Healthcare

Modernising Continuing Professional Development for Healthcare Professionals with Verifiable Digital Certificates

CLIENT	Jordan Ministry of Health
INDUSTRY	Healthcare
TECH STACK	Laravel 13 Livewire 3 Volt Tailwind CSS PhpSpreadsheet SMS Gateway QR Codes

01 The Challenge

Doctors, nurses, pharmacists and allied health professionals across Jordan rely on accredited Continuing Professional Development hours to keep their practice current. The authority running this programme depended on a legacy C# ASP.NET system that had become hard to maintain and extend, while the programme itself needed online courses, proper exams, accredited-hours certificates and a reliable way for anyone to confirm a certificate is genuine.

Any replacement also had to carry over years of existing records. Professionals who had already registered and earned certificates could not be asked to start again, and identity data had to stay trustworthy enough to stand behind an official certificate.

02 Our Solution

We rebuilt the platform from the ground up in Laravel with Livewire and Volt, as a mobile-first, Arabic-only RTL web application. Trainees sign in with their national ID or residency number and an SMS one-time code. At registration, identity is checked against government civil-registry and residency lookups, and the identity fields are locked to that official source so they cannot be edited by hand.

Learning is organised as courses, units and lessons with video and PDF content and per-trainee progress tracking. Lesson and course exams draw on question banks the admin team imports from Excel. On completion, the platform issues printable certificates carrying a QR code that links to a public verification page, backed by an HMAC-signed verification hash so a certificate cannot be forged by editing its details.

- **Accreditation management:** accreditation bodies in a hierarchy, with accreditation periods, approved hours, lecturer hours and cost.
- **Sponsors and signatories:** external sponsor logos and configurable signatories printed on certificates.
- **Expiry alerts:** a daily scheduled job warns of expiring accreditations in-app and by SMS.
- **Account safety:** phone-number change requests confirmed by a one-time code.
- **Administration:** enrolments, a suggestions inbox with PDF export, and reports with CSV export.

A repeatable, idempotent migration moves users and certificates from the legacy system, so it can be re-run safely until cut-over without creating duplicates.

03 The Results

- **Legacy records carried over:** roughly 7,500 professionals and 4,800+ certificates migrated from the old system through a repeatable, idempotent migration.
- **Tamper-evident certificates:** every certificate has a QR code, a public verification page and an HMAC-signed hash, restyled to match the familiar legacy look.
- **Trusted identity:** national ID or residency login with SMS one-time codes, and identity fields locked to government registry data.
- **Accreditation under control:** hierarchical accreditation bodies, approved hours and daily expiry alerts in-app and by SMS.
- **Review fully closed:** all 20 client review notes delivered across 14 workstreams, with the full test suite passing.

Facing a similar challenge? Talk to our engineering team: info@jo-life.com • +962 79 0888 700 • www.jo-life.com