Snapchat Data Transparency Redesign

Yiyang Zhang

April 6, 2025

Agenda

Rationale

Rationale

Rebuild user trust through transparent controls and reduced cognitive load

1. Enhanced User Clarity & Accessibility

Many users were unaware of how their data was being collected and used.   Simplified language, visual aids (like icons and progress bars), and a more intuitive layout make privacy settings easier to navigate.   Instead of buried legal jargon, data permissions are now explained in plain language with toggles for quick adjustments.

2. Granular Control Over Data Sharing

 Users had limited options to customize data-sharing preferences.The redesign introduces step-by-step breakdowns of what data Snapchat collects (location, contacts, ad preferences) and lets users opt in/out selectively. A new "Data Permissions" dashboard allows users to revoke access to specific features (like camera or microphone) without disabling the entire app.
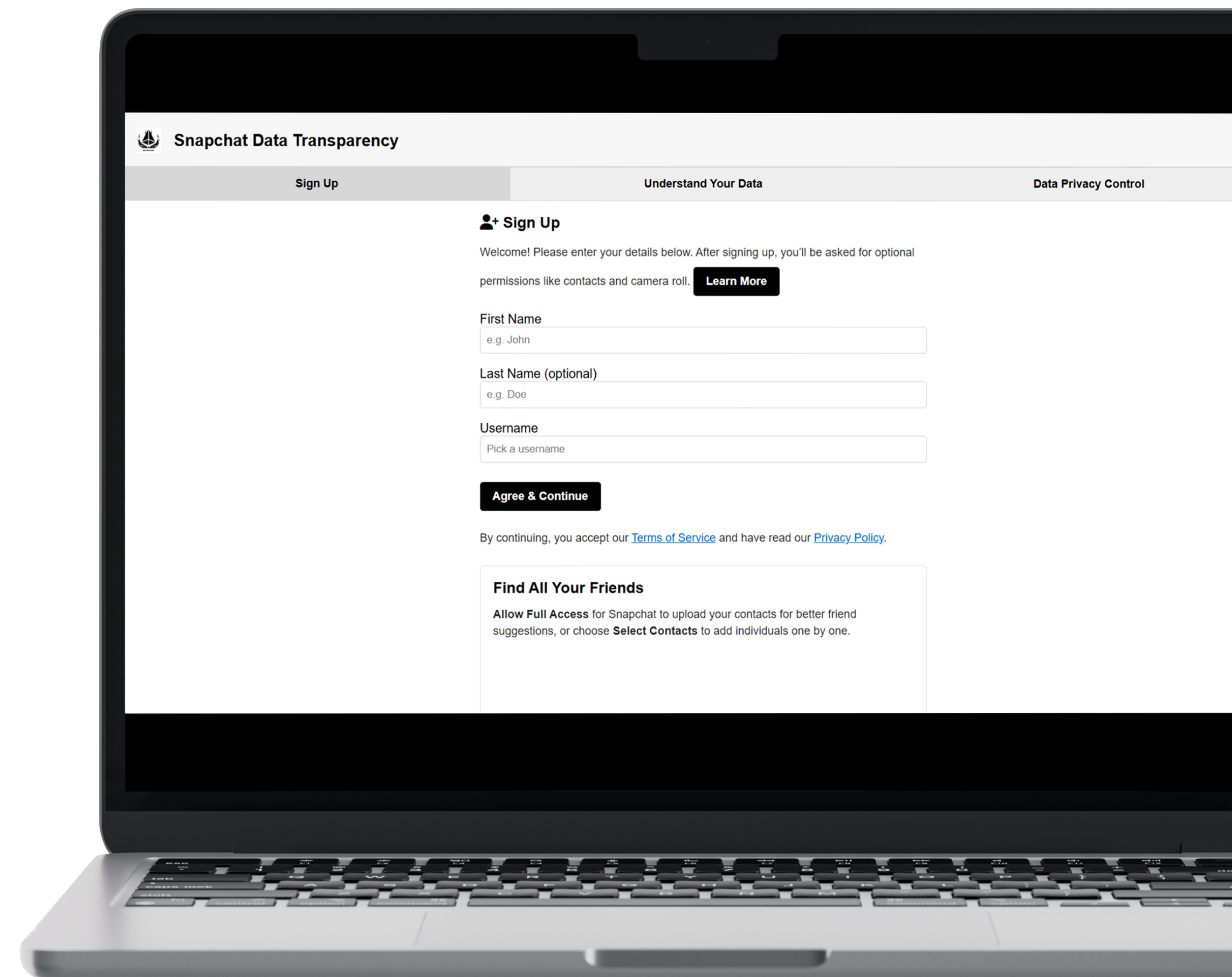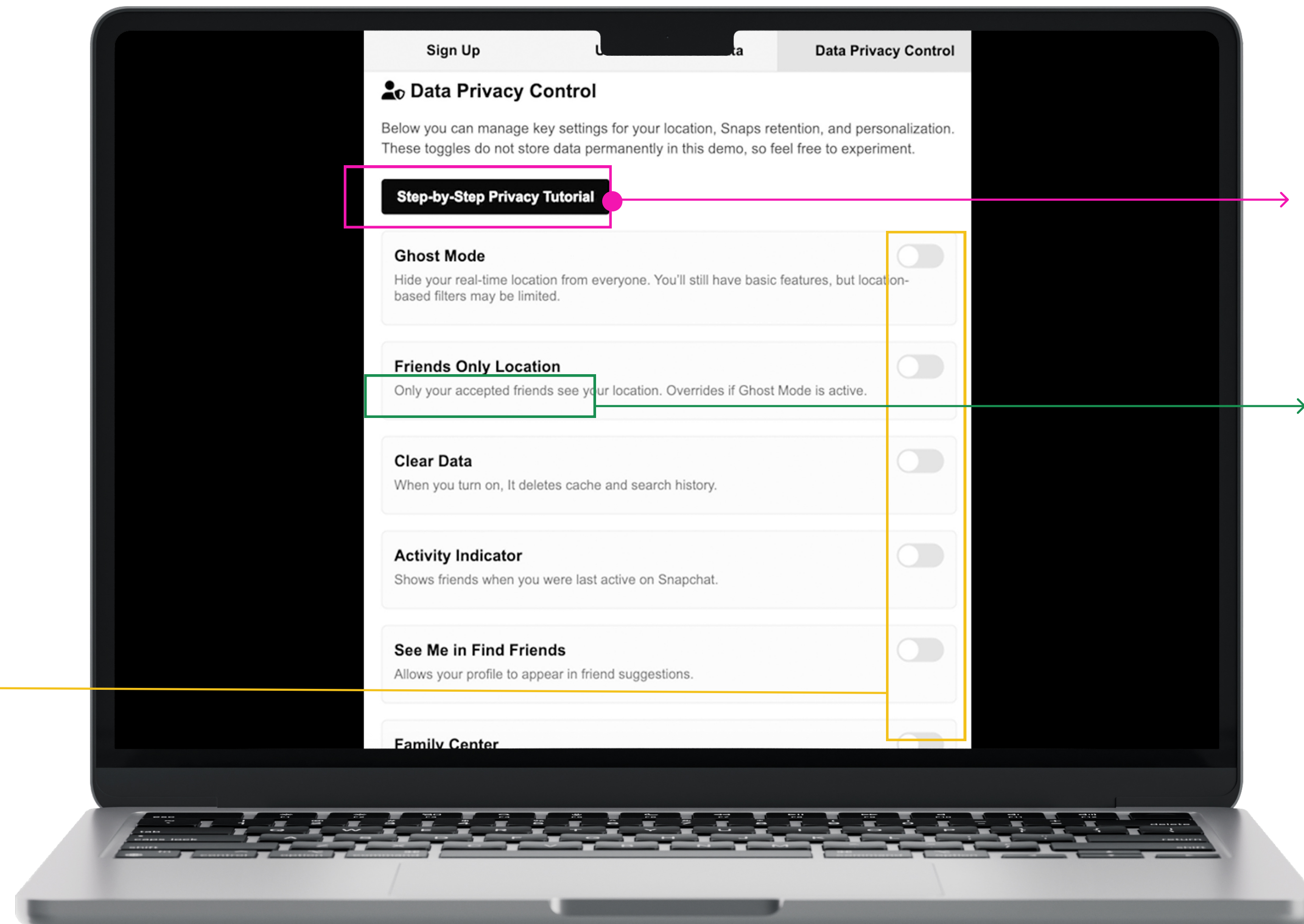
Sign Up | Data Privacy Control

Data Privacy Control

Below you can manage key settings for your location, Snaps retention, and personalization. These toggles do not store data permanently in this demo, so feel free to experiment.

Step-by-Step Privacy Tutorial → Learn more about privacy data policies more directly and quickly

Ghost Mode
Hide your real-time location from everyone. You'll still have basic features, but location-based filters may be limited.

Friends Only Location
Only your accepted friends see your location. Overrides if Ghost Mode is active. → quick privacy summaries

Clear Data
When you turn on, It deletes cache and search history.

Activity Indicator
Shows friends when you were last active on Snapchat.

See Me in Find Friends
Allows your profile to appear in friend suggestions.

Family Center

Users can directly control the privacy switch

Core Design Rationales

1. User Empowerment Through Clarity

Problem: Previous privacy controls used technical/legal jargon

Solution: Implemented plain-language explanations with visual aids

Example: Replaced "Location Services" toggle with "Who Can See My Location" and interactive Snap Map previews

2.Trust-Building Architecture

- Surface-Level (quick privacy summaries)

- Detailed (expandable explanations)

- Technical (full data specs for advanced users)

Research

Research
Preliminary theoretical research based on data transparency

The oretical Domain	Core Theory (Source)	Theory Summary	Relevance to Data Transparengy	Reference
Privacy Psychology	Privacy Calculus Theory (Dinev &Hart,2006)	User make decisions by weighing the benefit(e.g., personalized services)and risks(e.g., privacy breaches) of data sharing.	User's "selective disabling"of data permissions can be explained by the benefit-risk model;transparent design reduces perceived risks.	Dinev, T. & Hart, P (2006). Privacy Calculus Model in E-Commerce
User Autonomy	Self-Determination Theory (Deci & Ryan,1985)	User require perceived control and autonomy over their action;lack of control reduces engagement.	Provide granular permission controls(e.g.,location access as"precise/approximate/disabled")to enhance user control.	Deci, E.L, &Ryan, R. M. (1985).Intrinsic Motivation and SelfDetermination inHumanBehavior
Information Cognition	Mental Model Matching (Norman,1983)	User interfaces must align with user's mental models to reduce cognitive load.	Complex navigation (e.g. 3+layers for privacysettings in legacySnapchat) causesconfusion; simplifyarchitecture anduse progressive disclosure.	Norman, D.A.(1983).Design RulesBased on Analyses of Human Error
Interaction Ethics	Critique of Dark Patterns (Brignull et al.,2010)	Behavior=Motivation+Ability+Triggers;all three must align to drive action	Legacy Snapchat'scomplex privacysettings reduceuser ability;simplify workflowsand add contextualguidance (e.g.error prompts withpermission tips).	Brignull, H.(2010). Dark Patterns:Deception vs. Honesty in UI Design
Behavioral Guidance	Fogg Behavior Model(Fogg,2009)	Behavior =Motivation +Ability +Triggers; all three must align to driveaction.	Legacy Snapchat'scomplex privacysettings reduceuser abilitysimplify workflowsand add contextualguidance (e.g..error prompts withpermission tips).	Fogg. B. J.(2009).A Behavior Model for Persuasive Design

Research

A design strategy framework based on mainstream data transparency theory

Strategy Type	Core Approach	Theoretical Foundation
Real-Time Feedback Mechanisms	Display data usage, retention periods, and risk levels during critical user actions (e.g., data collection/sharing).	Privacy Calculus Theory (Dinev & Hart, 2006) Fogg's Behavior Model (Fogg, 2009)
Layered Privacy Controls	Offer "Basic → Advanced" progressive settings; surface high-frequency controls (e.g., location toggles), hide complex options.	Self-Determination Theory (Deci & Ryan, 1985) Progressive Disclosure Principle (Nielsen, 2006)
Visualized Legal Terms	Convert complex terms into interactive flowcharts, short videos, or emoji summaries.	Dark Patterns Critique (Brignull et al., 2010) EU GDPR Guidelines (EDPB, 2021)
Reversible Operations	Provide "Undo" options for privacy actions (e.g., disabling permissions) and retain change histories.	Mental Model Alignment (Norman, 1983) ISO 9241-110 Usability Standards (ISO, 2020)
User Education Modules	Use interactive tutorials, case videos, or simulations to explain data practices.	Cognitive Load Theory (Sweller, 1988) NIST Privacy Framework (NIST, 2020)

Research
Discover Research& User Analysis

Method Used

Heuristic Evaluation(old)
I go through each screen, looking for hidden or poorly labeled privacycontrols.Of the Snapchat app to spot confusing privacy settings and unclear data practices.

Comparative Analysis(old)
did some compare snapchat with Instagram and Twitter to see howthose apps present data permissions and privacy information.

User Interviews(old)
did some interview across five people (3 frequent Snapchat users aged19–24 and 2 older users aged 33 and 52) to learn about their confusion around location sharing,how long snaps really last, unclear Terms of Service and Data pravicy.

Diary Study(new)
just ask participants to keep a daily log of their experiences with the snapchatover 3days , if they noting any interactions with privacy settings or moments of confusion. theyjust sent me the issue. is good for me to find non visible problem in one sessions interview.

Research
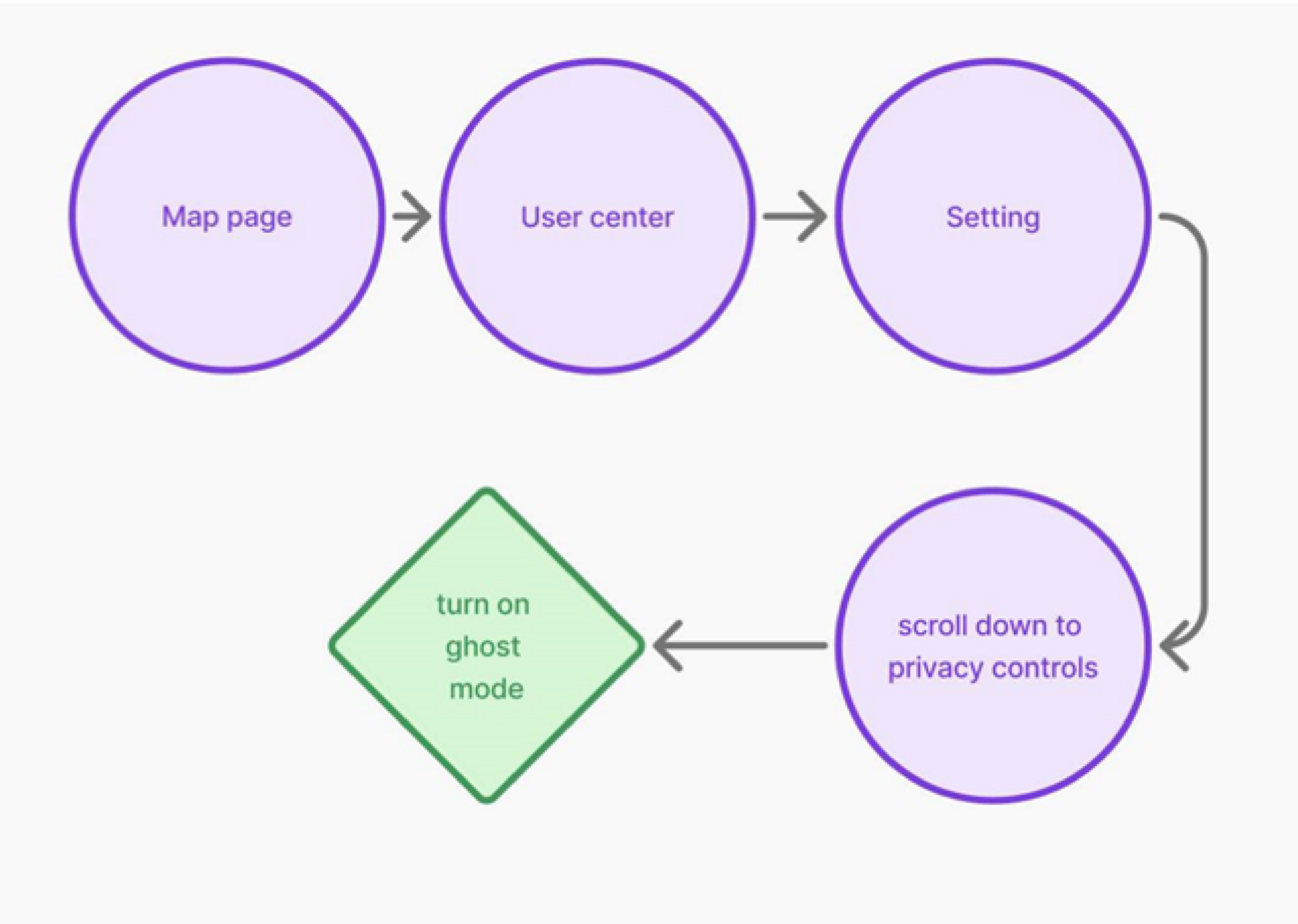## Heuristic Evaluation

Ephemeral Content Misconception
found that many users think snaps vanish immediately after viewing, unaware that Snapchat can store metadata or even unviewed snaps for up to 30 days.

Location Sharing Oversight
discovered that Snap Map updates my location automatically when the app is opened, and privacy options like Ghost Mode or Friends Only are hidden under several layers. (show in chart) (map-user center-setting-scroll down to privacy controls-turn on ghost mode)

Terms of Service Complexity
realized that the Terms of Service are very text-heavy, making it unable for most users, including myself, actually read or understand them fully. And I use chatGPT to simplify the Terms of Service.

Existing user flow
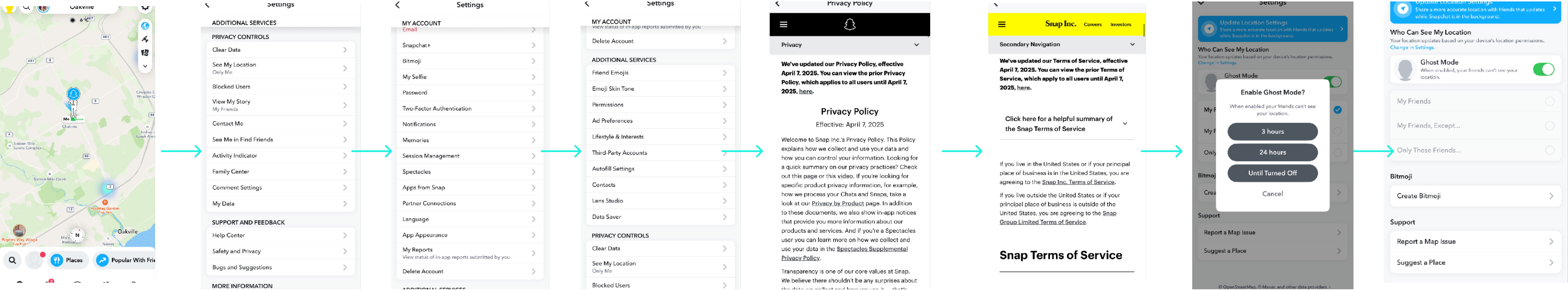
Research
Heuristic Evaluation Summarize

Main questions	Main findings	Theoretical basis/relevant research
Brief content misunderstanding	Users mistakenly believe that "ephemeral" content is completely destroyed, and do not realize that Snapchat stores metadata and unviewed content for 30 days	Metadata blind spot theory: Users generally have a cognitive bias of "content is data", ignoring the 90-day retention and legal storage requirements of EXIF data
Location sharing is not well supervised	Snap Map turns on real-time positioning by default, and the "ghost mode" is hidden in multiple layers of settings, making the operation path complicated.	Analysis of dark patterns in interfaces: default traps and framework manipulation induce users to expose data, with a 5-layer closure path depth, resulting in an activation rate of only 19%
Terms of Service Complexity	Users cannot understand the lengthy terms and conditions and the obscure legal terms, so they need to rely on ChatGPT to simplify them.	Cognitive load quantification: Flesch-Kincaid readability index is only 32.7 (average adult needs ≥60), and the accuracy rate of understanding key terms is less than 12%.
Insufficient granularity of permission control	Users cannot turn off historical location records individually, they need to disable the entire positioning function	Violation of the user control freedom principle: permission levels are not decoupled, leading to the risk of misoperation
Privacy fatigue and passive authorization	Users become numb to frequent pop-ups and complex settings, and habitually agree to permission requests	Behavioral economics framing effect: Positive statements (such as "share wonderful moments") induce users to reveal their data, and the frequency of early morning location checks surges by 240%.

The existing Snapchat privacy settings have problems, such as settings hidden in deep menus, complex language, lack of visual aids, and insufficient control granularity. These problems make it difficult for users to understand and manage their data.
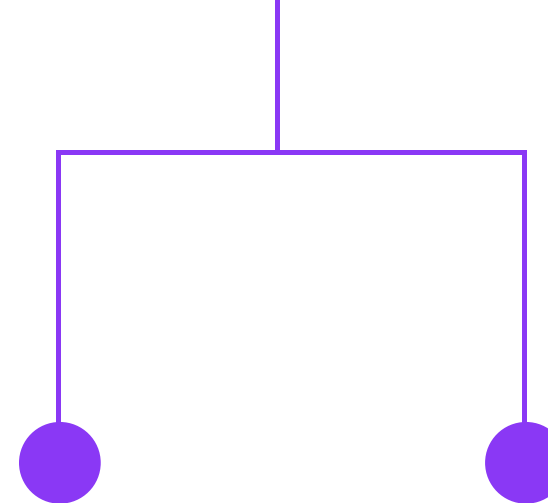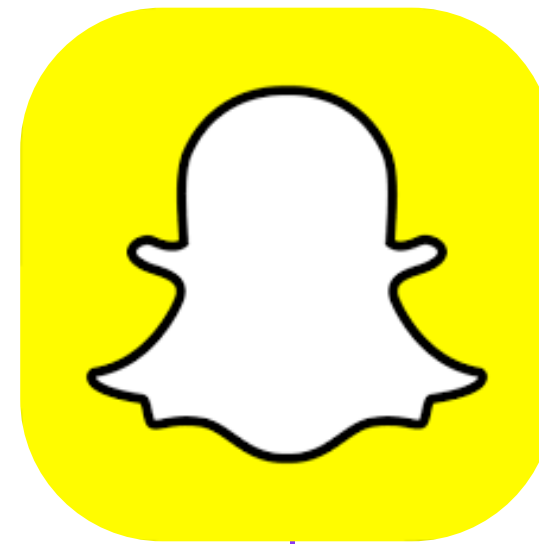
Research
Comparative Analysis

Analysis of User Control vs. Transparency
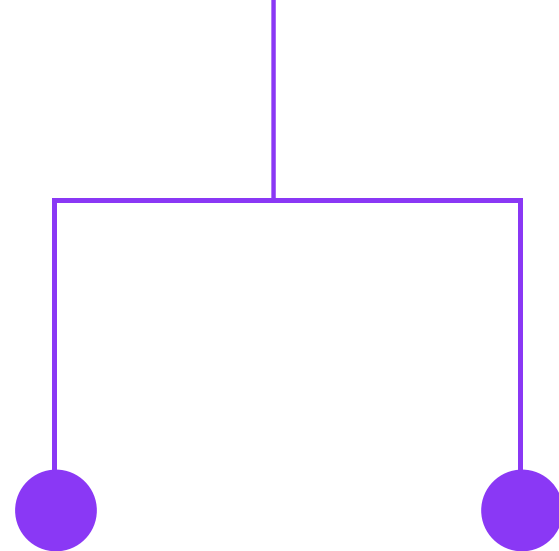
Provides settings for post visibility control, mention interactions, etc.

Recent policy updates (such as biometric data collection) require user consent

Provides privacy settings, such as controlling who can contact you or view your stories

Snap Map location automatic update, incognito mode and other options are deeply hidden
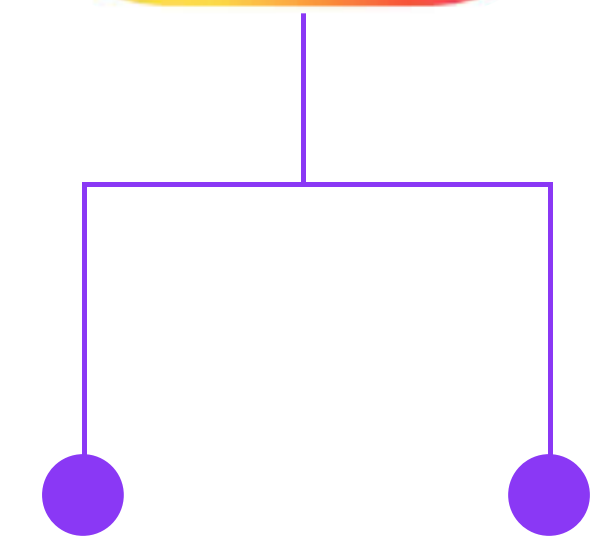
Provides detailed privacy settings, including account privacy (public or private), who can tag you, view posts, etc.

Instagram has easier settings and was rated higher than Snapchat in the 2023 Common Sense Media report.

Research
Comparative Analysis Summarize

Dimensions	Snapchat	Instagram	X
Data transparency tools	Provide a semi-annual transparency report to disclose the amount of illegal content processed (5.54 million illegal content processed in the second half of 2020) and the illegal viewing rate (VVR=0.08%)	No global transparency report is provided, but users are allowed to download data packages (including posts and messages, but without complete metadata)	Provides the aggregated permission status of the "data dashboard", but does not disclose the data retention period or third-party sharing map
Privacy settings entry complexity	It takes 5 steps to turn off real-time positioning (Map → User Center → Settings → Privacy Control → Ghost Mode)	It takes 3 steps to turn off positioning (Home → Settings → Privacy → Location), but keep the fuzzy positioning (1 km range)	It takes 4 steps to turn off location (sidebar → settings → privacy and security → location information), and historical data will be retained for 30 days
User data sharing control	Third-party sharing control is not open, and only personalized advertising can be turned off	Allow disabling data sharing by ad category, but turn on Personalized Ads by default	Unable to restrict data flow to third parties, privacy policy allows the use of public data to train AI (such as x.AI)
Date Sources	• <u>Snap Inc. Transparency Report</u> • The Verge review of Snap Map privacy settings (April 2023) • Snapchat official help document "Manage Ad Preferences" (Updated January 2024)	• The Washington Post experimental test (March 2023)	• X Developer Documentation (February 2024) • Reuters analysis of X's advertising strategy (October 2023)

Research
User Interviews

Profile 1: "Social Dependent"
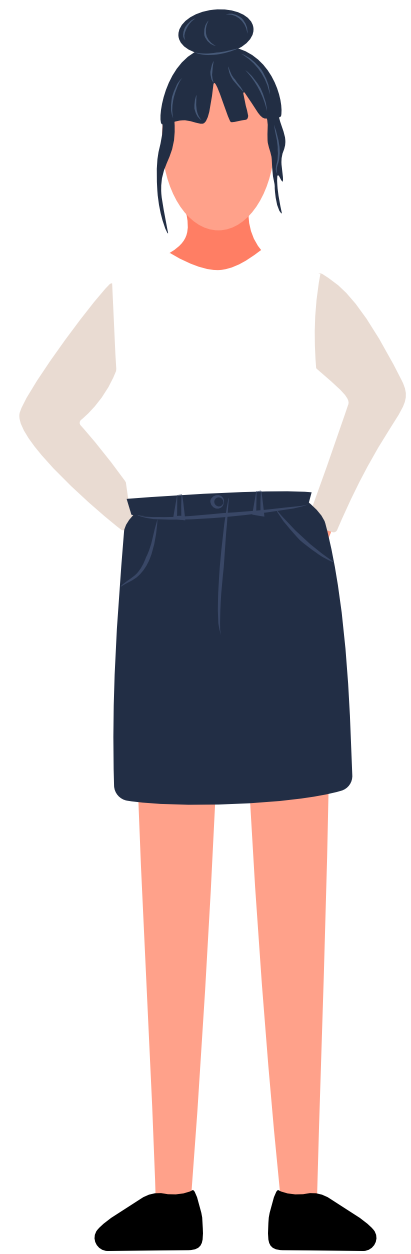
19yo student
female

Usage Habits

- 2.5hrs/day, relies on Snap Map

Core Needs

- Share moments quickly, hide location history

User Profiles

Behavioral Traits
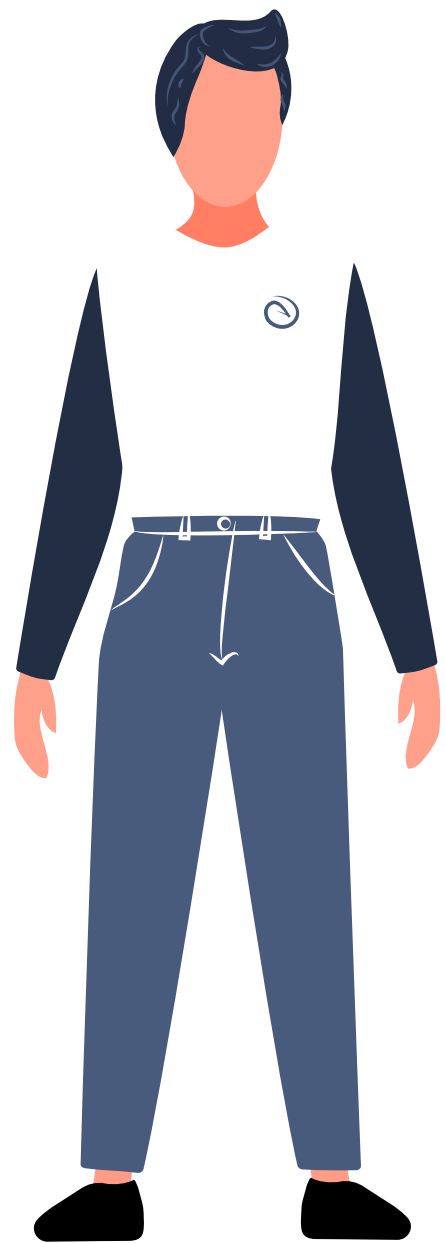
- Sends 150+ snaps/week, adjusts privacy frequently

Direct Quote

- "Friends saw my café check-in from last week, even after turning off location!"

Research
User Interviews

Profile 2: "Technologically Anxious"

24yo freelancer male

Usage Habits

• 10+ hrs/week, disables non-essential permissions

Core Needs

• Full control over data flow, reject ads

User Profiles

Behavioral Traits

• Sacrifices features for safety, audits settings weekly

Direct Quote

• "Who are 'third-party partners'? If they're ad companies, I'd never agree!"

Research
Diary study form for users

Date	Recorded Event	User Type	Description	Emotional Feedback
2025-03-29	Passive Permission Activation	Social Dependent (P1)	"Nearby Friends" feature auto-enabled after system update without clear notice	Surprise, Feeling monitored
2025-03-30	Unnoticed Terms Update	Technologically Anxious (P2)	Received targeted ads post-TOS update; accepted without reading	Anger, Powerlessness
2025-03-31	Post-Permission Popup Spam	Privacy-Conscious (P4)	Constant popups to re-enable location after disabling; user reluctantly complied	Frustration, Stress
2025-04-01	Snap Retention Misunderstanding	Feature Compromiser (P3)	Friend referenced an "expired" snap; user realized server stored data	Embarrassment, Distrust
2025-04-02	Blurred Location Residue	Technologically Resistant (P5)	Received local ads after disabling location; suspected hidden tracking	Confusion, Suspicion
2025-04-03	Undetected Screenshot	Social Dependent (P1)	Discovered snap was screenshotted via external channels; felt violated	Fear, Loss of control
2025-04-04	Cross-Platform Ad Tracking	Technologically Anxious (P2)	Instagram-browsed products appeared in Snapchat ads; questioned data sharing	Anger, Helplessness

Research

Key opportunities based on previous research

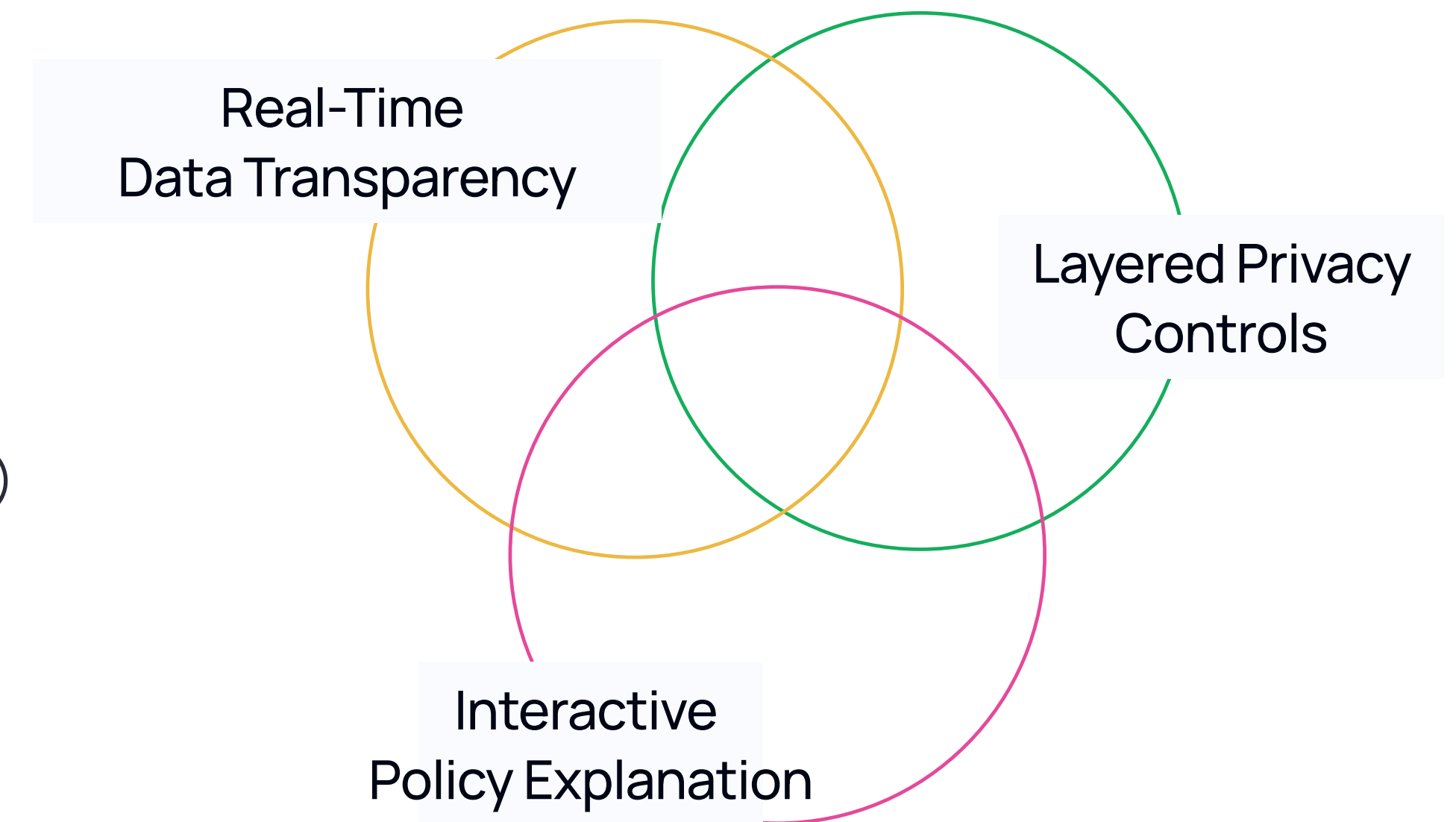### Real-Time Data Transparency

Display data retention rules and risks during critical actions (e.g., sending snaps, enabling location).

Layered Privacy Controls

Simplify high-frequency privacy paths (e.g., direct "Privacy Hub" on the home screen) and offer "Basic→Advanced" progressive settings to avoid overload.
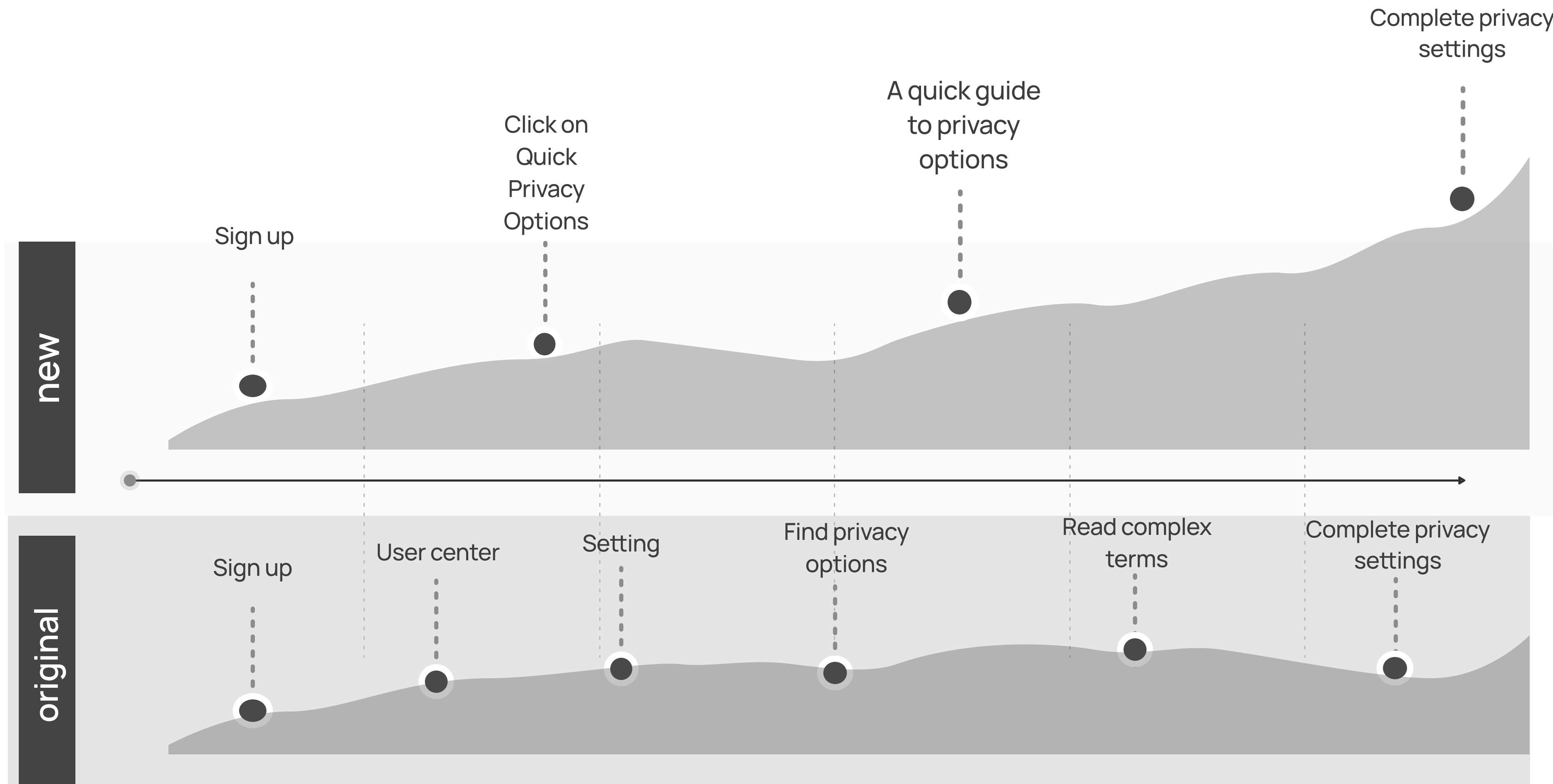
Interactive Policy Explanation

Transform complex terms into visual flowcharts, and allow users to selectively consent.

Real-Time
Data Transparency

Layered Privacy
Controls

Interactive
Policy Explanation

Research
Analysis of Current UserFlow

new

Complete privacy
settings

A quick guide
to privacy
options

Click on
Quick
Privacy
Options

Sign up

original

Sign up

User center

Setting

Find privacy
options

Read complex
terms

Complete privacy
settings

Visual Research
Simplicity and Minimalism

Snapchat's Core Principle: The app prioritizes clean, intuitive interfaces with minimal clutter. This is essential for the transparency redesign so users don't feel overwhelmed by too much information or too many options.
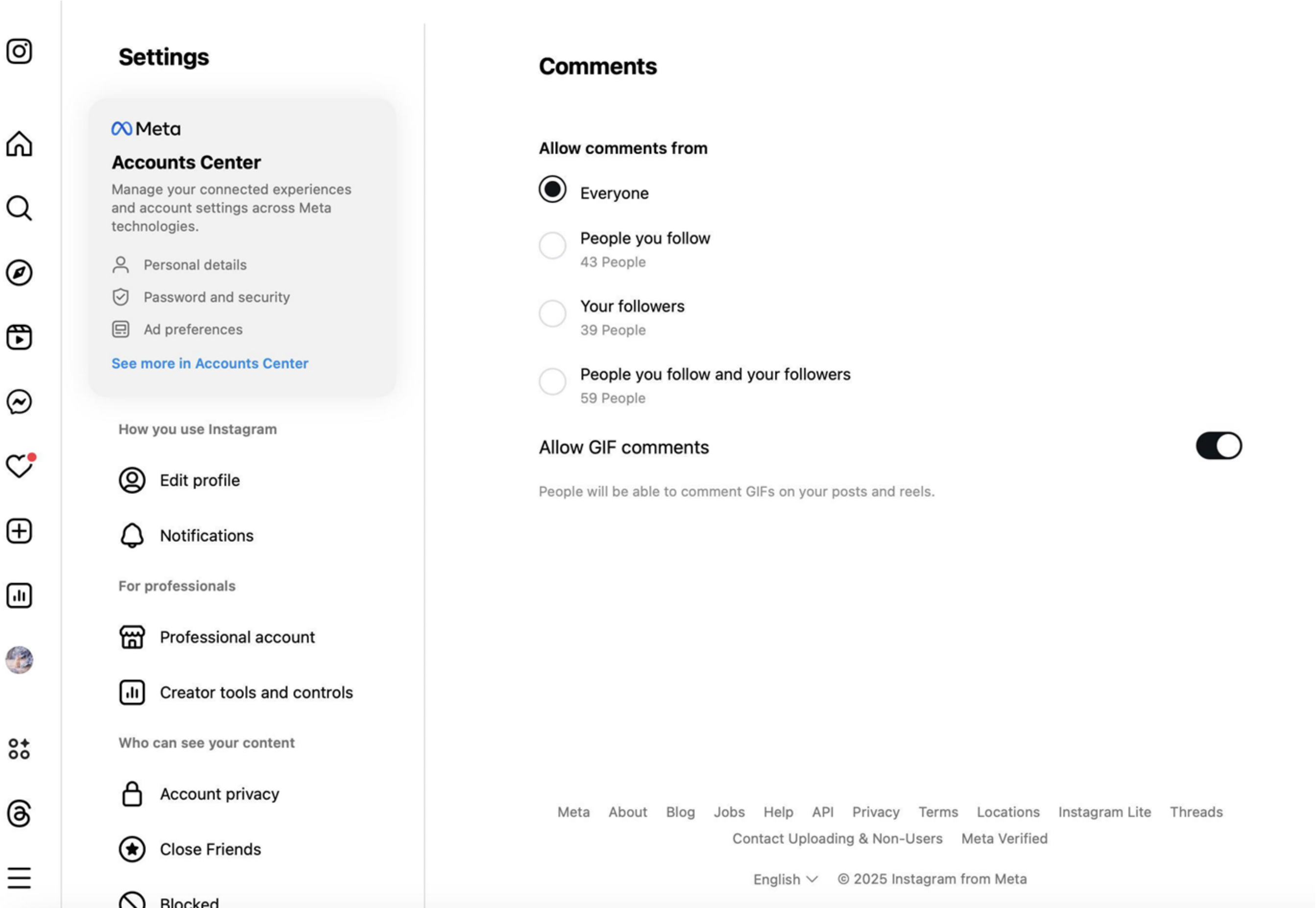
Visual Research

## Application to Data Transparency:

Use icons that are easy to understand (e.g., a lock icon for privacy settings, a share icon for third-party sharing).
Utilize toggle switches and sliders to adjust settings.
Present data permissions and history in a clean, list-style layout with collapsible sections for ease of navigation.
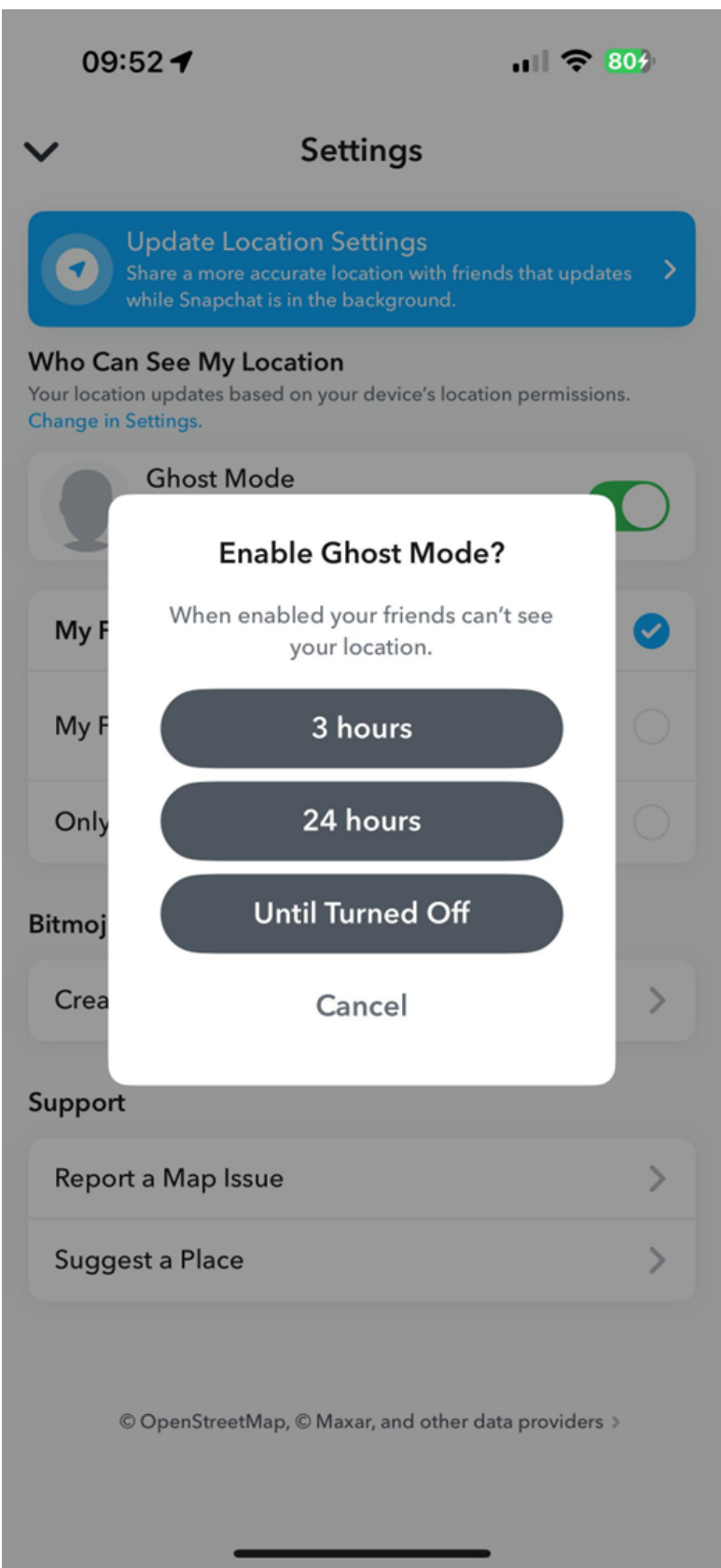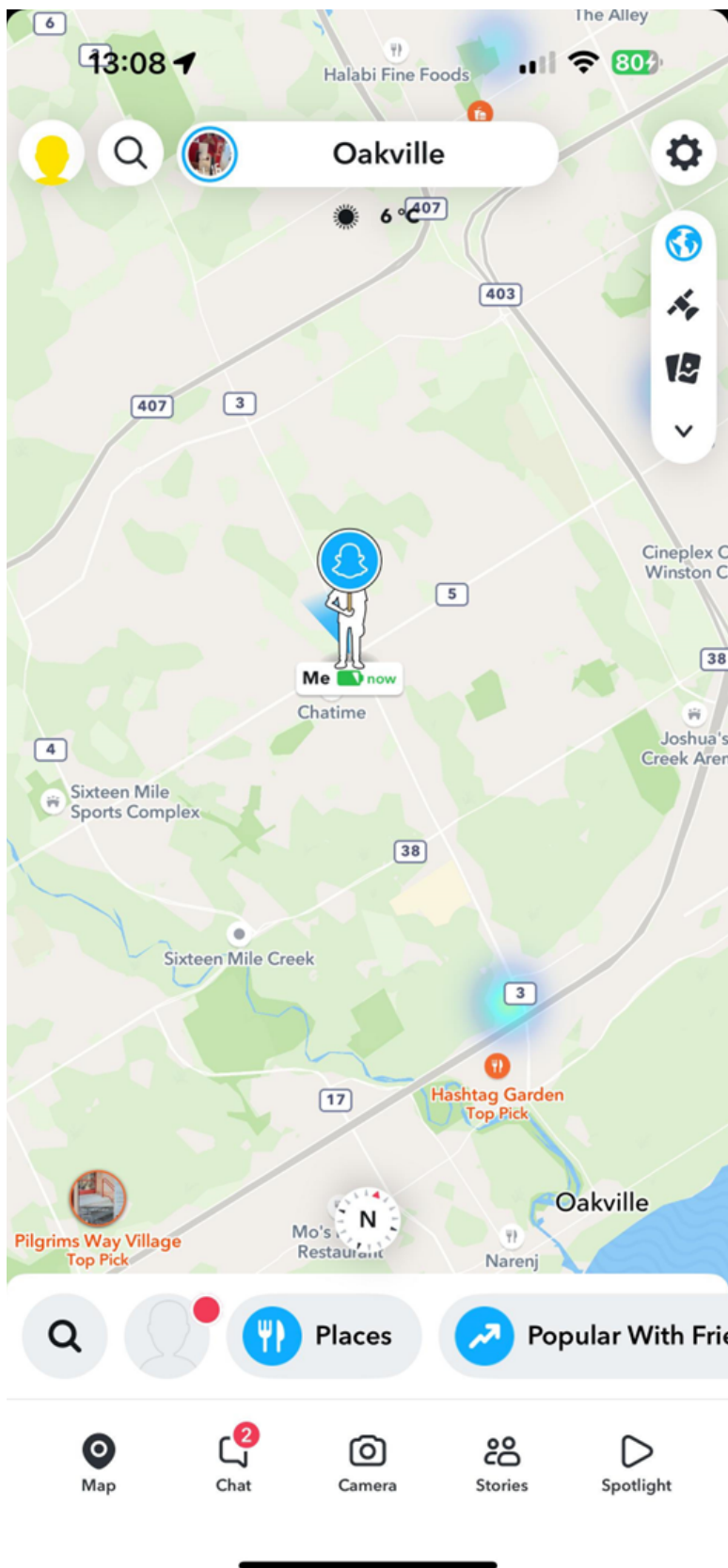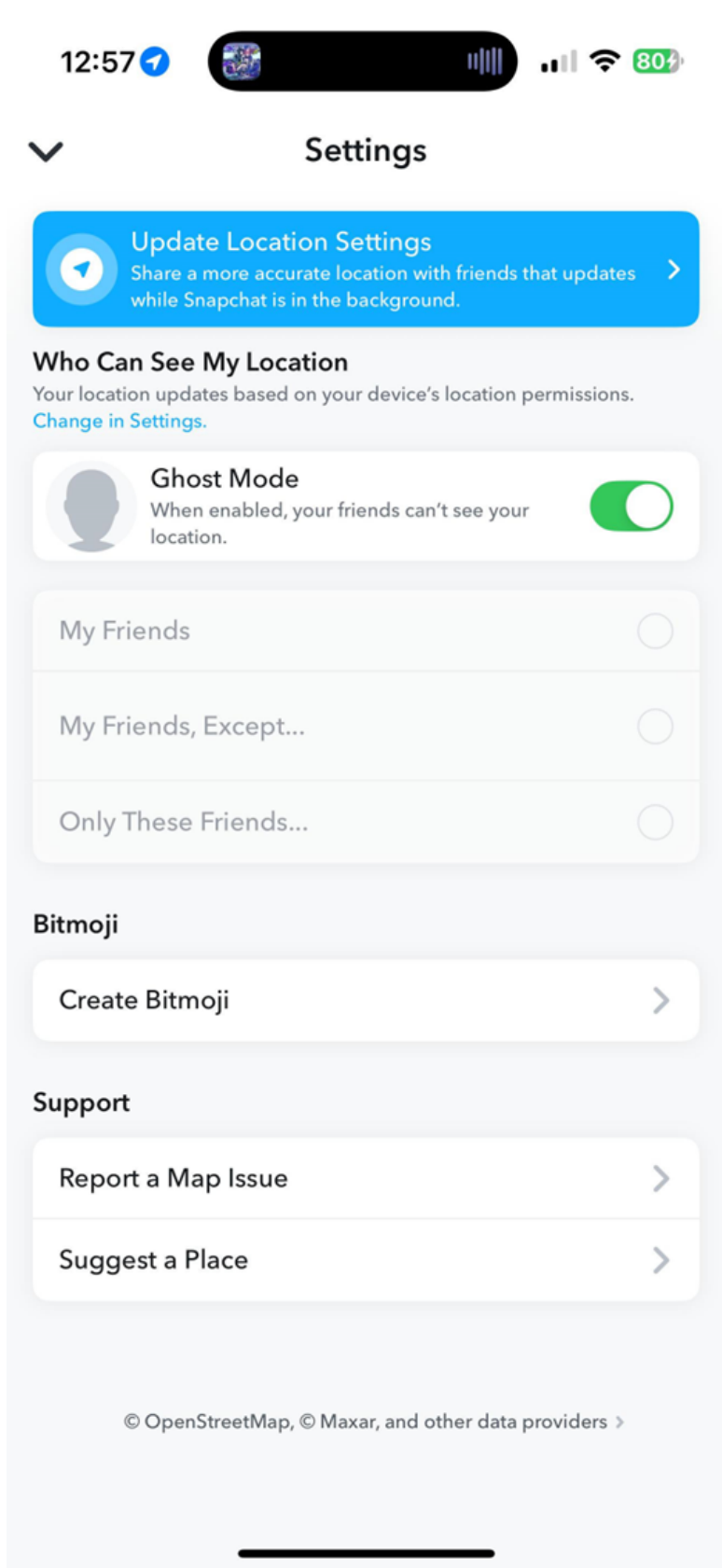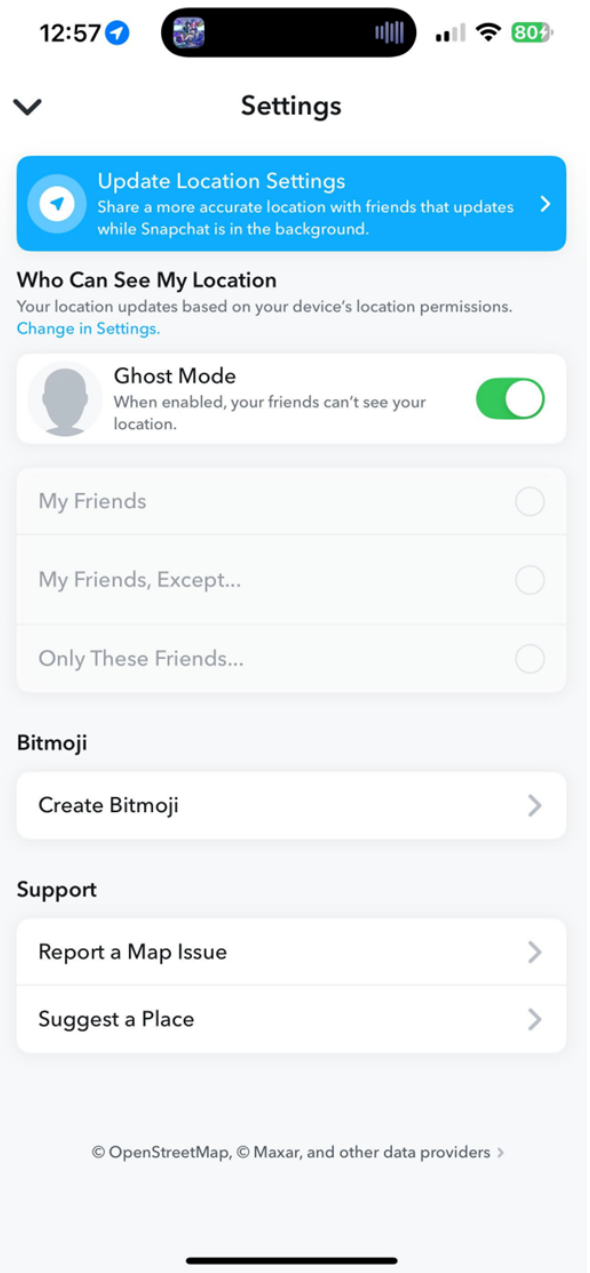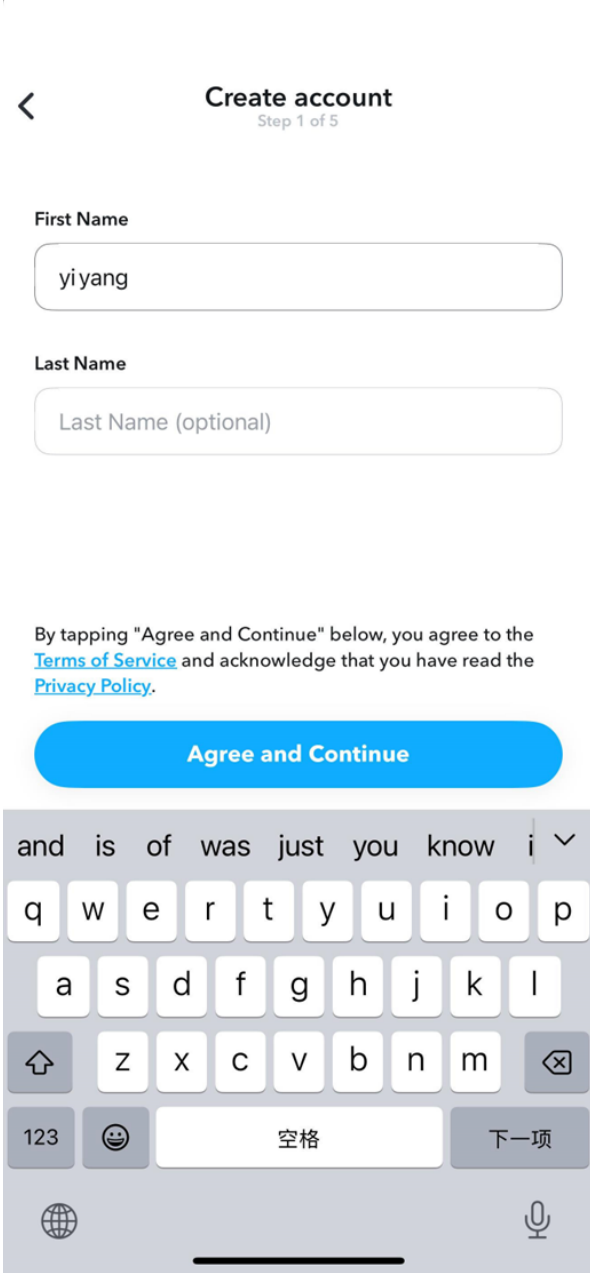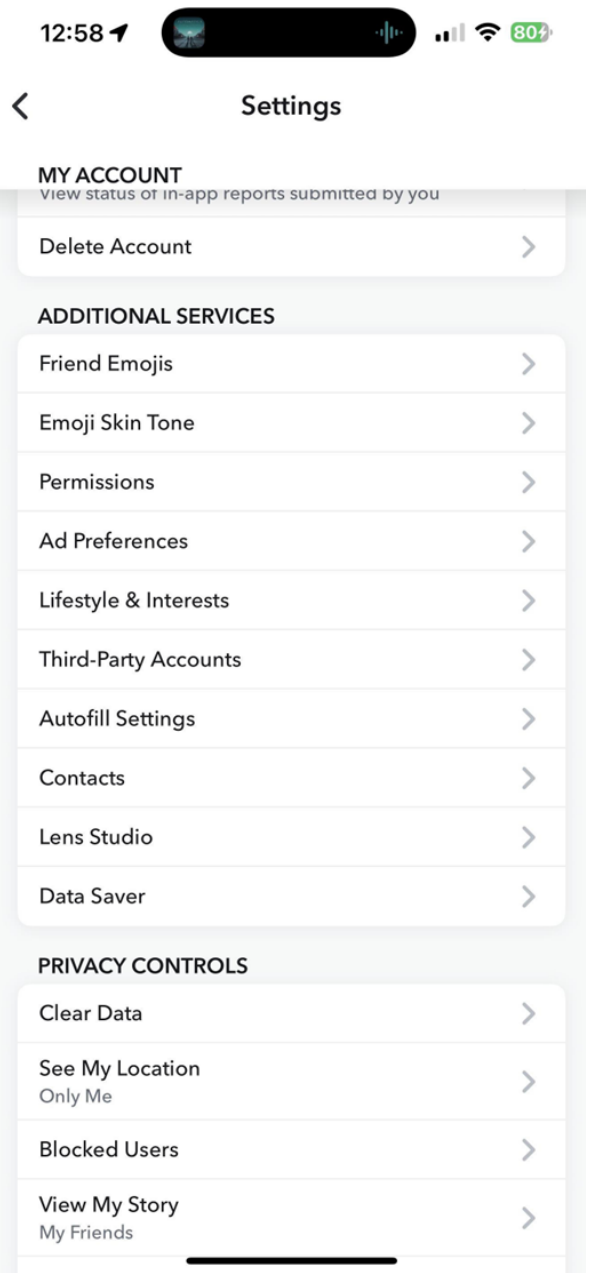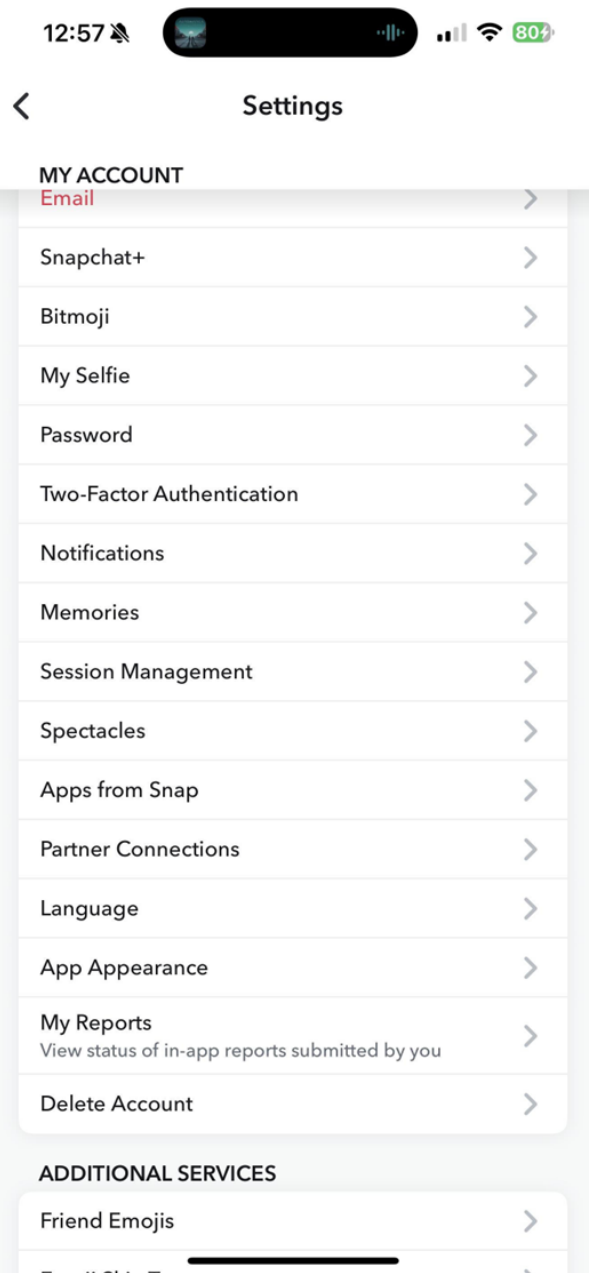
Visual Research

Use of Color:

- Snapchat's Color Scheme: The vibrant yellow, white, and black color scheme stands out. It's bold but doesn't overwhelm the user, with a clear contrast to highlight key actions.
- Visual Inspiration: High-contrast colors for key buttons (e.g., black and white for the main action button).
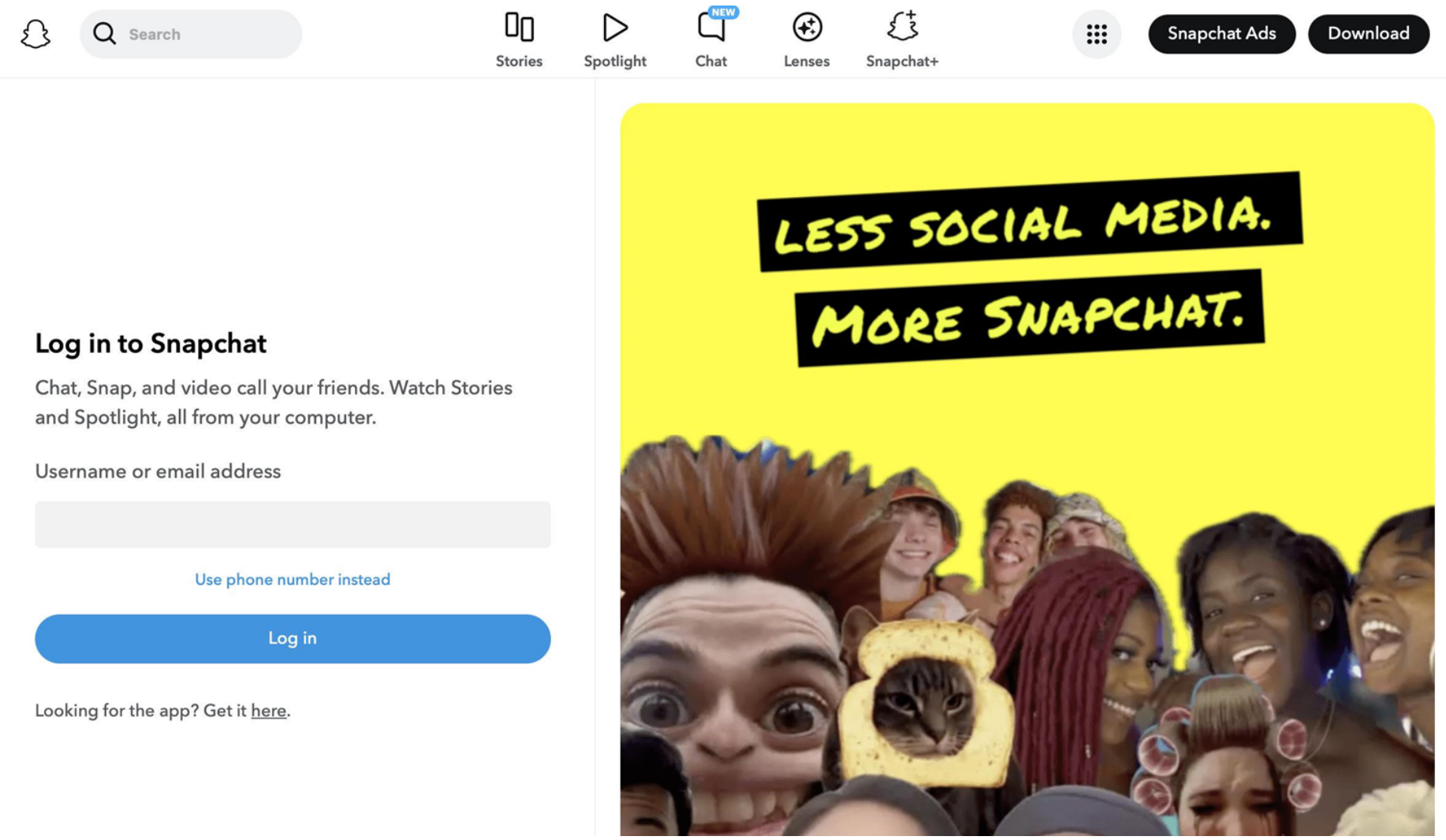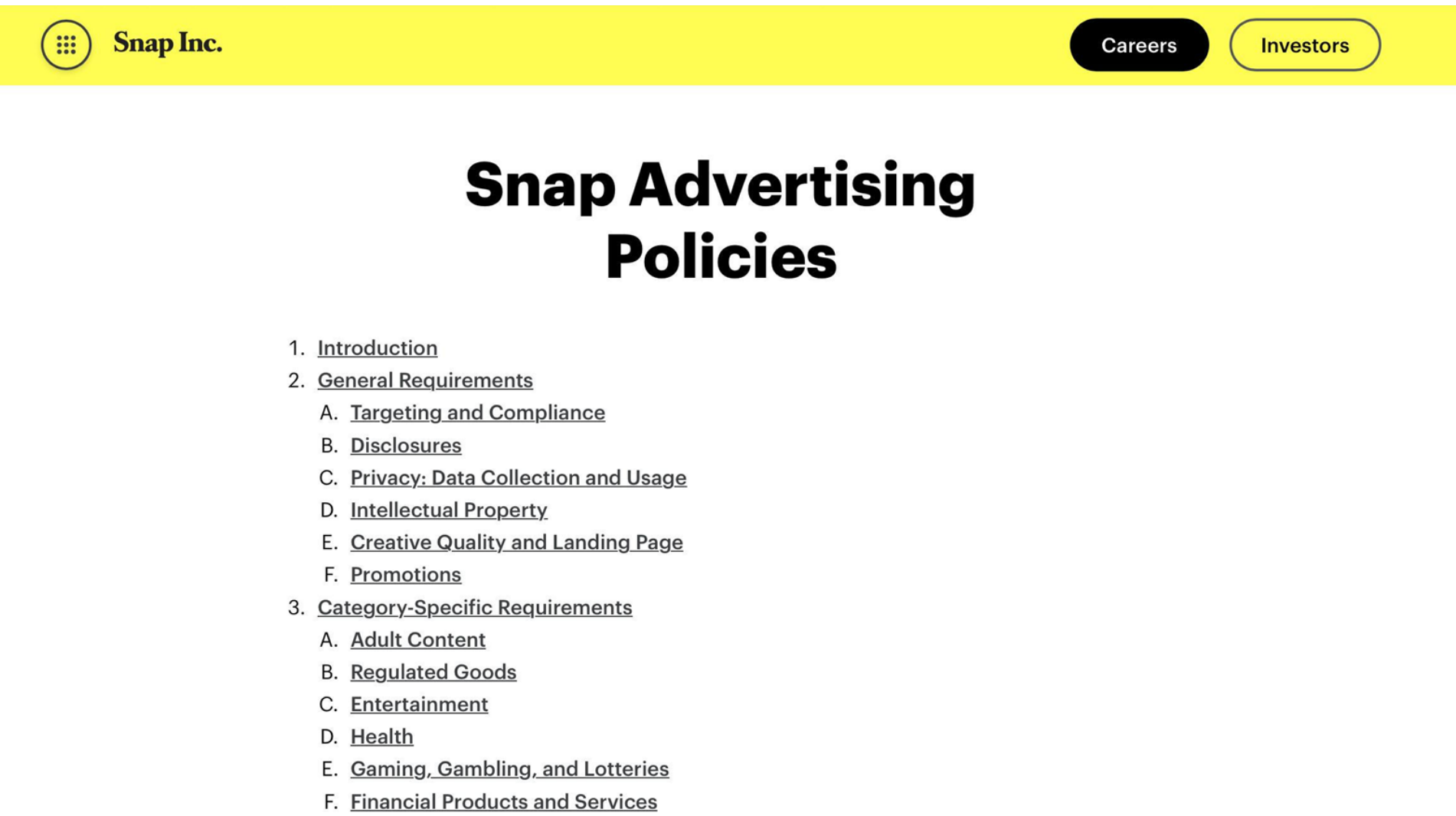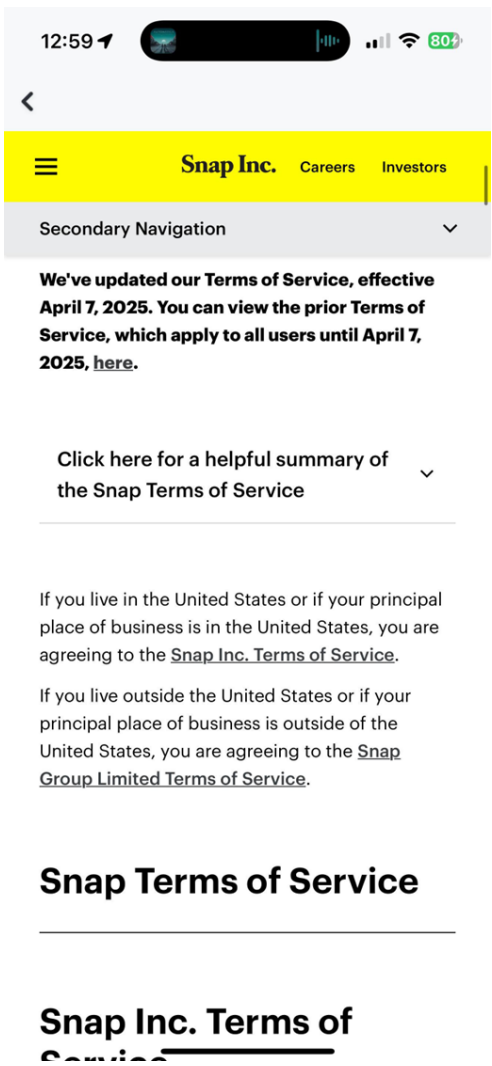
Visual Research

User-Controlled Settings:

- Snapchat's Control Over Preferences: Snapchat's approach to letting users customize their experience, from who can see their stories to notification settings.
- Visual Inspiration: Clear toggle buttons that allow users to opt in or out of various functions. The controls are easy to find and adjust.

Visual Research

Iconography and Clear Labels:

- Snapchat's Iconography: The use of simple, bold icons makes it easy for users to understand actions, like the yellow camera icon for snapping photos, or the ghost logo for home.
- Visual Inspiration: Simplified, easy-to-understand icons, paired with clear labels.
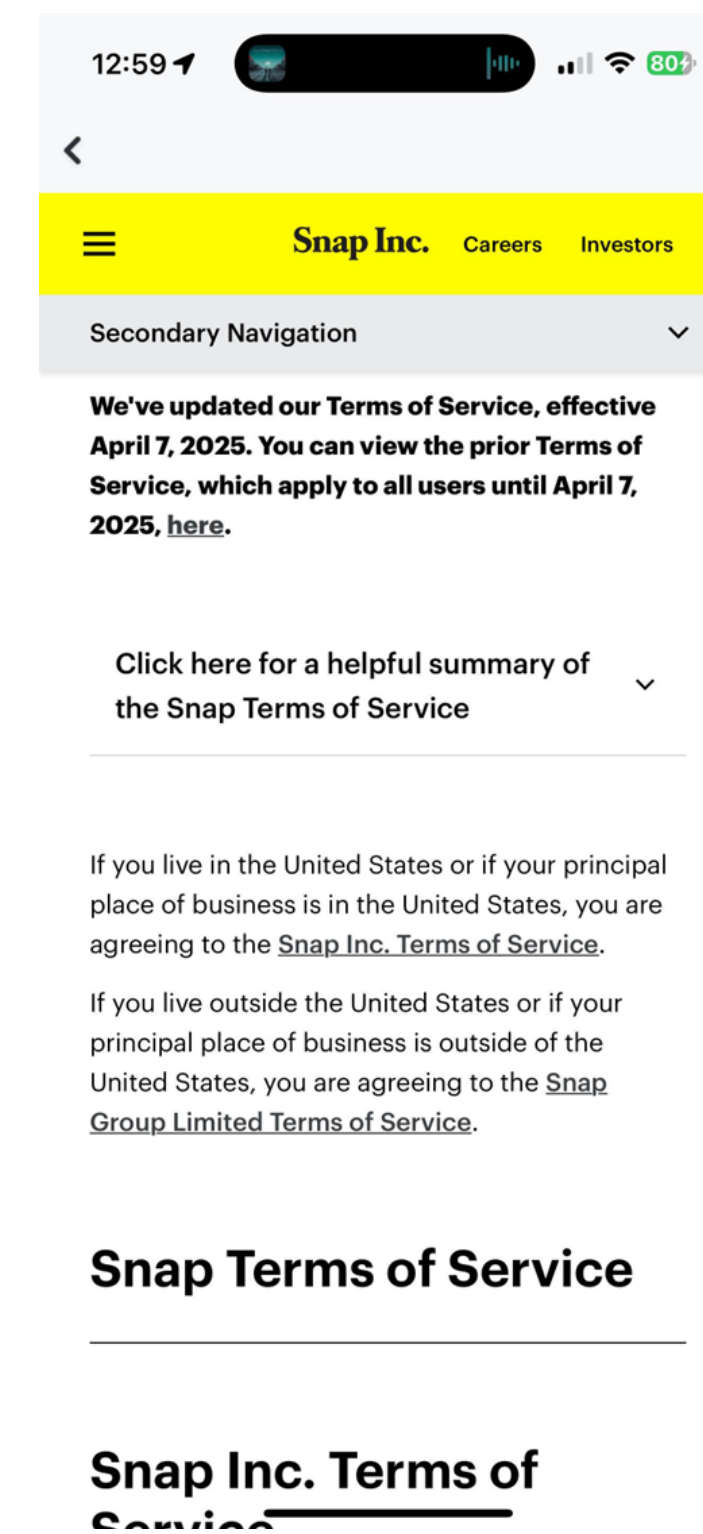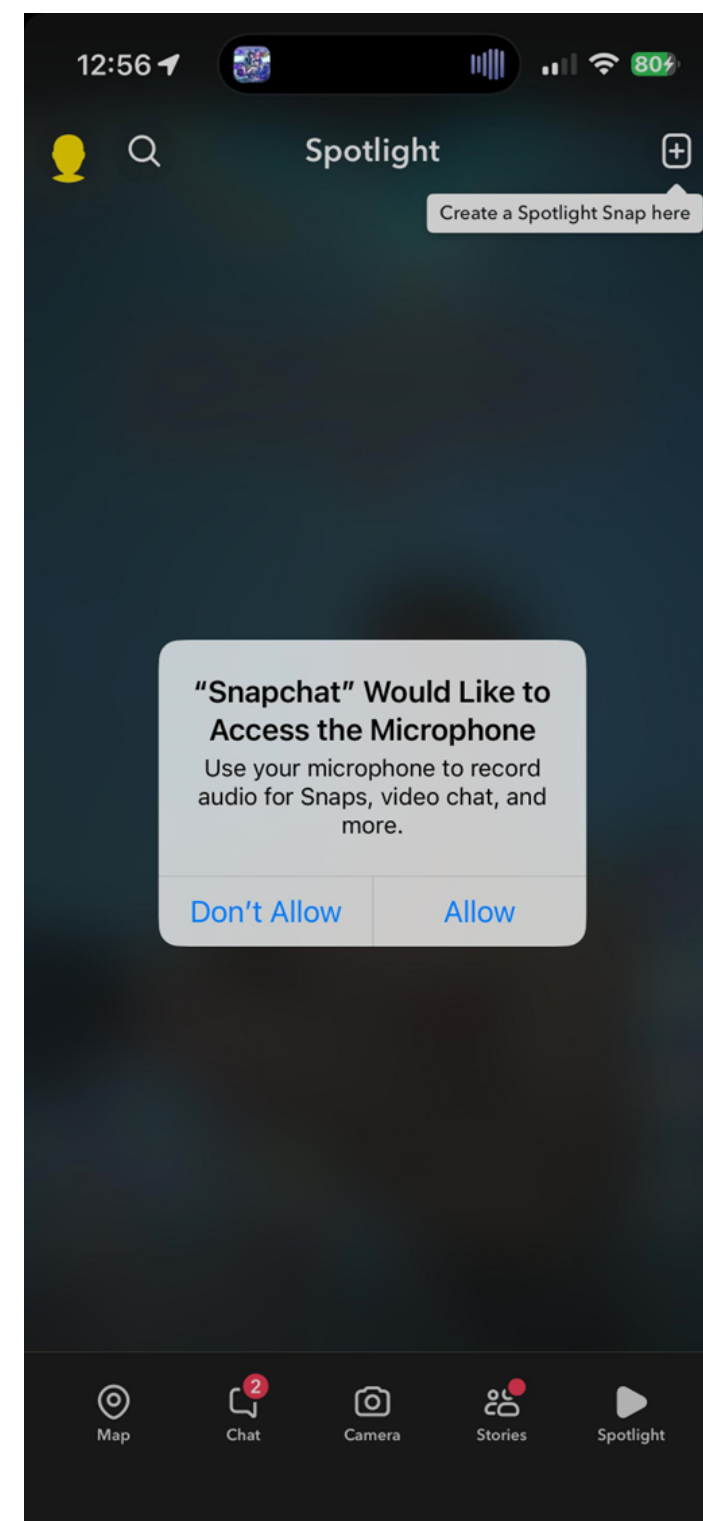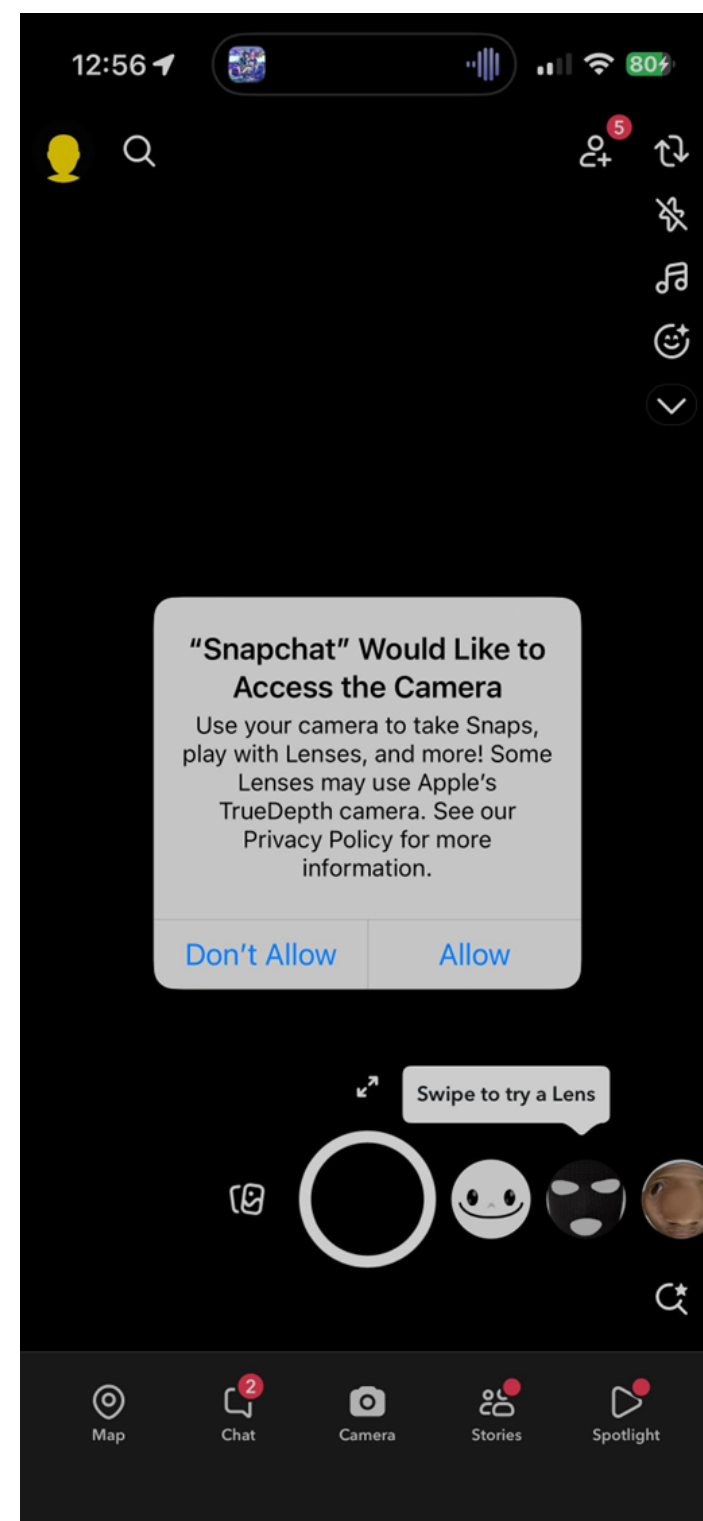
Visual Research

Modular Layouts:

- Snapchat's Layout Style: Many of Snapchat's screens use a modular layout where each section can be swiped or clicked through individually.
- Visual Inspiration: Modular grid systems with distinct cards or sections, each representing a piece of information.
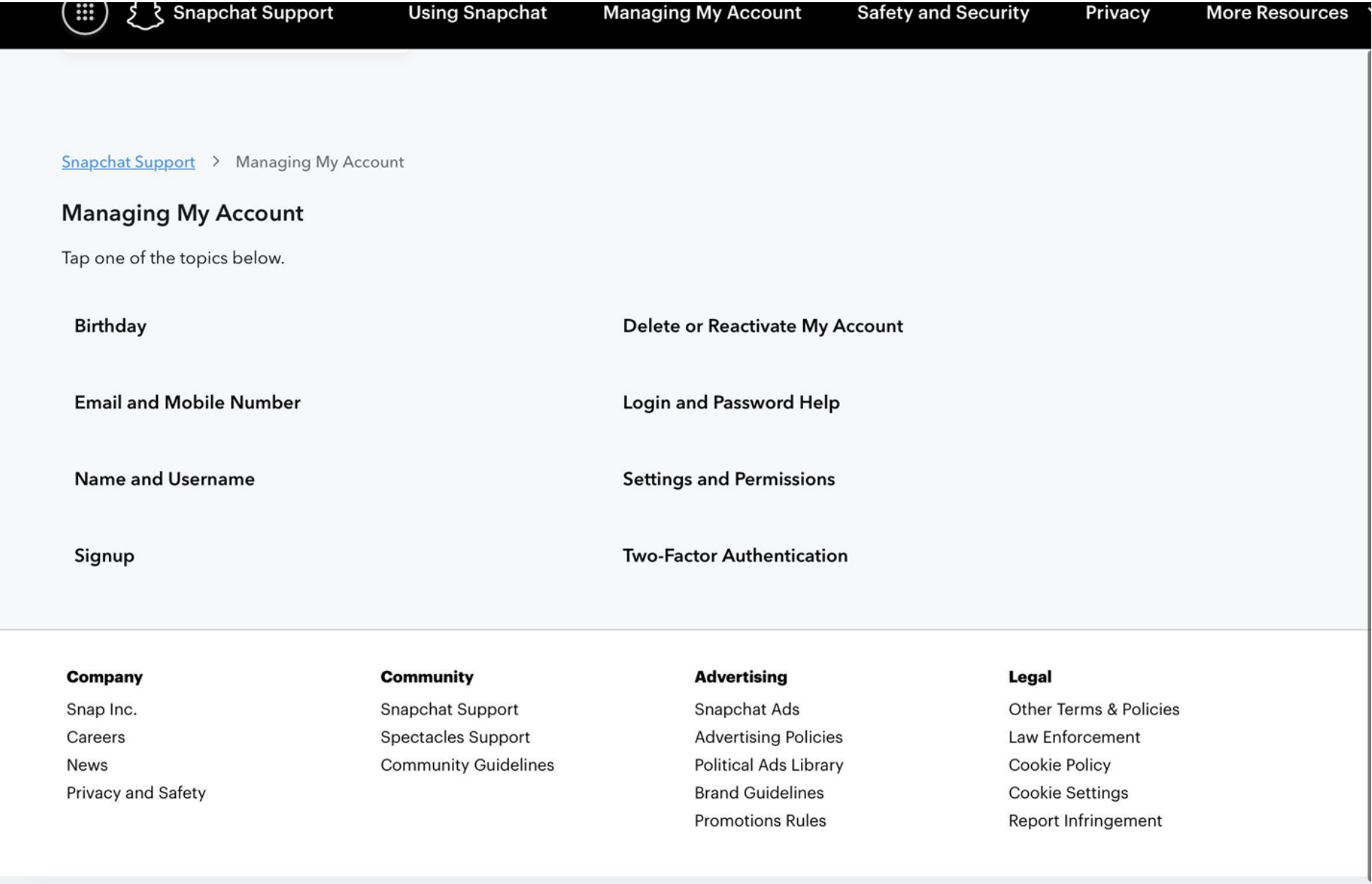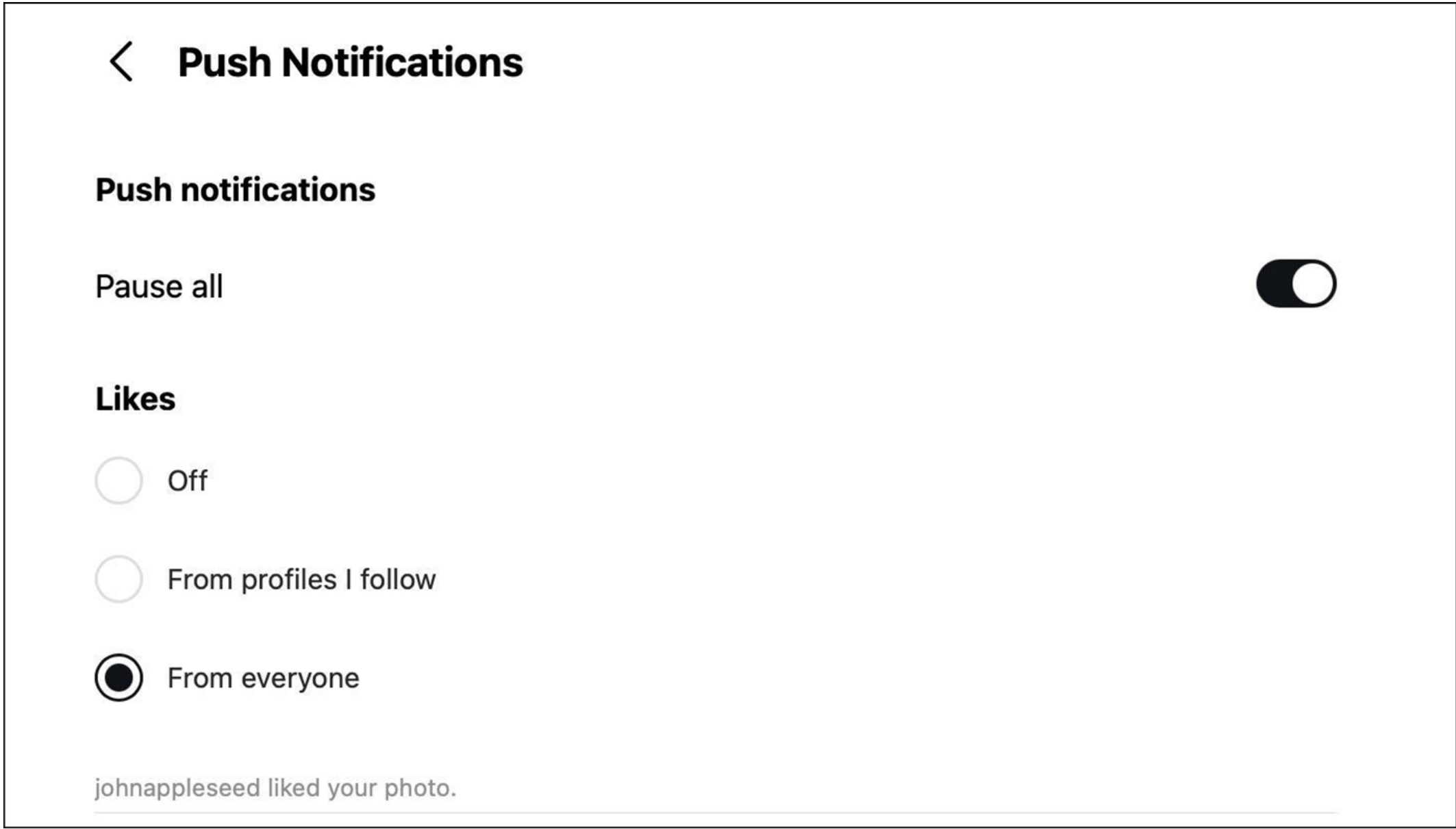
Visual Research
Research-Driven Visual Design Decisions

1.Three-Layer Disclosure System

Glanceable icons → Simple explanations → Technical details

2.Simple on/off button

Quickly complete privacy settings

Color Psychology

Black and white contrast + transparency levels, clear information levels.

Efficient interaction

The core operations are highly contrasted and the auxiliary content is weakened to reduce cognitive load.

Typography Manipulation

The system font is used to differentiate content levels in a step-by-step manner through font size (24px for desktop/20px for mobile), font weight (Medium to Light) and line height (1.3×-1.6×), adapting to multiple terminals and ensuring readability.

Visual Research

Key Aspects of Snapchat Data Transparency Redesign

Manifest Redesign	Visual Design	Profile Sheets	Visual Focus
Clearer Privacy Settings	Simple, intuitive icons that lead users directly to their privacy settings, making it easier for them to adjust their preferences.	Could include details about the permissions granted to Snapchat, such as location access, camera, and microphone use, and the ability to toggle these on or off.	Focus on color coding for categories (e.g., green for enabled, gray for disabled permissions), with clear toggle switches or checkboxes.
Transparency Dashboard	A personalized dashboard displaying how data is used, who it's shared with (including third-party apps), and the duration data retention.	Sections showing Data Access History and Shared Data Summary, where users can see when and why their data was accessed by the app and external services.	Timeline charts or graphs that break down data activities over time. This could also include bar charts or pie charts to show the proportion of data shared with third parties.
Data Deletion & Control	A streamlined interface for requesting data deletion or adjusting data retention preferences.	A clear button for "Request Deletion," possibly accompanied by confirmation pop-ups to avoid accidental removal.	A section showing Retention Preferences (how long the data is kept) and the option for immediate deletion.

Wireframe Development

Phase 1: Low-Fidelity Wireframes

- Created basic layouts for new data transparency dashboard
- Designed simplified navigation paths to privacy controls
- Developed clearer information hierarchy for data categories

Phase 2: High-Fidelity Wireframes

- Refined visual design while maintaining Snapchat's brand aesthetic
- Incorporated micro-interactions for better user guidance
- Added progressive disclosure for complex information

Wireframe Development
Preliminary sketch And Low-Fidelity Prototype
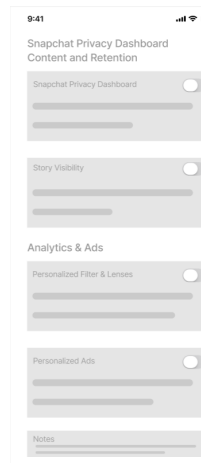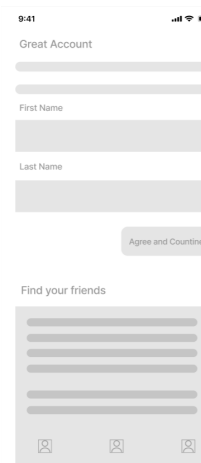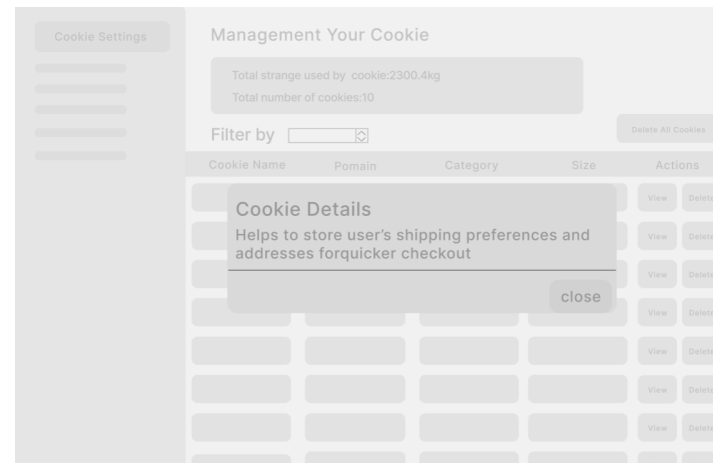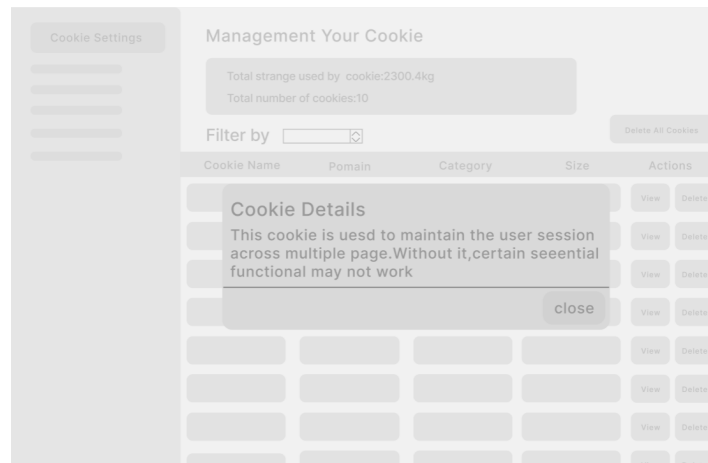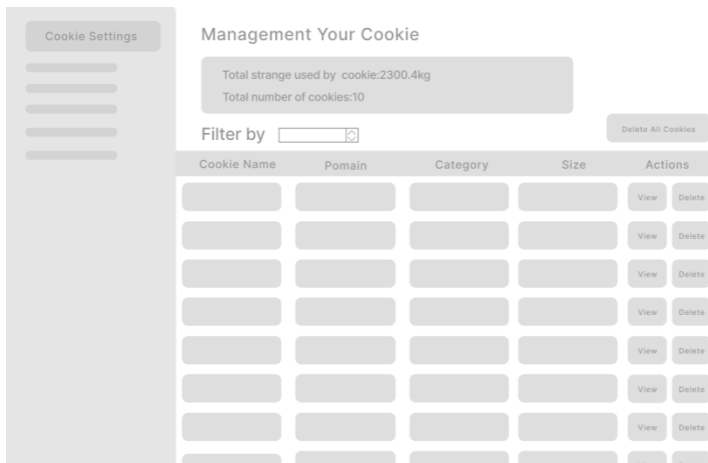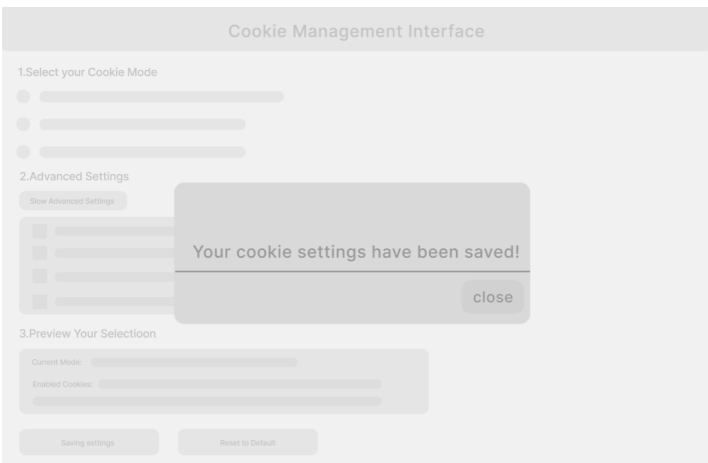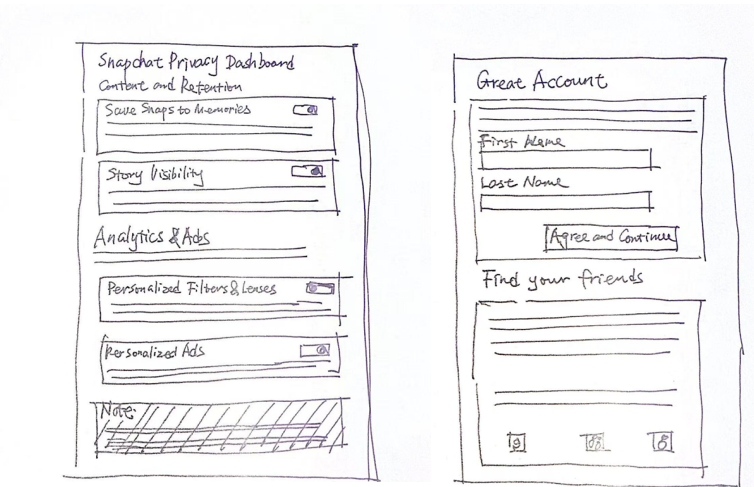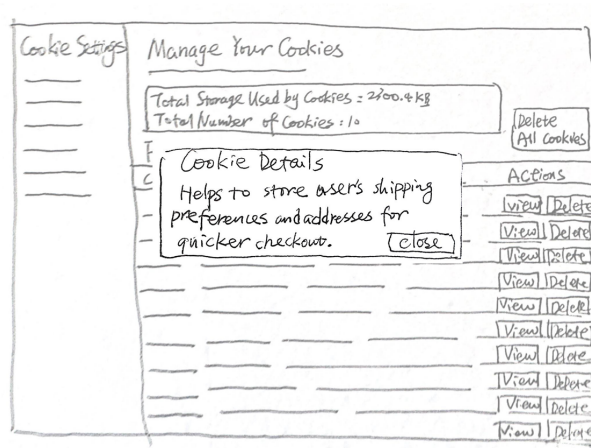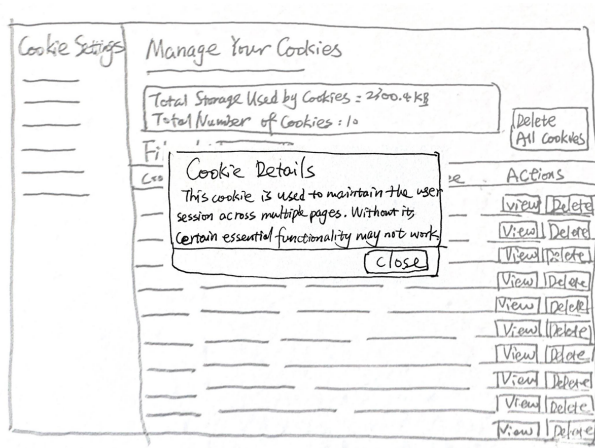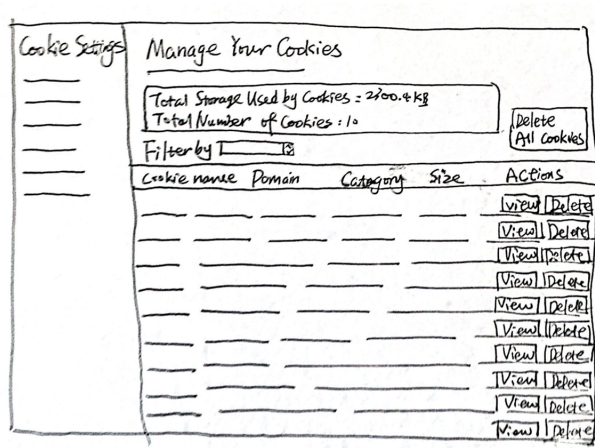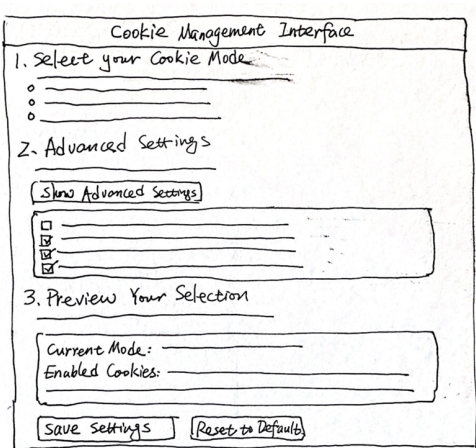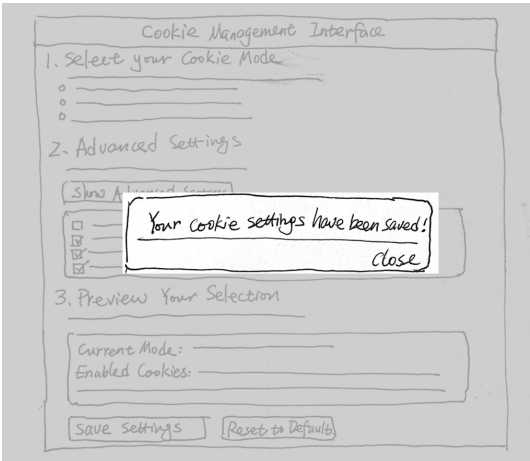
Wireframe Development

Major improvements

Data Dashboard:
I created a single screen on seting that sums up location sharing, ephemeral content rules, ad/ analytics toggles, and friend list controls

I developed basic grayscale screens focused on layout, using larger toggle switches and short bullet points to explain each privacy choice. I tested this with a small group, and the main feedback was to add more visual warnings about potential oversharing . Also the highlighting "Ghost Mode" more clearl

Manage Your Data Settings

Here you can control how Snapchat handles your location, Snaps storage, ads preferences, and more. Changes are saved in your browser's local storage and can be reset at any time.

Ghost Mode
Hide your real-time location from everyone. You can still use filters but location-based ones may be limited.

Location for Friends Only
Only friends you've added see your location. This setting is overridden by Ghost Mode if it's on.

Save Snaps to Memories
Allows your viewed Snaps to be stored on Snapchat servers for quick retrieval. If off, Snaps won't be saved.

Personalized Ads & Filters
Uses your activity to show relevant ads and Lenses. Turn off for less personalized features.

Simplified Terms & Privacy

Snaps Retention: Opened Snaps disappear from your feed, but unopened Snaps can be stored for up to 30 days. Some metadata may persist for analytics or legal requirements.

Location Data: Shared only with your chosen audience. You can hide it completely via

Wireframe Development

High-Fidelity Mockups:Sign Up

Snapchat Data Transparency

Sign Up	Understand Your Data	Data Privacy Control

👤+ Sign Up

Welcome! Please enter your details below. After signing up, you'll be asked for optional permissions like contacts and camera roll. **Learn More**

First Name
e.g. John

Last Name (optional)
e.g. Doe

Username
Pick a username

Agree & Continue

By continuing, you accept our Terms of Service and have read our Privacy Policy.

Find All Your Friends

Allow Full Access for Snapchat to upload your contacts for better friend suggestions, or choose **Select Contacts** to add individuals one by one.

Find All Your Friends

Allow Full Access for Snapchat to give you the best friend suggestions, or choose "Select Contacts" for individual contacts to be automatically added as friends.

Learn about privacy control tutorials step by step

User registration interface

Wireframe Development

High-Fidelity Mockups : sign up

Participants felt much clearer on how the app uses location, liked having ephemeral disclaimers visible from the first day.
And user say the tutorials is not clear and they ask for a step by step tutorial.
Added a "Learn More" link in each section that expands with a real excerpt from the Terms of Service or Privacy Policy

Click to learn more about the detailed policy

Wireframe Development
High-Fidelity Mockups : sign up

Agree & Continue

By continuing, you accept our Terms of Service and have read our Privacy Policy.

Find All Your Friends

Allow Full Access for Snapchat to upload your contacts for better friend suggestions, or choose **Select Contacts** to add individuals one by one.

Find All Your Friends

Allow Full Access for Snapchat to give you the best friend suggestions, or choose "Select Contacts" for individual contacts to be automatically added as friends.

How do you want to add contacts?

Select Contacts

Allow Full Access

Continue

Continue

Mobile terminal example

Wireframe Development

High-Fidelity Mockups:Understand Your Date

Snapchat Data Transparency

Sign Up	Understand Your Data	Data Privacy Control

Understand Your Data

Snapchat collects certain information to power features like friend suggestions, location-based filters, and ephemeral Snaps. These brief tutorials explain **what data is used**, **why**, and **how you control it**.

📖 Start Step-by-Step Tutorial → Learn about privacy control tutorials step by step

Want to see an example of how Snapchat requests permission to use your data?

Try It Out

Mobile terminal example

Wireframe Development

High-Fidelity Mockups: Try It Out

Mobile terminal example

You can choose "Allow Full Access", "Select Contacts", or "Don't Allow" based on your preference.
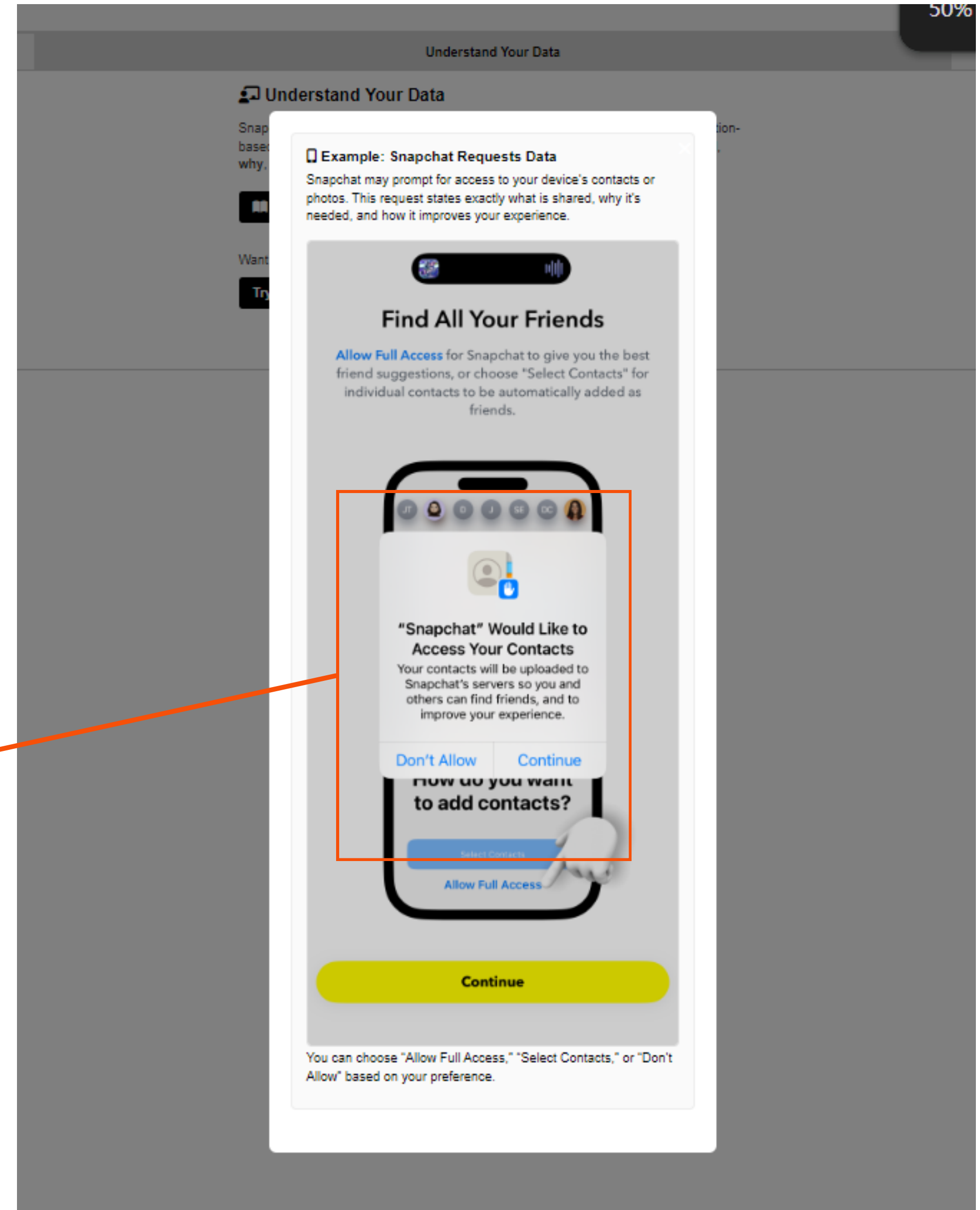
Wireframe Development

High-Fidelity Mockups:Understand Your Date

Learn about privacy control tutorials step by step

Contacts & Friend Suggestions

Snapchat uses your contact list (with permission) to find which of your friends are on Snapchat. You can skip this to add friends manually if you prefer.

Next →

Want to see an example of how Snapchat requests permission to use your data?

Try It Out

Camera & Photos

Allowing camera access lets you take Snaps, and letting Snapchat see certain photos enables easy sharing and usage of location data in images.

← Previous   Next →

Want to see an example of how Snapchat requests permission to use your data?

Try It Out

Microphone Access

Snapchat may request microphone permission for audio-based Lenses or video chats. You can always disable this in your device settings.

← Previous   Next →

Want to see an example of how Snapchat requests permission to use your data?

Try It Out

Ephemeral Snaps & Retention

Snaps disappear after viewing, but unopened Snaps remain on servers for up to 30 days. Some metadata is retained for troubleshooting.

← Previous   Done

Want to see an example of how Snapchat requests permission to use your data?

Try It Out

Location Sharing

Snap Map can broadcast your live location to friends (or hide it with Ghost Mode). This feature is optional and can be toggled anytime.

← Previous   Next →

Want to see an example of how Snapchat requests permission to use your data?

Try It Out

Wireframe Development

High-Fidelity Mockups:Date Privacy Control

Snapchat Data Transparency

Sign Up	Understand Your Data	Data Privacy Control

👤 Data Privacy Control

Below you can manage key settings for your location, Snaps retention, and personalization. These toggles do not store data permanently in this demo, so feel free to experiment.

Ghost Mode

Hide your real-time location from everyone. You'll still have basic features, but location-based filters may be limited.

Friends Only Location

Only your accepted friends see your location. Overrides if Ghost Mode is active.

Save Snaps to Memories

Allows your Snaps to be stored for re-viewing. If off, your Snaps won't remain after they're viewed.

Personalized Ads & Filters

Uses activity data to deliver more relevant filters and ads. If off, features may be less personalized.

Display key privacy options more intuitively

Users can directly control the privacy switch

Wireframe Development

High-Fidelity Mockups:Date Privacy Control

Friends Only Location
Only your accepted friends see your location. Overrides if Ghost Mode is active.

Silde

Save Snaps to Memories
Allows your Snaps to be stored for re-viewing. If off, your Snaps won't remain after they're viewed.

Personalized Ads & Filters
Uses activity data to deliver more relevant filters and ads. If off, features may be less personalized.

⮂ Terms of Service (Simplified)

- You agree that Snapchat can process your content (Snaps, messages) to provide the service.
- You must follow the community guidelines (no illegal or harmful content).
- Company may update terms, and continuing to use the service is your acceptance.
- Full TOS here.

🛡 Privacy Policy (Simplified)

- Opened Snaps disappear, unopened remain for up to 30 days on servers.
- Location is shared only if you grant permission, and can be toggled via Ghost Mode.
- Contacts and camera roll are optional for friend suggestions and sharing media.
- Ads & personalization rely on usage data; you can disable them here.
- Full Privacy Policy.

© 2025 Snap Inc. All rights reserved. (not actural snap inc)
code by Yiyang. All rights reserved.

Allow users to share their real-time location only with friends, rather than making it public or completely hidden.

Allows users to save snaps (photos/videos) they take to private storage

👥 Data Privacy Control

Below you can manage key settings for your location, Snaps retention, and personalization. These toggles do not store data permanently in this demo, so feel free to experiment.

Ghost Mode
Hide your real-time location from everyone. You'll still have basic features, but location-based filters may be limited.

Friends Only Location
Only your accepted friends see your location. Overrides if Ghost Mode is active.

Save Snaps to Memories
Allows your Snaps to be stored for re-viewing. If off, your Snaps won't remain after they're viewed.

Personalized Ads & Filters
Uses activity data to deliver more relevant filters and ads. If off, features may be less personalized.

⮂ Terms of Service (Simplified)

- You agree that Snapchat can process your content (Snaps, messages) to provide the service.

If you open,it allows users to completely hide their real-time location from any of their friends

A legal agreement that users must agree to when using the platform