

CONCEPT STUDY · INTERACTIVE PROTOTYPE

MemberSpace: Transparent mobile subscription and membership manager with honest 2-tap cancellation and pause options.

Transparent, frictionless self-serve billing and honest cancellation. MemberSpace provides a 2-tap cancellation flow with zero trickery: members can choose to pause their subscription for 1 to 3 months, switch to a lower tier, or cancel completely, with an immediate, clear guarantee that paid entitlements remain active until the end of the billing cycle.

INDUSTRY VERTICAL	DOMAIN SECTOR
Hospitality & Member Services	Digital Subscriptions & Member Retention
PROTOTYPE STACK	TARGET PRODUCTION RUNTIME
Next.js / TypeScript	React Native / Expo

Executive Summary

Nathan manages his premium fitness and professional community membership on his phone. When his travel schedule intensifies, he wants to pause his membership for 60 days. In standard apps, canceling or pausing requires calling customer service during business hours or clicking through deceptive retention traps.

Digital subscription apps frequently deploy aggressive dark patterns: hiding cancellation buttons behind obscure FAQs, forcing users into phone calls, or immediately revoking remaining paid access, destroying customer goodwill and violating app store guidelines.

Operational Hurdles & The Failure of Conventional Approaches

In real-world mobile deployments within Hospitality & Member Services, applications encounter operational friction that desktop web portals never face.

Core Engineering Challenges Addressed:

- 1. Operational Bottleneck:** Digital subscription apps frequently deploy aggressive dark patterns: hiding cancellation buttons behind obscure FAQs, forcing users into phone calls, or immediately revoking remaining paid access, destroying customer goodwill and violating app store guidelines.
- 2. Data Integrity Risk:** Traditional approaches rely on synchronous network calls that fail under unstable cellular handoffs or high concurrency.
- 3. User Experience Impact:** Frustration occurs when users lose in-progress work or receive misleading feedback from unbuffered user interfaces.

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Architectural Solution & Interface Design

Demonstrated UX & Architecture Decision:

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Principal Interface Screens (5 Views):

- 1 Member Portal Home**
Active membership tier (Pro Access), billing cycle renewal date, and exclusive member perks.
- 2 Plan & Billing Manager**
One-tap controls for tier upgrade/downgrade, payment method update, and subscription pause.
- 3 Flexible Membership Pause**
Option to freeze billing for 30, 60, or 90 days with automatic resumption.
- 4 Honest 2-Tap Cancellation**
Transparent confirmation with prominent display of remaining paid access expiration date.
- 5 Entitlement Confirmation**
Receipt confirming cancellation with zero penalty and 1-click reactivation button.

Interactive Journey: Self-Serve Subscription Management to Transparent Pause / Cancellation

Open Member Portal → Review Pro Plan (\$29/mo) → Tap "Manage Plan" → Select 60-Day Pause alternative → Confirm freeze with zero penalties.

- 1 Open MemberSpace subscriber portal
- 2 Review current plan: "Pro All-Access Member (\$29.00/month, Renews Oct 1st)"
- 3 Tap "Manage Subscription & Billing"
- 4 Tap "Cancel or Pause Membership": observe honest options without forced surveys
- 5 Select "Pause for 60 Days (Resume Dec 1st)" to protect grandfathered pricing
- 6 Confirm pause: receive immediate confirmation badge with active access through Oct 1st

Reset Mechanism: One-click reset to initial active monthly subscription state.

Handled Edge Cases & Exception Recovery

**Edge Condition #1:**

Credit card expiration grace period warning giving 7 days of uninterrupted access while updating details

**Edge Condition #2:**

Membership pause confirmation detailing exact resumption date and credit rollover

**Edge Condition #3:**

App Store / Google Play external subscription management deep link for store-managed IAP billing

Actual Prototype vs. Target Native Production Runtime



Actual Prototype Stack

Platform & Framework:

Next.js / TypeScript

Languages:

TypeScript, Tailwind CSS

Interactive subscription self-serve portal demonstrating tier switching, pause options, and honest cancellation.



Target Production Stack

Platform & Framework:

React Native / Expo

Languages & Storage:

TypeScript, RevenueCat SDK, Stripe Billing API

Unified handling of Apple StoreKit in-app purchases and Google Play Billing with server-side webhook reconciliation.

Explicit Prototype Boundaries & Validation Methodology

Documented Prototype Limitations:

- Simulated in browser using local state machine without live Apple StoreKit / Google Play Billing Server-to-Server notifications.
- Payment card updates simulated without live Stripe Elements or PCI vault integration.

Target Production Telemetry:

Evaluate churn recovery rates and lifetime member value across 10,000 digital community subscribers.

Commercial Offer Alignment & Handover Guarantees

This technical concept study directly demonstrates the design, state-machine architecture, and resilience engineering delivered under FFNA Solutions' fixed-scope programs:

Product Prototype Sprint

2-week fixed sprint delivering high-fidelity interactive simulation with edge recovery.

Mobile MVP Launch

6–8 week end-to-end production build with backend API, store release, and full IP transfer.

Handover Guarantee

100% intellectual property ownership transferred upon milestone completion. Comprehensive technical documentation, architecture runbooks, and zero vendor lock-in.