

Building a Simplified Pharmacy Management System

Efficient operations and accurate inventory management are essential for success in the retail pharmacy sector. Our client has a digital solution designed to simplify and automate pharmacy processes, making daily operations smoother and more efficient.



Company Overview

The client has a retail pharmacy business struggling with manual processes. They aim to modernize operations, improve efficiency, and enhance customer service through technology-driven solutions.

Challenges

- ▶ No effective management of pharmacy information systems
- ▶ Manual tracking of sales transactions and inventory records
- ▶ Persistent discrepancies in stock item tracking
- ▶ Difficulty determining accurate stock balances in real-time
- ▶ Inefficient reporting processes
- ▶ Challenges in Medicine expiry management

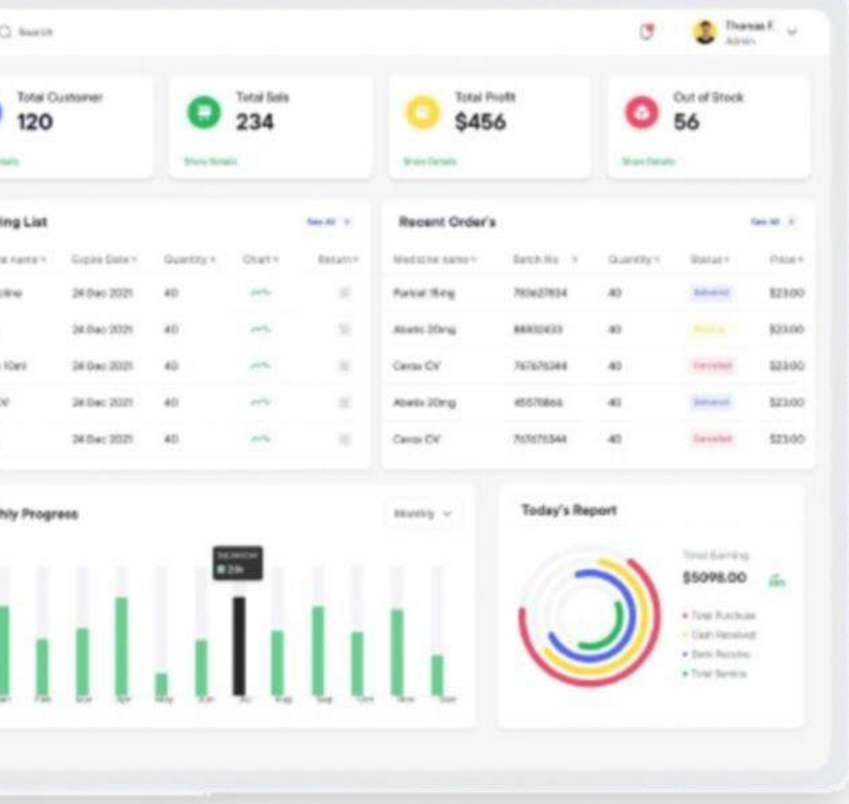
Solutions

- 💡 The app is a simplified pharmacy management system designed to streamline retail pharmacy operations.
- 💡 The application automates transactions related to sales, inventory management, and reporting, ensuring accuracy and efficiency.
- 💡 Goals of this application include, **Master Data Management, Easy Billing, Inventory Management, GST Filing, Reporting, Payment Services, Cash Management.**

Technical Stack

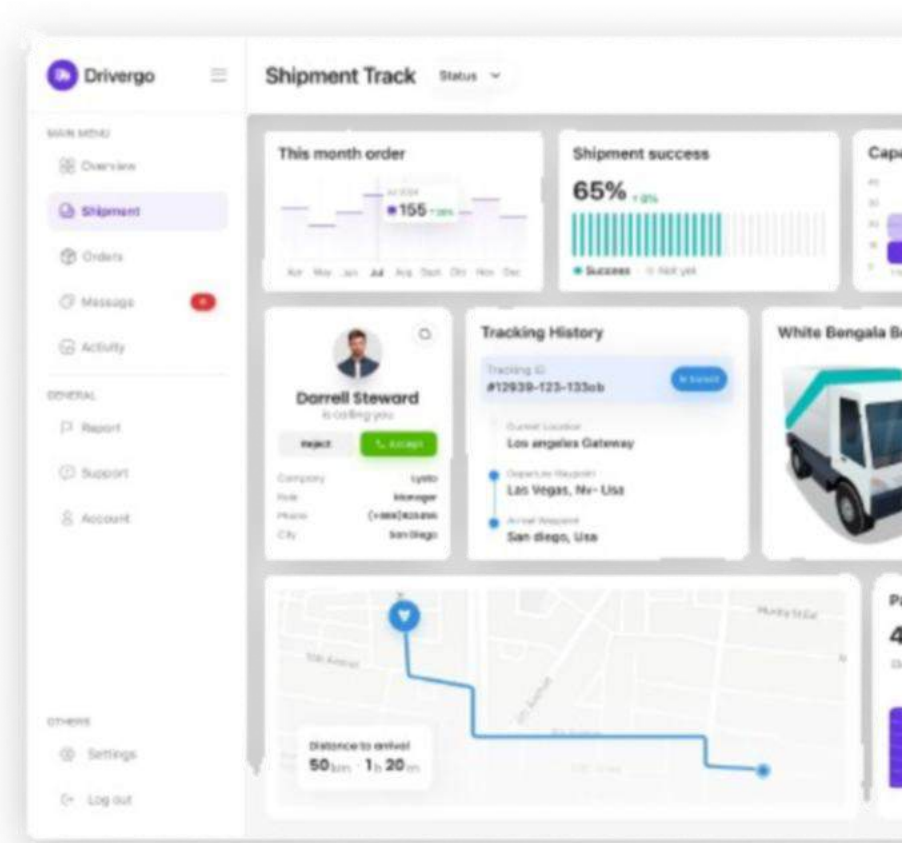
- Frontend: React JS, Electron, HTML, CSS, UX Design
- Backend: Node JS
- Database: PostgreSQL
- Cloud Infrastructure: AWS EC2, RDS, S3

Modules



- 📄 Invoice Management
- 📦 Order Management System
- 📋 Stock Management
- ↔️ Inter-Department Transfer
- 👤 Patient Records
- 📋 Inventory Management

- ⚙️ Master Data Management
- 🏠 GST Filing
- 📊 Reporting System
- 💰 Cashier Management
- 💳 Payment Services



Results

- Established a centralized repository for pharmacy inventory.
- Eliminated manual record-keeping processes.
- Reduced stock discrepancies through real-time tracking.
- Improved inventory visibility and management.
- Enhanced reporting capabilities for better business insights.
- Streamlined accounting and billing operations.
- Minimized medicine expiry waste through proactive tracking.
- Enabled offline operations ensuring business continuity.

Technical Implementation

- The solution is built as a web-based application using a modern technology stack.
- The front end is developed with React JS, ensuring a smooth and user-friendly experience, while the back end is powered by Node JS for efficient processing.
- PostgreSQL is used for secure and reliable data management.
- The system is hosted on AWS cloud infrastructure (EC2, RDS, S3), providing scalability and security.
- It also supports offline functionality, allowing pharmacies to continue operations even in case of internet disruptions.

Summary

Our client helps retail pharmacies streamline their operations with a digital solution. It reduces manual work, improves inventory tracking, and ensures smooth business operations. The system works offline, allowing pharmacies to continue running without internet disruptions. It also supports standard hardware, making it cost-effective and easy to use. By automating key processes, the solution lets pharmacies focus more on customer service instead of administrative tasks.