

# EdifyMobile

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

## Project Overview

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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

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### 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

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## 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

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- **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

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**Framework:** React Native, Expo SDK

**Language:** TypeScript

**State:** Zustand, TanStack Query

**Design:** Fabric.js (Canvas)

**Storage:** ImageKit CDN

**Payments:** Stripe

**Notifications:** OneSignal

## Skills Demonstrated

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React Native

Expo

TypeScript

Camera Integration

Image Upload

Cloud Storage

Stripe

Push Notifications

Canvas/Fabric.js

Mobile UI/UX

## Deliverables

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- 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

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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.