



CryptoSI Vest

ANTI-RUG PLATFORM



Logic Document

15 Jan 2025

Overview

This **UX Logic Document** outlines the user experience flow and design principles for **CryptoSI Vest**, a cutting-edge platform for creating secure and transparent token vesting solutions on Ethereum Virtual Machine (EVM)-compatible networks. The document serves as a blueprint to ensure the platform is intuitive, trustworthy, and aligned with the goals of developers, investors, and community members.

CryptoSI Vest addresses common challenges in token vesting by offering customizable schedules, robust security features, and real-time tracking tools. It incorporates flexible options such as time-based, price-triggered, and hybrid vesting schedules, making it an ideal solution for blockchain projects of all sizes.

This document provides:

- A detailed explanation of user personas and their journey through the platform.
- Key features such as the dashboard, vesting creation process, and monitoring tools.
- Core technical logic, including the integration of decentralized oracles, middleware for efficient data retrieval, and fallback mechanisms like the CryptoSI DAO.
- A structured approach to maintaining transparency, from community-accessible data to anti-flash price mechanisms.

The primary goal of this document is to guide the development team in creating a seamless and secure user experience while maintaining the principles of decentralization and efficiency.

Goals

1. **Define User Experience Flow:** Outline the step-by-step process for users to interact with the CryptoSI Vest platform, ensuring clarity and ease of navigation.
2. **Identify Key Features:** Highlight core functionalities such as vesting creation, monitoring, and transparency tools.
3. **Support Development:** Serve as a blueprint for developers to build the platform in line with user needs and technical specifications.
4. **Ensure Usability:** Provide guidance on creating an intuitive interface accessible to both technical and non-technical users.

5. **Promote Transparency:** Detail mechanisms that enable public verification of vesting schedules, boosting trust in the platform.
6. **Establish Security Standards:** Incorporate features like smart contract audits, decentralized hosting, and anti-flash price mechanisms.
7. **Facilitate Customization:** Allow developers to implement flexible vesting options tailored to various blockchain project requirements.
8. **Maintain Decentralization:** Emphasize solutions that do not rely on centralized databases or intermediaries, ensuring the platform remains trustless and efficient.
9. **Guide Technical Implementation:** Provide technical details for integrating oracles, middleware, and decentralized data solutions.
10. **Set Clear Milestones:** Offer a structured approach for building, testing, and launching the platform in a phased manner.

Key Features

A. User Dashboard

The central hub for users to access all relevant vesting details, ensuring clarity and ease of use.

- **Features:**
 - Total Vested Tokens: Display the amount of tokens locked in vesting contracts.
 - Pending Tokens: Show tokens awaiting release based on conditions.
 - Release Schedules: Provide timelines and milestones for token unlocking.
 - Real-Time Updates: Offer live tracking of vesting progress, powered by blockchain data and middleware for improved responsiveness.

B. Vesting Creation Flow

A guided process for creating and deploying vesting contracts.

- **Step-by-Step Flow:**
 - **Input Vesting Details:** Users specify the token address, beneficiary address, and total amount.
 - **Select Vesting Type:** Options include:
 - **Time-Based:** Unlock tokens after a predefined duration or in periodic intervals.
 - **Price-Based:** Release tokens when the token reaches a specific price threshold.

- **Hybrid:** Combine time and price conditions for added flexibility. Price must trigger for time to start.
- **Define Release Mechanics:**
 - **Cliff Vesting:** Set a fixed period during which no tokens are released, followed by regular periodic unlocking.
 - **Linear Vesting:** Gradual token release over time. Set length to full release
 - **All-at-Once Release:** Unlock all tokens when conditions are met.
- **Confirmation:** Users review their inputs and deploy the contract on the blockchain.

C. Price Tracking Integration

Ensures reliable price-based triggers for vesting contracts.

- **Mechanisms:**
 - **Oracles:** Utilize decentralized price oracles for real-time token price data.
 - **Direct Pool-Based Feeds:** Retrieve token prices directly from liquidity pools for niche or low-cap tokens.
 - **Anti-Flash Features:** Introduce conditions requiring the price to remain above the target for a specified duration, mitigating risks from price manipulation and flash loans. 24hours should be fine.

D. Beneficiary Transparency

Enhances accountability by providing stakeholders with visibility into vesting contracts.

- **Features:**
 - **Public Dashboard:** Accessible view of vesting conditions, token holders, and release schedules.
 - **Community Trust Tools:** Allow anyone to verify that project developers or founders cannot access tokens prematurely, ensuring fair practices.

Personas

Founders and Developers

Who They Are:

- Founders are project creators who allocate tokens to team members, investors, and partners as part of a planned tokenomics structure.
- Developers are generally seen as the person or persons who created the meme coin.

Goals:

- Ensure tokens are securely locked to maintain investor confidence.
- Create customized vesting schedules to align with project timelines and milestones.
- Mitigate risks of token misuse by implementing mechanisms like price- or time-based triggers.
- Demonstrate transparency to their community by making vesting schedules publicly visible.

How CryptoSI Vest Helps:

- **Flexible Vesting Options:** Offers time-based, price-based, and hybrid schedules, allowing founders to adapt to diverse project needs.
 - **Secure Contracts:** Provides fully audited and immutable smart contracts to protect vested tokens.
 - **Dashboard Access:** Enables developers to manage and monitor multiple vesting schedules in one place.
 - **Community Trust Tools:** Transparency features, such as public dashboards, help founders prove that tokens are securely locked and cannot be prematurely accessed.
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2. Investors

Who They Are:

- Individuals or institutions who contribute capital to a blockchain project in exchange for tokens.
- Early backers interested in the project's long-term success and stability.

Goals:

- Monitor when and how their vested tokens will be unlocked.
- Verify that vesting schedules are adhered to and cannot be manipulated.
- Ensure the security of their investments through a reliable vesting mechanism.

How CryptoSI Vest Helps:

- **Real-Time Tracking:** The dashboard provides detailed updates on vesting progress, including total vested tokens, pending tokens, and release schedules.
 - **Notification Features:** Alerts when milestones (e.g., time or price triggers) are approaching.
 - **Public Transparency:** Investors can access publicly visible vesting details, ensuring trust in the project's operations.
 - **Anti-Flash Mechanisms:** Protect investments by requiring price stability over time before token releases are triggered.
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3. Community Members

Who They Are:

- General stakeholders, including token holders, enthusiasts, and potential investors interested in the project's credibility.
- Often the most vocal advocates or critics of a project's tokenomics and trustworthiness.

Goals:

- Verify that developers or project teams cannot access and sell large amounts of tokens prematurely, potentially destabilizing the project.
- Gain confidence in the project by ensuring transparency and adherence to vesting schedules.
- Access data that confirms the project's commitment to fair practices and long-term growth.

How CryptoSI Vest Helps:

- **Publicly Accessible Data:** Vesting contracts and their conditions are visible to anyone, fostering trust and accountability.
- **Community Oversight Tools:** Enables members to verify that locked tokens cannot be released until predefined conditions are met.
- **Prevent "Rug Pulls":** By locking tokens securely and transparently, the platform helps reassure the community that the project team cannot exit with funds suddenly.
- **Educational Resources:** Integrated tooltips and guides within the platform help non-technical users understand vesting schedules and token release mechanisms.

4. Vesting Partners

Who They Are:

Vesting partners are front ends which allow projects to directly interact with Crytosi Vest, usually during the bonding, launching or funding stages. They may include launchpads, blockchain advisors, influencers, or other ecosystem participants who bring credibility and exposure to the project.

Goals:

- Act as trusted intermediaries who validate and promote the project's vesting mechanism.
 - Ensure the adoption of secure and transparent vesting practices to build community confidence.
 - Earn incentives while supporting the successful execution of tokenomics.
 - Expand their influence and reputation in the blockchain ecosystem by aligning with credible projects.
 - Expand upon their current offerings
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Challenges:

- Maintaining a balance between their operational costs and the need to appear unbiased.
 - Ensuring the vesting mechanism they partner with aligns with the community's trust expectations.
 - Staying informed about the evolving blockchain landscape to support innovative and secure vesting mechanisms.
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How CryptoSI Vest Helps:

1. **Incentivized Partnerships:**
 - Vesting partners earn **2.5% of the vested amount** for their contributions, ensuring a mutually beneficial relationship.
2. **Transparent Vesting Contracts:**
 - Partners can vouch for fully audited, immutable contracts that enhance project credibility and ensure security.

3. **Public Dashboard Access:**

- Real-time visibility into vesting schedules allows partners to monitor and showcase progress to communities.

4. **Comprehensive Features:**

- The platform's hybrid vesting schedules, which combine price- and time-based triggers, provide robust tools for partners to promote the project.

5. **Community Trust Building:**

- Vesting partners can highlight the project's adherence to secure vesting schedules, preventing early token misuse and ensuring long-term project success.

Why These Personas Matter

By addressing the needs of these three key user groups, CryptoSI Vest not only fosters trust and transparency but also ensures a user-centric design that benefits all stakeholders. This approach strengthens the project's credibility and contributes to its long-term success.

Vesting Schedules

Overview:

Vesting schedules are at the heart of CryptoSI Vest, enabling secure, automated token releases based on predefined conditions. These schedules are implemented through smart contracts, ensuring that the rules are immutable and cannot be manipulated once deployed.

Features:

- **Time-Based Vesting:**

- Tokens are unlocked after a specific time interval or progressively over a linear schedule.
- Useful for long-term projects, employee incentives, or staged investor releases.

- **Price-Based Vesting:**

- Tokens are released only when the token reaches a predetermined price.
- Anti-flash mechanisms ensure the price remains stable above the target for a set duration before triggering the release.

- **Hybrid Vesting:**

- Combines time and price conditions for more granular control, such as unlocking tokens progressively after a price milestone is reached.

Technical Implementation:

- Smart contracts are written in Solidity for EVM-compatible chains.
 - Contracts include customizable parameters such as:
 - Start and end dates for vesting periods.
 - Target price thresholds.
 - Release methods (cliff, linear, or lump-sum).
 - Audits ensure compliance with security best practices.
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2. Price Feeds

Overview:

Accurate and reliable price data is critical for price-based vesting schedules. CryptoSI Vest integrates multiple mechanisms to obtain token prices, ensuring flexibility and reliability across different token types.

Mechanisms:

- **Decentralized Oracles:**
 - Sources real-time token prices from trusted services like Chainlink or Band Protocol.
 - Ensures tamper-proof and reliable price data for major tokens.
- **Pool-Based Price Feeds:**
 - Retrieves prices directly from decentralized exchange (DEX) liquidity pools.
 - Ideal for niche or low-liquidity tokens that may not be supported by major oracles.
 - Example: Using Uniswap or PancakeSwap pool data to calculate token prices based on reserves.

Anti-Manipulation Measures:

- Introduce a “price stability period” to prevent token releases from flash spikes.
- Require price validation from multiple sources to reduce reliance on a single feed.

Technical Integration:

- Contracts interact with oracles or pool APIs via decentralized libraries or SDKs.

- Data fetching and validation logic are optimized to minimize gas costs and latency.

Click-by-Click Flow for Starting a New Vesting Contract

A. Price-Based Vesting Contract for \$Exmpl

- 1. Connect Wallet:**
 - Click **"Connect Wallet"** on the homepage.
 - Choose from wallet options (e.g., MetaMask, WalletConnect).
 - Approve the connection to the CryptoSI Vest platform.
- 2. Navigate to Create Contract:**
 - Click **"Create Vesting Contract"** from the dashboard menu.
- 3. Select Vesting Type:**
 - Choose **"Price-Based Vesting"** from the available options.
 - Click **"Next"** to proceed.
- 4. Enter Token Details:**
 - Input the token address for \$Exmpl.
 - Specify the total amount of tokens to be vested.
 - Dialogue will show what percentage of the entire supply that represents
 - Click **"Next"** after confirming details.
- 5. Define Price Trigger:**
 - Enter the target price at which tokens should be released (e.g., \$5.00 per \$Exmpl).
 - Price can be set against ETH or USDT
 - Set a **price stability period** (between 0 - 48 hours).
 - Optionally, add a fallback price source (e.g., choose between Chainlink, Uniswap pool data, or a custom feed).
 - Click **"Next"** to continue.
- 6. Choose Release Mechanism:**
 - Select one of the following:
 - **All-at-Once Release:** Entire vested amount is unlocked once the price condition is met.
 - **Cliff Release:** Set an initial locked period (e.g., 1 month after the price is reached) before the tokens are fully released.
 - Click **"Next."**
- 7. Add Beneficiaries:**
 - Enter the wallet address of the beneficiary.
 - Optionally, add multiple beneficiaries and define how the tokens will be distributed among them (e.g., percentages or fixed amounts).

- Click **“Next.”**
 - 8. **Review and Confirm:**
 - Review all contract details:
 - Token: \$Exmpl.
 - Total Amount: 1,000,000 tokens.
 - Price Target: \$5.00 with a 48-hour stability requirement.
 - Release Mechanism: Cliff release after 1 month.
 - At this point the **vesting partner** also adds their address
 - Click **“Confirm and Deploy.”**
 - 9. **Deploy Contract:**
 - Approve the transaction in the connected wallet.
 - Wait for the smart contract to be deployed on the blockchain.
 - Once deployed, view the transaction hash and a summary of the contract on the dashboard.
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B. Hybrid Vesting Contract for \$Exmpl (Price First, Then Linear)

1. **Connect Wallet:**
 - Click **“Connect Wallet”** on the homepage.
 - Choose from wallet options (e.g., MetaMask, WalletConnect).
 - Approve the connection to the CryptoSI Vest platform.
2. **Navigate to Create Contract:**
 - Click **“Create Vesting Contract”** from the dashboard menu.
3. **Select Vesting Type:**
 - Choose **“Hybrid Vesting”** from the options.
 - Click **“Next”** to proceed.
4. **Enter Token Details:**
 - Input the token address for \$Exmpl.
 - Specify the total amount of tokens to be vested.
 - Click **“Next”** after confirming details.
5. **Set Price-Based Trigger: (Mandatory)**
 - Define the target price for the initial release (e.g., \$10.00 per \$Exmpl).
 - Set the **price stability period** (e.g., 72 hours).
 - Optionally, specify the oracle or price feed source.
 - Click **“Next.”**
6. **Define Linear Vesting Period:**
 - Set the start time for the linear release (e.g., immediately after the price trigger is met).
 - Specify the total duration for linear vesting (e.g., 12 months).

- Choose the release frequency (e.g., monthly, weekly, or daily).
- Click **"Next."**
- 7. **Add Beneficiaries:**
 - Enter the wallet address of the beneficiary.
 - Optionally, add multiple beneficiaries and define token allocation percentages or amounts.
 - Click **"Next."**
- 8. **Review and Confirm:**
 - Review all contract details:
 - Token: \$Exmpl.
 - Total Amount: 500,000 tokens.
 - Price Target: \$10.00 with a 72-hour stability requirement.
 - Linear Release: Over 12 months, with tokens released monthly.
 - At this point the **vesting partner** also adds their address
 - Click **"Confirm and Deploy."**
- 9. **Deploy Contract:**
 - Approve the transaction in the connected wallet.
 - Wait for the hybrid smart contract to be deployed on the blockchain.
 - Once deployed, view the transaction hash and a summary of the contract on the dashboard.

Click-by-Click Flow for Checking the Vesting Schedule of Your Favorite Token (\$Exmpl)

1. Connect Wallet

- **Action:** Click **"Connect Wallet"** on the homepage.
 - **Options:**
 - Choose a wallet (e.g., MetaMask, WalletConnect, TrustWallet).
 - Approve the connection request in your wallet app.
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2. Access Vesting Schedules

- **Action:** Navigate to the dashboard by clicking **"Vesting Schedules"** from the main menu.
- **Options:**

- Search for a specific token by entering its name, symbol (e.g., \$Exmpl), or contract address.
 - Use filters to refine the results:
 - By wallet (e.g., only schedules involving your wallet).
 - By token address (e.g., community tokens, dev wallet tokens).
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3. View Token Details

- **Action:** Click on the row corresponding to \$Exmpl in the results list.
 - **Displayed Information:**
 - **Token Overview:**
 - Total tokens vested.
 - Number of active vesting schedules.
 - Current price and price trends (e.g., 24-hour, 7-day change).
 - **Dev Wallet Highlight:**
 - Special marker (e.g., a Crown icon) for tokens sent to the vesting contract by the **dev wallet**, which is also the creator of the token. This should be the TOP amount shown.
 - Tooltip explaining why these tokens are highlighted (e.g., to prevent “rug pulls”).
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4. Explore Vesting Contracts

- **Action:** Click “**View Contracts**” to see the list of active vesting contracts for \$Exmpl.
 - **Options:**
 - Sort contracts by:
 - Dev Wallet Vests: Contracts created by the dev wallet.
 - Time Remaining: From shortest to longest vesting period.
 - Token Amount: From largest to smallest vested amount.
 - Search for contracts involving specific beneficiaries (e.g., investors, team members).
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5. Check Vesting Details

- **Action:** Click on a specific vesting contract to open its details page.
- **Displayed Information:**
 - **Contract Overview:**

- Total tokens vested in this contract.
- Release schedule (e.g., cliff, linear, or price-based).
- Start and end dates of the vesting period.
- Current status (e.g., active, completed, or canceled).
- **Price-Based Triggers:**
 - Target price and stability requirements, if applicable.
 - Progress tracker showing the token's current price relative to the target.
- **Release History:**
 - List of past token releases with timestamps and amounts.
 - Pending tokens yet to be unlocked.
- **Dev Wallet Transparency:**
 - If the dev wallet created the contract or contributed tokens:
 - Highlighted under the "Source" section with a flag such as **"Developer Wallet Contribution."**
 - A history of all token deposits from the dev wallet.

6. Monitor Alerts

- **Action:** Enable alerts for changes in vesting progress.
- **Options:**
 - Notifications for:
 - Price triggers being met.
 - Scheduled releases occurring.
 - Dev wallet making additional deposits to the vesting contract.

7. Download and Share Vesting Data (possible V1.1.0)

- **Action:** Click **"Download Report"** to export vesting details as a PDF or CSV file.
- **Options:**
 - Share the report link to social media or community platforms to promote transparency.

8. Engage with the Community (Possibly V1.1.0)

- **Action:** Click **"Community Verification"** to post questions or concerns about the token's vesting schedules in the community forum.

- **Options:**
 - Vote on issues related to the token's transparency or schedule changes via CryptoSI DAO.
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Click-by-Click Flow for Collecting Vested Tokens After a Release Trigger

1. Connect Wallet

- **Action:** Click "Connect Wallet" on the homepage.
 - **Options:**
 - Choose a wallet (e.g., MetaMask, WalletConnect, TrustWallet).
 - Approve the connection request in your wallet app.
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2. Access Your Dashboard

- **Action:** Click "My Dashboard" in the main menu.
 - **Displayed Information:**
 - **Summary View:**
 - Total tokens vested across all contracts.
 - Tokens eligible for release.
 - Pending tokens and their respective vesting schedules.
 - **Quick Actions:** "Claim All Eligible Tokens" button.
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3. Review Eligible Vesting Contracts (Optional)

- **Action:** Scroll through the list of vesting contracts displayed on the dashboard.
- **Options:**
 - **Filter Contracts:**
 - By token name, symbol, or contract address.
 - By vesting status (e.g., "Eligible for Claim" or "In Progress").
 - **Search Contracts:** Enter a keyword (e.g., token name or wallet address).
- **Displayed Information:**
 - Token details (name, symbol, current price, marketcap).
 - Vesting schedule overview (e.g., cliff, linear, or price-based).
 - Total tokens vested, eligible, and pending.

4. Select Tokens to Claim

- **Option 1: Claim All Eligible Tokens**
 - **Action:** Click “Claim All Eligible Tokens” on the dashboard.
 - **Result:**
 - A single transaction consolidates all tokens eligible for release across contracts.
 - Reduces gas fees by bundling claims.
 - **Option 2: Claim Tokens from Individual Contracts**
 - **Action:**
 - Navigate to a specific vesting contract by clicking “View Details.”
 - Click “Claim Tokens” for that individual contract.
 - **Displayed Information:**
 - Vesting details (release schedule, start/end dates, pending tokens).
 - Eligible tokens for claim from this contract.
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5. Confirm the Transaction

- **Action:**
 - Review the transaction summary displayed by the platform, including:
 - Total tokens to be claimed.
 - Gas fee estimate.
 - Contract address for verification.
 - Click “Confirm” to proceed.
 - **Prompt:** Approve the transaction in your wallet (e.g., MetaMask).
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6. Transaction Processing

- **Backend:**
 - The platform interacts with the smart contract to verify eligibility and release tokens.
 - Tokens are transferred to the user’s wallet.
- **UI Feedback:**
 - Status updates on the platform (e.g., “Transaction Pending” → “Transaction Complete”).
 - A success message with the transaction hash and link to a blockchain explorer.

7. Track Updates on the Dashboard

- **Action:** Return to the dashboard to review updated information.
 - **Displayed Information:**
 - Updated vested token balances.
 - Next vesting milestone (date, target price, or remaining period).
 - History of completed claims with timestamps and transaction hashes.
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8. Optional Follow-Up Actions

- **Set Notifications:** Enable alerts for:
 - Upcoming release milestones (e.g., time-based trigger in 7 days).
 - Price progress updates for price-based triggers.
- **Export Data:** Download a summary of your vesting history for record-keeping or tax purposes.

This flow ensures a streamlined experience for users to claim their vested tokens, with options for quick batch claims or detailed per-contract transactions, all while maintaining transparency and security.