SOFTWARE ENGINEERING PORTFOLIO

Annas Tri Widagdo.

Fullstack Web Development

From user needs to useful software.

annastriwidagdo.me ↗



Explore the portfolio

Choose a section to jump directly to it.

05

Selected projects

Business applications, healthcare interfaces, and service-based systems.

Open project index ↗

01 **Profile & qualifications**
Education, achievements, and capabilities
p. 3 ↗

02 **Experience**
Work, internships, and collaboration
p. 6 ↗

03 **Selected projects**
Five practical software case studies
p. 8 ↗

04 **Practice & learning**
Development process, research, and training
p. 18 ↗

05 **Contact**
Portfolio, email, GitHub, and LinkedIn
p. 22 ↗

Turning user needs into useful applications



Annas Tri Widagdo

COMPUTER ENGINEERING GRADUATE

Diponegoro University

August 2022 – June 2026
Klaten, Central Java, Indonesia

WHAT I BRING

Experience across requirements, UI/UX, full-stack development, testing, deployment, and documentation.

HOW I WORK

Analytical problem-solving, stakeholder communication, and collaboration with development teams.

Academic achievement with practical experience

FINAL GPA

3.79 / 4.00

Bachelor of Computer Engineering

BEST GRADUATE · JULY 2026

Computer Engineering Program, Diponegoro University.
183rd Graduation Ceremony.

CUM LAUDE · JULY 2026

Completed the degree in 3 years, 10 months, and 11 days.

Academic work complemented by production applications and stakeholder-based projects.

Tools for building and delivering software

WEB INTERFACES

- Next.js
- React
- TypeScript
- HTML
- CSS
- Tailwind CSS

APIS & DATABASES

- Laravel
- NestJS
- MySQL
- Python
- PHP
- Flask
- PostgreSQL
- Prisma

TESTING & DESIGN

- Playwright
- Jest
- Vitest
- Postman
- Figma

VERSION CONTROL & DELIVERY

- Git
- Docker
- GitHub Actions
- Ubuntu
- Nginx
- Vercel

Supporting skills: SQL, requirements analysis, technical documentation, and code review.

From requirements to working systems

JAN – APR 2026

Fullstack Developer

CV Universal Kharisma Globalindo

Interviewed the business owner and translated operational needs into an ERP application. Built the frontend, APIs, and database, tested core workflows, deployed to Ubuntu VPS, and supported documentation, bug fixes, and maintenance.

Requirements · Development · Testing · Deployment

AUG – SEP 2025

UI/UX Designer Intern

Faculty of Engineering, Diponegoro University

Designed wireframes, user flows, and interfaces for SITEDI and SIPERPUS. Delivered designs to programmers as implementation references and wrote the SITEDI user guide to explain system workflows, features, and usage procedures.

User flows · Interface design · User guide

Working across teams and user needs

JUN – AUG 2025

Frontend Developer · Intern

Puskesmas Padangsari / iHealth Edu

Contributed to a team capstone with healthcare stakeholders. Translated interviews and workflow observations into role-based Next.js interfaces, integrated REST APIs and examination data, and participated in platform demonstrations.

Stakeholder collaboration · Frontend · API integration

JUL – AUG 2024

Junior Game Developer Intern

PT Duta Basis Dataprima

Processed 78 panoramas from team-provided 3D models and integrated them into 79 Unity scenes. Built mouse/touch controls, raycast interactions, and reusable hotspots, then presented the prototype to the director and internal team.

Unity · C# · Team development · Presentation

Five projects, practical user needs

01	**UKG System** Fullstack Developer	Connected operations across retail branches.	p. 9 ↗
02	**Nusa Dakwah** Fullstack Developer	Learning content, discussion, and administration.	p. 11 ↗
03	**Employee Attendance System** Fullstack Developer	Employee and HR portals with service-based APIs.	p. 13 ↗
04	**SIMASTOK** Fullstack Developer	Inventory movements and stock reporting.	p. 16 ↗
05	**iHealth Edu** Frontend contribution in a team	Digital health education and role-based interfaces.	p. 17 ↗

Explore all projects on my website ↗

One place to manage branch operations

Fullstack Developer · January–April 2026 · Production application

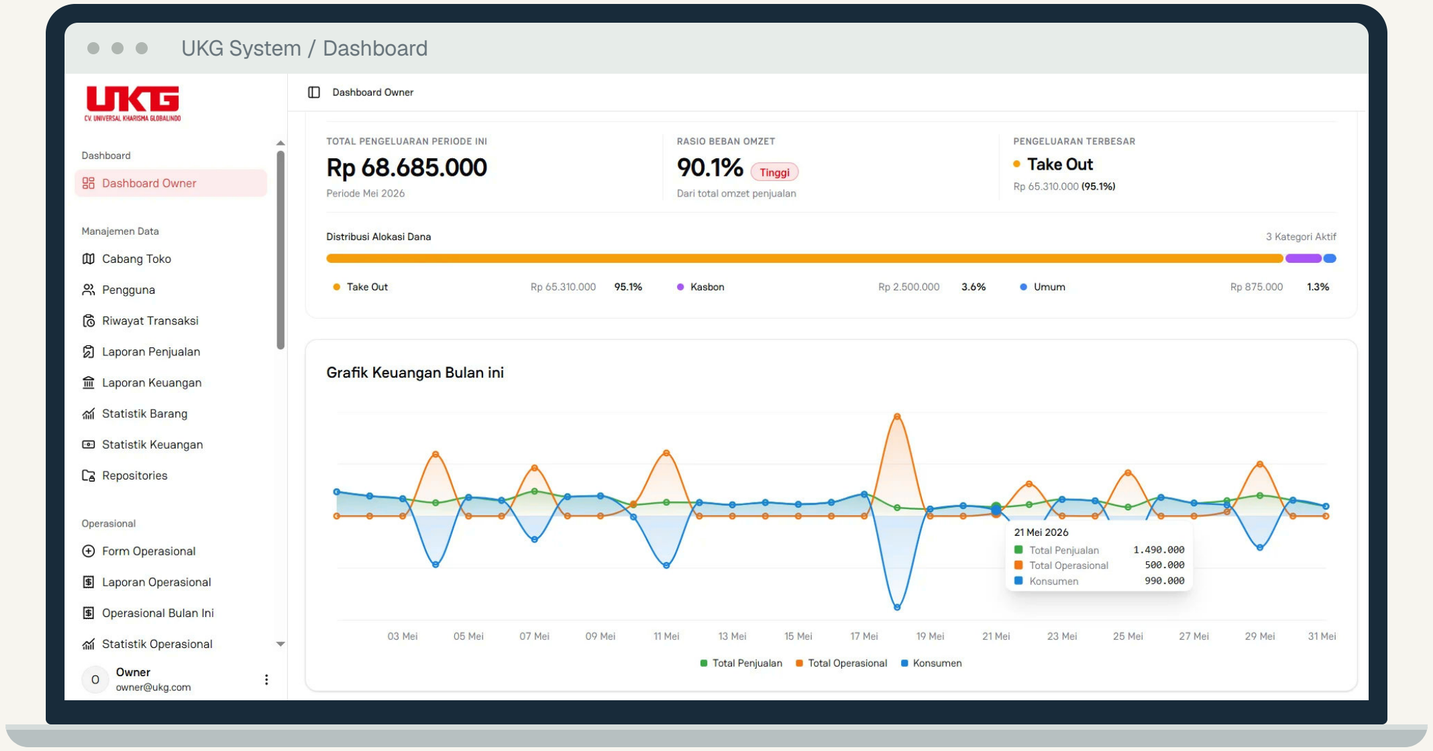
THE PROBLEM

Records were spread across notebooks, WhatsApp, and Excel.

MY CONTRIBUTION

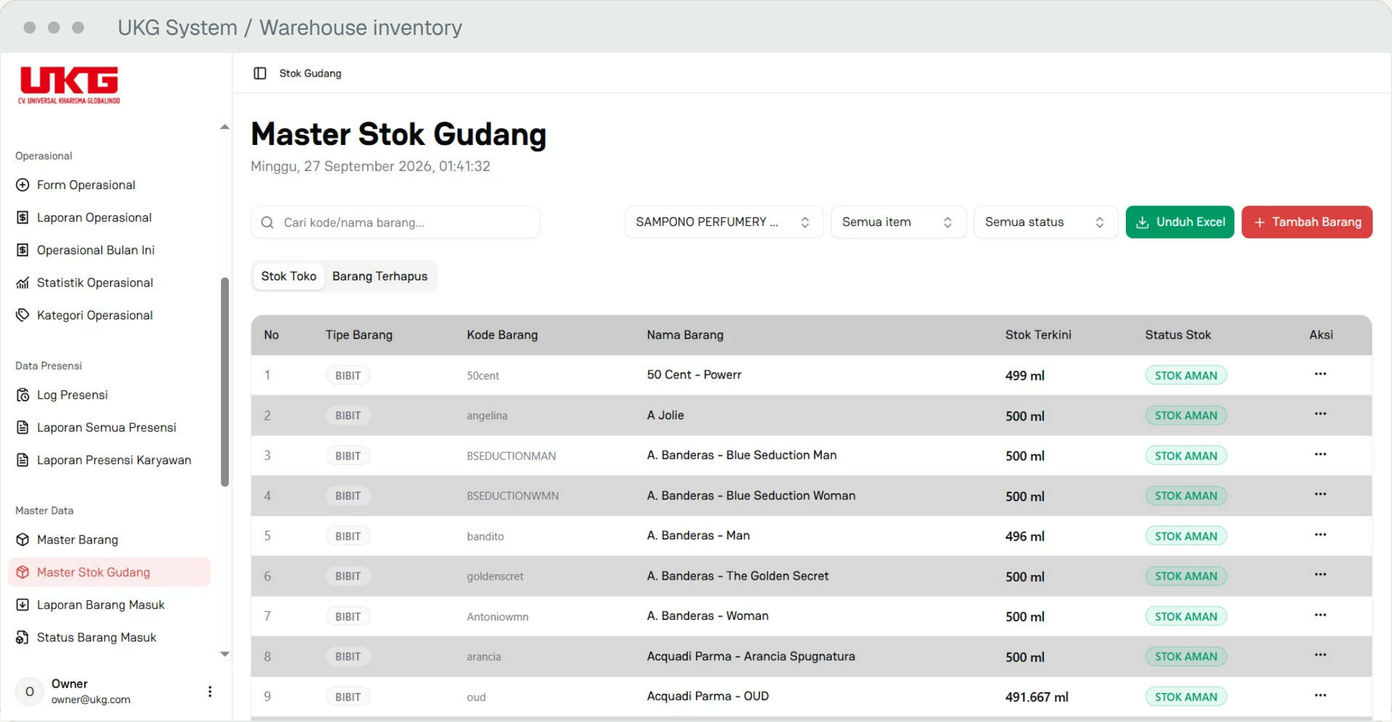
Gathered requirements and built the ERP from design to deployment and maintenance.

Next.js NestJS MySQL



Centralized reporting for remote branch monitoring.

Daily transactions become clear reports



Inventory & stock

Ordering & POS

Connected operational modules

POS, inventory, stock, ordering, attendance, sales, operating expenses, reports, and dashboards.

DELIVERY

Manual and Playwright testing, Ubuntu VPS deployment, and user documentation.

Explore UKG System ↗

Learning content with space for discussion

Fullstack Developer · January–February 2026

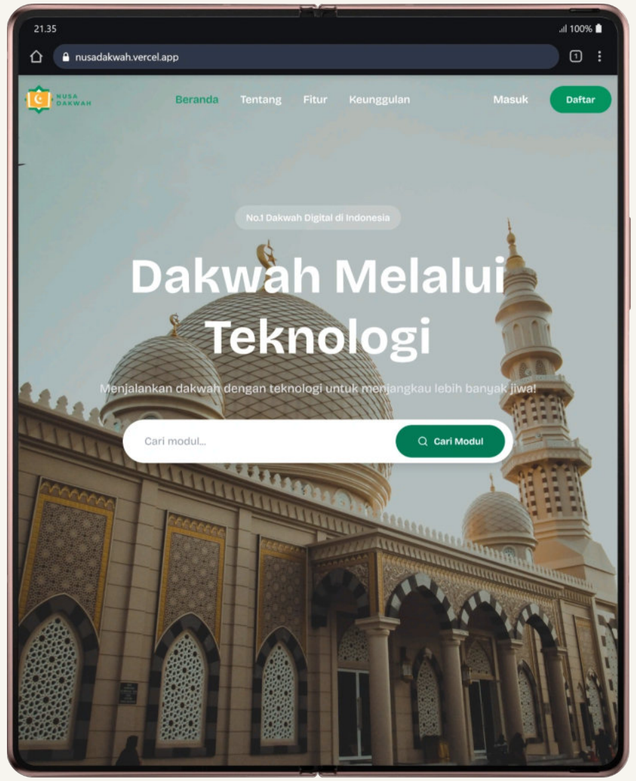
THE APPLICATION

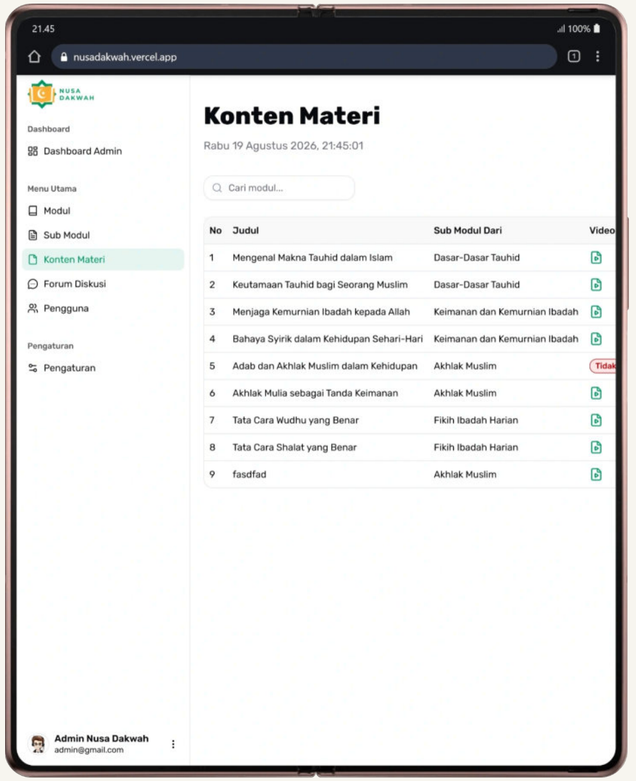
Structured lessons, articles, videos, search, forums, and content administration.

MY CONTRIBUTION

Product flow, UI design, frontend, APIs, database, testing, and deployment.

Next.js Laravel MySQL





A complete frontend-to-database workflow

HOW THE APPLICATION WORKS

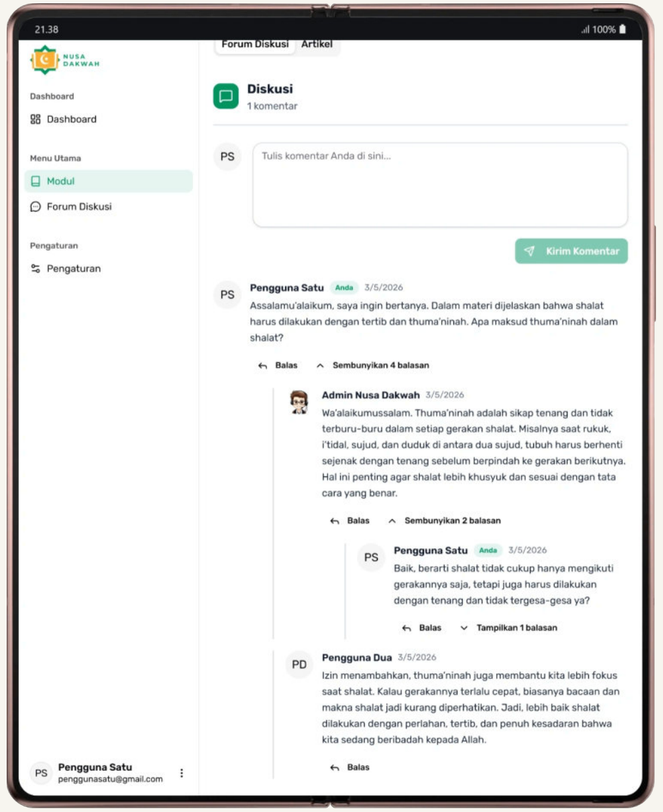
Next.js
Pages, forms, and discussions

Laravel
REST API and access rules

MySQL
Content and application data

JWT authentication and input validation.

Manual tests, Katalon automation, and Docker delivery.



Explore Nusa Dakwah ↗

Attendance that employees and HR can follow

Fullstack Developer · October 2026 · Portfolio project

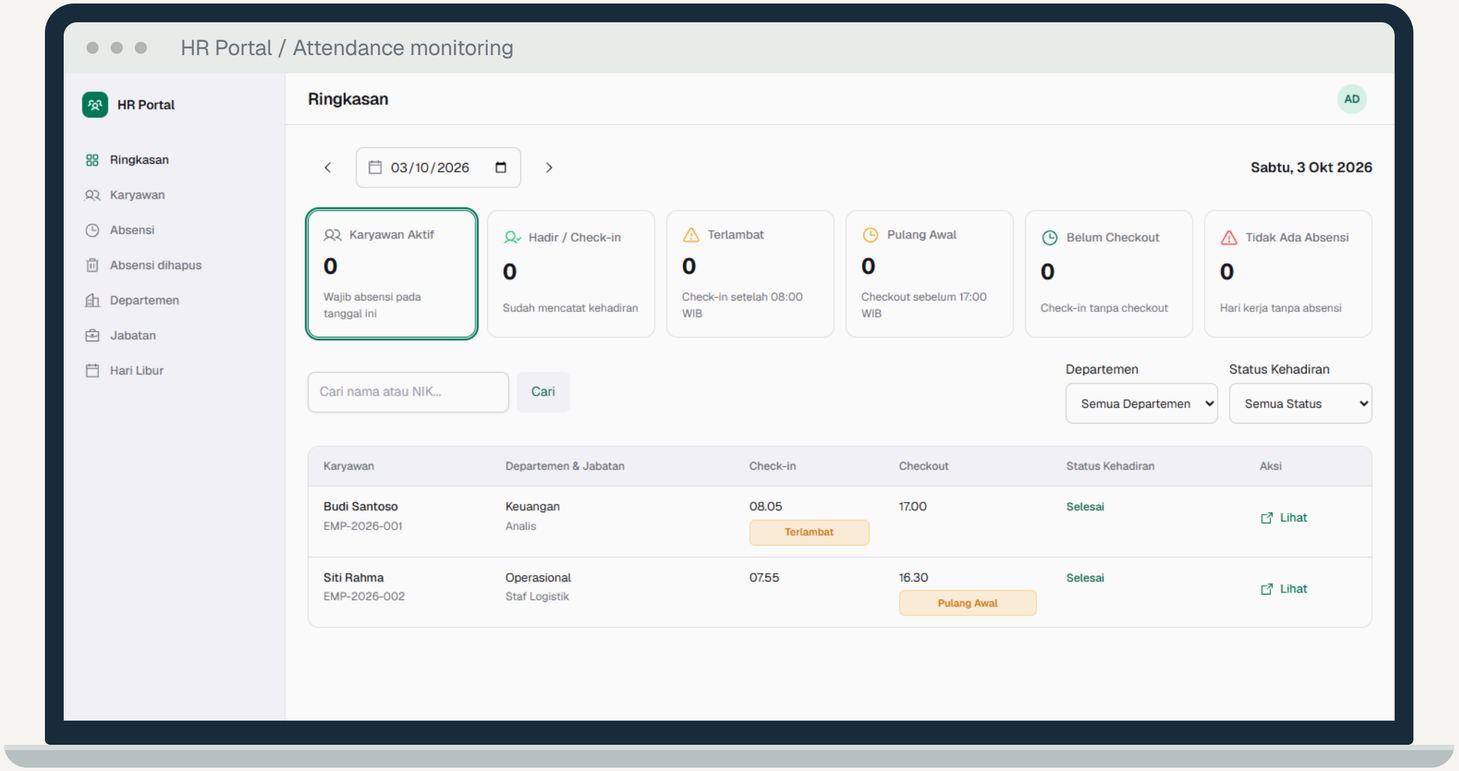
THE NEED

Record attendance and give HR a clear view of employee activity.

MY CONTRIBUTION

Requirements, React portals, backend services, database, tests, and deployment.

React NestJS Prisma



Existing UI test capture with demo data.

A clear view of daily attendance

EMPLOYEE PORTAL

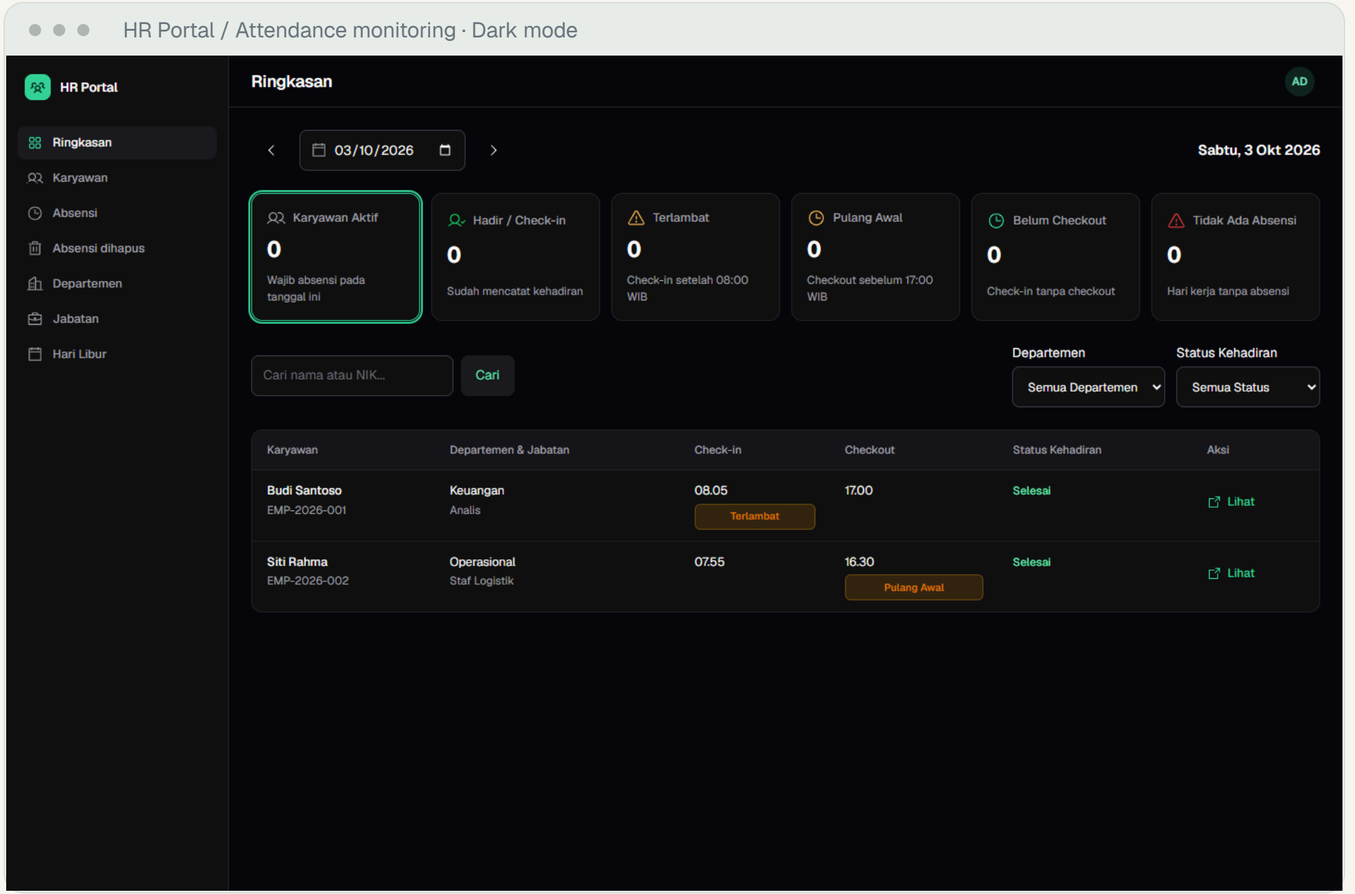
Check in/out with photo and location, and review attendance history.

HR PORTAL

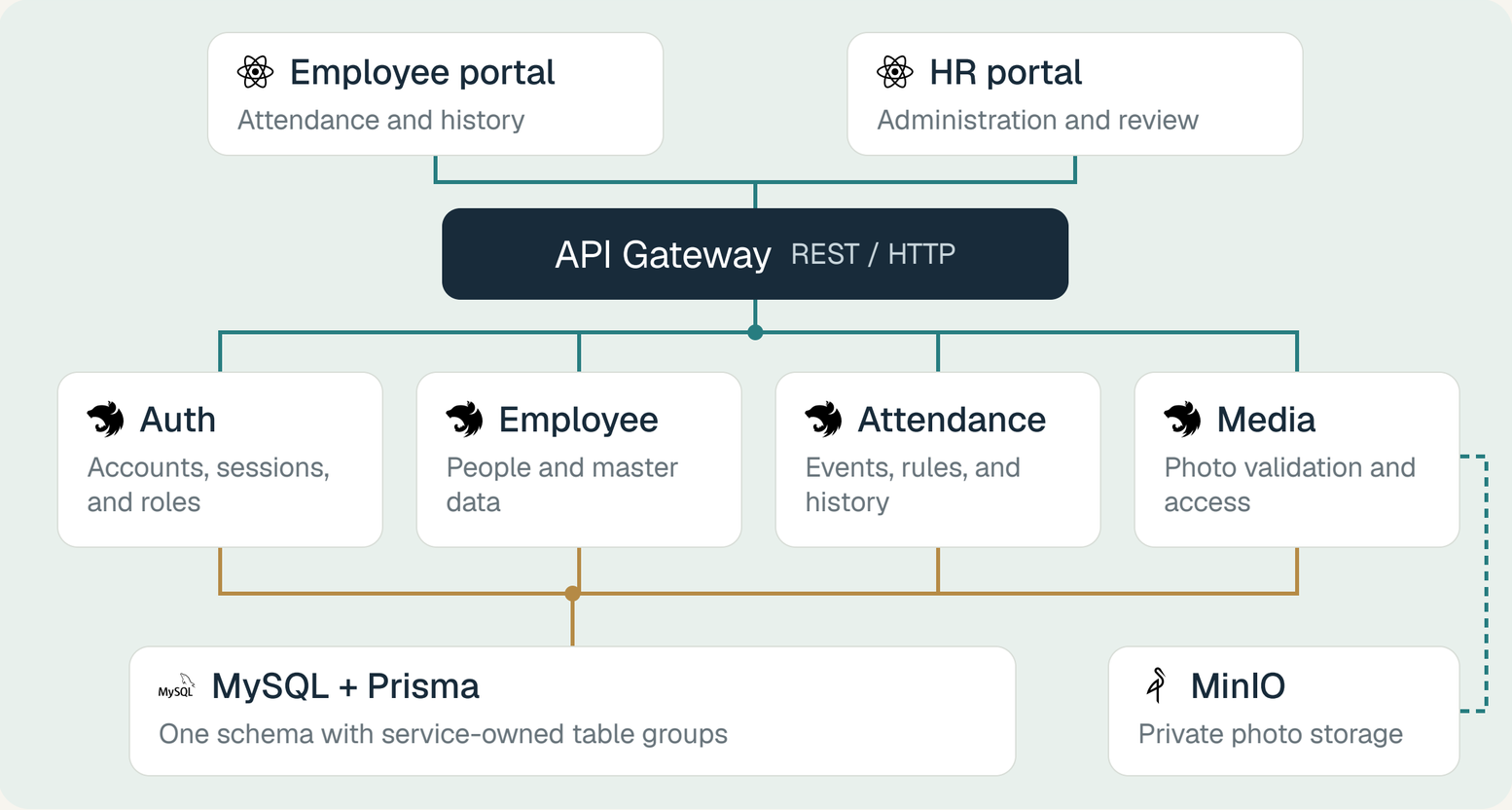
Manage employees, filter records, and review daily attendance summaries.

LIGHT & DARK MODES

Consistent workflows across both visual themes.



Clear responsibilities behind each portal



Teal: application requests / photo access · Gold: database access · Main paths shown; internal session checks omitted.

SEPARATE RESPONSIBILITIES

Portals use one entry point. Each service handles a defined business function.

CONTROLLED DATA ACCESS

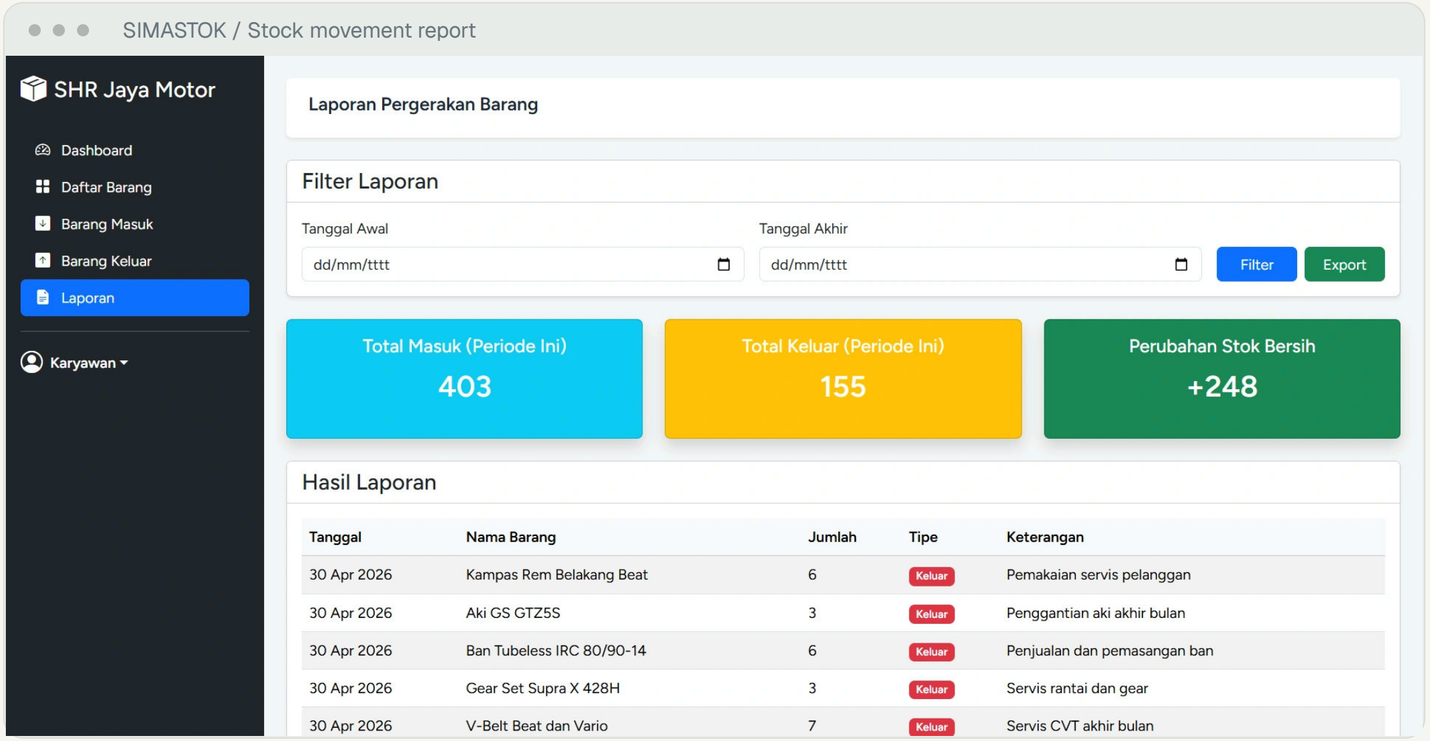
Services access their own table groups. Photo access uses temporary signed URLs.

RECOVERABLE WORKFLOWS

Idempotent requests, retry, and outbox recovery support cross-service operations.

Stock movements with a traceable history

Fullstack Developer · December 2025–January 2026



Laravel MySQL Playwright

THE NEED

Replace manual stock records with a central inventory workflow.

WHAT I BUILT

Role-based inventory, suppliers, stock in/out, validation, history, and PDF reports.

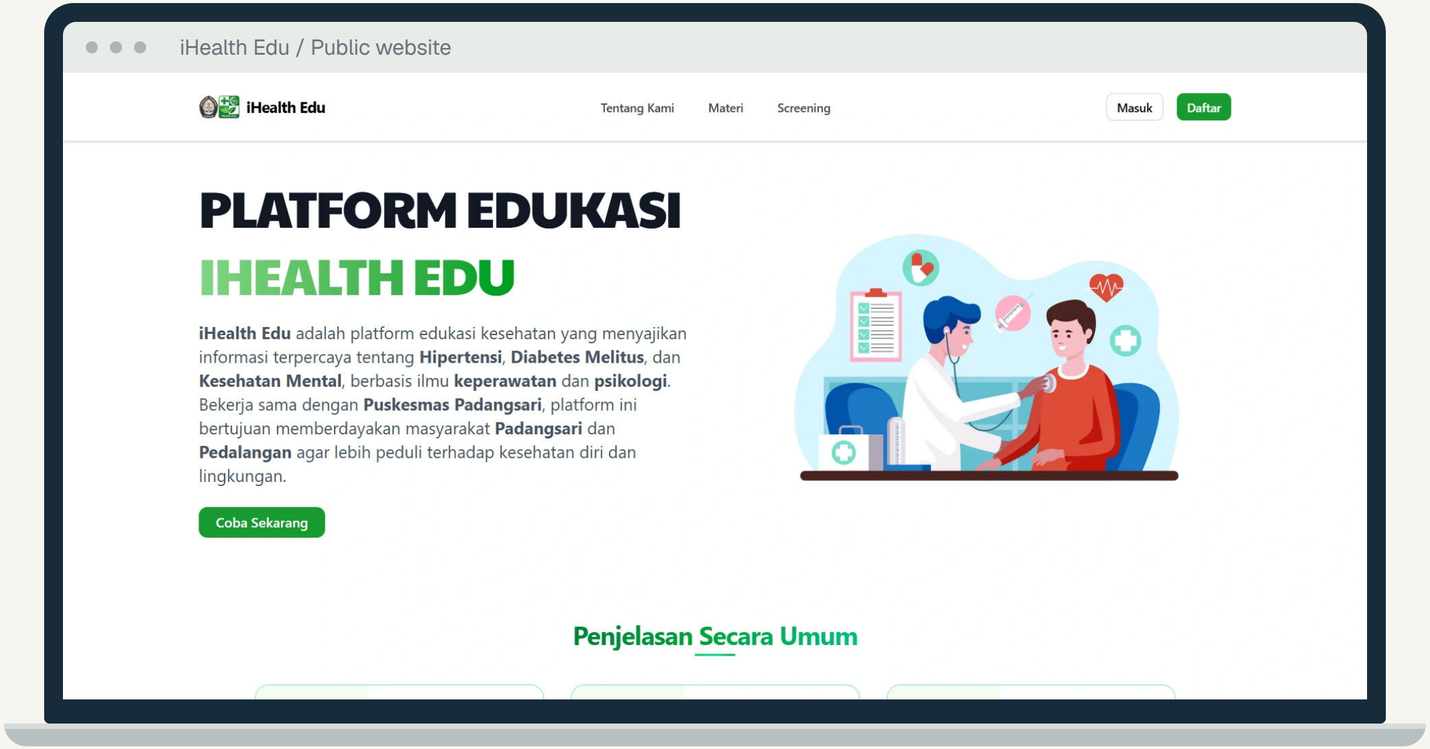
DELIVERY

User feedback, automated testing, and Docker deployment.

Explore SIMASTOK ↗

Healthcare interfaces shaped with stakeholders

Frontend Developer · Team capstone with Puskesmas Padangsari · June–August 2025



UNDERSTAND USERS

Stakeholder interviews and workflow observations informed the interface.

MY SCOPE

Role-based frontend and REST API integration, including ESP32 examination data and ML decision-support displays.

Explore iHealth Edu ↗

Next.js TypeScript Figma

Understand, build, verify, and hand over

01

Understand

Requirements, user stories, acceptance criteria, and system design.

02

Build

Incremental implementation with AI agents and code review.

03

Verify

Manual, unit, integration, and end-to-end testing.

04

Deliver

Deployment, technical documentation, and user guides.

AI-ASSISTED DEVELOPMENT

Codex

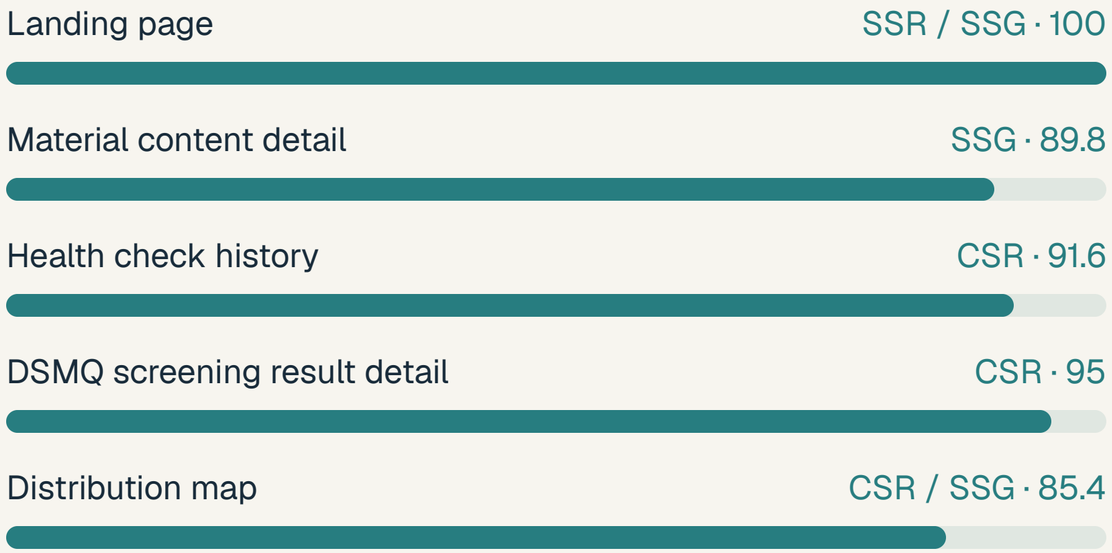
Antigravity

Kiro AI by AWS

Claude Code

The right rendering method depends on the page

SELECTED LIGHTHOUSE PERFORMANCE SCORES



Research tests across five pages. Scores describe this study, not production guarantees.

Comparative Analysis of Client-Side Rendering, Server-Side Rendering, and Static Site Generation for Frontend Performance on the Next.js-Based iHealth Edu Website

WHAT THE FINDINGS MEAN

Use SSG for static or semi-dynamic content; consider CSR for dynamic, user-specific, or highly interactive pages. Match rendering to data, authentication, and interaction needs.

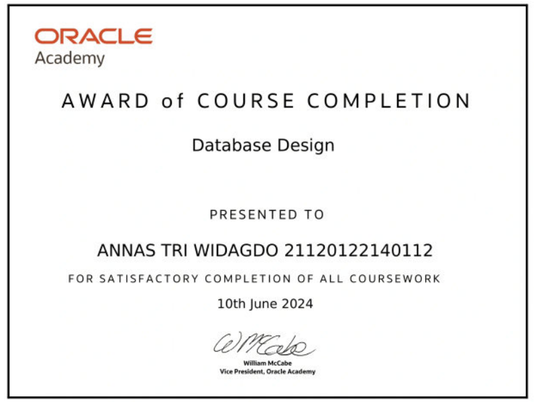
Read the thesis ↗

Relevant training, supported by credentials



SDD with Kiro

Dicoding Indonesia · Oct 2026



Database Design

Oracle Academy · Jun 2024



HCIA-AI V3.5 Course

Huawei Talent Online · Apr 2024

Database Foundations · Oracle Academy · Jun 2024
Introduction to IoT and Digital Transformation
Cisco Networking Academy · Oct 2023

CCNA: Enterprise Networking, Security, and Automation
Cisco Networking Academy · Jan 2026
IT Essentials: PC Hardware and Software · Cisco · Jan 2023

View all certificates ↗

English proficiency

TOEFL PREDICTION
EQUIVALENT SCORE

570

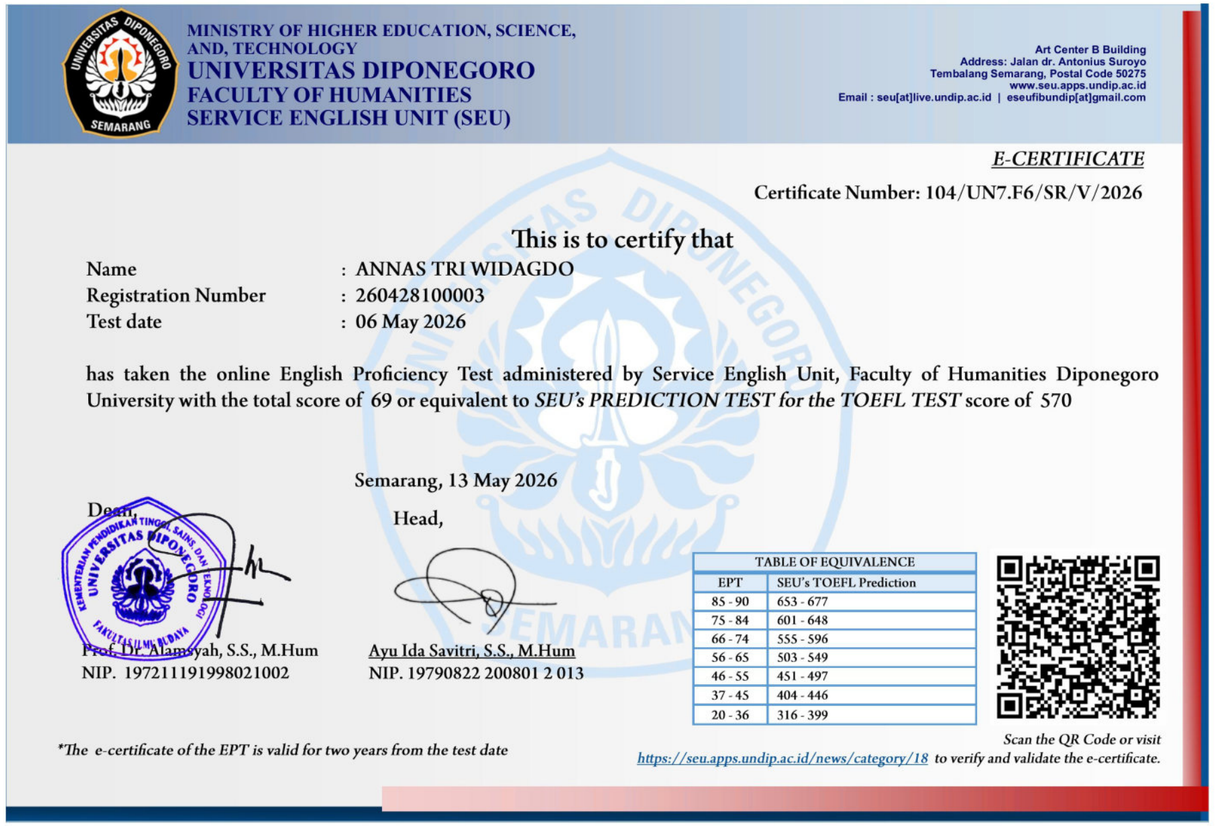
English Proficiency Test

EPT score: 69

Service English Unit
Diponegoro University

Test: 6 May 2026
Valid May 2026 – May 2028

Indonesian: Native



MINISTRY OF HIGHER EDUCATION, SCIENCE, AND, TECHNOLOGY
UNIVERSITAS DIPONEGORO
FACULTY OF HUMANITIES
SERVICE ENGLISH UNIT (SEU)

Art Center B Building
Address: Jalan dr. Antonius Suroyo
Tembalang Semarang, Postal Code 50275
www.seu.apps.undip.ac.id
Email : seu[at]live.undip.ac.id | seufibundip[at]gmail.com

E-CERTIFICATE

Certificate Number: 104/UN7.F6/SR/V/2026

This is to certify that

Name : ANNAS TRI WIDAGDO
Registration Number : 260428100003
Test date : 06 May 2026

has taken the online English Proficiency Test administered by Service English Unit, Faculty of Humanities Diponegoro University with the total score of 69 or equivalent to *SEU's PREDICTION TEST for the TOEFL TEST* score of 570

Semarang, 13 May 2026

Dean,

Prof. Dr. Alamsyah, S.S., M.Hum
NIP. 197211191998021002

Head,

Ayu Ida Savitri, S.S., M.Hum
NIP. 19790822 200801 2 013

TABLE OF EQUIVALENCE	
EPT	SEU's TOEFL Prediction
85 - 90	653 - 677
75 - 84	601 - 648
66 - 74	555 - 596
56 - 65	503 - 549
46 - 55	451 - 497
37 - 45	404 - 446
20 - 36	316 - 399

*The e-certificate of the EPT is valid for two years from the test date

Scan the QR Code or visit https://seu.apps.undip.ac.id/news/category/18 to verify and validate the e-certificate.

Let's build useful software.

annastriw6@gmail.com

Klaten, Central Java, Indonesia
Fullstack Web Development

annastriwidagdo.me ↗

github.com/annastriw ↗

linkedin.com/in/annastriwidagdo ↗