

Softronix4.0 Web Development Hackathon

Theme: *Don't just build a shop. Build a Shopkeeper.*

Time Limit: 24 Hours

1. The Problem

Websites used in e-commerce are dull. They are mere collections of fixed pictures. And there is not a one to consult, not a one to bargain with, not a human touch.

Your Mission: Create an e-commerce site (with Shopify, Next.js, any template you like) that includes an AI Personal Shopper, which does not merely chat, but can actually manage the site and assist the user to purchase items.

2. The Core Requirements (Must Haves)

A. The Storefront (The Body)

- You do not need to build the backend from scratch. You can use:
 - **Shopify** (Storefront API).
 - **MedusaJS** or **WooCommerce**.
 - **Mock Data:** A simple JSON file with 20 cool products is fine.
- **Requirement:** The site must look professional. It needs a Product List, a Cart, and a Checkout page.

B. The RAG Based Agent (Clerk)

You must embed an AI Assistant (The Clerk) that has **Access to the Inventory**.

- **The "No-Menu" Rule:** A user must "also" be able to find and buy a product *without clicking a single add-to-cart/buy button*, just by talking to the Clerk.
- **Capabilities:**
 1. **Semantic Search:** "I need an outfit for a summer wedding in Italy." (The Clerk must show light linens and sunglasses, not winter coats).
 2. **Inventory Check:** "Do you have this in blue?" (The Clerk checks the JSON/Database and answers).
 3. **Defined User Journey:** When the Clerk responds with any products, it should display the rich results (schema) of the products, with their basic information like reviews, price and must contain a hyperlink to that specific page.

C. The Real Value Addition

The Clerk should not just *talk*. It must *act*.

- **The "Vibe Filter":** When the user says "Show me cheaper options," the **website UI must update instantly** to sort by price. The chat bot must trigger a function that changes the website layout in real time.
- **Sales Agent:** The agent must also recommend relevant products to the users using their past activity data.

3. The "Haggle Mode"

The Scenario:

Users love personalized deals. Almost all the sales figures that always seem crazy to achieve are achieved using hyper personalization. For this project, you also have to build a "Negotiation Bot" feature.

- **The Task:** The user can ask the Clerk for a discount. ● **The Logic:** The Clerk has a hidden "Bottom Price."
 - If the user gives a good reason ("It's my birthday", "I'm buying two"), the Clerk generates a unique **Coupon Code** and applies it to the cart.
 - If the user is rude, the Clerk raises the price.
- **Tech:** Use OpenAI Function Calling to generate a code like BDAY-20 and inject it into the cart session.

4. Scoring Rubric (Total: 100 Points)

Category	Points	Success Criteria
The "Clerk" Personality	30	Is the bot helpful/funny, or is it a robot? Does it feel like a human?
UI Integration	30	Critical: Does the chat actually change the website? (e.g., filters products, adds to cart).
Visual Polish	20	Does the store look trustworthy? (Good images, clean fonts).
"Haggle" Logic	20	Can I negotiate a discount? Does the bot have a spine (refuses lowballs)?

Hackathon Plan of Execution

All participants are allotted **24 hours** to complete the project. The official time window begins at **10:00 AM on 13th February 2026** and concludes at **10:00 AM on 14th February 2026**.

All participants are directed to visit GCU on 14th February at 10:00 AM to present the project prepared within the given 24-hour timeframe. Please ensure timely arrival and come fully prepared for your presentation.

Best of luck to all teams.