

E-Commerce Website

Woodmart Mega Electronics

Implementation Plan

Product Foundations

- Finalize scope (catalog size, variants, localization, payment/shipping providers, content strategy) and write user stories.
- Define UX goals using the static Woodmart snapshot; produce component inventory and Tailwind design tokens (colors, typography, spacing).
- Select supporting services (search engine, queue backend, CDN, payments, analytics) and draft non-functional requirements.

Architecture & DevOps

- Scaffold monorepo: Laravel 12 API + Vue 3 SPA via Vite, Tailwind configured with design tokens, Pinia, Vue Router.
- Establish environments (local, staging, production); set up Docker dev stack, GitHub Actions CI (lint, tests, build), and deployment scripts for Ubuntu/Apache (PHP-FPM, Node build step, MySQL migration flow).
- Configure monitoring/logging stack (Telescope for dev, Sentry/New Relic for prod) and secrets management.

Core Backend Modules

- Design database schema for catalog, inventory, pricing, promotions, customers, orders, payments, shipments, reviews.
- Implement RBAC and auth: Laravel Breeze/Jetstream base + `spatie/laravel-permission`, policies/guards for admin vs public.
- Build REST/GraphQL endpoints (catalog browse, search, cart, checkout, account) with validation, caching, job queues for async tasks.

Frontend Delivery

- Create layout shell (header/mega menu, footer, responsive grid) and shared Vue components mapped from snapshot.
- Implement route-level pages: Home, Category, Product detail, Search results, Cart, Checkout, Account dashboard.
- Integrate API services, state management, form handling, SSR or hydration strategy for SEO-critical pages.

Commerce Features

- Catalog management: filtering, sorting, comparison, quick view, wishlists, product bundles.
- Cart & checkout: guest checkout, payment integrations, shipping options, promotions, order confirmation flow.

- Account area: order history, returns, saved addresses, profile settings, downloadable invoices.

Content & Admin

- Build admin UI (Filament/Nova or custom) for catalog CRUD, promotions, banners, mega menu configuration.
- Integrate CMS capabilities for landing blocks, blog, testimonials; schedule promotions and banner rotations.
- Add auditing, activity logs, and staff notifications.

Quality & Hardening

- Testing strategy: Pest unit/feature tests, API contract tests, Vitest + Vue Test Utils, Playwright/Dusk for end-to-end critical paths.
- Performance and security: caching (Redis), CDN integration, rate limiting, 2FA, vulnerability scanning, accessibility audits.

Launch & Iteration

- Populate staging with sample data, conduct UAT, load testing, SEO review.
- Plan production cut-over, monitoring, post-launch support, and backlog for enhancements (loyalty, personalization, multi-tenant/multi-store if needed).