

Product Requirements Document (PRD)

CryptoWill: Simple Crypto Asset Discovery & Will Creation Tool

Version: 1.0

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Document Owner: Product Team

Status: MVP Specification



Executive Summary

Vision Statement

Create a simple, effective tool that allows cryptocurrency holders to discover their assets across multiple wallets, designate beneficiaries, and generate basic legal documents for asset distribution upon death.

Mission

Provide crypto users with an accessible platform to document their digital assets and create simple wills, ensuring their cryptocurrency holdings can be properly inherited by designated beneficiaries.

Product Overview

CryptoWill is a web-based discovery tool that connects to multiple blockchain wallets, allows users to prove ownership through message signing, manages beneficiary information with automatic percentage allocation, and generates printable legal documents for crypto asset distribution.

Problem Statement

Current Pain Points

1. **Asset Discovery:** Crypto holders often have assets spread across multiple wallets and blockchains
2. **Proof of Ownership:** Difficulty proving ownership of wallet addresses for legal purposes
3. **Beneficiary Management:** No simple way to designate crypto beneficiaries with proper contact information
4. **Legal Documentation:** Lack of simple legal documents specifically for cryptocurrency inheritance
5. **Fair Distribution:** Complex percentage calculations for multiple beneficiaries

Solution

A focused platform that solves these specific problems through: - Multi-blockchain wallet connection and asset discovery - Message signing for proof of ownership - Automated beneficiary percentage allocation - Simple legal document generation and printing

Target Audience

Primary Users

- **Crypto Holders:** Individuals with cryptocurrency assets across multiple wallets
 - **Age Range:** 25-65 years old
 - **Technical Level:** Basic to intermediate crypto knowledge
 - **Asset Range:** Any amount of cryptocurrency holdings
 - **Primary Need:** Simple asset documentation and inheritance planning
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Product Goals & Objectives

Primary Goals

1. **Asset Discovery:** Connect and discover assets across multiple blockchain wallets
2. **Ownership Verification:** Prove wallet ownership through message signing
3. **Beneficiary Management:** Simple beneficiary setup with contact information and ETH addresses
4. **Document Generation:** Create printable legal documents for asset distribution
5. **User Experience:** Intuitive interface accessible to non-technical users

Success Metrics

- **User Registration:** 1,000+ users in first 3 months
 - **Wallet Connections:** Average 3+ wallets connected per user
 - **Document Generation:** 80%+ of users generate a will document
 - **User Satisfaction:** 4.0+ rating from user feedback
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Core Features & Requirements

1. User Authentication

Login Options

- **Social Login:** Google, Twitter, Facebook integration
- **Blockchain Signature:** Sign-in with Ethereum and other blockchain wallets
- **Traditional Auth:** Email/password as fallback option

Security Features

- Multi-factor authentication support
- Secure session management

- Account recovery options

2. Wallet Connection & Asset Discovery

Supported Blockchains

Based on our existing wallet comparison data:

- **Ethereum** (📄): MetaMask, WalletConnect, Coinbase Wallet, Rainbow, Trust Wallet
- **Solana** (☉): Phantom, Solflare, Backpack, Glow
- **Bitcoin** (₿): Unisat, Xverse, Leather
- **Polygon**: MetaMask, WalletConnect compatible wallets
- **Cosmos** (✳️): Keplr, Cosmostation
- **Cardano** (₳): Nami, Eternl

Wallet Integration Features

- **Connection Interface:** User-friendly wallet selection and connection
- **Asset Discovery:** Automatic detection of tokens, NFTs, and native assets
- **Message Signing:** Prove ownership by signing a message with each wallet
- **Address Storage:** Securely store verified wallet addresses
- **Asset Listing:** Display discovered assets without pricing (asset names and quantities only)

3. Beneficiary Management

Beneficiary Information Required

- **Personal Details:**
 - Full legal name
 - Relationship to user
 - Phone number
 - Email address
 - Physical address

- **Crypto Details:**
 - Ethereum address (required - must resolve to valid ETH address)
 - Other blockchain addresses (optional)
- **Social/Contact:**
 - Twitter handle (optional)
 - Other social media (optional)
 - Emergency contact information

Automatic Percentage Allocation

- **Single Beneficiary:** Automatically set to 100%
- **Two Beneficiaries:** Automatically split 50%/50%
- **Multiple Beneficiaries:** Equal distribution (e.g., 3 people = 33.33% each)
- **Manual Override:** User can adjust percentages manually
- **Validation:** Ensure total always equals 100%

4. Document Generation

Legal Document Template

Create a simple crypto-specific will addendum that includes:

- **User Identification:** Full legal name and signature
- **Asset Declaration:** List of verified wallet addresses and discovered assets
- **Beneficiary Designation:** Complete beneficiary information and allocation percentages
- **Proof of Ownership:** Reference to signed messages proving wallet ownership
- **Distribution Instructions:** Clear instructions for asset transfer
- **Legal Disclaimers:** Basic legal language and limitations

Document Features

- **PDF Generation:** Professional PDF format for printing

- **Print Optimization:** Formatted for standard 8.5x11" paper
- **Digital Signatures:** Support for digital signature integration
- **Version Control:** Track document updates and changes

5. User Interface

Dashboard

- **Wallet Overview:** Connected wallets and verification status
- **Asset Summary:** Total discovered assets across all wallets
- **Beneficiary Status:** Number of beneficiaries and allocation completeness
- **Document Status:** Will completion and last updated date

Wallet Management

- **Connection Interface:** Easy wallet connection with clear instructions
- **Verification Status:** Visual indicators for message signing completion
- **Asset Display:** Clean list of discovered assets by wallet
- **Disconnection Options:** Ability to remove wallet connections

Beneficiary Management

- **Add/Edit Interface:** Simple forms for beneficiary information
- **ETH Address Validation:** Real-time validation of Ethereum addresses
- **Percentage Calculator:** Visual percentage allocation with automatic calculations
- **Contact Verification:** Optional email/phone verification

Document Generation

- **Preview Mode:** Preview document before final generation
 - **Print Interface:** Optimized printing options
 - **Download Options:** PDF download and save functionality
 - **Update Notifications:** Alerts when asset changes require document updates
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Technical Architecture

Frontend Architecture

- **Framework:** Next.js 15+ with TypeScript
- **UI Library:** Tailwind CSS + shadcn/ui components
- **State Management:** Zustand for global state
- **Wallet Integration:** WagmiJS for Ethereum, Solana Wallet Adapter for Solana
- **PDF Generation:** jsPDF or Puppeteer for document creation

Backend Architecture

- **Runtime:** Node.js with Express
- **Database:** PostgreSQL for user data and beneficiary information
- **Authentication:** NextAuth.js with social providers + custom wallet auth
- **Storage:** Encrypted storage for sensitive information
- **API Design:** RESTful APIs with proper error handling

Blockchain Integration

- **Multi-Chain Support:** Separate providers for each blockchain
- **Message Signing:** Standard message signing protocols for ownership proof
- **Address Validation:** ENS resolution for Ethereum addresses
- **Asset Discovery:** Blockchain APIs and indexing services (Alchemy, Moralis)

Security Architecture

- **Data Encryption:** Encrypt sensitive data at rest
- **Secure Communication:** HTTPS/TLS for all communications
- **Access Control:** Role-based access with proper session management
- **Privacy:** Minimal data collection, user-controlled data sharing

Data Models

```
interface User {
  id: string
  email?: string
  socialId?: string
  walletAddress?: string
  createdAt: Date
  lastLogin: Date
}

interface ConnectedWallet {
  id: string
  userId: string
  blockchain: string
  address: string
  walletType: string
  isVerified: boolean
  signedMessage?: string
  signedAt?: Date
  discoveredAssets: Asset[]
}

interface Asset {
  id: string
  walletId: string
  type: 'native' | 'token' | 'nft'
  symbol: string
  name: string
  contractAddress?: string
  tokenId?: string
  balance: string
  discoveredAt: Date
}

interface Beneficiary {
  id: string
  userId: string
  fullName: string
  relationship: string
  ethAddress: string
  phoneNumber: string
  email: string
  physicalAddress: string
  twitterHandle?: string
  allocationPercentage: number
  createdAt: Date
  updatedAt: Date
}

interface WillDocument {
  id: string
  userId: string
  version: number
  generatedAt: Date
  pdfPath: string
  isActive: boolean
  walletSnapshot: ConnectedWallet[]
}
```



```
beneficiarySnapshot: Beneficiary[]  
}
```

User Experience Design

User Journey: Complete Will Creation

1. Registration & Login

- **Landing Page:** Clear value proposition and call-to-action
- **Login Options:** Social login, wallet connection, or email signup
- **Onboarding:** Brief tutorial explaining the process

2. Wallet Connection

- **Wallet Selection:** Choose from supported wallets by blockchain
- **Connection Process:** Standard wallet connection flow
- **Message Signing:** Sign a message to prove ownership
- **Asset Discovery:** Automatic scanning and asset detection

3. Beneficiary Setup

- **Add Beneficiaries:** Simple form for beneficiary information
- **ETH Address Input:** Address validation with ENS support
- **Percentage Allocation:** Automatic calculation with manual override
- **Contact Verification:** Optional verification steps

4. Document Generation

- **Review Information:** Summary of wallets, assets, and beneficiaries
- **Generate Document:** Create PDF will document
- **Preview & Print:** Review document and print options
- **Save & Update:** Save document and set up update notifications

Design Principles

- **Simplicity:** Clean, uncluttered interface
 - **Security:** Clear security indicators and explanations
 - **Accessibility:** WCAG 2.1 compliance
 - **Mobile Responsive:** Works on all device sizes
 - **Trust:** Professional design that builds confidence
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Security & Compliance

Security Measures

- **Data Encryption:** All sensitive data encrypted at rest and in transit
- **Secure Authentication:** Multi-factor authentication support
- **Message Signing:** Cryptographic proof of wallet ownership
- **Access Logging:** Comprehensive audit trails
- **Regular Backups:** Encrypted backups with disaster recovery

Privacy Protection

- **Minimal Data Collection:** Only collect necessary information
- **User Control:** Users control what information is shared
- **Data Retention:** Clear data retention and deletion policies
- **GDPR Compliance:** European privacy regulation compliance

Legal Considerations

- **Disclaimer:** Clear limitations and legal disclaimers
 - **Jurisdiction:** Basic template suitable for common law jurisdictions
 - **Professional Review:** Recommendation for legal review
 - **Updates:** Process for updating documents when laws change
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Business Model

MVP Approach

- **Free Tier:** Basic functionality for initial user acquisition
- **Simple Pricing:** Single paid tier for advanced features
- **No Subscriptions:** One-time payment model for simplicity

Revenue Streams

Free Tier (MVP Launch)

- Basic wallet connection (up to 3 wallets)
- Simple beneficiary management (up to 3 beneficiaries)
- Basic document generation
- Standard support

Paid Tier (\$49 one-time)

- Unlimited wallet connections
- Unlimited beneficiaries
- Advanced document templates
- Priority support
- Document updates and notifications
- Professional legal disclaimers

Future Revenue Opportunities

- Professional legal review services
- Integration with estate planning attorneys
- Premium document templates
- Multi-language support
- Enterprise/family office solutions

Phase 1: Core MVP (Months 1-3)

Month 1: Foundation

- ☐ Project setup and architecture
- ☐ User authentication system
- ☐ Basic UI/UX framework
- ☐ Database schema and models

Month 2: Core Features

- ☐ Wallet connection system
- ☐ Asset discovery implementation
- ☐ Message signing for ownership proof
- ☐ Beneficiary management interface

Month 3: Document Generation

- ☐ Legal document template creation
- ☐ PDF generation system
- ☐ Print optimization
- ☐ Testing and bug fixes
- ☐ MVP launch preparation

Phase 2: Enhancement (Months 4-6)

- ☐ Additional blockchain support
- ☐ Enhanced security features
- ☐ Mobile optimization
- ☐ User feedback integration

- [] Performance optimization
 - [] Analytics and monitoring
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Success Metrics

User Metrics

- **Registration Rate:** Target 100+ new users per week
- **Completion Rate:** 70%+ of users complete full will creation
- **Wallet Connections:** Average 3+ wallets connected per user
- **Beneficiary Setup:** 80%+ of users add at least one beneficiary
- **Document Generation:** 75%+ of users generate a will document

Technical Metrics

- **Platform Uptime:** 99.5%+ availability
- **Page Load Time:** <3 seconds average
- **Wallet Connection Success:** 95%+ success rate
- **Document Generation Success:** 98%+ success rate

Business Metrics

- **User Acquisition Cost:** <\$50 per user
 - **Conversion to Paid:** 15%+ conversion rate
 - **User Satisfaction:** 4.0+ rating
 - **Support Response:** <24 hours average
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Risks & Mitigation

Technical Risks

- **Wallet Integration Failures:** Multiple provider redundancy
- **Blockchain Network Issues:** Graceful error handling and retries
- **Security Vulnerabilities:** Regular security audits and testing

Legal Risks

- **Document Validity:** Clear disclaimers and professional review recommendations
- **Regulatory Changes:** Flexible architecture for compliance updates
- **Liability Issues:** Comprehensive terms of service and limitations

Business Risks

- **Low Adoption:** Strong user research and iterative development
 - **Competition:** Focus on simplicity and user experience differentiation
 - **Technical Complexity:** Phased rollout with core features first
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Conclusion

CryptoWill represents a focused solution for cryptocurrency asset discovery and inheritance documentation. This MVP platform provides essential tools for crypto holders to document their assets, designate beneficiaries, and generate simple legal documents for asset distribution.

The platform's success will depend on providing a secure, user-friendly interface that makes crypto inheritance planning accessible to everyday users. By focusing on core functionality - wallet connection, asset discovery, beneficiary management, and document generation - we can deliver immediate value while building a foundation for future enhancements.

Document Status: MVP Specification v1.0

Target Launch: 3 months

Next Review: Weekly development reviews