

Nabila Melsyana

Full-Stack Developer · Jakarta, Indonesia
nabilamelsyana5@gmail.com · +62 888 516 9997 · [LinkedIn](#) · [GitHub](#) · [Portfolio](#)

SUMMARY

Full-Stack Developer who has delivered eight products end to end — five live and in use today — across AI platforms, learning systems and business operations software. I own the full cycle on each one: requirements, database design, backend, frontend, testing and release. I am also a BNSP-certified System Analyst: before any code is written I work out which features a product actually needs, where the requirements conflict, and what should be dropped. Core stack is Laravel and React/Next.js with TypeScript, and I have shipped with Python/FastAPI, Fastify, Inertia.js, MySQL, PostgreSQL and MongoDB. Five of my products use AI as load-bearing architecture — retrieval-based answering, computer vision, and an autonomous browsing agent that routes work across seven model providers. At MAXY Academy I help coordinate 16 interns across 5 concurrent projects while still shipping my own features.

SKILLS

Languages	PHP · JavaScript · TypeScript · Python · Java · SQL · HTML · CSS
Backend	Laravel · Blade · FastAPI · Fastify · Express.js · Inertia.js · REST API design · Sanctum · JWT · RBAC
Frontend	React · Next.js · Tailwind CSS · shadcn/ui · Radix UI · Alpine.js · Zustand · Zod · React Hook Form · TanStack Query · Framer Motion · Recharts
Databases	MySQL · PostgreSQL · MongoDB · SQLite · Redis
AI & real-time	Google Gemini (text + Vision) · OpenAI · Groq · Claude · RAG retrieval · SSE streaming · Socket.io · WebRTC · Pusher
Integrations	Midtrans · Xendit · Google Calendar & OAuth · Open-Meteo · WhatsApp API · Chrome Extension (MV3)
Tools	Git · GitHub/GitLab · Docker · Postman · Vite · Puppeteer · Figma · Visual Paradigm
Practice	System analysis · requirements translation · MVC · authentication & authorisation · functional and end-to-end testing (Cypress) · UAT · documentation · Agile/Scrum · mentoring

EXPERIENCE

- Full-Stack Developer — MAXY Academy · Jakarta

Oct 2025 – Present

 - Joined as a Full-Stack Developer Associate through the Kemnaker MagangHub programme and moved onto a full-time one-year contract in May 2026 — same products, same ownership throughout.
 - Build and deliver web applications end to end for internal platforms and confidential client projects, in lean teams where one person carries frontend, backend and database together.
 - Own the full cycle on each product: requirements, solution planning, implementation, testing, refinement and release support.
 - Help coordinate **16 interns across 5 concurrent projects** — assigning tasks, reviewing progress, clearing blockers, keeping five delivery timelines aligned at once.
 - Wrote the learning modules the intern cohort trained on and mentor them on coding practice and delivery standards.
- Full-Stack Developer — Ministry of Education, Culture, Research and Technology · MBKM/MSIB programme

Aug – Dec 2024

 - Worked on national education infrastructure with a cross-functional team: the **SISTER** integrated resource system for higher education, and the re-engineering of **SISARPRAS**.
 - Implemented and refined CRUD flows inside an existing production codebase, took part in code review, and maintained the change logs that made handover clean.
- Data Management — Telkom Indonesia · Jakarta · Internship programme

Jun – Aug 2024

 - Owned data integrity for a weekly reporting cycle, reconciling disagreements between sources, and documented the data definitions and update procedures so the process did not depend on one person.
- Practicum Assistant, Analysis & Design of Information Systems — Telkom University

Feb – Jun 2024

 - Taught requirements identification and UML modelling (use case, activity, sequence, class, component, deployment) in Visual Paradigm; reviewed student specifications and prepared UAT notes.
- Practicum Assistant, Object-Oriented Programming — Telkom University

Sep – Dec 2023

 - Taught core Java OOP through lab sessions and code review; wrote the practice material the class used.
- UI/UX Designer — Niagahoster × Rakamin Academy · Virtual internship

Aug – Oct 2023

 - Lo-fi to hi-fi prototyping with developer handoff; redesigned the payment flow as the capstone, driven by usability and heuristic review.

SELECTED PROJECTS

Nova AI — Autonomous marketing research agent

MAXY Academy · Solo · 2026 · [Live](#)

A Chrome extension that takes one brief, drives a real browser to research a brand and its competitors on the live web, and returns a market intelligence report plus a five-sheet Excel campaign plan. Routes work across **7 AI providers** by role with key-pool failover on rate limits; 40-step agent loop with a reflection gate that reopens research when questions go unanswered; metrics computed in code rather than estimated by a model. Covered by 32 test suites.

Chrome Extension MV3 · JavaScript · Chrome DevTools Protocol · Canvas 2D · Groq · Gemini · Claude · OpenAI

AI Vero — Multi-tenant B2B AI agent platform

MAXY Academy · Solo · 2026 · [Live](#)

A SaaS platform where a company uploads its own documents and web pages and gets a customer-service chatbot that answers only from that material. Wrote a **custom lexical relevance scorer** instead of paying for a vector database — synonym bridging, logarithmic term-frequency cap, heading and bigram bonuses — so a low score is detectable and the agent can refuse rather than invent. Adds MD5 response caching, automatic complaint escalation to a human, and 20 permissions across 3 roles.

Next.js 15 · TypeScript · OpenAI · SQLite · Radix UI · Zod · Puppeteer · Cheerio · SSE streaming

Flowbuddy — Employee productivity & wellbeing platform

MAXY Academy · Team of 2 · 2026 · [Live](#)

An app companies use to manage productivity and wellbeing together: tasks tied to KPIs, attendance, mood check-ins, and an early warning to managers when someone is heading toward burnout. RBAC across 3 layered roles, a weekly AI summarisation pipeline run on a schedule to keep token cost predictable, real-time presence over Pusher, and a native Chrome extension that blocks distracting sites during focus mode.

Next.js 16 · React 19 · TypeScript · MySQL · Google Gemini · Pusher · Leaflet · PWA · Chrome Extension

Virtual Intern LMS — Multi-service learning platform

Personal project · Solo · 2026

A platform for running paid online internship programmes end to end: courses and quizzes, live classes that record themselves, graded coding assignments, payment and verifiable certificates. **Three services behind one interface** — a Laravel core, a Node/Fastify meeting server, and an isolated code runner. Anti-cheat progress that refuses a skipped video, shadow recording via headless Puppeteer, and QR coupons whose token rotates every 30 seconds to close a screenshot-sharing fraud path.

Laravel 12 · PostgreSQL · React 18 · Fastify · Socket.io · WebRTC · Puppeteer · Monaco · Xendit · Redis

Otopia Auto Care — Car wash operations & POS

Personal project · Solo · 2025 · [Live](#)

The operating system for a car wash and auto-detailing business: point of sale, stock, staff, memberships and reporting across **14 modules and 4 roles**. A bill of materials makes selling one wash draw down shampoo and polish in fractional litres automatically; denomination-based shift reconciliation reports the cash variance; paying a technician's commission writes the expense entry so the P&L updates without double bookkeeping.

React 18 · FastAPI (Python) · MongoDB · Tailwind · shadcn/ui · Zod · Recharts · JWT · WhatsApp API

WebOrder Studio — Agency order & payment management

Personal project · Solo · 2025

An order and payment system for a digital agency: a client orders a website, pays a deposit then the balance, and follows the project stage by stage without asking for updates. Modelled as **three explicit state machines** (Order, Payment, Project) so a job that runs for weeks and gets revised can never hold a contradictory status. One confirmed payment cascades into a PDF receipt, a project record with a derived deadline, and a WhatsApp notification.

Laravel 11 · Alpine.js · MySQL 8 · Midtrans · Google Calendar & OAuth · DomPDF · Node.js (whatsapp-web.js)

SmartFarm — AI agronomy assistant

Personal project · Solo · 2025

A farming app that turns weather and sensor readings into a plain-language daily to-do list per plot, and diagnoses plant disease from a photo of a leaf. Every task has a "Why?" button returning the agronomic reasoning behind it. Sensor readings are held in **Redis rather than written to disk** to avoid write wear, polled every 2.5 seconds with live heat-stress alerts.

Laravel 13 · React 18 · Inertia.js v2 · Gemini + Gemini Vision · Open-Meteo · Recharts · Redis

Maxy Learning — Interactive learning platform

MAXY Academy · Solo · 2025 · [Live](#)

An online course platform where every lesson is a hands-on exercise the system grades. **Fixer Studio** hands the learner a deliberately broken interface to repair and scores the repair; a drag-and-drop UML builder validates diagrams for structural correctness; a simulated Git terminal parses real commands and redraws the branch tree live. Six learning tracks.

Next.js 16 · React 19 · TypeScript · Tailwind CSS v4 · Framer Motion · React Markdown

EDUCATION & CERTIFICATION

Telkom University, Bandung — B.Sc. Information Systems, School of Industrial Engineering

2021 – 2025 · GPA 3.70 / 4.00

BNSP Certified System Analyst — national professional certification

Valid 2025 – 2028

Spoken Indonesian (native) · English (conversational)