UNIVABIO 2026 · AI FOR HUMAN HEALTH

PROJECT DESCRIPTION

VitalLens

Your blood tests, finally speaking your language — an AI health companion that helps you **detect illness earlier**, **understand it better**, and **live with it more easily**.

THE PROBLEM

Billions of lab reports are handed to patients each year in a language they cannot read, while the doctor's explanation is often weeks away. **Single snapshots hide trends**, conditions progress silently between visits, symptom anxiety leads to frantic searching or dangerous delay, and appointments start unprepared. VitalLens closes the gap between **receiving results** and **actually understanding them**.

40+
BLOOD MARKERS RECOGNIZED BY VISION AI

<30s
FROM REPORT PHOTO TO PLAIN-LANGUAGE BRIEFING

3
CARE LEVELS: SELF-CARE · DOCTOR · EMERGENCY

100%
EDUCATIONAL FRAMING, NEVER A DIAGNOSIS

FOUR CONNECTED MODULES

1 Lab Report Decoder

Upload a photo of any blood test. **Vision AI (GLM-4V)** reads every marker, unit, and printed reference range; a clinical language model (**Dr. V**) writes a plain-language briefing with key findings, trends, next steps, and questions for your doctor.

2 Health Timeline & Trends

Every upload joins a longitudinal timeline. VitalLens tracks each marker across dates and surfaces **direction and % change** — catching the slow drifts (falling hemoglobin, depleting iron stores) that a single report can never show.

3 Nurse V — Symptom Guide

A conversational triage companion. Describe symptoms in your own words; Nurse V asks focused questions and recommends one of **three care levels** — with red-flag symptoms like chest pain escalating to emergency guidance instantly.

4 Doctor Visit Prep

Combines lab history and symptom conversations into a **one-page visit sheet**: key results, changes over time, and the exact questions to ask. Printable and downloadable — walk in prepared, walk out with answers.

HOW IT WORKS

Snap / Upload
Any blood test report, from any lab

→

Vision AI Extracts
Markers, units, and reference ranges

→

Dr. V Explains
Plain-language briefing, no jargon

→

Guided Action
Right care level, at the right time

Built With

Next.js 16 · App Router | TypeScript | Tailwind CSS 4 + shadcn/ui | GLM-4V Vision Model | GLM Clinical LLM | Prisma + SQLite | Recharts | Framer Motion

- **Deterministic safety layer** — critical-value checks in code, never left to the model alone
- **40+ marker reference DB** with printed-range override and sex/age caveats surfaced

Impact & Audience

- **Patients** receiving lab results before their follow-up visit
- **Chronic-condition patients** tracking markers over months
- **Health-anxious users** needing calm guidance, not search-engine panic
- **Anyone without a medical degree** — which is everyone

Safety by design: VitalLens never states a diagnosis, uses "can be associated with" framing throughout, escalates red-flag findings and symptoms deterministically, and directs users to professionals at every decision point. It is an educational companion — built to work **alongside** doctors, never instead of them.