

EdifyMobile

Cross-Platform Trading Card App with Image Capture & Cloud Storage

Project Overview

Built a cross-platform mobile application for designing and purchasing custom trading cards. Users can upload photos, customize card designs using a canvas-based editor, and purchase physical cards through integrated print-on-demand fulfillment.

Key Achievement: Single codebase serving iOS and Android with native-quality performance and features including camera, haptics, and push notifications.

Core Features

Camera Integration

Native camera access for photo capture with image cropping and optimization before upload.

Canvas Design Tool

Fabric.js-powered editor for card customization with templates, text, and image manipulation.

Cloud Storage

ImageKit CDN integration for optimized image delivery

Push Notifications

OneSignal integration for order updates, new

Technical Implementation

Image Handling Pipeline

- Camera capture with permission handling
- Client-side image compression
- Secure upload to cloud storage
- CDN delivery with responsive sizing
- Caching strategy for offline access

Canvas-Based Design Tool

- Fabric.js integration for object manipulation
- Pre-built card templates
- Text overlay with custom fonts
- Image positioning and scaling
- Real-time preview rendering

Payment & Fulfillment

- Stripe payment integration
- Print-on-demand via Printful API
- Order tracking and status updates
- Shipping address management

Mobile-Specific Features

- **Haptic Feedback:** Tactile responses for interactions
- **Safe Area Handling:** Proper insets for notches and home indicators
- **Gesture Support:** Swipe, pinch, and pan gestures
- **Offline Mode:** Local data persistence with sync

- **Deep Linking:** Direct navigation from notifications/URLs

Tech Stack

Framework: React Native, Expo SDK

Language: TypeScript

State: Zustand, TanStack Query

Design: Fabric.js (Canvas)

Storage: ImageKit CDN

Payments: Stripe

Notifications: OneSignal

Skills Demonstrated

React Native

Expo

TypeScript

Camera Integration

Image Upload

Cloud Storage

Stripe

Push Notifications

Canvas/Fabric.js

Mobile UI/UX

Deliverables

- Cross-platform mobile app (iOS/Android)
- Camera integration for photo capture
- Canvas-based card design tool
- Cloud image storage with CDN
- Stripe payment integration
- Push notification system
- Order tracking and fulfillment
- App Store and Play Store deployment

Why This Matters

This project demonstrates mobile-first development with native device features. The image capture → cloud upload → CDN delivery pipeline is exactly what's needed for proof-of-service capture in field service applications. The cross-platform approach ensures maximum reach with minimal development overhead.