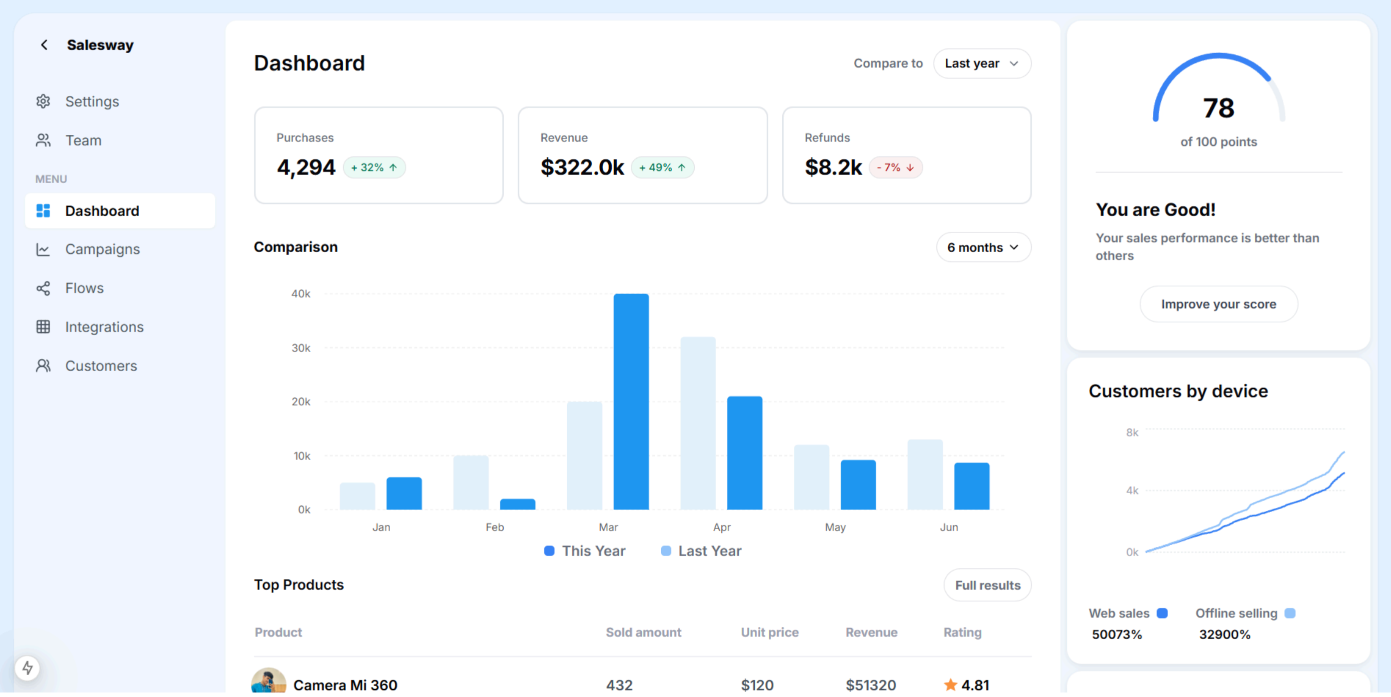
Next.js + PostgreSQL Data Visualization



Dashboard

Purchases 4,294 + 32% ↑

Revenue $322.0k + 49% ↑

Refunds $8.2k - 7% ↓

78 of 100 points

You are Good!

Your sales performance is better than others

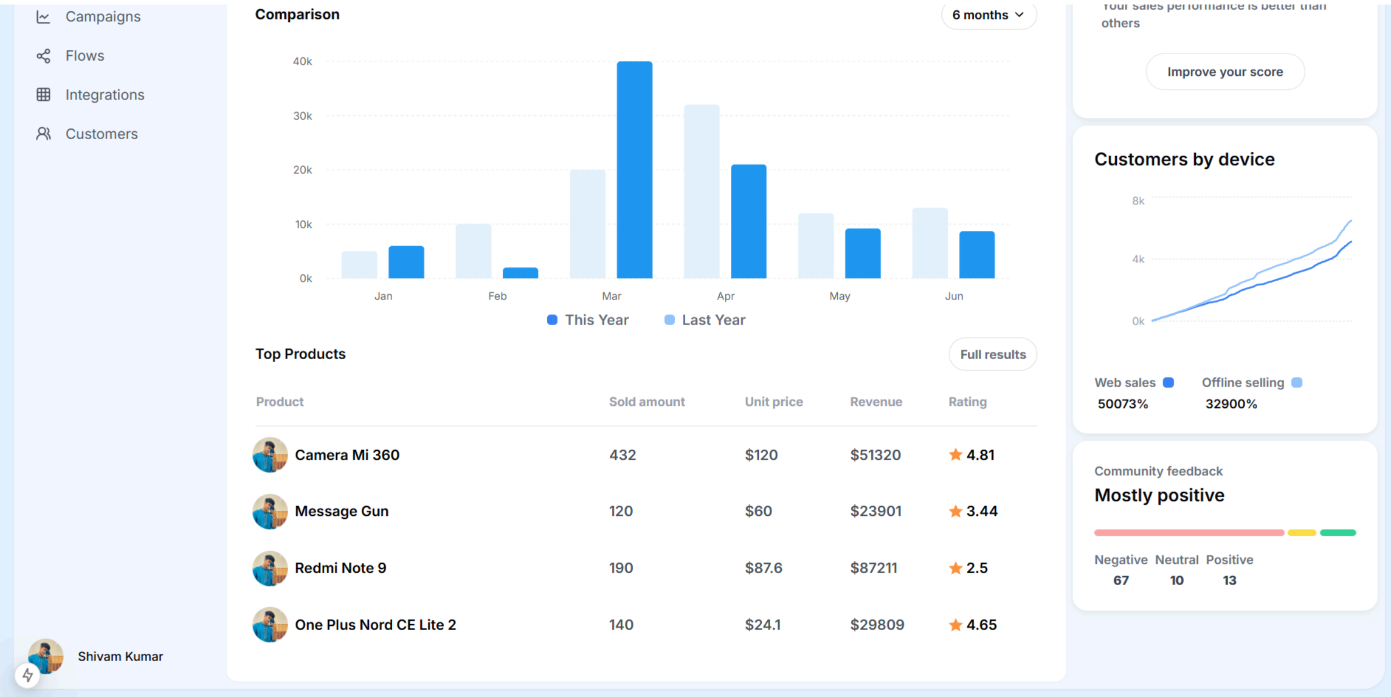
Customers by device

Web sales 50073%

Offline selling 32900%

Top Products

Product	Sold amount	Unit price	Revenue	Rating
Camera Mi 360	432	$120	$51320	★ 4.81



Web sales 50073%

Offline selling 32900%

Top Products

Product	Sold amount	Unit price	Revenue	Rating
Camera Mi 360	432	$120	$51320	★ 4.81
Message Gun	120	$60	$23901	★ 3.44
Redmi Note 9	190	$87.6	$87211	★ 2.5
One Plus Nord CE Lite 2	140	$24.1	$29809	★ 4.65

Community feedback

Mostly positive

Negative	Neutral	Positive
67	10	13

1738621799814

Overview

This project is a Next.js application that integrates with a PostgreSQL database to fetch and visualize data. It includes:

1. A REST API for fetching table data from the database.
2. A frontend that dynamically renders a comparison chart using Recharts.
3. A secure database connection using SSL authentication.

Features

1. Fetches data from a PostgreSQL database.
2. Dynamically displays data in a bar chart.
3. Handles errors gracefully for invalid table names and database failures.
4. Uses TypeScript for type safety and improved development experience.

Tech Stack

- Next.js – Server-side rendering and API handling
- PostgreSQL – Database for storing records
- Recharts – Data visualization library for bar charts
- TypeScript – Static typing for better maintainability
- ShadCN Components – UI components for a modern design

Setup Instructions

1️⃣ Clone the Repository

```
git clone https://github.com/shhiivvaam/frontend_assignment.git
cd frontend_assignment
```

2️⃣ Install Dependencies

```
npm install
```

3️⃣ Configure Environment Variables

Create a .env file in the root directory and add the following:

```
DB_USER=your_db_user
DB_HOST=your_db_host
DB_NAME=your_db_name
DB_PASS=your_db_password
DB_PORT=your_db_port
DB_URL=your_db_url
DB_SSL_CA=yout_db_ssl_ca
```

4️⃣ Run the Development Server

```
npm run dev
```

Then open http://localhost:3000 in your browser.

API Endpoint

1. Fetch Data from Database

- GET /api/fetchData?table=sheet{sheet_id}

2. Query Params:

- table (string) – Required, the table name to fetch data from.

🛡️ Security Considerations

Uses SSL certificates for a secure database connection.

1. Prevents SQL injection by using parameterized queries.
2. Handles API errors gracefully with proper response statuses.

ThankYou

Shivam