

Mustafa Melake

Full Stack Engineer — Next.js | TypeScript | High-Performance E-Commerce

Egypt (Remote: MENA/Gulf, Europe, US) • +20 106 774 5012 • mustafamelake@gmail.com
mustafamelake-portfolio.vercel.app • github.com/MustafaMelake • linkedin.com/in/mustafa-melake-002b37379

PROFESSIONAL SUMMARY

Full Stack Engineer who builds production e-commerce platforms where the money is always right. I specialize in the Next.js App Router (React Server Components, Server Actions) with strict TypeScript, architecting business logic that runs server-side and cannot be tampered with by the browser — server-authoritative pricing, race-safe inventory, and exact-to-the-cent financial accuracy. Two client platforms delivered and handed over in 2026, both scoring 100/100 Lighthouse Performance and SEO on core landing and product pages, with zero post-launch defects.

TECHNICAL SKILLS

- **Core Stack:** Next.js (App Router, Server Components, Server Actions, Streaming), React, TypeScript (strict), Tailwind CSS, Node.js
- **Databases & ORM:** PostgreSQL, Prisma, MongoDB, schema design, Decimal-precision money modelling, atomic transactions
- **Testing & Quality:** Vitest, Zod runtime validation, TypeScript strict mode, Lighthouse / Core Web Vitals auditing
- **Architecture:** Server-authoritative business logic, role-based access control (RBAC), authentication (Better Auth), race-safe stock control, multi-tenant/multi-branch data scoping, SEO & technical performance
- **Tools & Delivery:** Vercel, Git & GitHub, CI/CD, shadcn/ui, Radix UI, Framer Motion
- **Foundational:** MERN stack (MongoDB, Express, React, Node.js), REST API design

CLIENT WORK & EXPERIENCE

Freelance Full Stack Engineer — Independent (Remote)

2024 – Present

Ali Baba — Multi-Branch E-Commerce Platform | Client: Ahmed Ali | Delivered July 2026

Next.js App Router, React, TypeScript, Prisma, PostgreSQL, Better Auth, Tailwind CSS

- Architected and shipped a full-stack platform for a multi-branch patisserie: a customer storefront plus a role-gated admin console, delivered solo from schema design through production handover.
- Built a pure server-side discount engine that resolves the same live promotion on product cards, cart, and checkout — customers are always billed exactly the price the owner set, with no client-side calculation trusted.

- Implemented branch-scoped RBAC resolved live from the database, so each branch manager sees and controls only their own orders, stock, and customers — never another location's.
- Engineered race-safe atomic stock control and Decimal-precision currency handling end to end, with revenue counted only on delivered orders and pinned to Africa/Cairo — so reported figures reconcile exactly with the business's actual takings.
- Achieved 100/100 Lighthouse Performance and SEO on core landing and product pages via full server rendering with no client-side data-fetching layer.

"Mustafa gave us one system for all our branches. Every manager sees only their own orders and stock, the site loads instantly, and the daily numbers finally match what we actually sold." — Ahmed Ali, Owner, Ali Baba

Rose Misk — Luxury Fragrance Storefront | Client: Ahmed El Madawy | Delivered June 2026

Next.js App Router, React, TypeScript, Prisma, PostgreSQL, Zod, Vitest, Tailwind CSS

- Delivered a security-hardened luxury storefront and admin dashboard, with every privileged read and write routed through a guarded, Zod-validated Server Action.
- Made checkout tamper-proof by re-deriving every price from the database at the moment of payment and discarding client-submitted totals — eliminating an entire class of pricing fraud and refund exposure.
- Prevented oversells with atomic conditional stock updates and idempotent cancel-restock logic, so two shoppers can never buy the last unit.
- Wrote a Vitest regression suite covering the commerce core — **60/60 tests passing**, with 100% coverage of critical price and discount calculations under strict TypeScript.
- Built a transactional guest-to-user cart merge that never drops items at sign-in, protecting orders at the highest-risk step of the funnel.

"A flawless launch. The store looks exactly like the luxury brand we wanted and it simply works — nothing broke, nothing needed fixing after handover." — Ahmed El Madawy, Founder, Rose Misk

SELF-DIRECTED EDUCATION & TRAINING

Full-Stack Engineering — Self-Directed, Ongoing

- Trained through official framework documentation (Next.js, React, Prisma, TypeScript), open-source codebases, and advanced engineering-focused video instruction, deliberately targeting production architecture over tutorial-level implementation.
- Track upstream releases closely and ship on current versions — Next.js App Router, React Server Components, Tailwind, and the React Compiler adopted in production work.
- Maintain a public portfolio of production and concept builds demonstrating commerce architecture, CMS design, and motion-driven frontend work: github.com/MustafaMelake