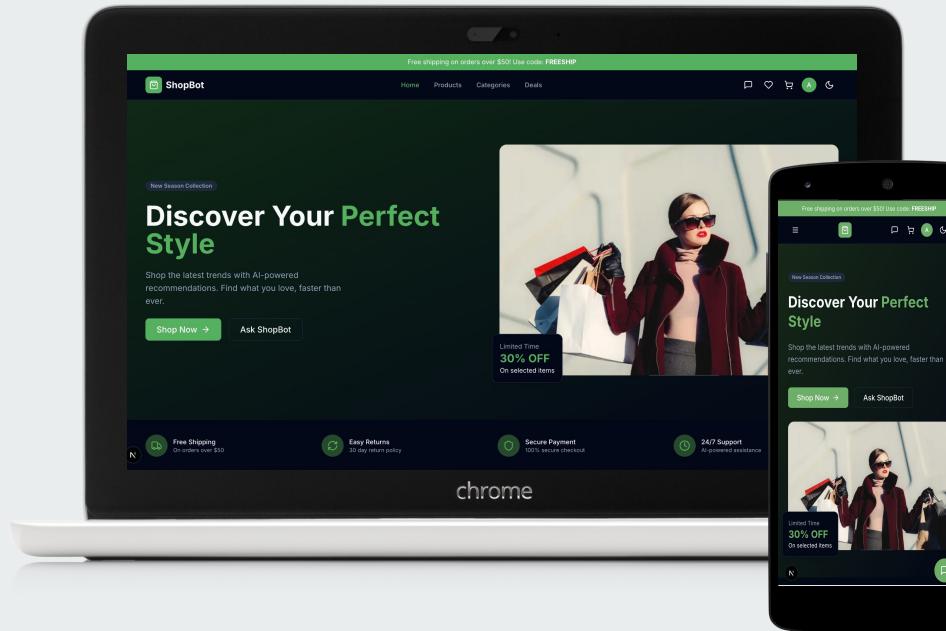

E-Commerce Chatbot App

Raka Admiral Abdurrahman



Outline

About

Features

Tech Stack

Architecture

Application

Demo

Question

About

About E-Commerce AI Chatbot

An intelligent e-commerce shopping assistant powered by Google Gemini AI. This full-stack application provides conversational product discovery, cart management, and checkout assistance through natural language interactions.

Features

Features

- AI-Powered Conversations: Natural language understanding with Google Gemini 2.5
- Product Discovery: Search, filter, and browse products through chat
- Smart Recommendations: Gift suggestions based on recipient and occasion
- Shopping Cart Management: Add, remove, and review cart items via conversation
- Voucher System: Apply and manage discount codes
- Order Processing: Complete checkout flow with address selection
- Multi-Session Support: Maintain multiple chat conversations
- Dark/Light Theme: User-configurable theme with system preference detection
- Responsive Design: Optimized for desktop and mobile devices

Tech Stack

Tech Stack (Frontend)

Technology	Version	Purpose
Next.js	16.1.x	React framework with App Router
React	19.x	UI library
TypeScript	5.7.x	Type safety
Tailwind CSS	3.4.x	Utility-first styling
Zustand	5.x	State management with persistence
Lucide React	0.474.x	Icon library
React Markdown	10.x	Markdown rendering in chat
Embla Carousel	8.5.x	Product carousels
Sweetalert2	11.x	Alert dialogs
date-fns	4.x	Date formatting

Tech Stack (Backend)

Technology	Version	Purpose
FastAPI	0.109.x	Async web framework
Python	3.11+	Runtime
SQLAlchemy	2.0.x	Async ORM
asyncpg	0.29.x	PostgreSQL async driver
Pydantic	2.6.x	Data validation
Google GenAI SDK	latest	Gemini AI integration
python-jose	3.3.x	JWT authentication
passlib	1.7.x	Password hashing
Uvicorn	0.27.x	ASGI server

A close-up photograph of a person's hands writing in a spiral-bound notebook with a black pen. The hands are positioned over the open pages, and the notebook is resting on a light-colored surface. The background is slightly blurred.

Tech Stack (Database)

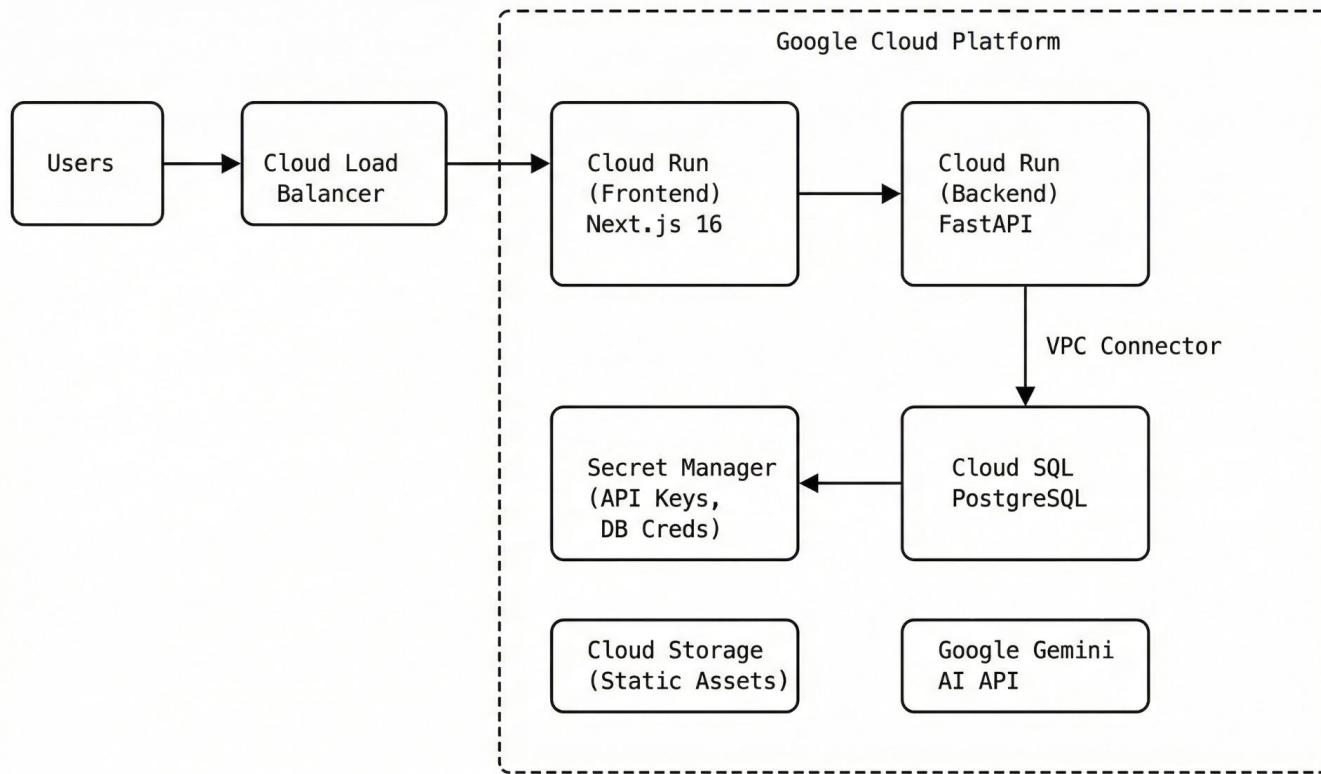
Technology

PostgreSQL

Purpose

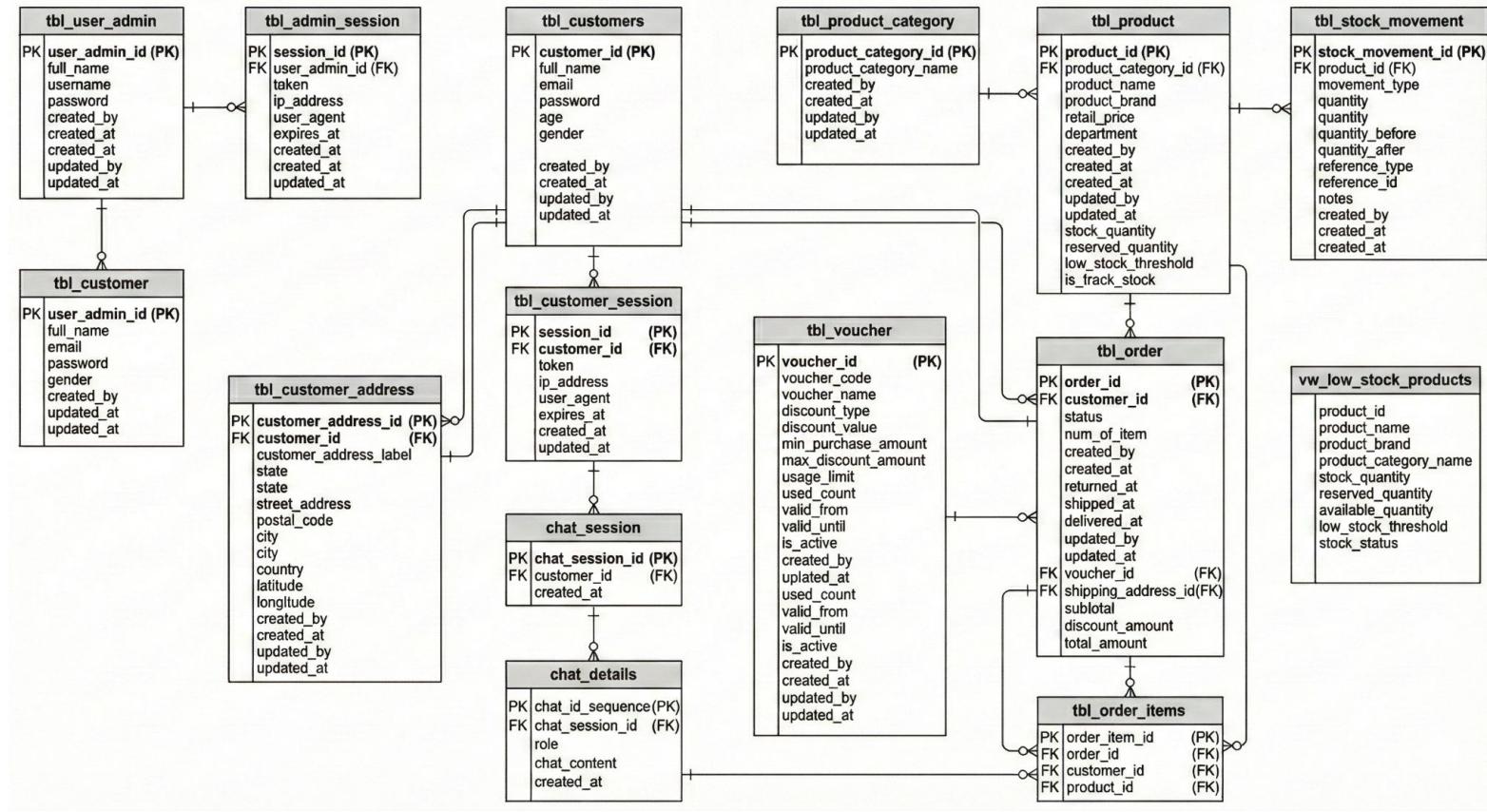
Primary database

Architecture



High-level architecture

Database Schema



Database Schema

Application

Free shipping on orders over \$50! Use code: FREESHIP

ShopBot

Home Products Categories Deals

New Season Collection

Discover Your Perfect Style

Shop the latest trends with AI-powered recommendations. Find what you love, faster than ever.

Shop Now → Ask ShopBot



Limited Time
30% OFF
On selected items

Free Shipping
On orders over \$50

Easy Returns
30 day return policy

Secure Payment
100% secure checkout

24/7 Support
AI-powered assistance

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Homepage

E-Commerce Chatbot E-Commerce Chatbot Chatbot Backend - Swagger

localhost:3000/products

Free shipping on orders over \$50! Use code: FREESHIP

ShopBot

Home Products Categories Deals

All Products

Showing 12 of 29120 products

Categories

- All Categories
- Accessories
- Active
- Blazers & Jackets
- Clothing Sets
- Dresses
- Fashion Hoodies & Sweatshirts
- Intimates
- Jeans
- Jumpsuits & Rompers
- Leggings
- Maternity
- Outerwear & Coats
- Pants
- Pants & Capris
- Plus
- Shorts
- Skirts
- Sleep & Lounge
- Socks
- Socks & Hosiery
- Suits
- Suits & Sport Coats

Search products... Search

Grid View List View

Women

SEVEN7
Seven7 Women's Long Sleeve Stripe Belted Top

\$49.00 Add to Cart

Women

CALVIN KLEIN
Calvin Klein Women's MSY Crew Neck Roll Sleeve

\$69.50 Add to Cart

Women

CALVIN KLEIN JEANS
Calvin Klein Jeans Women's Solid Flyaway Shirt

\$69.50 Add to Cart

Women

N

Women

12 Message

Product Page

Free shipping on orders over \$50! Use code: FREESHIP

ShopBot

Home Products Categories Deals

Shop by Category

Explore our wide range of products organized by category. Find exactly what you're looking for.

Accessories
Browse Products →

Active
Browse Products →

Blazers & Jackets
Browse Products →

Clothing Sets
Browse Products →

Dresses
Browse Products →

Fashion Hoodies & Sweatshirts
Browse Products →

N

12

Category Page

Free shipping on orders over \$50! Use code: FREESHIP

ShopBot

Home Products Categories Deals

Cart Heart Account

Hot Deals & Offers

Discover amazing discounts on your favorite products. Limited time offers you don't want to miss!

Flash Sale
Up to 50% off on selected items

Limited Time Offer
Don't miss these amazing deals

Special Discounts
Exclusive offers for you

Today's Best Deals

-15% OFF

Seven7
Seven7 Women's Long Sleeve Stripe

-20% OFF

Calvin Klein
Calvin Klein Women's MSY Crew Neck

-25% OFF

Calvin Klein Jeans
Calvin Klein Jeans Women's Solid

-30% OFF

Bailey 44
Bailey 44 Women's Undertow Top

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Chatbot Backend - Swagger

Deals Page

E-Commerce Chatbot E-Commerce Chatbot Chatbot Backend - Swagger

localhost:3000/chat

Chat History

- New Chat
- Chat Session Feb 1, 2026, 09:18 AM
- Chat Session Feb 1, 2026, 09:09 AM
- Chat Session Feb 1, 2026, 09:04 AM
- Chat Session Feb 1, 2026, 07:34 AM
- Chat Session Feb 1, 2026, 06:56 AM

ShopBot AI Shopping Assistant

A

Here's what's in your cart:

- Queen Accessories- Faux Flap Jean Leggings- by Queen - \$13.99
- Modadorn New Arrivals Spring & fall Star Light Infinity Scarf Women's fashion clothing & accessories by Modadorn - \$12.99
- Juicy Couture Perfume Pink Velour Zip Solid Hoodie by Juicy Couture - \$79.99

Your current total is **\$106.97**.

Would you like to proceed to checkout, or do you want to make any changes to your cart?

Items in your cart

 Queen Accessories- Faux Flap Jean Leggings- by Queen	\$13.99	
 Modadorn New Arrivals Spring & fall Star Light Infinity Scarf	Modadorn	\$12.99
 Juicy Couture Perfume Pink Velour Zip Solid Hoodie	Juicy Couture	\$79.99

Feb 1, 2026, 04:18 PM

I want to checkout

Feb 1, 2026, 04:20 PM

A

Great! To proceed with checkout, please provide the shipping address you'd like to use. If you have a saved address, you can tell me its label (e.g., "Home," "Office").

Also, do you have any voucher codes you'd like to apply to your order?

Browse Products View Cart Current Deals Help

Ask me anything about our products... Press Enter to send, Shift+Enter for new line

Chatbot Page

Demo

Questions?

Thank you!