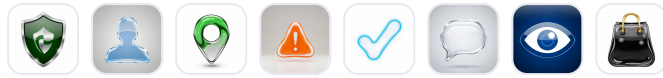




Secure task verification and cryptocurrency reward distribution platform integrating blockchain technology, on-device facial recognition, and geolocation for humanitarian aid delivery. Privacy-focused, cross-platform (iOS, Android, Web), Swiss FADP and UNICEF compliant.



## App Features

- Biometric facial recognition (on-device, privacy-first)
- AID token reward distribution for task completion
- Beneficiary data synchronization (offline-first)
- Real-time route planning and navigation
- Beneficiary tracking (Critical / Urgent / Stable)
- Emergency SOS alert system
- AI-powered beneficiary vulnerability assessment
- Data erasure (right to be forgotten)
- Crypto wallet with BIP39-compatible seed phrases
- Map-based task discovery with geolocation check-in
- QR code scanning for aid delivery verification
- Danger zone overlays with severity-based styling
- Role-based access (operators, agencies, beneficiaries)
- Mission chat for team coordination
- Dark mode and light mode theming
- Beneficiary onboarding workflow

## Integrations

- UN OCHA ReliefWeb (live humanitarian data via RSS)
- Expo Location API (GPS, geofencing)
- Expo Camera (facial capture and verification)
- Expo SecureStore (encrypted on-device storage)
- Expo Local Authentication (Face ID / fingerprint)
- TanStack React Query (server-side state)
- AsyncStorage (local persistence)
- React Navigation (screen management)

## Standards & Compliance

- Swiss FADP (Art. 6 consent-based data access)
- UNICEF data handling standards
- Swiss utility token classification (tax optimized)
- FADP-compliant audit logging

## Programs / Frameworks

- React Native with Expo SDK 54
- Express.js (backend API server)
- PostgreSQL + Drizzle ORM (database)
- React Native Reanimated 4 (animations)
- React Native Maps (map rendering)
- React Native Gesture Handler (touch)
- TypeScript (full-stack type safety)
- Node.js (server runtime)

## Blockchain Identifiers

- BIP39 mnemonic seed phrase generation
- AID utility token (reward distribution)
- Ethereum / Polygon (smart contract execution)
- Encrypted wallet storage via SecureStore

- Rate-limited API with granular access levels
- Blockchain-verified task completion
- On-device biometric processing (zero data export)
- Automated reward distribution via smart contracts

## 3rd Party APIs

- UN OCHA ReliefWeb API (alerts, disasters, reports)
- Expo Location Services (foreground / background)
- React Native Maps / OpenStreetMap (map tiles)
- Custom REST API (agency data, API key auth)