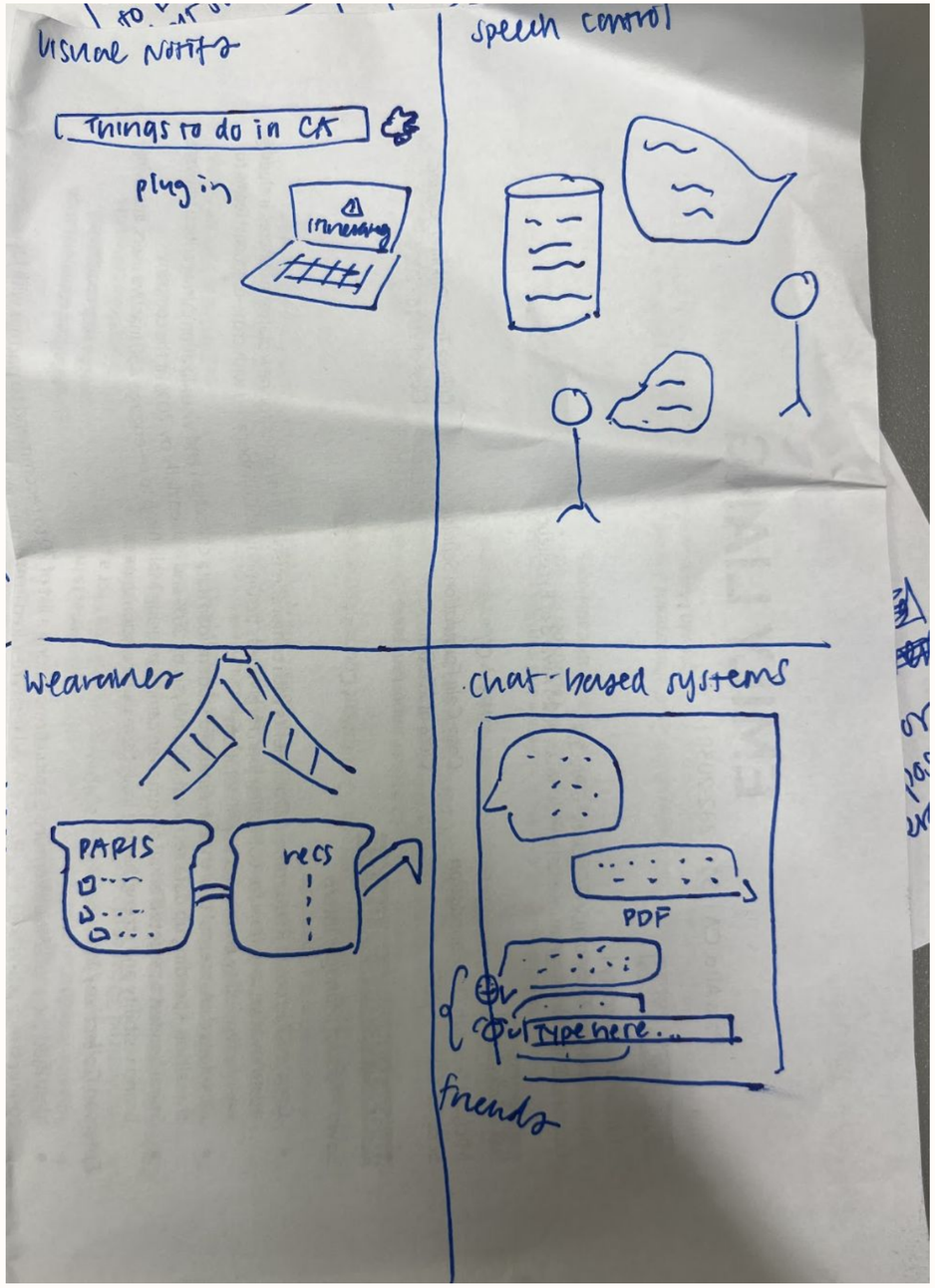
headphones that read out itinerary & info

Free

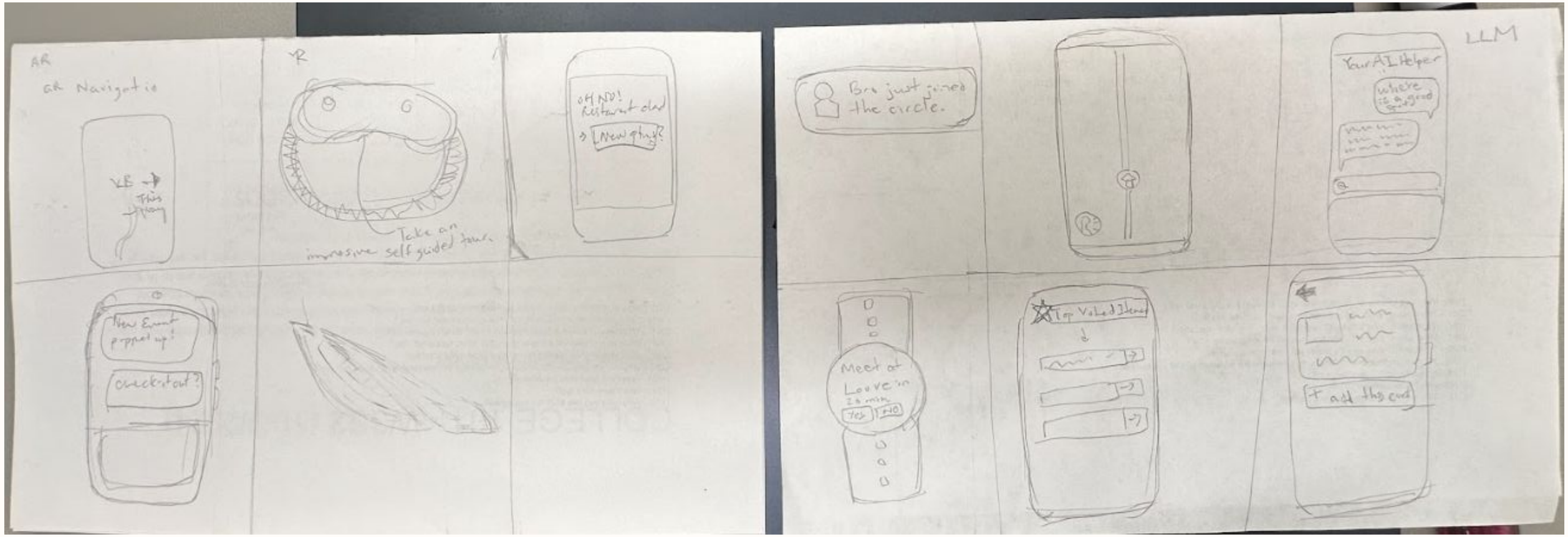
part of airlines B2B




FIRST EXAMPLE
Who is your favorite character (or the character you relate to the most)? Why?
Where would you like to visit?
user selects location on map
San Francisco
vibe?
DAYS?
must do?
quick qs about the travel goals
Brit's itinerary!
time
link
recs an itinerary
hotel
Food
further categories on types
Brit's itinerary
in end, user can swipe yes or no on itinerary
2nd realization
name
interests
create profile
select interests
fill w interests for personalized recs
revisit
where next?
create travel group
previous trips
create an itinerary
1 create a travel group
2 look at my previous trips
3 create an itinerary
Group Name
To plan:
Brit itinerary
burger
carnival
concert
user can drag & drop to customize provided itinerary
concert
burgers
surf
can also add to itinerary
create itinerary
user can add location, description and photos to create own itinerary

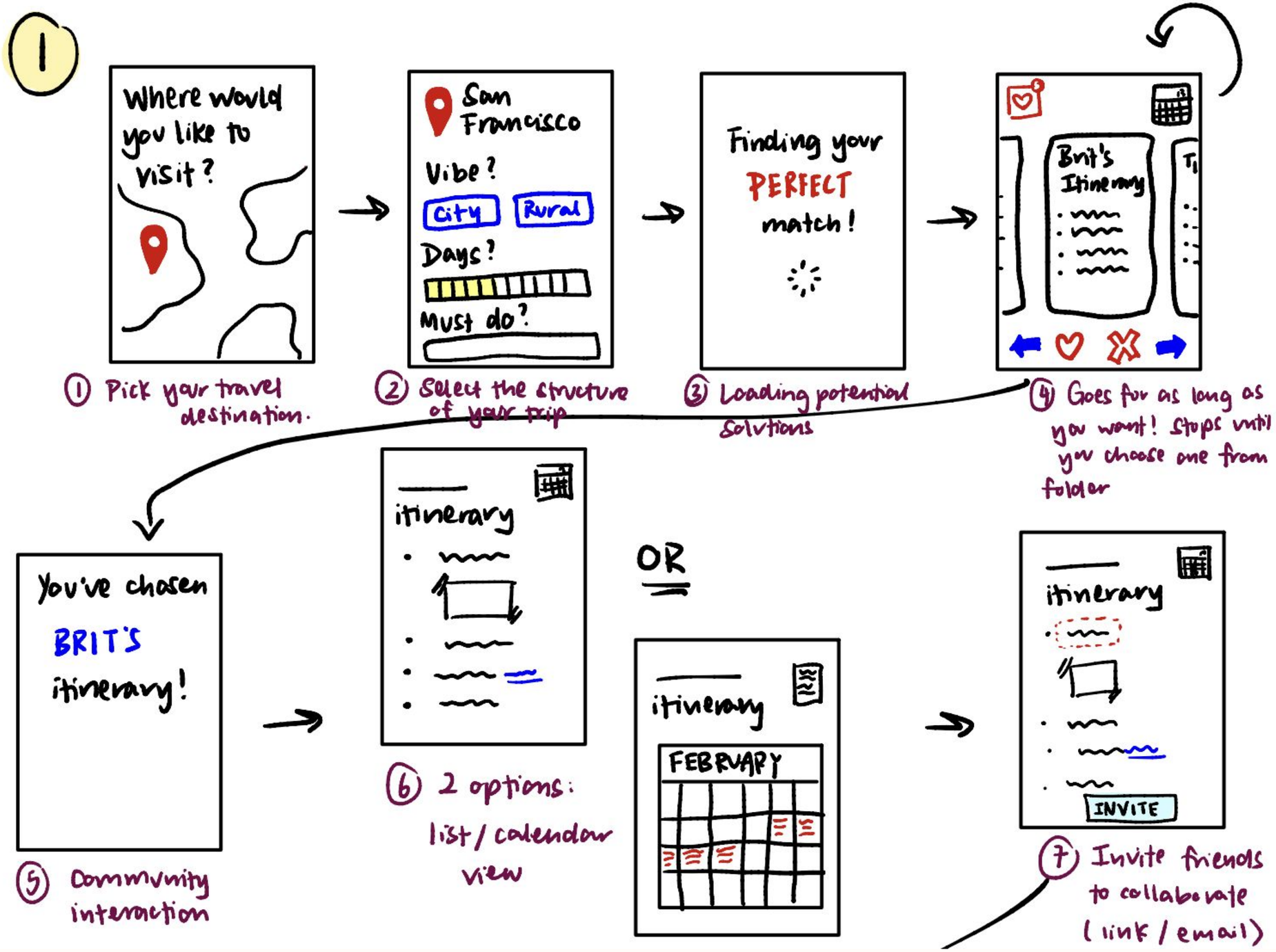

visual notifs
Things to do in CA
plug in
itinerary
speech control
wearables
PARIS
recs
chat-based systems
PDF
Type here...
friends

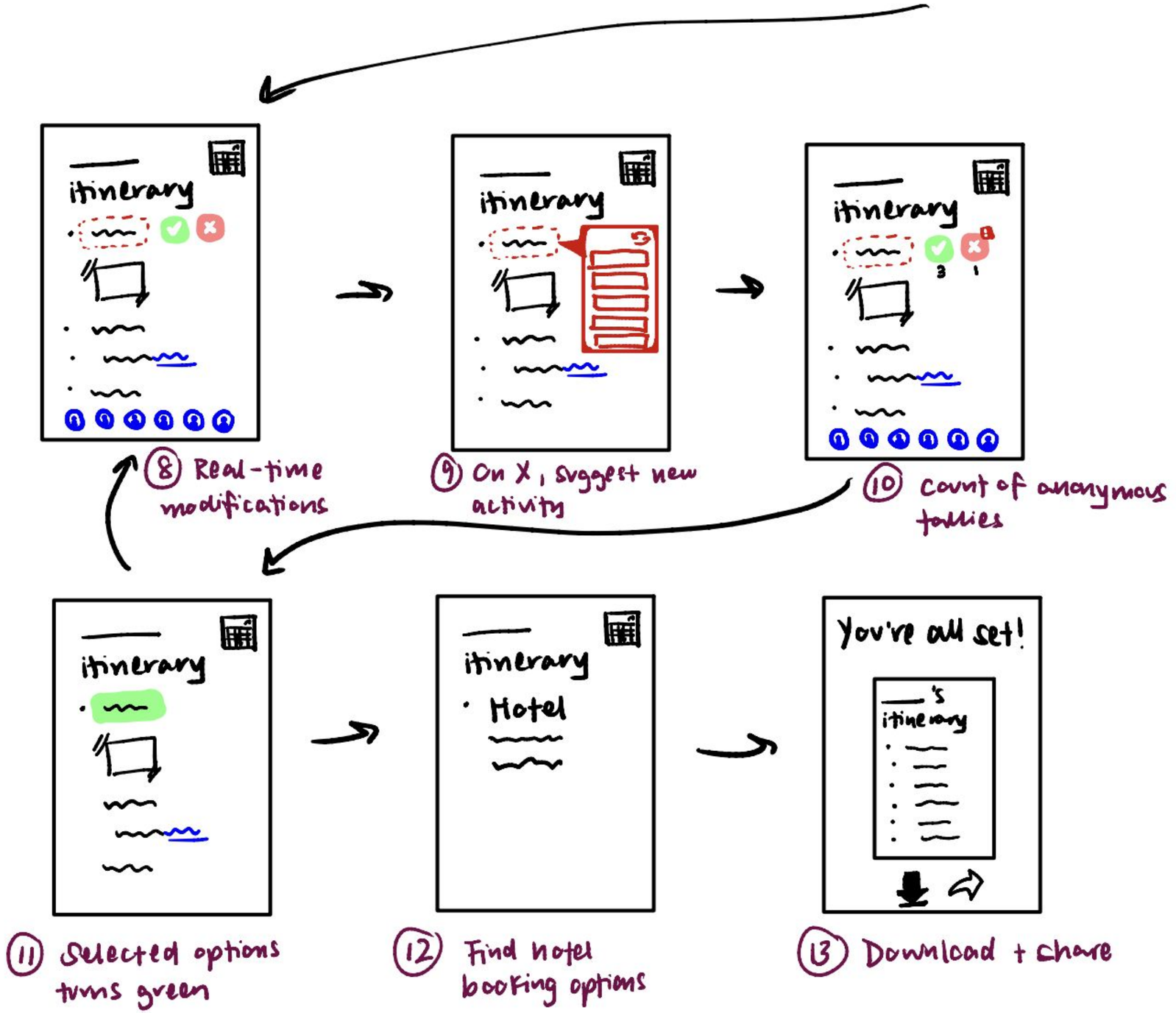
Ecosystem of technologies



Realization #1

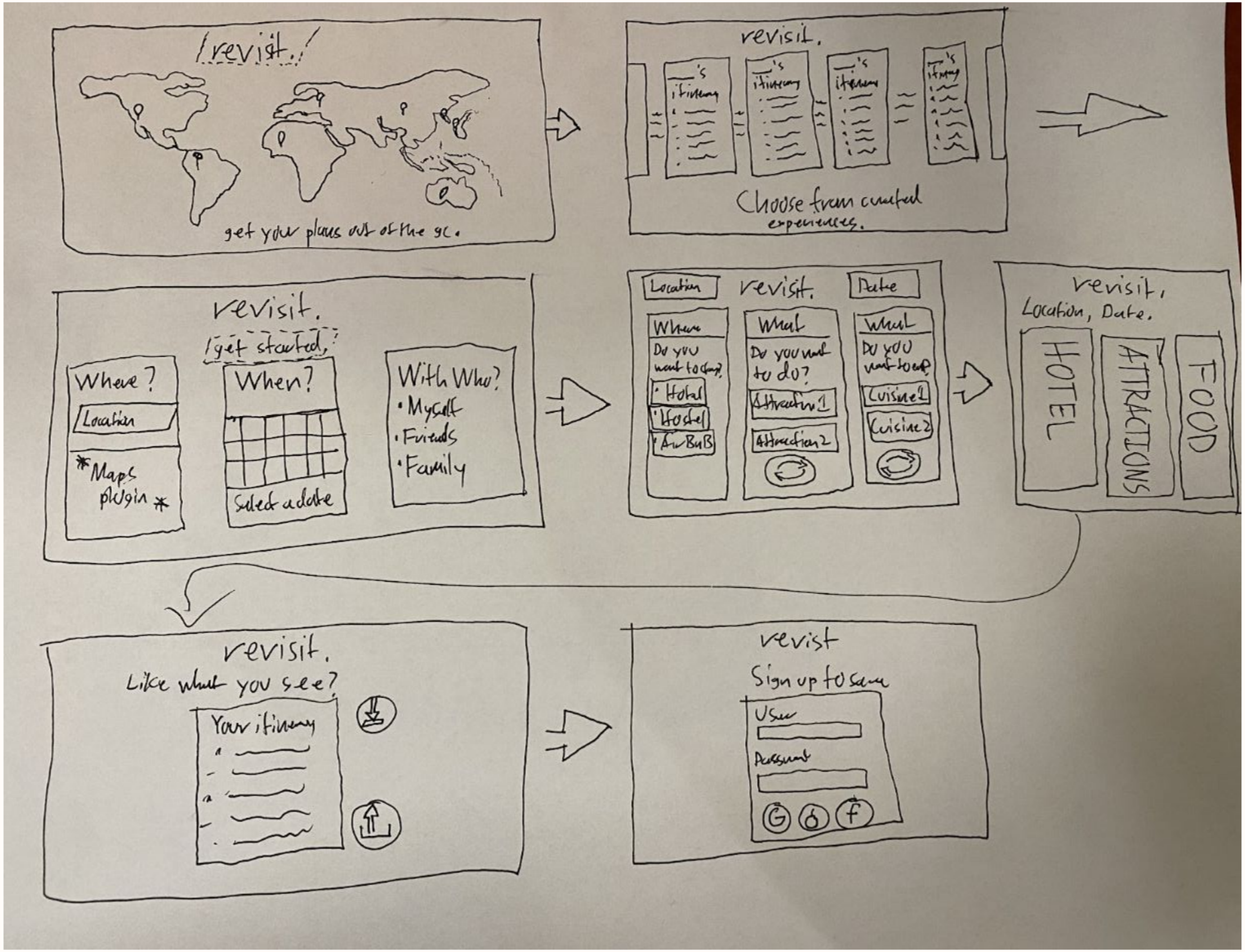
revisit App


1
Where would you like to visit?
San Francisco
Vibe?
City
Rural
Days?
Must do?
Finding your PERFECT match!
Brit's Itinerary
① Pick your travel destination.
② Select the structure of your trip
③ Loading potential solutions
④ Goes for as long as you want! Stops until you choose one from folder
You've chosen BRIT'S itinerary!
⑤ Community interaction
itinerary
⑥ 2 options: list / calendar view
OR
itinerary
FEBRUARY
itinerary
INVITE
⑦ Invite friends to collaborate (link / email)


itinerary
itinerary
itinerary
3
1
(8) Real-time modifications
(9) On X, suggest new activity
(10) count of anonymous tallies
itinerary
itinerary
Hotel
You're all set!
's itinerary
(11) Selected options turns green
(12) Find hotel booking options
(13) Download + share

Realization #2

revisit Web


revisit.
get your plans out of the gc.
revisit.
's itinerary
's itinerary
's itinerary
's itinerary
Choose from curated experiences.
revisit.
Get started.
Where?
Location
Maps plugin
When?
Select a date
With Who?
• Myself
• Friends
• Family
Location
revisit.
Date
Where
Do you want to stay?
• Hotel
• Hostel
• AirBnB
What
Do you want to do?
Attraction 1
Attraction 2
What
Do you want to eat?
Cuisine1
Cuisine2
revisit.
Location, Date.
HOTEL
ATTRACTIONS
FOOD
revisit.
Like what you see?
Your itinerary
revist
Sign up to save
User
Password
G
f

Realization Prioritization

App

1. Easily accessible during travel
2. Less stressful way to make decisions (cue Samantha)
3. Easier collaboration

Web

1. More aligned to current planning methods → on computer
2. Wider screen, wider coverage and visual input
3. Central hub for booking (ex. book plane tickets in second tab)

App

1. Easily accessible during travel
2. Less stressful way to make decisions (cue Samantha)
3. Easier collaboration

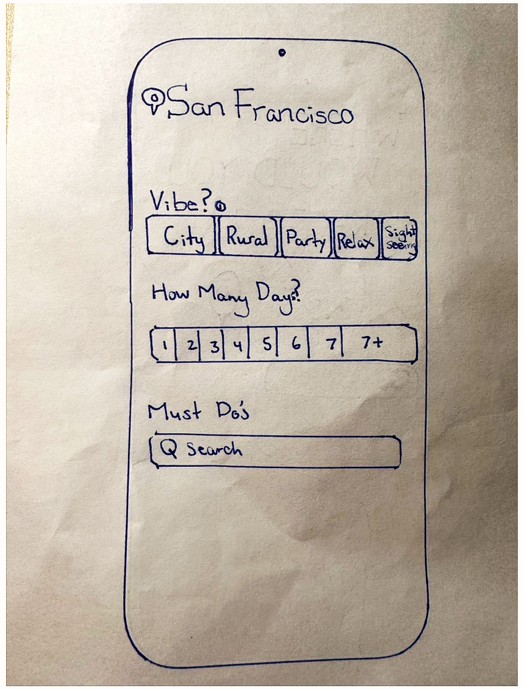
Web

1. More aligned to current planning methods → on computer
2. Wider screen, wider coverage and visual input
3. Central hub for booking (ex. book plane tickets in second tab)

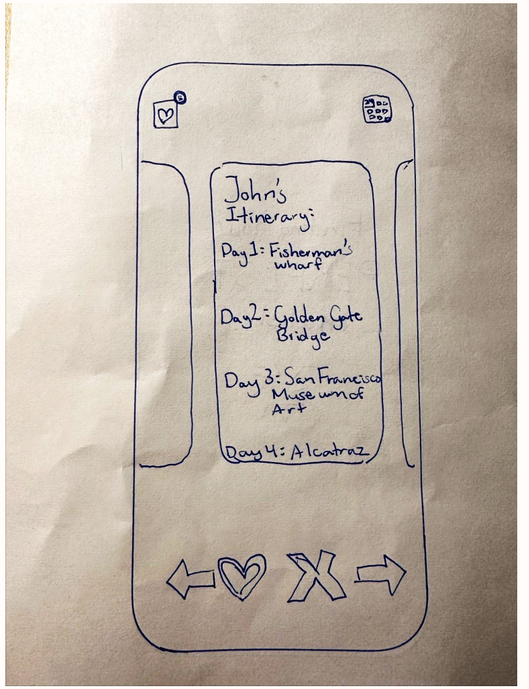
Low-Fi Prototype

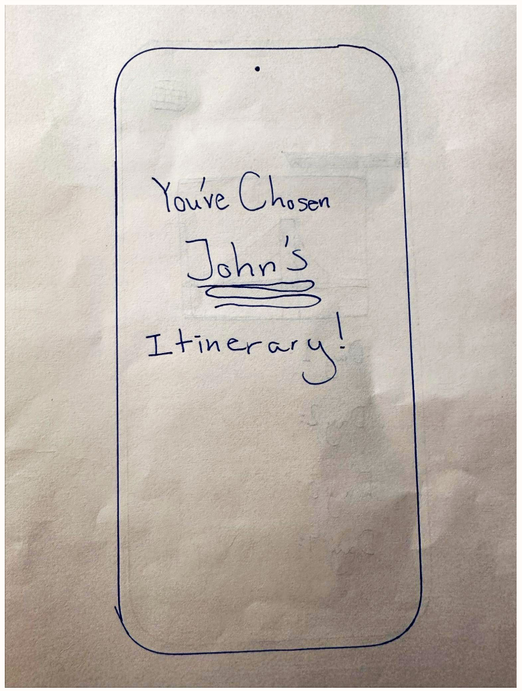
1/2

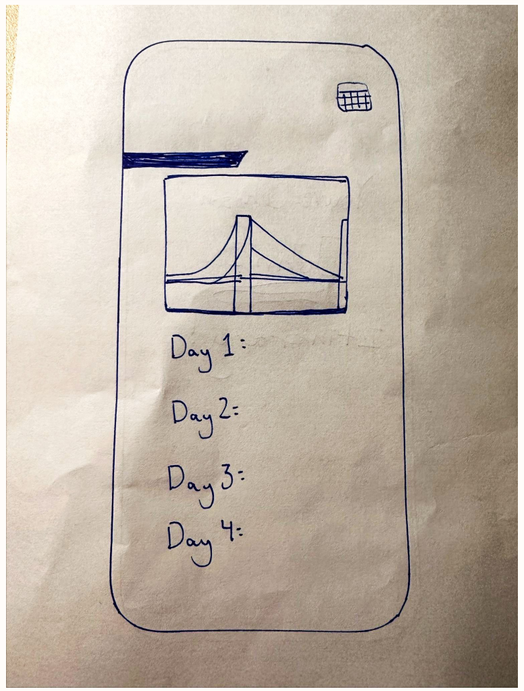
WHERE WOULD YOU LIKE TO??
Visit

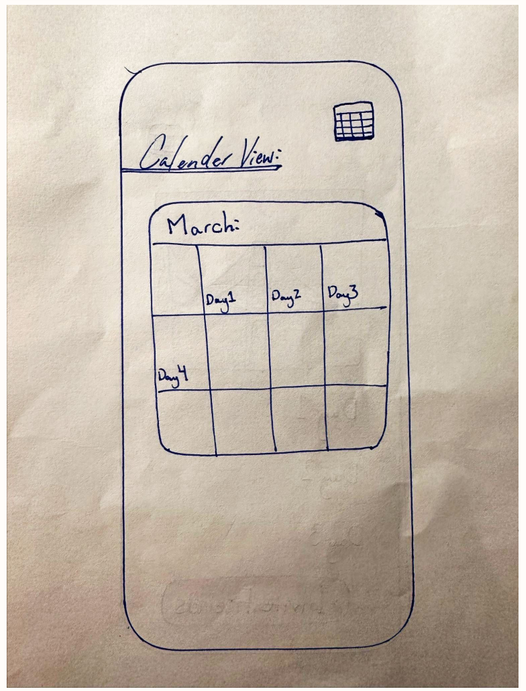

San Francisco
Vibe?
City
Rural
Party
Relax
Sight seeing
How Many Days?
1 2 3 4 5 6 7 7+
Must Do's
Search

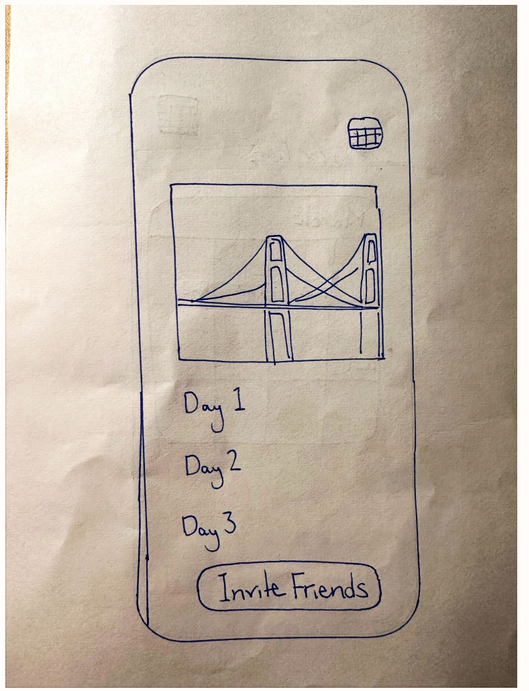
Finding Your PERFECT Match!


John's Itinerary:
Day 1: Fisherman's wharf
Day 2: Golden Gate Bridge
Day 3: San Francisco Museum of Art
Day 4: Alcatraz

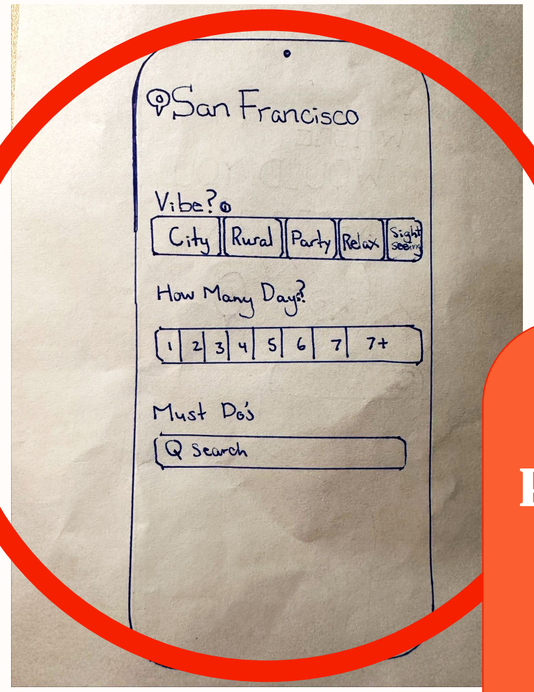

You've Chosen John's Itinerary!

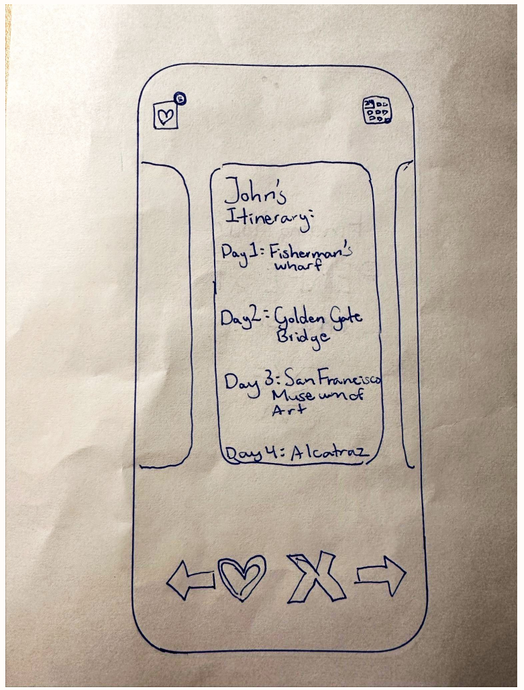

Day 1:
Day 2:
Day 3:
Day 4:


Calender View:
March:
Day1
Day2
Day3
Day4


Day 1
Day 2
Day 3
Invite Friends

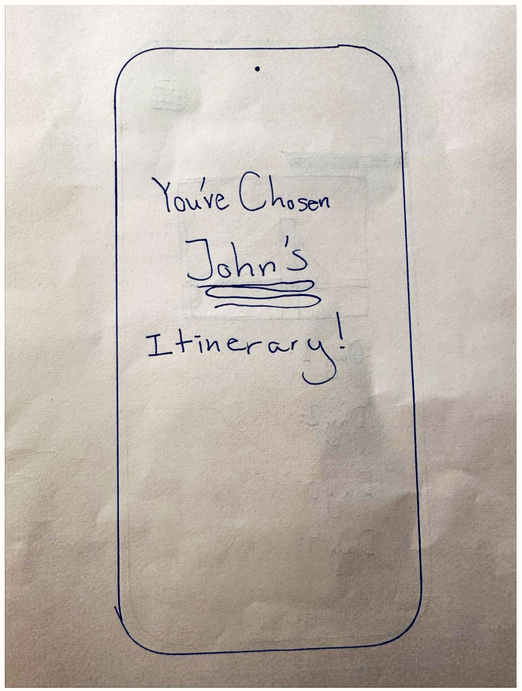
1/2

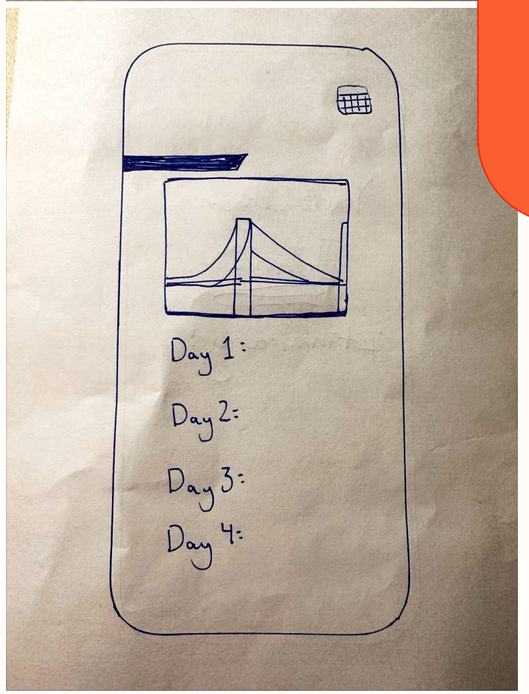


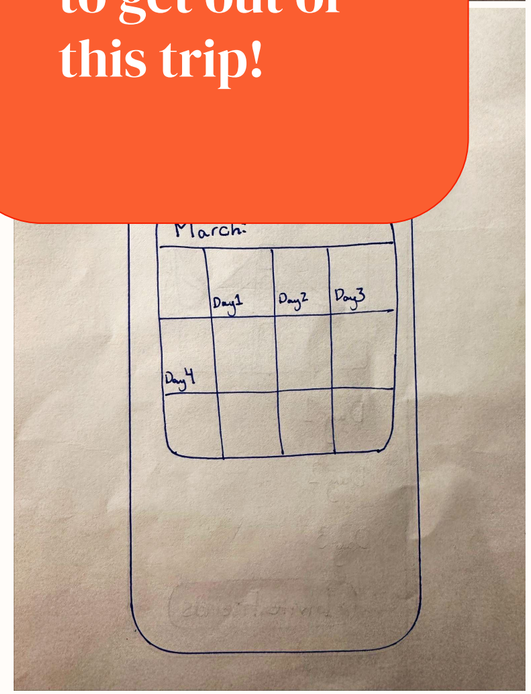


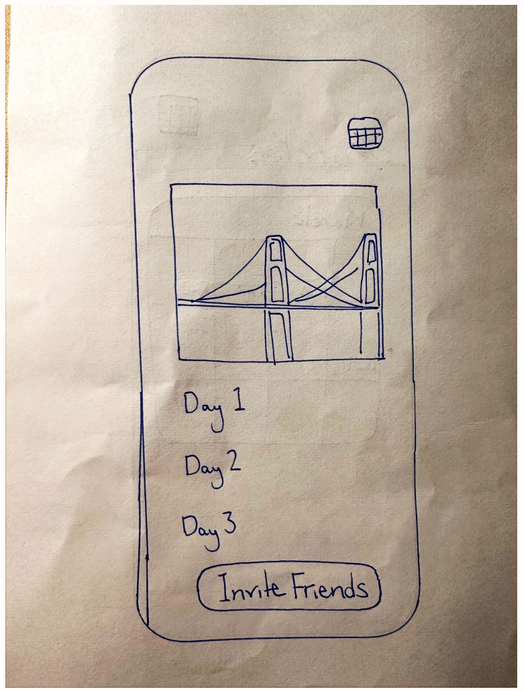
Preference page

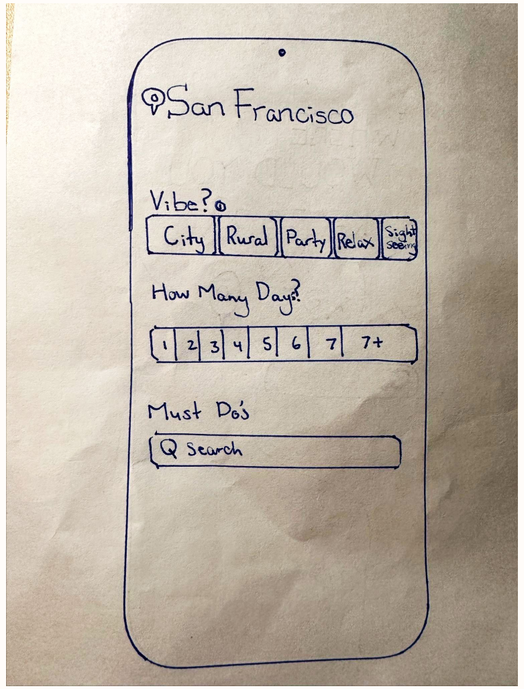
- Understand what you want to get out of this trip!

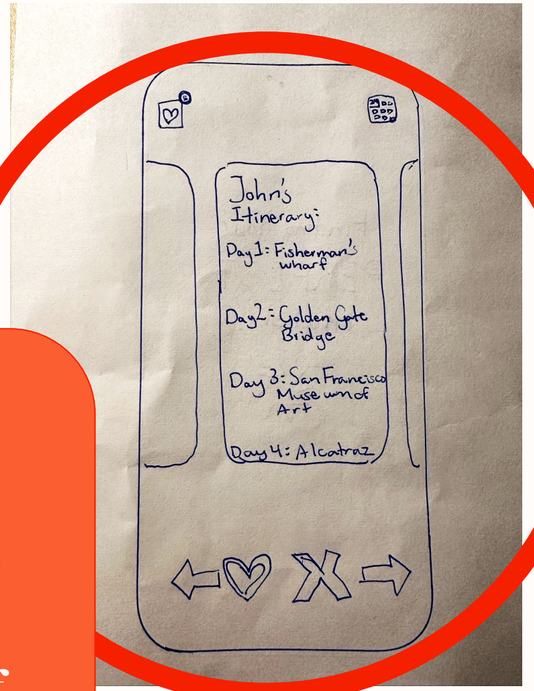






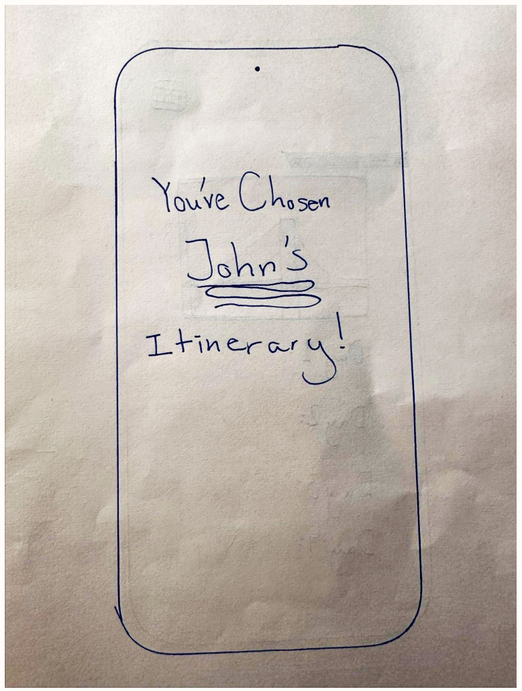


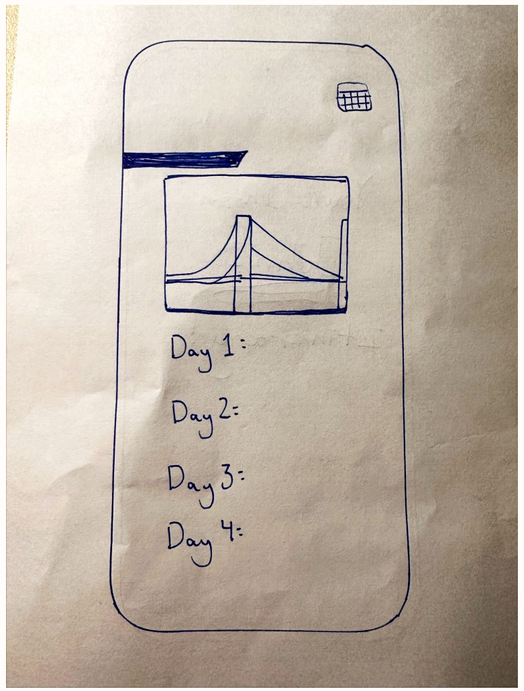


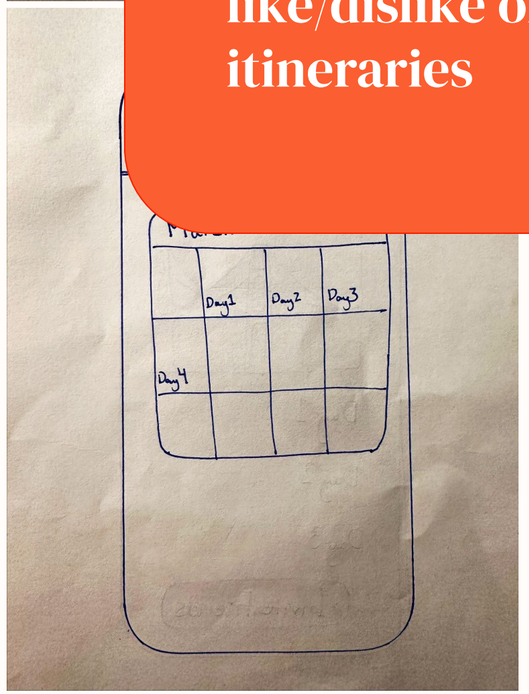


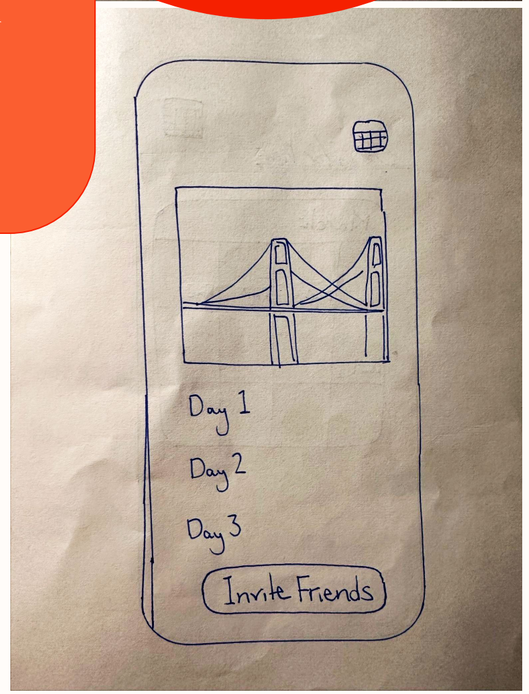
Like/Dislike

- Tinder-esque quick like/dislike of itineraries

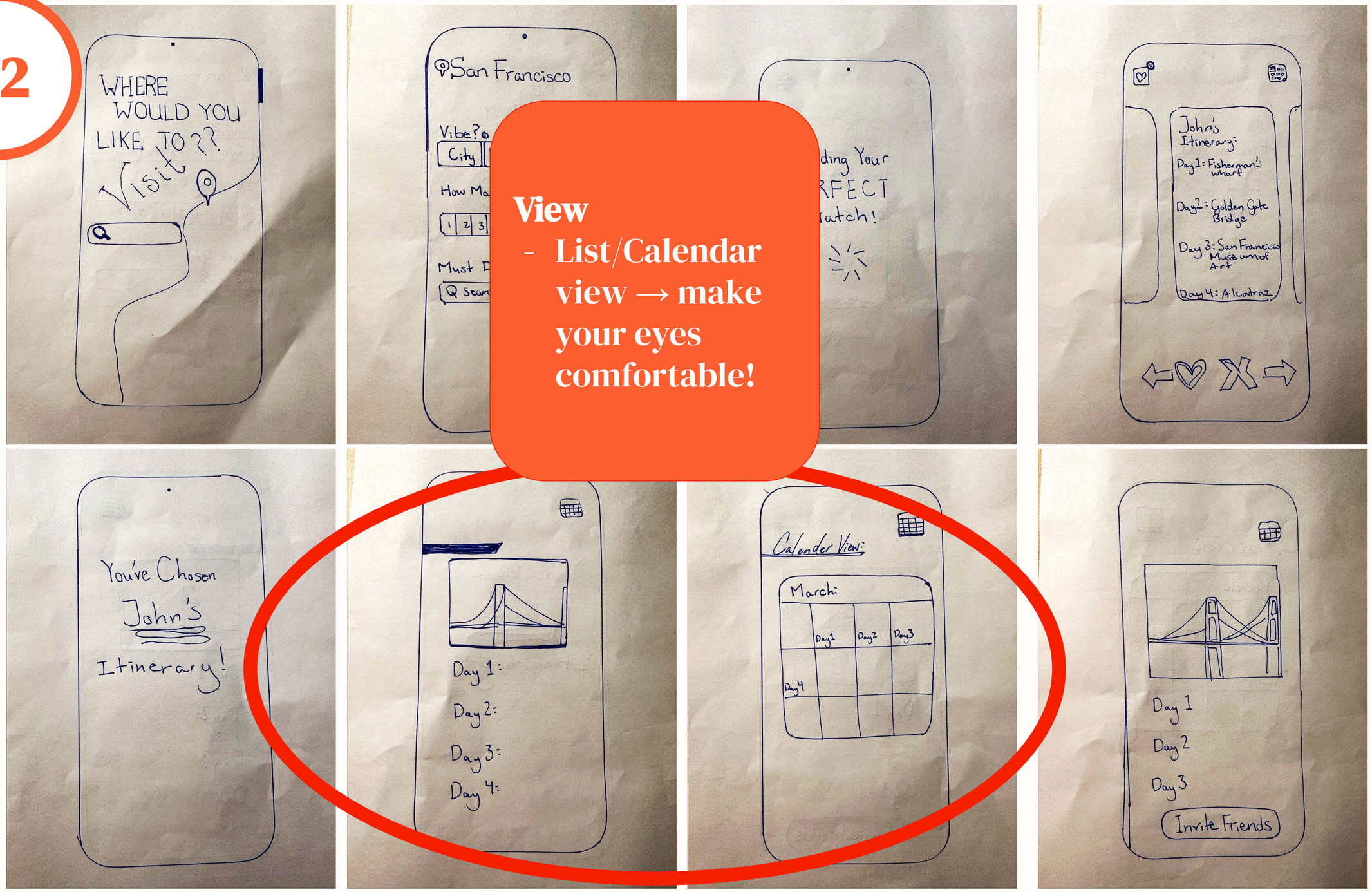








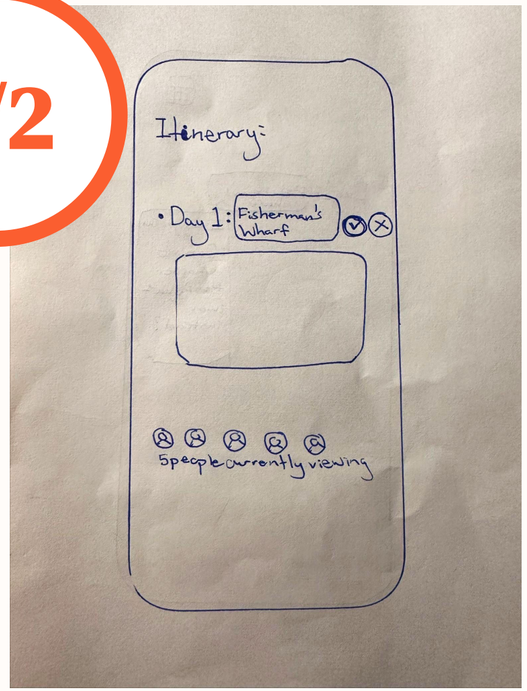
1/2

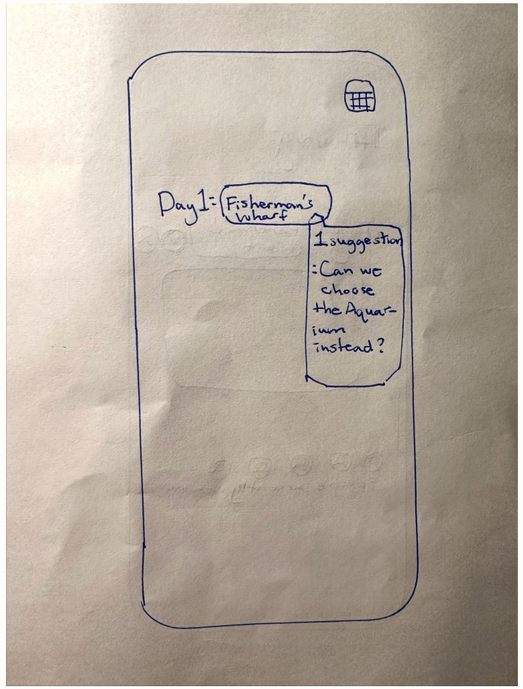


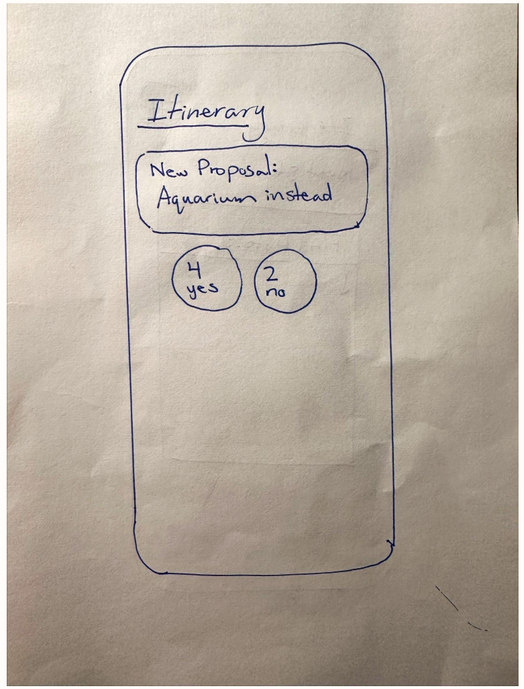
View

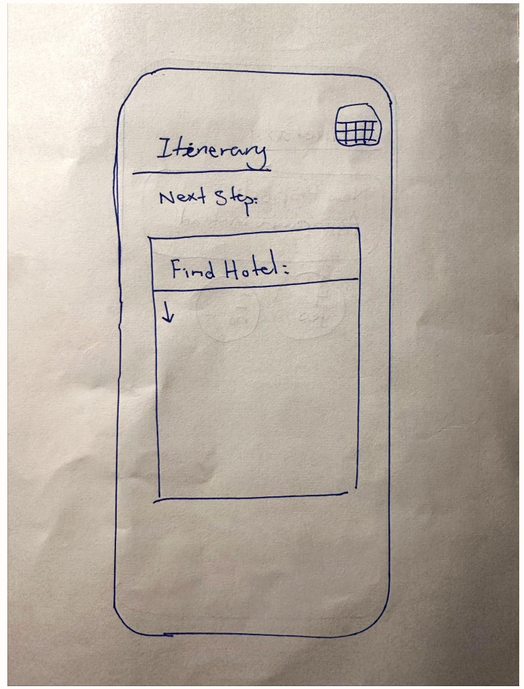
- **List/Calendar view → make your eyes comfortable!**

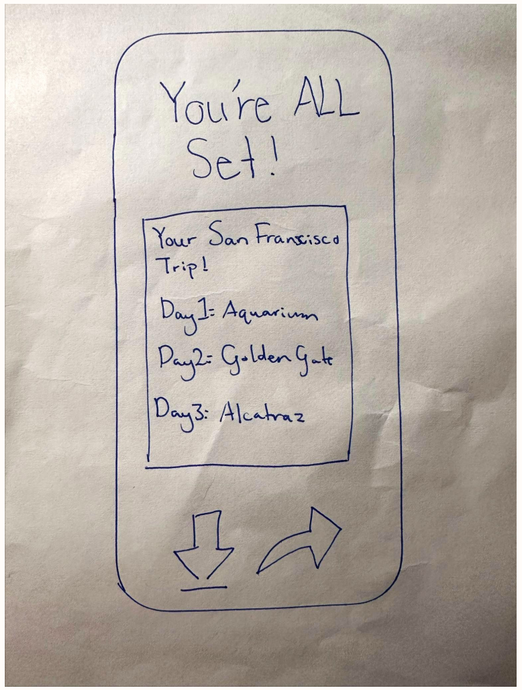
2/2


Itinerary:
• Day 1: Fisherman's Wharf
5 people currently viewing

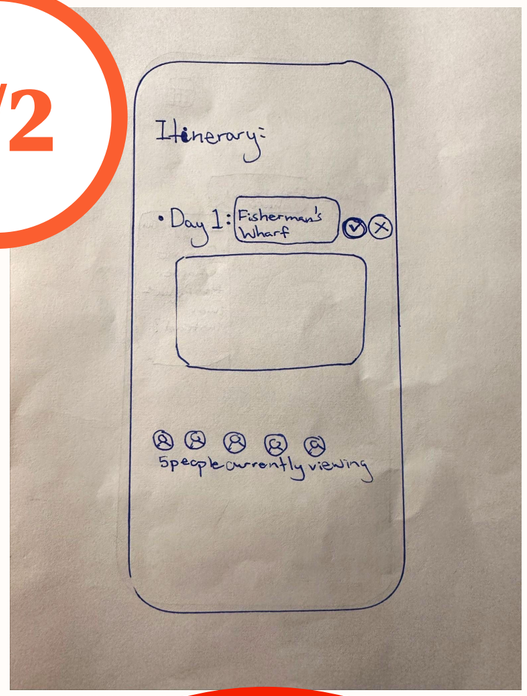

Day 1: Fisherman's Wharf
1 suggestion: Can we choose the Aquarium instead?

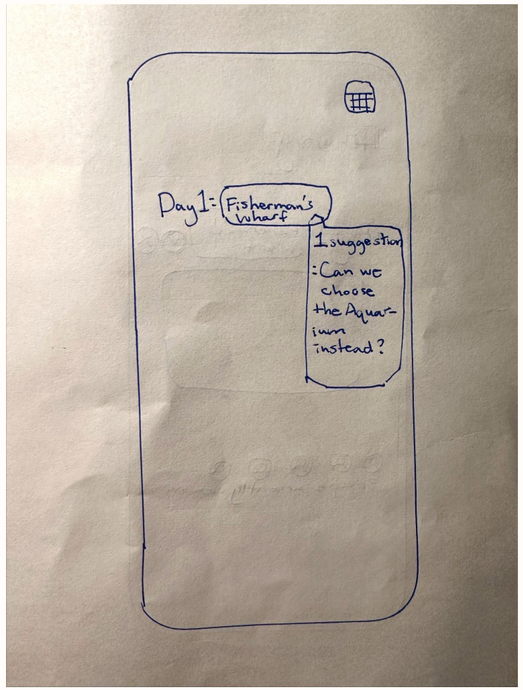

Itinerary
New Proposal: Aquarium instead
4 yes
2 no

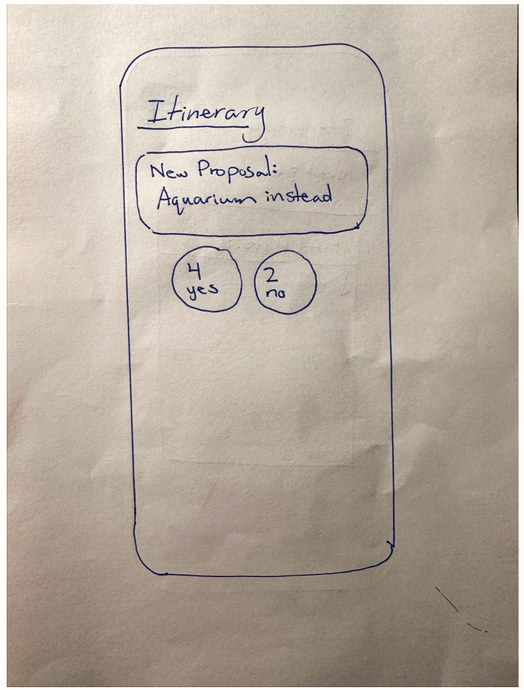

Itinerary
Next Step:
Find Hotel:

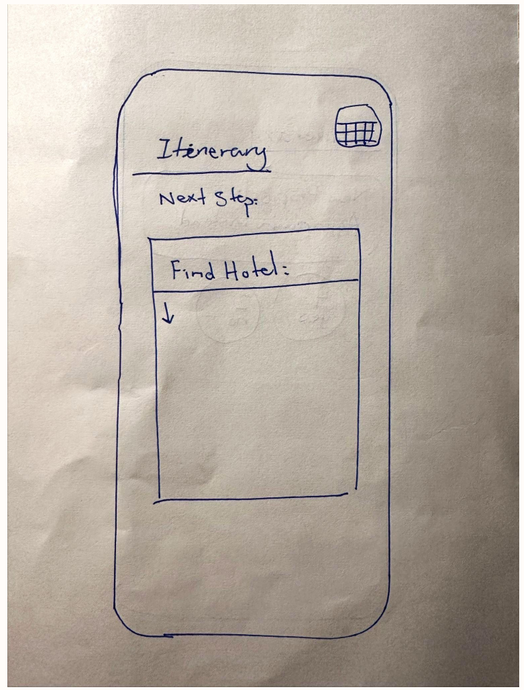

You're ALL Set!
Your San Francisco Trip!
Day 1: Aquarium
Day 2: Golden Gate
Day 3: Alcatraz

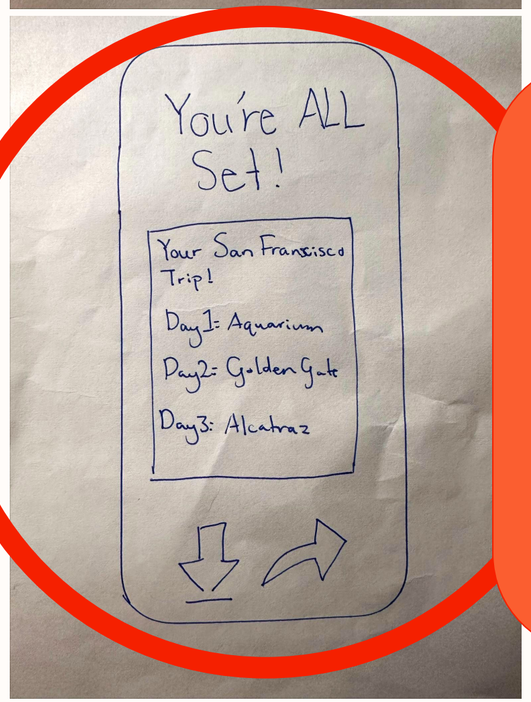
2/2











Downloadable/Shareable

- Save for use during the trip/share with friends!

Task Flows

Simple :

- Users can search for itineraries that are specific to the desired location

Moderate :

- Users can share itinerary with others in the group

Complex:

- Users can customize certain activities they find interesting

Simple

Users can search for itineraries that are specific to the desired location

Search bar:

- Input desired location

Effective title:

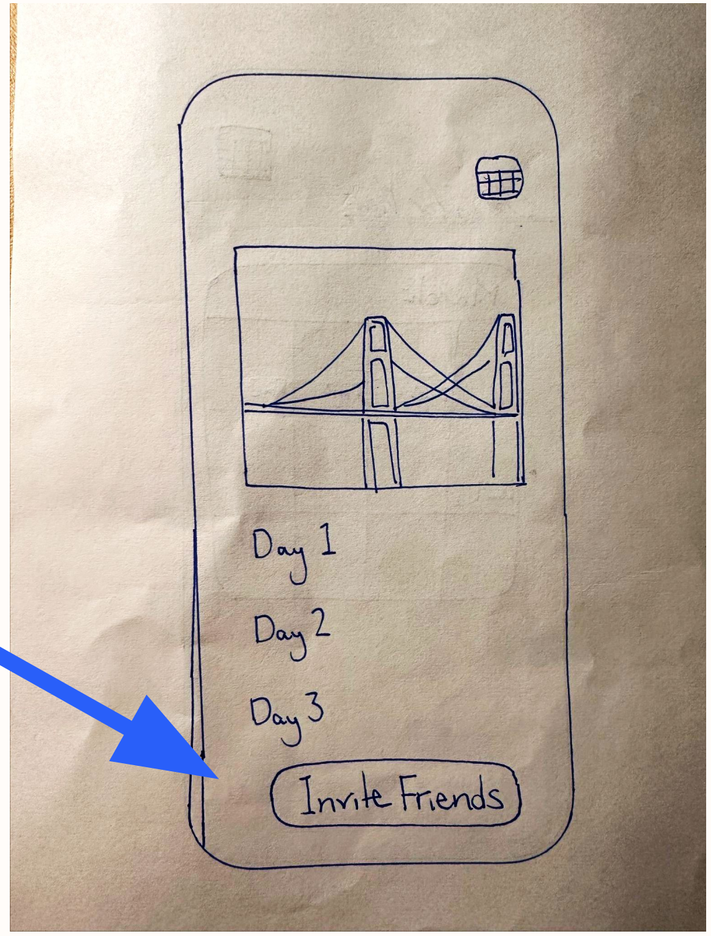
- Prompts users to complete task

Moderate

Users can share itinerary with others in the group

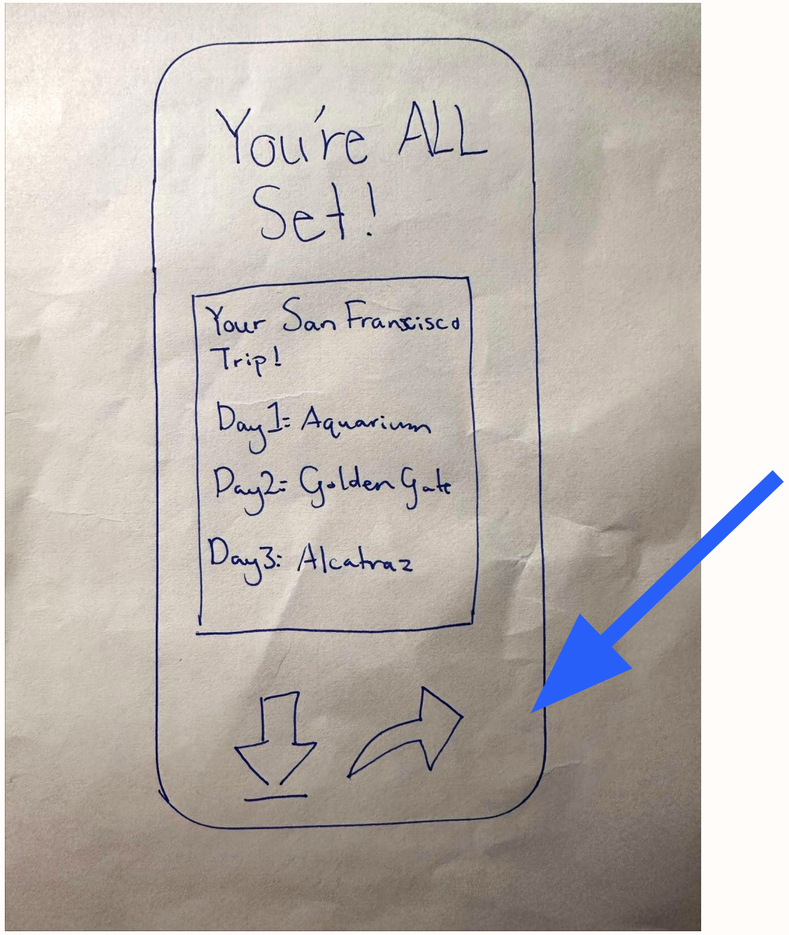
Invite friends to edit:

- **Allow multiple users to collaborate together**
  - **Phone number invite/*revisit* account invite**



Moderate

Users can share itinerary with others in the group

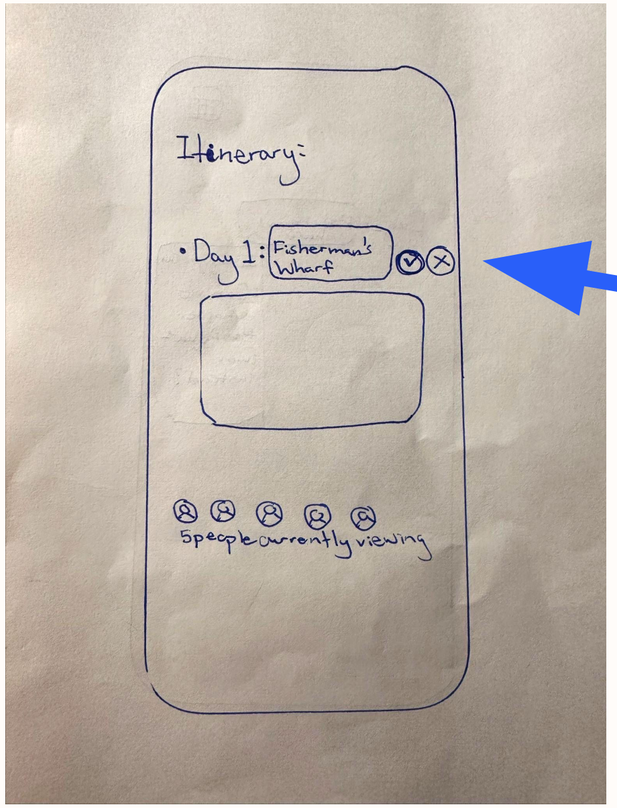


Share final itinerary:

- Download and share with friends and family
  - Phone number, any other apps that support (ex. Email, Instagram, Airdrop, etc.)

Complex

Users can customize certain activities they find interesting

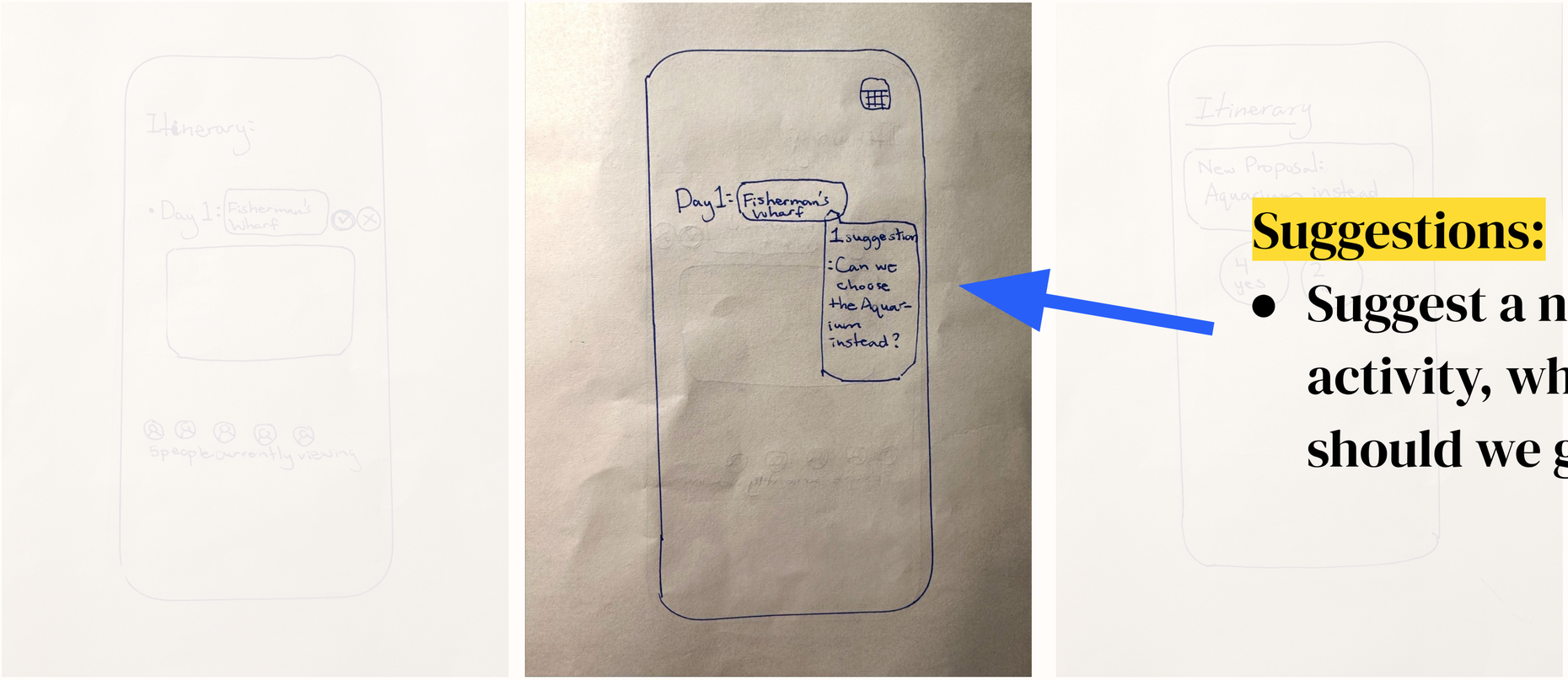


Vote on activity:

- **Majority wins on whether or not an event stays in the itinerary**

Complex

Users can customize certain activities they find interesting



Suggestions:

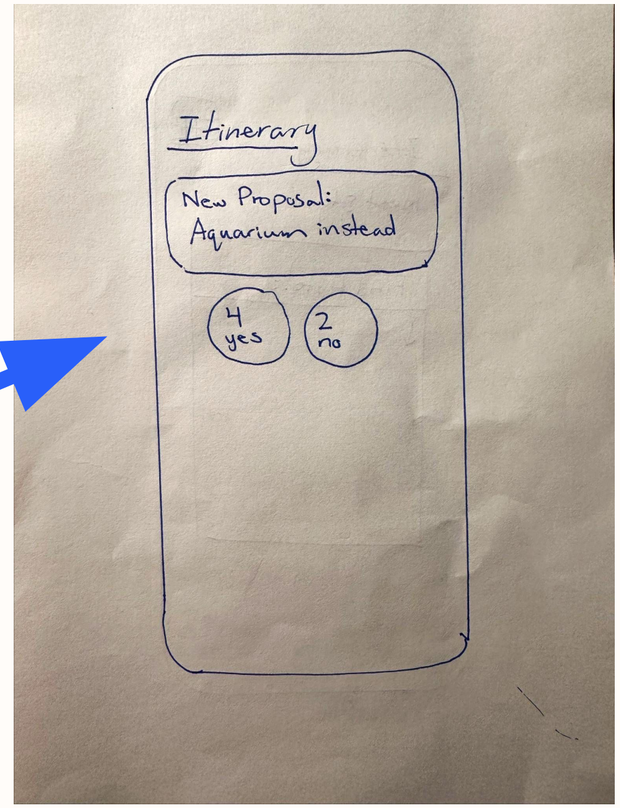
- **Suggest a new activity, where else should we go?**

Complex

Users can customize certain activities they find interesting

Vote on suggestions:

- **Pick another activity out of those suggested!**
  - **If struggling, table it! (or else we'll find ourselves in an infinite loop...)**



Testing Methods

Testing Methodology

We tested the design with the following participants:

- Participant 1: Luigi (Gen Z, in mid 20s, travels frequently)
- Participant 2 Vinay (Tourist visiting Stanford campus
- Participant 3: Amir (Mid-40's, frequent traveler with wife)
- Participant 4: Sasha (Stanford sophomore, doesn't travel often)

Recruitment and Compensation:

We focused on frequent travelers and occasional tourists as they are the most likely to benefit from our app. To ensure diversity, we selected participants from different age groups, travel frequencies, and backgrounds. Our participants included individuals in their mid-20s, 40s, and a college student, capturing a wide range of experiences. Participants also represented various travel scenarios, such as frequent international travel, tourism, and infrequent local trips. Participants were not compensated.

Environment:

- Various campus locations (main quad, CS building, people sitting down)
- Tested at participants' tables or where they were sitting.

Procedure:

- Told participants who we were and also provided brief background of class and assignment.
- Created script and explained the task and have participants walk through the lo-fi prototype first.
- Answered clarifying question only when they've tried without our help first. The 2nd round was more conversational.
- Last, asked participants to reflect on which functions were intuitive and what caused confusion.
- Tyler(Computer), Ilaria & Emily(Notetaker), Kenneth(Photo-taker)

Usability Goals & Metrics

Pleasing (High User Satisfaction)

- **Time to Value:**

  How quickly users understood the core value of the app by interacting with the paper prototype (e.g., how long it took them to grasp the concept of planning trips, discovering attractions, or sharing itineraries).

- **Task Completion Rates:**

  Percentage of users who were able to complete key tasks using the paper prototype (such as simulating a trip booking, creating an itinerary, or finding a destination).

- **Feedback on Posting and Sharing:**

  Qualitative feedback on how users felt about the ability to share their travel experiences, post reviews, or recommend places based on what they saw in the prototype. This includes how often they said they'd use such features from a scale from 1 - 10.

Testing Results

Statistics

2

Instances where participants asked for clarification about the swipe functionality

7.75

Likelihood of using the app from 1-10

6

Total misclicks/ missteps when using voting system on prototype

Testing Results

Luigi

Gen Z, in mid 20s, travels frequently

<u>What went well:</u>

- Setting up for itinerary match (choosing city & selecting vibes)
- Invite friends already on the app to add to itinerary
- Swiping left and right to find the perfect itinerary

<u>What didn't go well:</u>

- Polling amongst friends → felt voting feature came out unexpectedly
- Categorizing tasks felt unnecessary → didn't need to look for hotels on the app, focus just on itinerary

Testing Results

Vinay

Tourist visiting Stanford campus

<u>What went well:</u>

- Setting up for itinerary match (choosing city & selecting vibes)
- Found it helpful to have all the information in one place
- Was familiar with the swipe left/right format to choose a favorite

<u>What didn't go well:</u>

- Itinerary collaboration is unclear → suggested using colors and avatars to make it clear that voting is happening
- Wanted itineraries to be even more individualized → wanted more details (time slots, recommended times to visit, purpose of travel, etc.)

Testing Results

Amir

Mid-40's, travels 2x a month with wife

What went well:

- Liked having a calendar view & finding it was intuitive
- Could easily answer the questions to prepare for itinerary matching

What didn't go well:

- Home screen to search for destination was unclear
- Collaborating on itinerary was unclear → mostly felt the need for individual planning
- "Must-do's" had a different meaning → thought actual essentials, such as restroom, getting gas, and public transportation, and other logistical must-dos

Testing Results

Sasha

Stanford sophomore, doesn't travel often

What went well:

- Found swiping left/right on itineraries a great way to find a favorite, but did wish there were more visual indicators for the itineraries
- Felt engaged on the app, especially because you can collaborate on the app
- Having suggested next steps makes her feel prepared for travel

What didn't go well:

- Unclear in the beginning if user was being matched with person or an itinerary

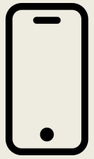
Discussion

Implications

Travelers desire a high level of individualization and customization (even more than we thought)

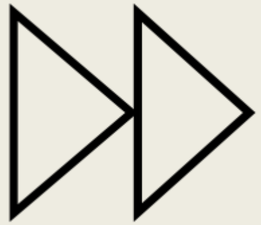
Many users are familiar with the dating app format, so actions are intuitive, but end goal can be confused (e.g. users thought swiping left/right would lead to a match with another user instead of an itinerary)

Icons, colors, user guides, and popups are required for non-intuitive actions (e.g. collaborating with friends to customize the itinerary)



Users want to stay and do everything on one platform

Next Design Steps



1. Onboarding page needs more selection options to better suit users' travel needs, but not overwhelm the user and create onboarding friction.
2. Provide user guide after inviting friends to demonstrate how to vote on individual activities within the itinerary.
    a. Use colors to demonstrate agreement/disagreement during the polls
3. Task page was simple but confused users. Sort next steps chronologically instead of by category to make clearer → countdown until trip.
4. Enlarge search bar in homepage to make it more obvious that users should choose their destination.

Testing Couldn’t Reveal…

1. How voting process would look for the *entire* itinerary (voting for each individual activity)
2. How real-time collaboration on itinerary will look

Thank you!

Appendix

App

1. Easily accessible during travel
2. Less stressful way to make decisions (cue Samantha)
3. Increased overall usage (people spend more time on their phones)
4. Easy collaboration
5. More intimate and personalized
6. Targeted more towards younger audience

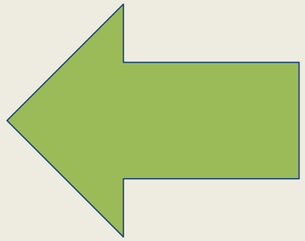
Web

1. More aligned to current planning methods → on computer
2. Wider screen, wider coverage and visual input
3. Central hub for booking (ex. book plane tickets in second tab)
4. More professional, caters towards specific audience
5. Easy to use for all ages

Pros and Cons of Selected Interface

Choose your location (Option 1)

Pros	Cons
- Straight to the point; can get itinerary quickly - User doesn't have to do a hassly onboarding process (making a profile, something that is always tedious) - Allows for quick repair (via swipe recs) - Categorizes recommendations (housing, food, tourist attractions)	• Pegged to one location, doesn't track user preferences across locations • Doesn't encourage users to come back and use app again • Doesn't highlight collaboration flow • Doesn't highlight how to create an itinerary for the platform • Swipe-to-select approach can be toxic/addicting



Web (Option 2)

Pros	Cons
- Do not need to download an app - Allows for more personalization across locations and allows for collaborative experiences - Allows users to create a travel group, look at past trips, and create their own itinerary - Drag-and-drop approach is nice for making modifications	• Creating a profile before getting an itinerary can draw people away from app / create frustration • When traveling, people don't want to pull out their laptop • Doesn't encourage users to come back again • Cannot swipe left/right on laptop (not as intuitive) • Not as convenient

Critical Incidents

0 (no problem)	- Calendar view is intuitive - The set up process for itinerary match (choosing city and selected vibes) - Inviting friends + others can see the same itinerary - Swiping left/right was to choose a match - It was clear that users were being matched with an itinerary once it got to the "We've found you a match" page
1 (cosmetic problem)	- Choosing a destination on home screen → make search larger, focus of the screen - Categorizing tasks confused users and drew them away from the main goal of itinerary creation - "Must-do's" had a different meaning → thought actual essentials, such as restroom, getting gas, and public transportation, and other logistical must-dos
2 (minor usability problem)	- When faced with a swipe left/swipe right function, users associate it with a dating app and immediately assume that they'll be matched with a person, rather than an itinerary - Wanted itineraries to be even more individualized with details like time slots, recommended times to visit, purpose of travel
3 (major usability problem)	- Itinerary collaboration not quite clear from the jump → took some explaining to understand
4 (usability catastrophe)	- Many people did not notice the yes/no voting options for itinerary customization and wasn't too sure what to do with it

Prep for Prototype Testing

Script

- Provide some background to user about the app (problem we're trying to solve, how we're trying to solve it)
- Ask them to walk through app, thinking out loud
- Tasks:
    - 1. Search for itinerary for specific destination
    - 2. Share itinerary with others in group
    - 3. Customize certain activities