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Authentication Provider Migration - Clerk

Overview:

This document describes the implementation plan for the new authentication and CDN access system for the Varsity Sports platform. Since the previous server did not include authentication or secure streaming, this is a greenfield setup designed to enable secure login, one-time ticket access, and protected video delivery across Web, iOS, and Android.

Objective:

List what this feature aims to achieve:

- Provide user authentication using **Email and Google login**.
- Centralize all user accounts under a single Clerk project.
- Support one-time access codes for subscriber or giveaway access.
- Restrict video playback with **short-lived**, **signed URLs** (CloudFront).
- **V** Enforce **one IP per login** and prevent account sharing.
- Work consistently across Website, iOS, and Android.

Architecture Overview:

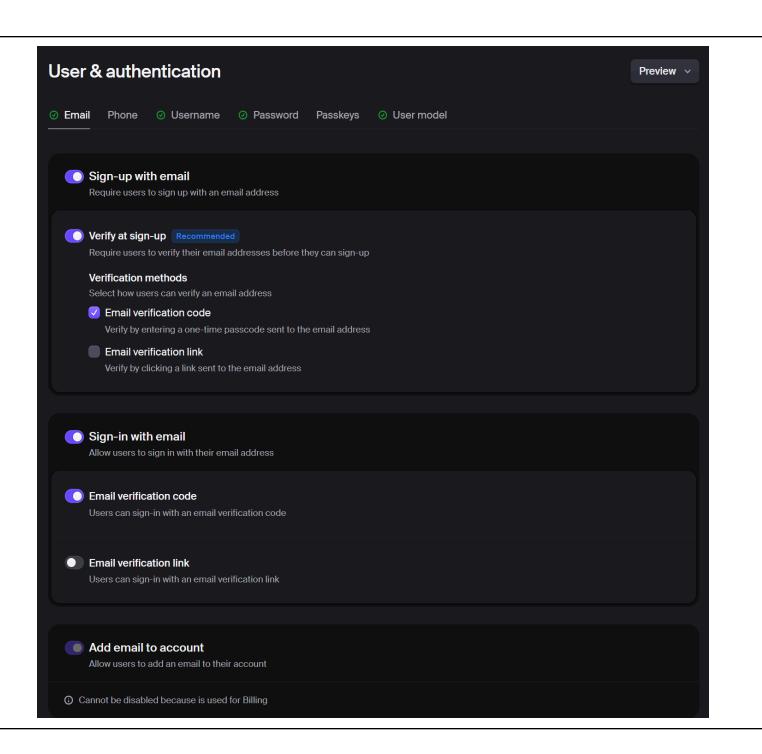
User → Clerk (Auth) → Backend (Session + Policy) → CloudFront (Signed URL) → Player (Video)

Component	Description	
Clerk	Manages login, registration, sessions, email verification	
Backend API	Verifies Clerk JWT, enforces IP policy, issues signed URLs	
Database	Stores session, ticket, redemption, and IP data	
CDN (CloudFront)	Delivers video only with signed URL	
Clients	Web, iOS, Android apps using the same auth source	

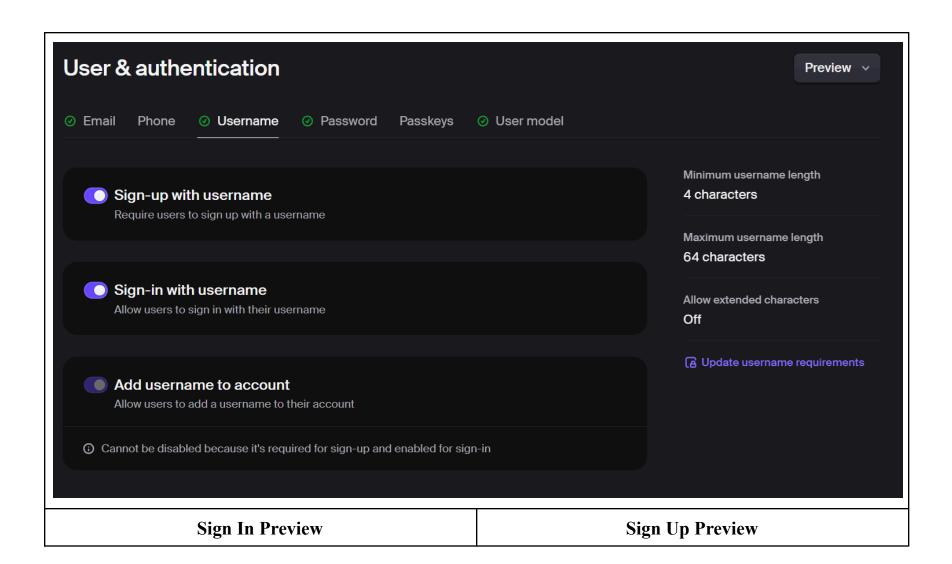
Acceptance Criteria:

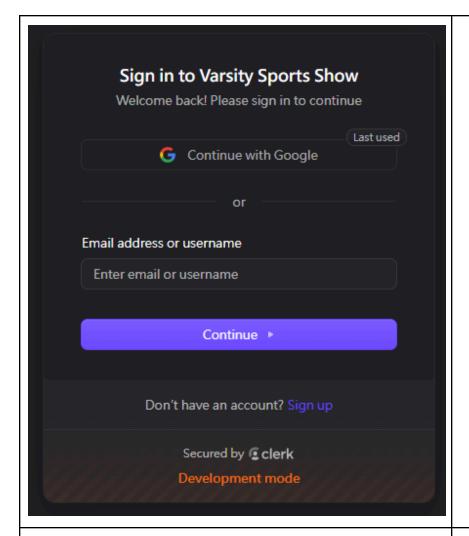
- User can sign in via Clerk (Email or Google).
 Tickets can be issued, redeemed once, and revoked.
 "One IP per session" enforcement works.
 Documentation allows any team member to deploy on a new server.

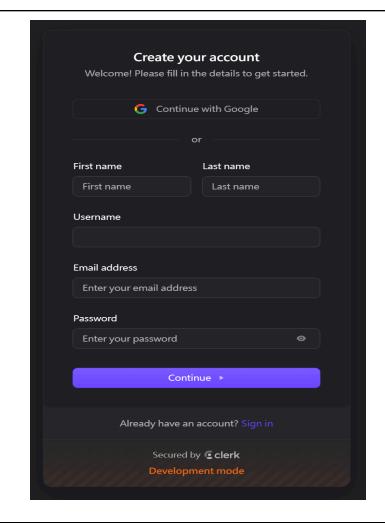
User & Authentication - Email



User & Authentication - Phone (Pro Plan) User & authentication Preview ~ Username User model Passkeys Email Phone Password Sign-up with phone Pro Require users to sign up with a phone number Sign-in with phone Pro Allow users to sign in with a phone number Add phone to account Pro Allow users to add a phone number to their account **User & Authentication - Username**

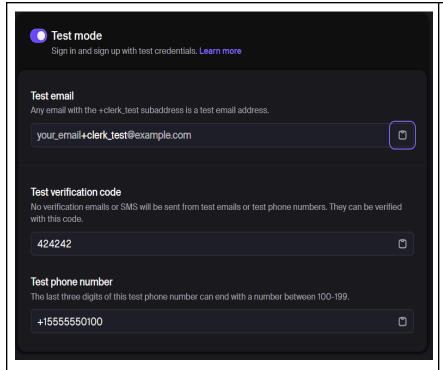


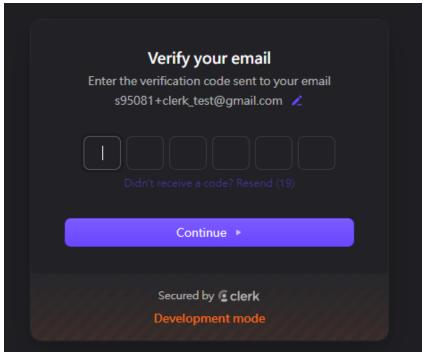




Test Mode Preview

Email Verification (test code: 424242)

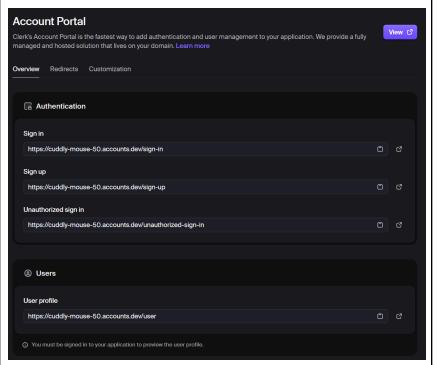


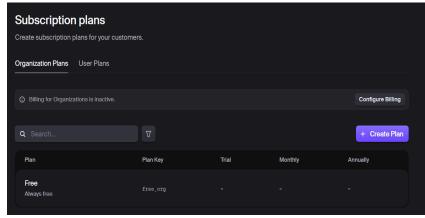


WorkSpace Account Portal For Admin

Once we upgrade to Pro plan, domain are able to change

Subscription plans Setting





Clerk provides both *User Plans* and *Organization Plans* to structure subscription-based access.

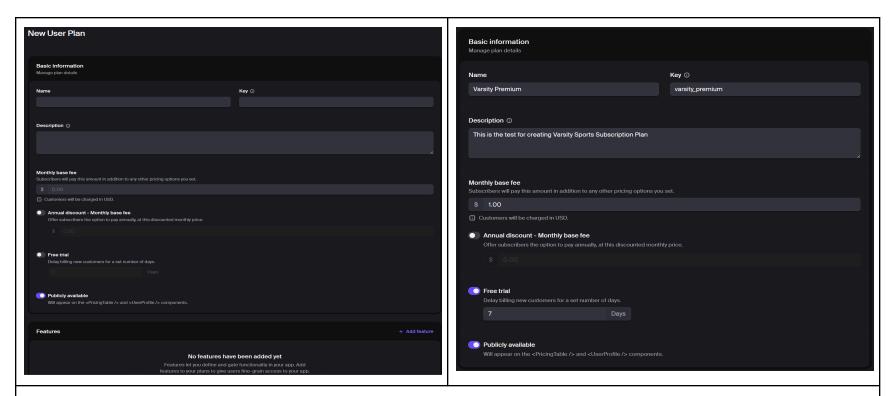
For the Varsity Sports Show, the system will primarily use User Plans to manage individual subscriber access to livestreams.

Integration with Stripe or another payment processor will be implemented to handle billing and renewal logic.

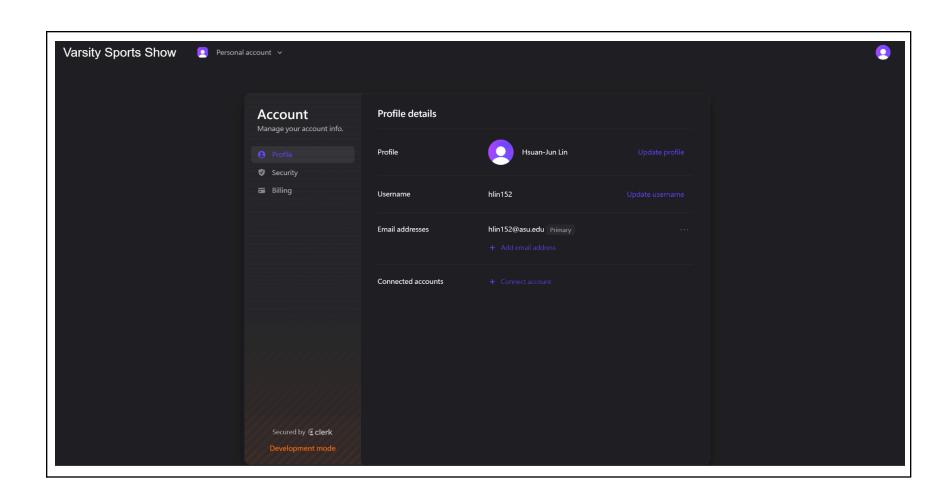
In future expansions, Organization Plans can be used for school-level or team-based access management.

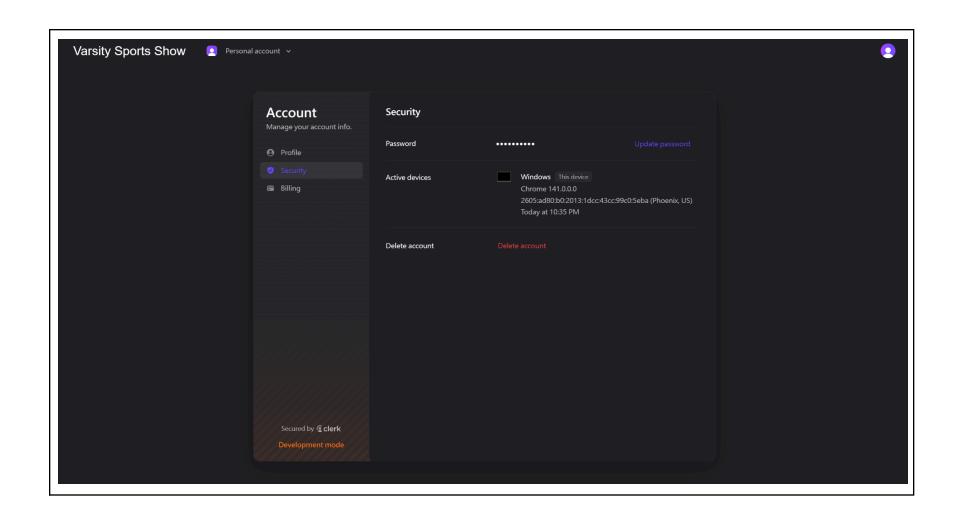
Create New User Plan Preview

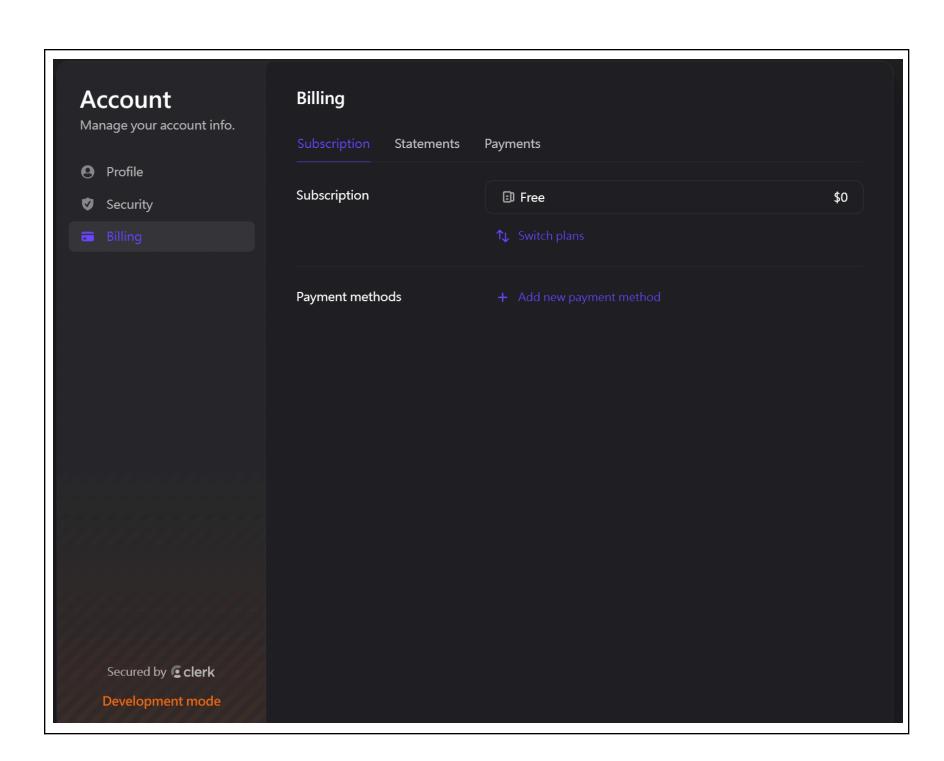
Example Plan Preview

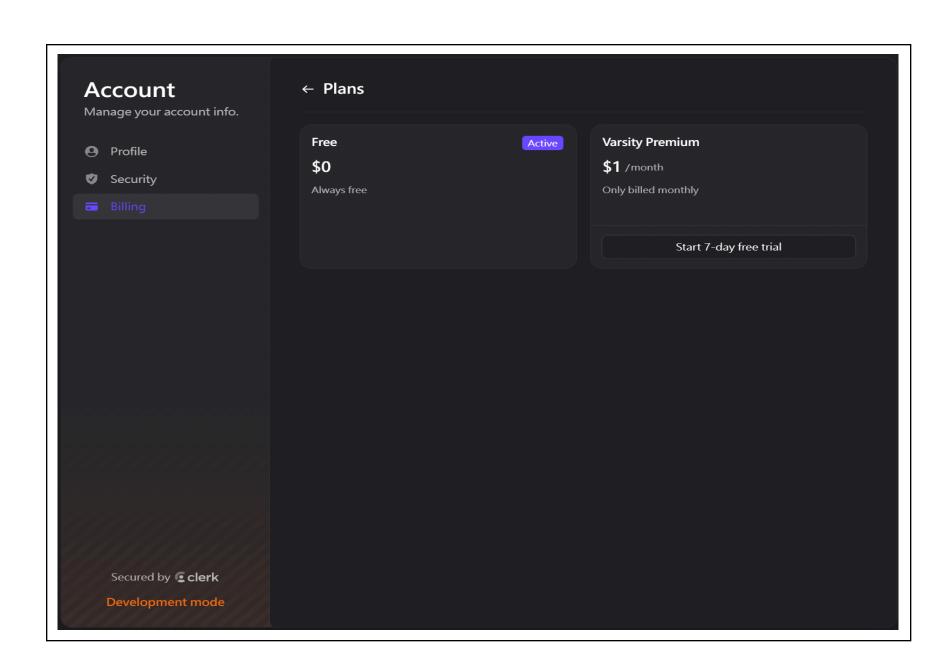


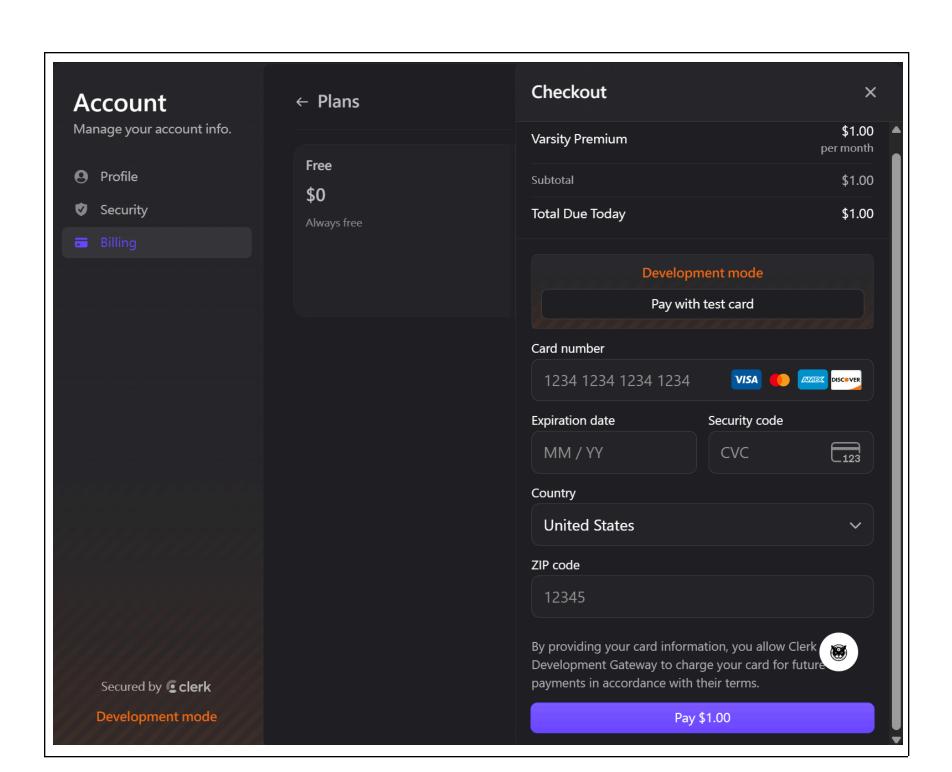
User Portal Preview (Can customized and integrated into site)

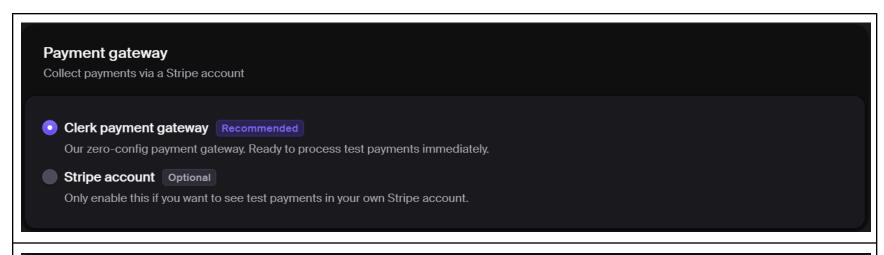


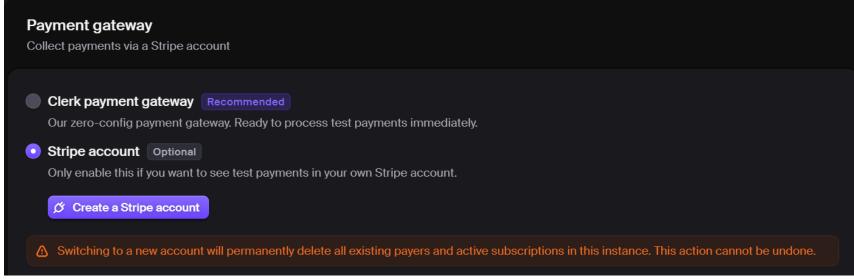








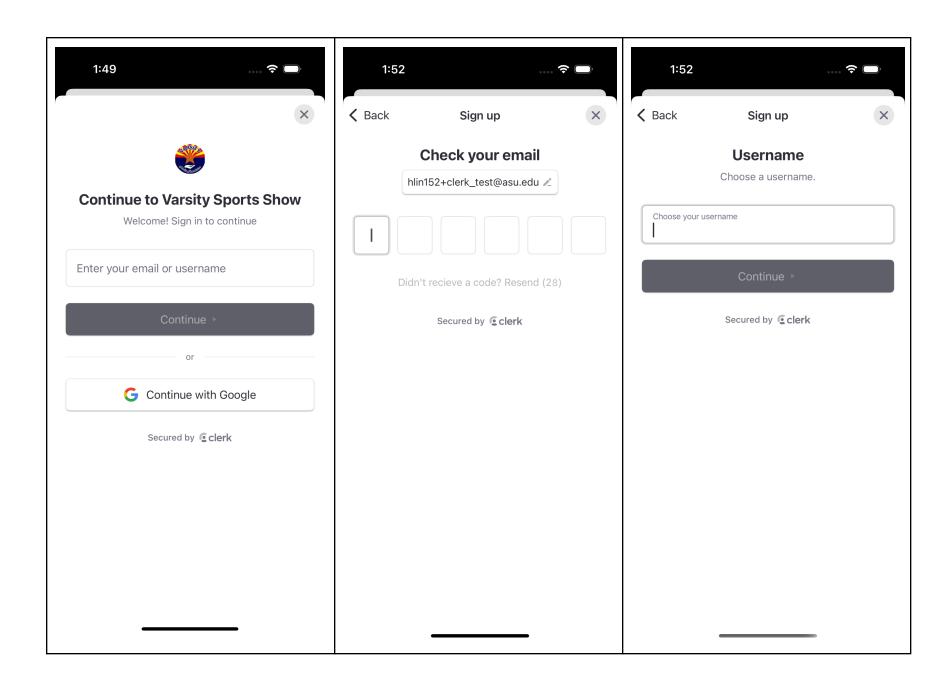


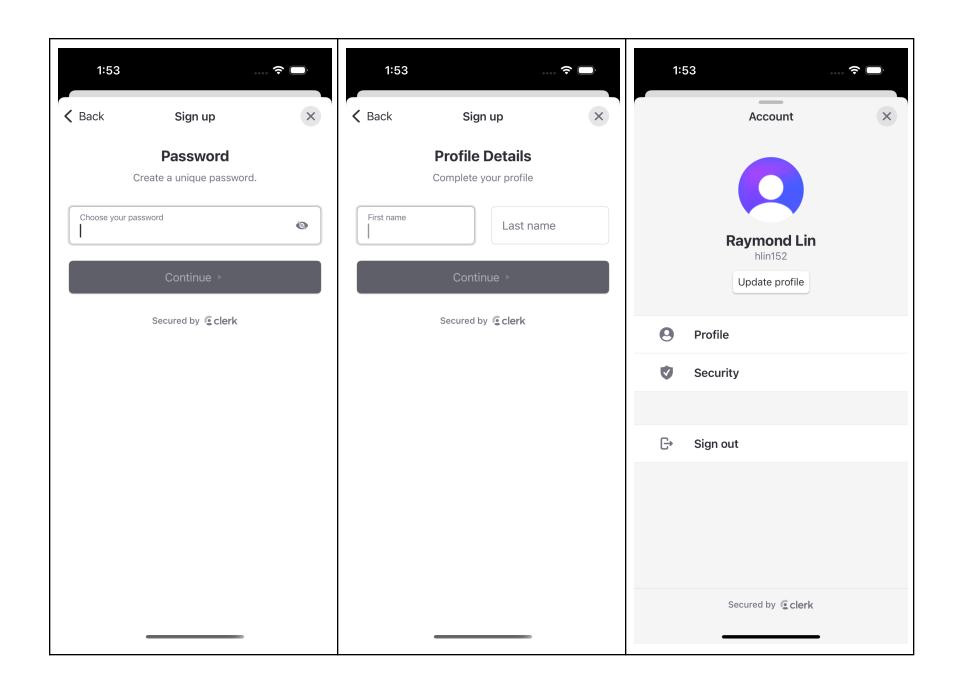


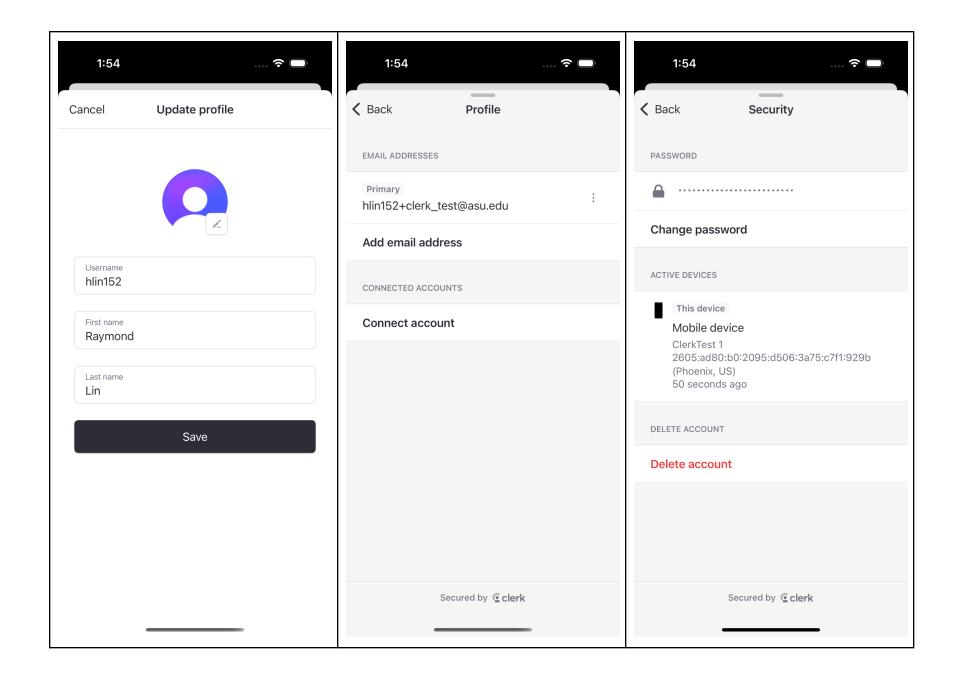
Note: Choose the payment gateway to make sure it work smoothly - Stripe Account Recommend

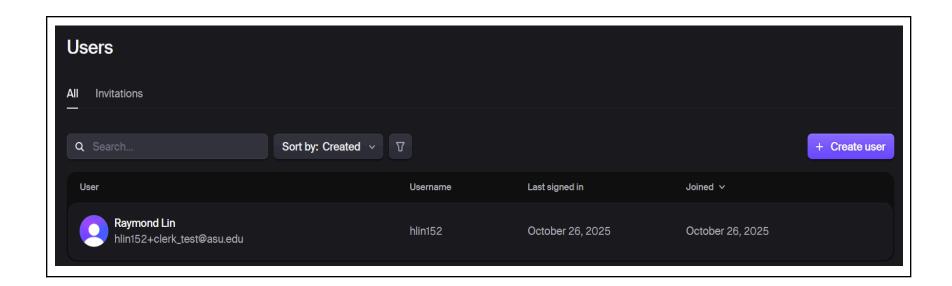
IOS App SDK Test:

Quick Integrated Overview









Summary:

Need more info from Sponsor and teammate

- Domain and following domain site info required to set up with **Node.js**
- Once the site complete, then move on IOS, Android App
- Early set up? Subscription Plan name, est. monthly paid, free trial, ...etc
- Check If IOS Swift UI, login and sign up page changed to Clerk UI Integrated?





Username or Fmail

Password

Forgot password?



Don't Have An Account? Sign Up

Sign-in UI simplification

- Replace the username/password fields with one "Sign in / Sign up" button.
- On tap, open Clerk AuthView (right). Clerk manages authentication, verification, and recovery.
- After authentication, users return to our app flow unchanged.

Benefits: faster onboarding, fewer errors, and centralized user management for the sponsor (subscriptions, roles, user details).

App Sales Commission:

In addition to the \$99 annual fee, if your app is a paid app or includes In-App Purchases, Apple will take a commission from your revenue (usually 15% or 30%, depending on whether your annual revenue qualifies you for the Small Business Program).

