

# HbarWatch – Financial Transparency for Hedera

Smart explorer turning Hedera data into actionable financial insights.

Track: On-chain Finance

## **PROBLEM**

## Low Transparency in African Web3 Finance

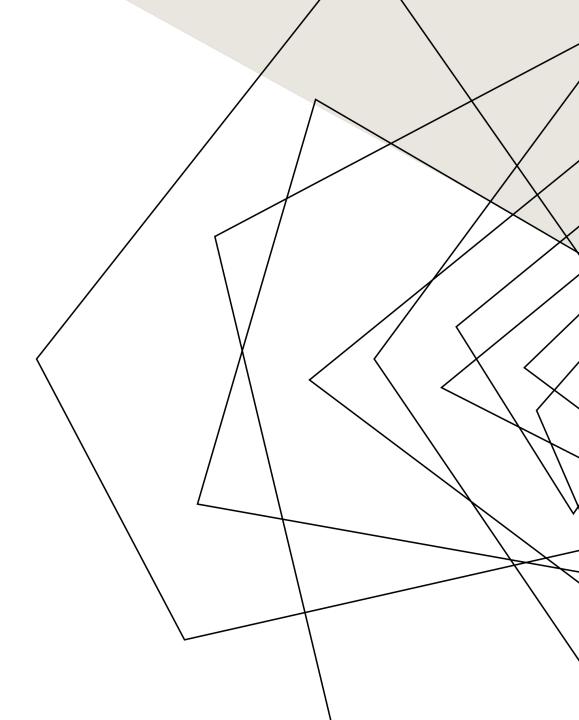
Challenge 1: Users see balances, but not true value

Challenge 2: Token concentration & scam risk often hidden

**Challenge 3:** Difficult to verify **counterparty trustworthiness** 

**Challenge 4:** Fragmented data sources → **low confidence** & adoption barriers

Result: users navigate Web3 finance with **blind spots and risk**.

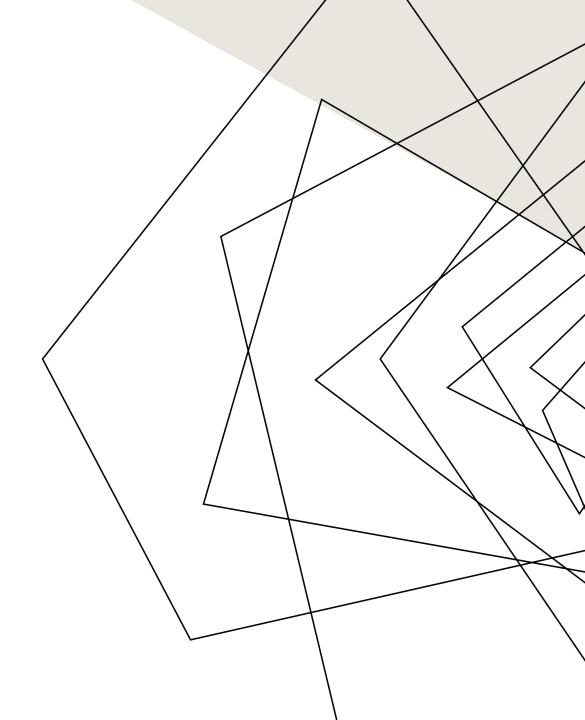


## **SOLUTION**

## A smart explorer + portfolio tracker providing:

- Real-time **net worth tracking**
- **Diversification** & portfolio health insights
- **Token concentration** & whale exposure alerts
- **Counterparty heatmap** to detect risky connections
- Live pricing & verified NFT metadata

On-chain finance, made clear and trustworthy.



## WHY HEDERA?

Hedera provides critical advantages for Africa's Web3 growth:

- **ABFT finality** → fastest, most secure settlement
- **Predictable low fees** → affordable financial access
- Native HTS transparency → supply + holder tracking
- **Mirror Node insights** → real-time forensics
- **ESG leadership** → institutional-ready

Hedera is **uniquely suited** for transparent DeFi.



## **MARKET & OPPORTUNITY**

## African crypto adoption is accelerating:

- \$100B+ annual crypto volume in Africa
- **2nd highest global adoption** (Chainalysis)
- Millions lack trustworthy financial tools
- Retail users & fintechs demand **risk visibility**

## Target users:

Retail users • Traders • Web3 startups • Compliance teams

HbarWatch enables informed, safer participation in Web3.



## PRODUCT OVERVIEW

## **Portfolio & Analytics**

- Net worth charts & USD pricing
- Token allocation breakdown

## **Market Transparency**

- Top holders + whale detection
- Supply concentration metrics

## **Security & Monitoring**

- Real-time follow + alerts
- Counterparty heatmap

## **Experience**

- NFT gallery
- Dark mode + mobile responsiveness



## **ARCHITECTURE & HEDERA INTEGRATION**

#### **Hedera Services**

- **HTS:** token supply, balances, holders
- Mirror Node: transactions, NFTs, counterparty mapping

#### **Authentication**

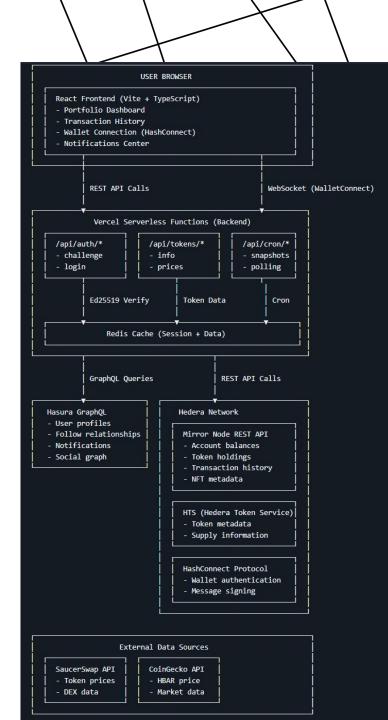
HashPack WalletConnect (Ed25519 challenge-response)

#### **Data**

- SaucerSwap pricing + liquidity
- Serverless backend for historical snapshots

Fully trustless analytics powered by Hedera.





## **BUSINESS & REVENUE MODEL**

Freemium + Subscription NFT (Pro Pass)

#### Free:

- Basic explorer, balances, NFT view

#### **Pro NFT Access:**

- Alerts & monitoring
- Whale + concentration intel
- Historical analytics



## **Hackathon Achievements**

#### **GitHub Commits & Code Quality**

- ~300+ commits with clear, descriptive messages following conventional commits format
- Full-stack TypeScript implementation with comprehensive type safety
- **No hard-coded secrets**, proper JWT authentication
- Production-ready code with ESLint compliance and proper error handling

#### **Hedera Features Implemented**

- Hedera Mirror Node Integration (6+ API endpoints)
  - Account balance queries
  - Transaction history with pagination
  - Token holdings and metadata
  - NFT inventory tracking
  - Network nodes data
  - Real-time data fetching with <500ms response times

#### ■ Hedera Token Service (HTS) Integration

- Dynamic token tracking for any HTS token
- Token decimals normalization
- Multi-token portfolio valuation
- Token price integration via SaucerSwap API

#### ■ HashConnect/WalletConnect Authentication

- Ed25519 signature verification using hashgraph/sdk
- Challenge-response authentication flow
- JWT session management
- Secure off-chain authentication (zero transaction fees)

#### ■ Real-time Transaction Monitoring

- Serverless cron job polling transactions every 15 minutes
- Automated notification system for followed accounts
- Token transfer detection with proper decimal handling

#### Historical Data & Analytics

- Nightly portfolio snapshots stored in Redis
- Net worth calculation combining HBAR + token values
- Time-series data for portfolio performance tracking

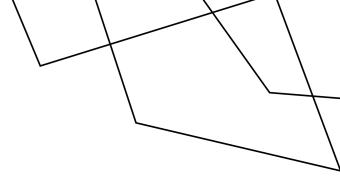
Portfolio tracking with real-time USD valuation

- ▼ Transaction history with filtering and infinite scroll
- ✓ Social follow system with notifications

- Wallet authentication with HashPack
- ▼ Top token holders analysis
- Counterparty transaction mapping
- ✓ NFT gallery with metadata display



## **TEAM**





## **Aleix Devesa**

Software Engineer

Hedera Developer Certified 

✓

Owns 100% of development

Execution velocity + direct ecosystem experience.

## **FUTURE ROADMAP**

## Roadmap (3–6 Months)

- V Production-ready application deployed on Hedera Mainnet
- Al risk & portfolio summaries
- Trending token & whale dashboards
- Compliance reporting & export tools
- Mobile app + ecosystem API
- Pro NFT subscriptions
- Community watchlists & alerts

**Goal:** Become the financial intelligence layer for Hedera in Africa and worldwide.

## THE ASK

- Hedera mentorship + pilot partnerships
- Funding for scaling infra + mobile development

# **DEMO**



https://youtu.be/oBPCyj7hIVY

