PROJECT DOCUMENTATION

Mohamed Hassan Amin Co

How a lighting and electrical supplier established in 1972 got a bilingual online store, an admin panel and an app customers can install.

DURATION	ADMIN MODULES	PAYMENT WAYS	STATUS
2 months	18	3	Live
Discovery to support	Catalogue to settings	Card, cash, transfer	Open in two languages

CLIENT Mohamed Hassan Amin Co	REFERENCE PD-Ektra_0005	DURATION 2 months
CATEGORY Websites	VERSION 1.0	PREPARED BY Ektra Tech

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01 OVERVIEW

The project at a glance

Mohamed Hassan Amin Company supplies LED lighting and electrical equipment in Cairo. Ektra built its e-commerce platform: a bilingual storefront, an admin panel with eighteen modules, and an app customers can install.

CLIENT **Mohamed Hassan Amin Co**	KIND OF PROJECT **E-commerce platform**	PLATFORM **Web, installable app**	DURATION **2 months**
DELIVERED BY **Ektra Tech**	STATUS **Live, version 1.0**	LANGUAGES **English and Arabic**	LIVE LINK **mohamedhassanaminco.com**

ADMIN MODULES
18
In five groups

API ENDPOINTS
80+
One backend, two fronts

CATEGORIES
9
Emergency to waterproof

02 THE CONSTRAINT

What held the client back

A supplier with fifty years of trade, nine product categories and six brands had no store of its own. Browsing, comparing and paying all needed a conversation.

- **No catalogue online:** products, options and specification sheets lived in supplier files, not where a customer could search them.
- **No way to pay:** card, cash on delivery and bank transfer each needed a manual arrangement.
- **Two languages:** customers read Arabic or English; a storefront had to serve both, right to left included.
- **Everything by hand:** banners, promotions, shipping cities and contact details needed a developer to change.

03 HOW WE FOUND IT

Discovery

We started from the shelf, not the screen: what is sold, how it varies, how it ships and how it is paid for.

01 **Mapped the catalogue.** Nine categories, six brands, products with options (size, colour) and variants with their own price and stock, a PDF sheet per product.

02 **Followed an order.** From the cart to the city it ships to, the promo code applied, the tax added, the way it is paid and the invoice sent.

03 **Listed what changes weekly.** Hero banners, news, the welcome pop-up, the announcement bar, shipping prices, contact details: all of it had to be editable without a developer.

04 **Set the bar for speed.** Page loads and API responses were measured before and after every optimisation layer.

04 THE SOLUTION

What Ektra built

One backend, two fronts: a storefront that sells in two languages and an admin panel that runs the catalogue, the orders and the marketing.

- Storefront: hero banners, brands, categories and news; search with filters by category, brand, price and sale; product pages with galleries, options and variants; a cart kept across visits.
- Checkout: shipping cities with a price each, free shipping above a threshold, promo codes, 14% tax on the discounted amount, and three ways to pay: card, cash on delivery, bank transfer.
- After the order: a confirmation page, a PDF invoice to print or download, an email with the invoice attached, and a push notification to the admin.
- Admin panel: eighteen modules for the catalogue, the orders, the insights, the content, the marketing, shipping, contact and users, listed in the next section.
- An installable app: add to the home screen on iPhone, Android and desktop, an offline page, push notifications for admins and clients, background sync.
- Security and speed: rate limits per route, security headers, parameterised SQL, signed payment webhooks, a global CDN, server-side caching and code splitting.

Measured, not promised: after the CDN and caching layers, the home page loads in 445 ms instead of 7,900 ms, and API responses answer in 1 to 3 ms server-side.

The stack

FRONTEND **React 18, code split**	BACKEND **Node.js 20, Express 4**	DATABASE **PostgreSQL 15**	PAYMENTS **Hosted card gateway**
IMAGES AND PDFS **Sharp, headless Chrome**	PUSH **Web Push (VAPID)**	HOSTING **Nginx, PM2, Cloudflare**	SECURITY **Helmet, rate limits, HMAC**

05 MODULES AND FEATURES

What the system holds

The storefront, then the admin modules by group.

MODULE	WHAT IT DOES	STATUS
S1 Storefront	Home, shop with filters, product page, cart, checkout, order confirmation, about, contact; EN and AR	Live
A1 Dashboard	Module hub in five sections; modules switched on and off by administrators	Live
A2 Products	Options, variants, multiple images, PDF catalogue, search, filters, stock	Live
A3 Orders	Status, payment method, delivery status, read and unread, print invoice	Live
A4 Insights	Orders, revenue, products and brands, filters, 30-second refresh	Live
A5 Catalogue lists	Categories and brands with images, bilingual names	Live

MODULE	WHAT IT DOES	STATUS
A6 Content	News, page images for eight page types, about page, company profile PDF	Live
A7 Marketing	Welcome pop-up, announcement bar, promo codes with limits and dates	Live
A8 Shipping	Cities with a price each, free shipping rules	Live
A9 Communication	Contact settings, contact submissions, push notifications	Live
A10 Users	Admin, editor and viewer roles, activation, password management	Live

Features worth a line

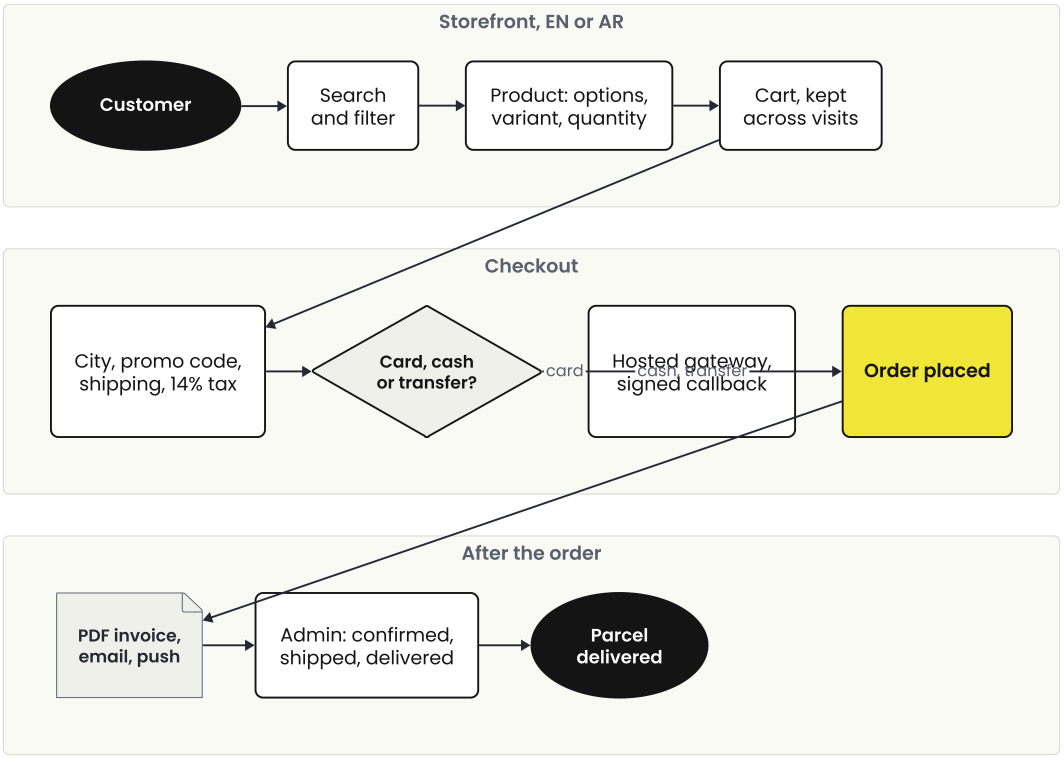
- Filters that live in the address, so a search can be shared
- Cart kept across visits
- Invoice PDF emailed with every order
- Push notifications for new orders
- Variants with their own price and stock
- Free shipping detected at the threshold
- Install on the phone like an app
- Right to left Arabic throughout

06 HOW IT WORKS

The flow, start to end

An order travels from a search to a delivered parcel without a phone call, and the admin sees every step.

FROM BROWSING TO A DELIVERED ORDER



01 **Browse.** Search, filter by category, brand, price or sale; open a product, choose its options and quantity.

02 **Check out.** Name, phone, city and address; a promo code if there is one; shipping and tax calculated on the spot.

03 **Pay.** Card through the hosted gateway, cash on delivery, or bank transfer; the gateway's callback is verified by signature.

04 **Confirm.** Order number, summary, a PDF invoice; an email to the customer and a push notification to the admin.

05 **Fulfil.** The admin moves the order from pending to confirmed, shipped and delivered; the customer's page follows.

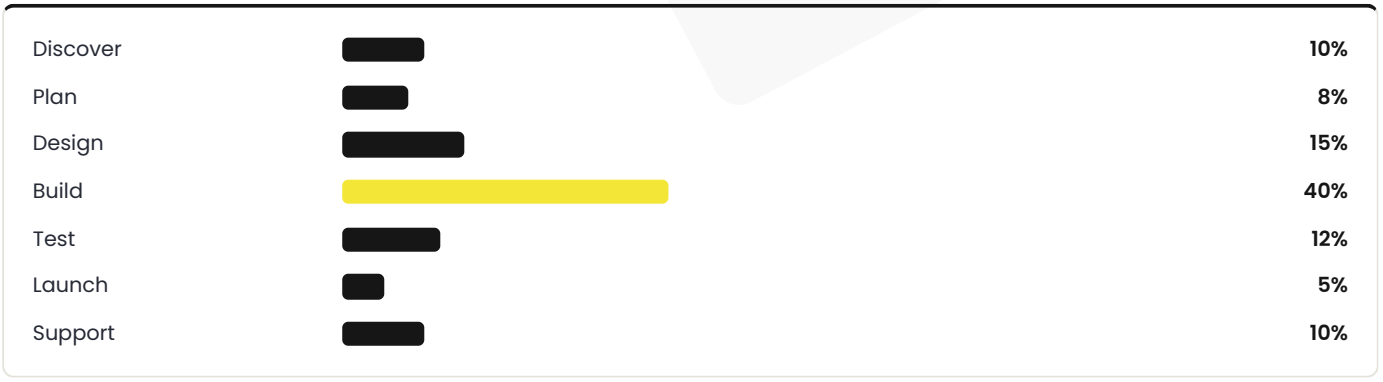
07 PROJECT STEPS

2 months, seven phases

Every Ektra project runs the same seven phases; here is what each one did for Mohamed Hassan Amin Co and the share of the 2 months it took.

PHASE	WHAT WAS DONE	SHARE	TIME
01 Discover	Mapped the catalogue, options and variants Followed an order from cart to invoice	10%	1 week
02 Plan	Eighteen admin modules in five groups Database, API and hosting plan	8%	1 week
03 Design	Storefront in the brand's green, EN and AR Admin screens with one pattern	15%	1 week
04 Build	Storefront, checkout, payments, invoices Admin modules, PWA, push, security layers	40%	3 weeks
05 Test	Checkout with every payment way Load times measured layer by layer	12%	1 week
06 Launch	Server, CDN, certificates, one-command deployment Catalogue and content loaded by the client	5%	1 week
07 Support	Performance work: caching, indexes, splitting Content and marketing changes by the client	10%	1 week

Share of the duration

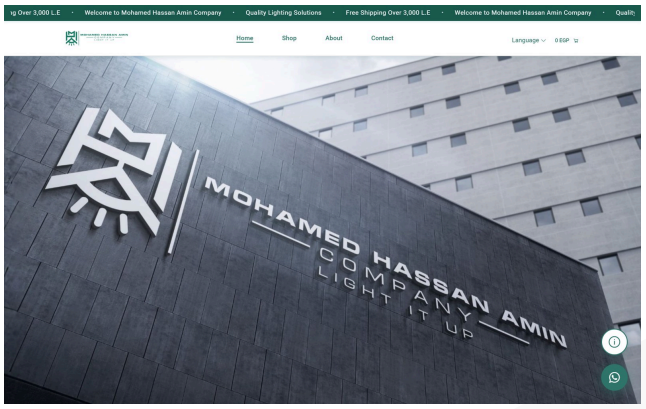


08 SCREENS

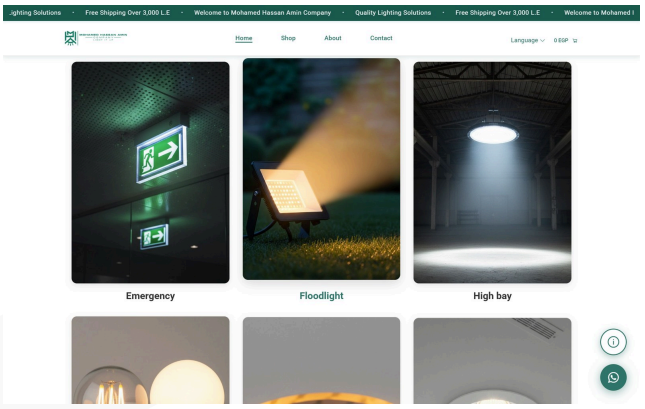
Real screens

Real pages of the live store, on a desktop and on a phone.

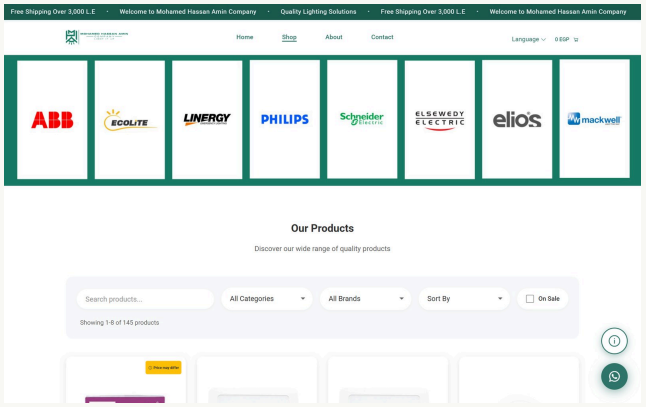
MOHAMED HASSAN AMIN CO, AS DELIVERED



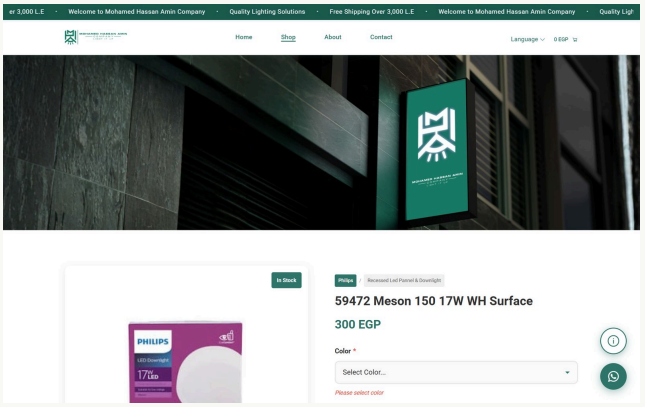
Home: the announcement bar, the hero banner



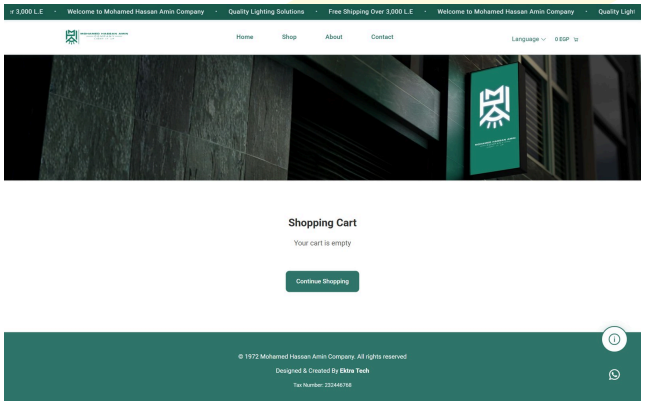
The nine categories



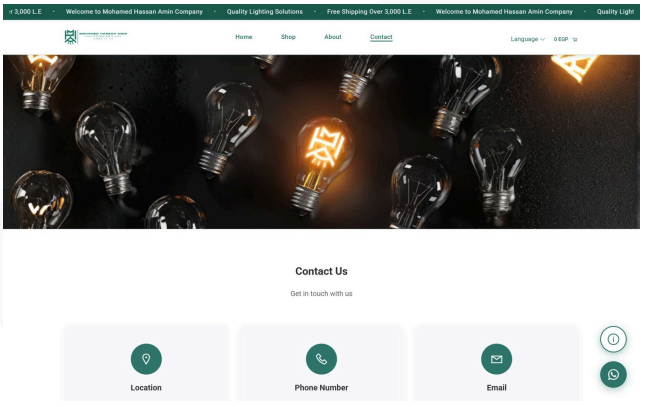
The shop with its filters



A product page with options and quantity

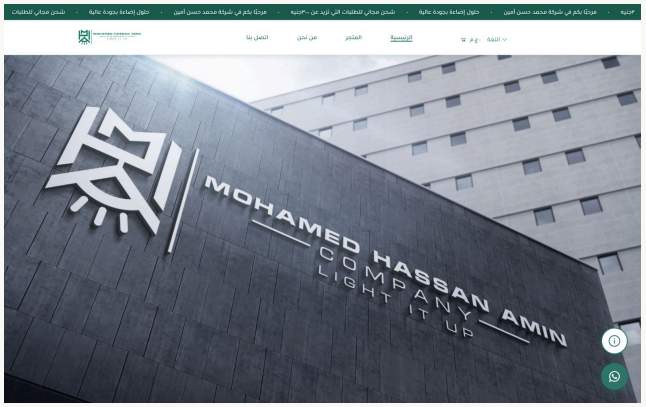


The cart

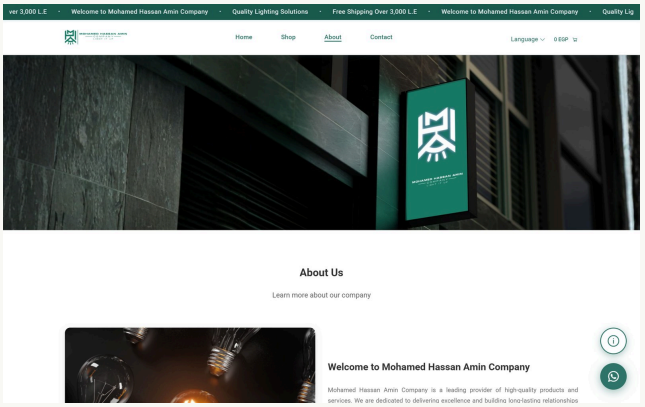


Contact with the map and the form

MOHAMED HASSAN AMIN CO, AS DELIVERED



The Arabic storefront, right to left



About, with the install-the-app guide



Home on a phone



The shop on a phone

09 DELIVERY TIMELINE

9 weeks end to end

The 2 months, phase by phase, from the first conversation to the first weeks in use.

WEEK 1 **Discover**
Catalogue model, order flow, payment ways agreed.

WEEK 2 **Plan**
Scope and release plan.

WEEK 3 **Design**
Screens approved in both languages.

WEEKS 4 TO 6 **Build**
The platform, module by module.

WEEK 7 **Test**
Every path proven, speed measured.

WEEK 8 **Launch: go-live**
The store open in both languages.

WEEK 9 **Support**
A store the client runs alone.

10 RESULTS

What changed

The figures below were measured server-side and recorded in the platform's technical documentation.

PAGE LOAD	FIRST BYTE	MAIN BUNDLE
445 ms	315 ms	94 KB
From 7,900 ms before the CDN	From 3,800 ms	Gzipped, split in 40+ chunks

- Customers browse, compare and pay in English or Arabic without a call.
- The client changes banners, news, promotions, shipping prices and contact details alone.
- Every order arrives with an invoice, an email and a push notification.

> Sales figures are the client's own and are not published.

11 SUPPORT AND NEXT STEPS

After launch

Live with a one-command deployment and a documented platform.

- **Releases:** build, upload, migrate, install, restart and health check in one script.
- **Documentation:** a complete platform document: features, modules, API, database, integrations and infrastructure.
- **Monitoring:** slow queries over 500 ms are logged with their details.

Next steps

- More payment gateways as the client asks
- Customer accounts and order history when the volume calls for them

End of document
Version 1.0. A store that sells in two languages: info@ektra-eg.com.

REFERENCE
PD-EKTRA_0005