UnifyID - Identity Platform Blueprint

GOAL & PURPOSE

To build a next-gen identity platform (UnifyID) offering:

- User authentication, tracking, and intelligent threat response.
- Section-wise and user-wise activity logging.
- Adaptive 2FA/MFA based on risk scoring.
- Blockchain-based audit for compliance and immutability.
- AI/ML-powered behavioral analysis and model updates.
- One single edition: Free for 3 months, then Premium ($3/user/month).

ROADMAP TO INDEPENDENCE LAUNCH (15 AUG)

Month	Milestone	Description
1-3	MVP Core Auth + 2FA	Laravel + WebAuthn + Real-time Dashboard
4-5	Risk Engine Alpha	FastAPI + ML (anomaly detection)
6-7	Blockchain Audit Trail	Hyperledger Indy + IPFS Anchoring
8-9	UX & Onboarding Engine	Policy UI, Consent Center
10-11	Beta Client Launch	Invite early adopters, collect feedback
12	Full Launch (Aug 15)	Product GA & Go-to-market Launch

TECH STACK (COST-EFFECTIVE & SCALABLE)

- Backend: Laravel (PHP), Sanctum, Passport

- Microservices: FastAPI (Python), Node.js (realtime)
- Frontend: Vue 3, Inertia.js, Tailwind CSS, Pinia
- Database: PostgreSQL, MongoDB (logs)
- Cache/Messaging: Redis, Kafka or RabbitMQ
- Blockchain: Hyperledger Indy, IPFS, Polygon testnet
- ML: PyTorch/TensorFlow, SHAP, Federated Learning (Flower)
- DevOps: Docker, GitHub Actions, Terraform, AWS/GCP Free Tier

SOFTWARE MODULE STRUCTURE

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1. Authentication Engine
   - Passwordless (WebAuthn), Adaptive MFA, OAuth2

2. Risk Engine (Python Microservice)
   - ML anomaly scoring, behavioral analytics

3. Blockchain Audit Module
   - DID registry, Immutable logs on IPFS/Polygon

4. Admin Dashboard
   - User-wise & section-wise activity tracking

5. Consent & Privacy Center
   - GDPR/CCPA compliance, user revocation

6. API Gateway & Developer Portal

- Plug-and-play SDKs, external IDP integration

STEP-BY-STEP DEVELOPMENT PLAN

- Step 1: Laravel core auth + 2FA (Sanctum, Passport, WebAuthn)
- Step 2: Design scalable log DB schema (PostgreSQL + MongoDB)
- Step 3: Create realtime tracker via Node.js + Redis
- Step 4: Build Python-based ML Risk Engine with FastAPI
- Step 5: Anchor logs using Hyperledger Indy + IPFS
- Step 6: Implement UX with Vue + Inertia + Tailwind
- Step 7: Launch Beta for 1-2 clients
- Step 8: Release on 15th August (Independence Day)