

# Custom Shopify App Integration

## Inventory & Fulfillment Orchestration Across Warehouses

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**Client:** DTC Brand

**Duration:** 2–3 Months

**Team Size:** 2–3 Developers

### *Project Overview*

Designed and developed a private Shopify application to centralize inventory management and automate fulfillment routing across multiple warehouses and third-party logistics providers.

### *Challenge*

The client faced frequent stockouts, overselling, and delayed fulfillment due to disconnected systems between Shopify and warehouse software. Manual reconciliation was causing operational inefficiencies.

### *Solution*

Built a Node.js-based private app leveraging Shopify's GraphQL API and Webhooks for real-time inventory updates. Implemented intelligent fulfillment routing logic to assign orders based on proximity and stock availability.

### *Results & Impact*

- Reduced stockouts by 40%
- Improved fulfillment speed by 25%
- Automated reordering logic preventing inventory gaps
- Real-time sync across 4 warehouses
- Significant reduction in manual operations

## ***Technologies Used***

- Shopify API
- GraphQL
- Node.js
- Webhooks
- MongoDB