Zesh AI Layer Whitepaper

Powering Web3 Evolution

December 2024

www.zesh.ai

Summary

1. *Introduction*

Swift development and innovation are crucial for success in the rapidly evolving web3 landscape. Zesh leverages AI Agents to deliver essential tools that enhance competitive advantage and foster rapid growth by integrating the best of web2 and web3 technologies. Our comprehensive suite of AI-powered, blockchain-agnostic tools ensures maximum accessibility and utility for diverse projects.

Zesh addresses significant challenges in Web3, focusing on community growth and engagement. As an AI-powered GrowthFi solution, our initial offerings include integrated reward campaigns and payment systems supported by advanced gamification and zero-knowledge machine learning (zkML) technology to ensure high user engagement.

Central to our platform is Zesh Portal, which deploys AI Agents to provide advanced data insights across multiple channels like Discord, Telegram, and X (formerly Twitter). Zesh Portal's analytics help projects identify real users, measure community sentiment, and track engagement patterns. This allows for precise targeting and fair reward distribution, fostering genuine community growth.

Our easy onboarding process, powered by AI Agents, uses account abstraction to create free wallets and NFT profiles for users, significantly reducing entry barriers. The Zesh Wallet stores digital assets, including rewards and achievements as Soulbound Tokens (SBTs). This web2-style onboarding ensures even users unfamiliar with web3 can join the ecosystem effortlessly. With account abstraction users create their own self-custodial wallet automatically.

Zesh integrates with leading community ecosystems, offering a unified workflow. Our AI algorithms identify key contributors and community builders through various metrics, enabling projects to nurture their most valuable members effectively.

Zesh also aims to foster demand for our native $ZAI token, which powers our platform and drives its economy. Each new tool, feature, and client increases $ZAI demand, creating a thriving token economy based on continuous innovation and adoption.

Even during bear markets and volatility, the demand for Zesh's tools is expected to remain strong. Innovative projects in development now will require robust community-building tools to succeed in the future, and Zesh's product-market fit perfectly meets this need.

By addressing critical challenges in community engagement and growth, Zesh empowers web3 projects to achieve sustainable success and maintain a competitive edge. Our platform's AI-driven insights, easy onboarding, and seamless integration make Zesh indispensable for any project aiming to thrive in the web3 environment.

2. Problem Statement

Communities are the beating heart of every successful web3 project. However, many projects struggle to transform occasional visitors into believers and holders, which is crucial for long-term survival. The current market offerings help to boost user numbers, but they fall short in building genuine, engaged communities, primarily due to the limitations of their design.

Fragmented Tool Ecosystem

Most web3 projects rely on a variety of single-purpose tools to manage their communities, leading to fragmented workflows and inefficiencies. This lack of integration complicates community management and hampers the ability to provide a seamless user experience.

Insufficient Data Insights

Existing reward campaigns and community management tools typically offer limited metrics, lacking the depth needed to understand genuine community engagement. This insufficiency prevents projects from accurately identifying and rewarding genuine users

Dispersed Feedback Mechanisms

Feedback from community members is often scattered across multiple platforms such as Discord, Telegram, and X. This dispersion makes it challenging for projects to capture, analyze, and respond to valuable feedback effectively, resulting in missed opportunities for community-driven improvements.

Engagement and Retention Difficulties

Sustaining meaningful user engagement is a persistent challenge for web3 projects, as projects struggle to maintain user interest and activity, which is vital for long-term community growth and loyalty.

Lack of Trust in Reward Distribution

Ensuring fair and transparent reward distribution is essential for building community trust. Projects need reliable tools to demonstrate fairness in their reward systems, as users are more likely to stay loyal to ecosystems perceived as equitable and transparent.

Challenges in Transitioning to Decentralized Autonomous Organizations (DAOs)

As regulatory and exchange pressures increase, many projects aim to transition to DAOs. However, without a well-educated and engaged community, these projects risk becoming DAOs in name only, lacking true community participation and effective governance.

Competitive Pressures

The web3 space is characterized by rapid innovation and intense competition. A significant proportion of new projects fail within their first year due to the inability to leverage competitive advantages effectively. To thrive, projects must adopt innovative tools and strategies that foster genuine community engagement and sustained growth.

3. *Solution*

Our dynamic ecosystem of specialized tools, powered by AI agents, empowers web3 projects to build genuine communities and accelerate their growth, ensuring they stay ahead of competitors and achieve success.

Tools and resources tailored for web3 projects

We understand the unique challenges that web3 projects face. **Zesh uses intelligent AI agents for our GRowthFi** solution tailored to address each obstacle to genuine community growth, providing tailored and scalable support for projects.

Robust tools for accelerated growth

Our platform includes essential tools and resources for Web3 projects to rapidly deploy and accelerate their growth. We provide easy-to-use, turnkey solutions powered by **AI agents** that integrate with each other and follow a unified workflow.

Community excellence

We recognize that community engagement is pivotal for the success of any project. That's why our suite of **AI-powered tools** is designed to enable projects to build and nurture highly engaged communities of exceptional quality.

Blockchain-agnostic solution

ZESH is the go-to platform for web3 projects, regardless of the blockchain they are built on. With **AI agents facilitating data-driven insights and workflows**, projects can navigate the Web3 space with confidence, dramatically increasing their chances of long-term success.

Infinite Possibilities

Embracing the limitless potential of web3, ZESH remains committed to continuously expanding our toolset, addressing emerging demands, and connecting projects and communities in ways that were never before possible.

Powered by AI

Zesh integrates **AI agents** into most of our applications, tailoring tools to the specific needs of individual users and creators. zkML ensures maximum transparency that demonstrates the effectiveness of our proprietary AI algorithms while maintaining the privacy of commercially sensitive data. This proves rewards are distributed according to our codebase and prevents manipulation, increasing trust for projects and users.

4. *Advantages*

Current web3 community growth tools often focus solely on vanity metrics that create numerous limitations for growth, making it challenging for projects to build genuine, sustainable communities. This has contributed to a high failure rate among new blockchain startups, with 95% struggling to achieve genuine growth.

Zesh addresses these challenges with a suite of features powered by **AI agents**, designed to drive real engagement and long-term success, offering projects a significant competitive advantage.

Key Advantages:

AI-Powered Suite of Web3 Growth Hacking Apps

ZESH is more than one app; it is an interconnected suite of AI-driven agents powering GrowthFI, CommunityFi, and MarketingFi tools with advanced analytics that prioritize and drive real community growth.

Easy Onboarding in Web2 style

ZESH offers a simplified web2-style onboarding process using account abstraction, greatly reducing barriers to entry. It also includes a free NFT for users to store their achievements.

Next Generation Digital Identity and Ownership

ZESH is using account abstraction to automatically create user wallets with NFTs to store users' achievements as SBTs. This ensures user security and privacy, fostering trust and reliability in the Web3 environment. With account abstraction users create their own self-custodial wallet automatically.

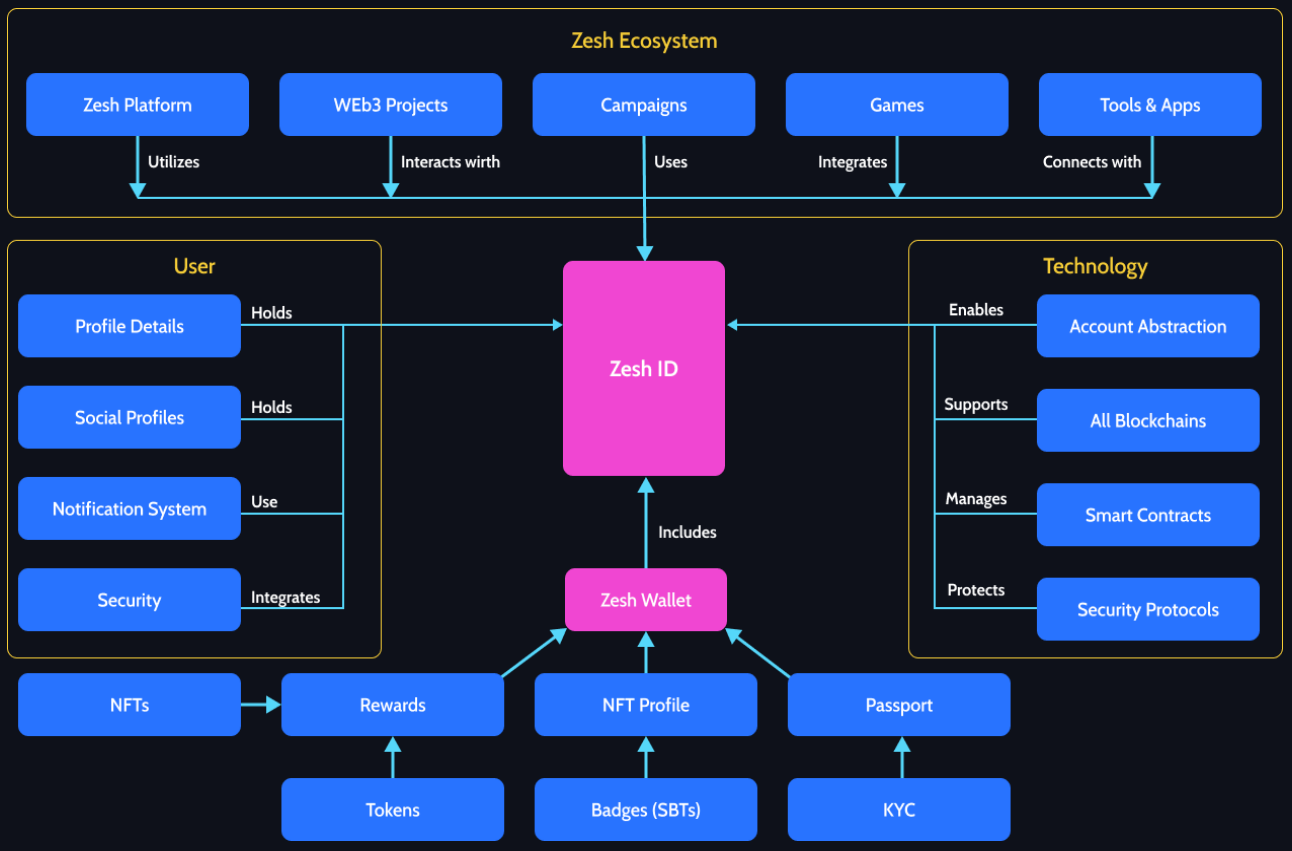
Fair Rewards

Leveraging zkML and advanced analytics, Zesh identifies and rewards genuine contributions fairly, promoting a more equitable and motivated community.

Compelling Gamification and AI Quality Engagement

Our gamification features, enhanced by **AI Agents**, incentivize participation and loyalty, driving higher engagement and retention. These agents monitor and reward quality user activity, ensuring a thriving ecosystem driven by meaningful contributions.

5. Products & Technology



Zesh is more than a single product; it is a suite of unique **AI-driven apps** within the Web3 space, designed to evolve with changing market needs. At Zesh, we are dedicated to delivering a cutting-edge platform that addresses the dynamic demands of the web3 landscape. By leveraging the latest advancements in AI and blockchain technology, we meticulously curate a software stack that offers a robust, secure, and highly adaptable ecosystem.

Zesh ensures cross-platform compatibility, delivering swift and efficient user experiences across various devices and platforms, with **AI agents** enhancing seamless and responsive interactions.

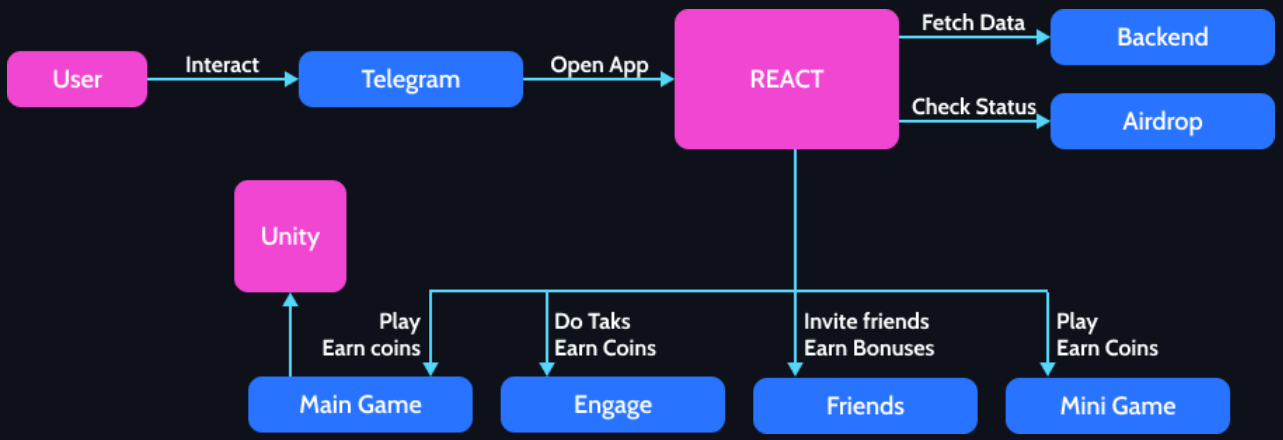
Real-time technologies are integral to our platform, enabling interactive features and instant updates that significantly enhance user engagement. Automation, powered by **AI agents**, streamlines processes to save valuable time and improve scalability, while zkML optimizes user experiences and platform functionalities for individualized efficiency and effectiveness.

Zesh is blockchain-agnostic, allowing users to interact seamlessly with multiple blockchains. Our platform's interoperability ensures it can work across a diverse range of technologies and blockchains, and it is built to handle increased usage and growth while maintaining optimal performance.

Security is paramount at Zesh, with robust measures and protocols supported by **AI** to protect user data and assets. Additionally, we focus on delivering an intuitive and user-friendly experience, ensuring our platform is easy to navigate and use regardless of the user's technical background.

5.1 Zesh Telegram Mini App

Zesh Telegram Mini App is an engaging product within the Zesh ecosystem that rewards users with coins contributing to the $ZAI token airdrop. Designed to enhance user engagement, this app leverages gamification to drive interaction for web3 projects.



Key Features:

- Main Gameplay: Tap to launch and propel a rocket towards the moon, featuring logos of various Web3 projects. Earn coins by tapping the rocket for 2-3 minutes until it reaches the moon.
- Invite a Friend Bonus: Earn additional coins by inviting friends, with rewards based on the quality and number of invites.
- Airdrop and Progress Tracking: Track progress towards the $ZAI token airdrop with visual indicators and a progress bar to monitor goal achievements.
- Engage to Earn Coins: Participate in one-time tasks like subscribing to the Zesh Telegram channel or following Zesh on X, and complete daily tasks to earn coins through activities on Telegram and X.
- Have Fun and Earn Coins: Maintain daily streaks by saying hello to Zeshy for extra bonuses and playing mini-games like finding a character to earn more coins.
- User Engagement Trains our AI Model: Gamification is a powerful method for differentiating human factors from bots. It helps train our AI model to identify uniquely human attributes, improving its ability to prioritize genuine engagement.

Technology:

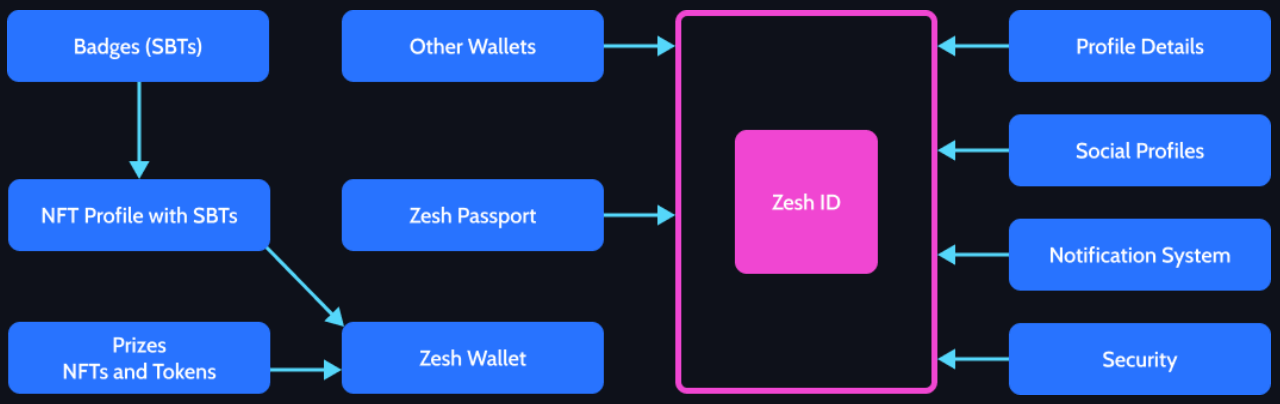
Zesh Telegram Mini App within the Zesh ecosystem utilizes a cutting-edge technology stack to deliver a seamless and engaging user experience. The frontend is built with React for dynamic interfaces and Unity for immersive game components, ensuring a responsive and visually appealing experience. The backend, powered by Node.js and Express.js, provides efficient real-time data handling and robust API communication. Integration with the Telegram Bot API and webhooks allows the app to interact directly with users, leveraging Telegram's extensive platform to enhance engagement and streamline access.

5.2 Zesh ID

Zesh ID utilizes account abstraction to securely hold vital user data, including the Zesh Passport, Zesh Wallet, NFT profile, and achievements as Soulbound Tokens (SBTs).

It encompasses all account details, NFT Profiles, connected wallets, and social profiles.

This comprehensive digital identity simplifies user interactions within the web3 ecosystem and ensures seamless integration across various platforms.



The Zesh ID technology serves as the cornerstone of the Zesh ecosystem, providing a comprehensive digital identity solution that integrates multiple key features. Each feature is designed to enhance user experience, security, and interoperability within the web3 space.

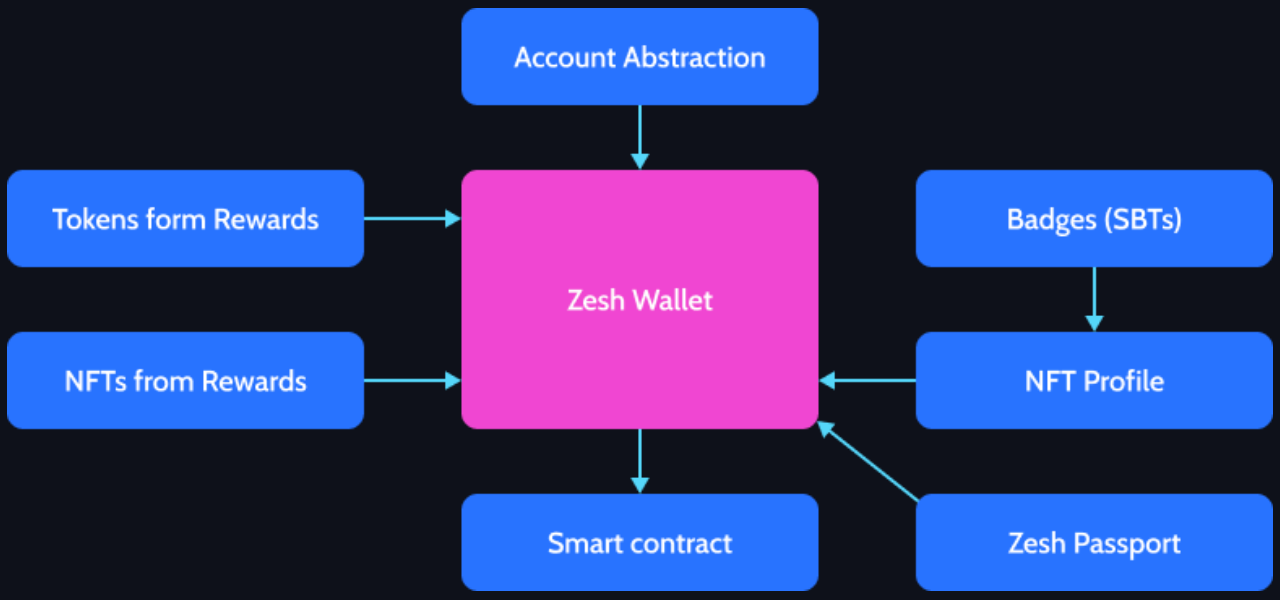
Key Features:

- **Zesh Passport**: A KYC-verified digital identity ensures that each user is uniquely and securely authenticated, providing a robust foundation for trust and compliance within the Zesh ecosystem.
- **Zesh Wallet**: Secure storage for rewards and assets is provided through the Zesh Wallet, which offers advanced security features to protect users' digital assets.Zesh Wallet is a self-custodial wallet where users remain in control of their digital assets. Using account abstraction enables users to automatically create their own self-custodial Zesh wallet.
- **NFT Profile**: Achievements and badges are stored as Soulbound Tokens (SBTs) within the NFT Profile, creating a verifiable record of user accomplishments that is immutable and transparent.
- **Connected Wallets**: The integration of multiple wallets allows users to manage their various digital assets with ease, providing flexibility and convenience in a single interface.
- **Social Profiles**: Linking to multiple social accounts, the Zesh ID enhances user interactions and engagement by seamlessly connecting their web3 identity with their social presence across platforms. Users can choose which, if any, social account they wish to connect to their Zesh ID. At all times, they remain in control of who can access their data.

5.3 Zesh Wallet

Zesh Wallet is generated automatically for users to ensure a seamless onboarding experience. It capitalizes on the growth of new entrants to the web3 space who are more familiar with web2 user interfaces. Zesh Wallet is a self-custodial wallet where users remain in control of their digital assets.

Zesh Wallet allows users to store their rewards securely and provides flexibility for withdrawals, either to a bank account or transfer to an exchange or other wallet of their choice. This streamlined approach eliminates the need for a complicated wallet setup, enhancing user convenience.



Key Features:

- **Seamless Onboarding:** Automatically generated for new users during the onboarding process, eliminating the need for complex wallet setup procedures. This ensures that even users unfamiliar with blockchain technology can quickly and easily start using the Zesh platform.
- **Secure Storage:** The wallet provides robust security measures to hold rewards and other digital assets safely. It employs advanced encryption and security protocols to protect against unauthorized access. While nothing is ever 100% secure, this offers users industry-standard levels of security.
- **Flexible Withdrawals:** Users have the flexibility to withdraw their funds either to a bank account or transfer them to exchanges or other wallets. This off-ramp capability ensures that users can easily convert their digital assets into fiat currency or other cryptocurrencies as needed.
- **User-Friendly:** The Zesh Wallet is designed with a focus on simplicity and ease of use. Its intuitive interface allows users to manage their digital assets effortlessly, making interactions within the Web3 ecosystem as straightforward as possible.

These features collectively ensure that the Zesh Wallet not only provides a high level of security and flexibility but also offers a seamless and accessible user experience, catering to both novice and experienced users in the Web3 space.

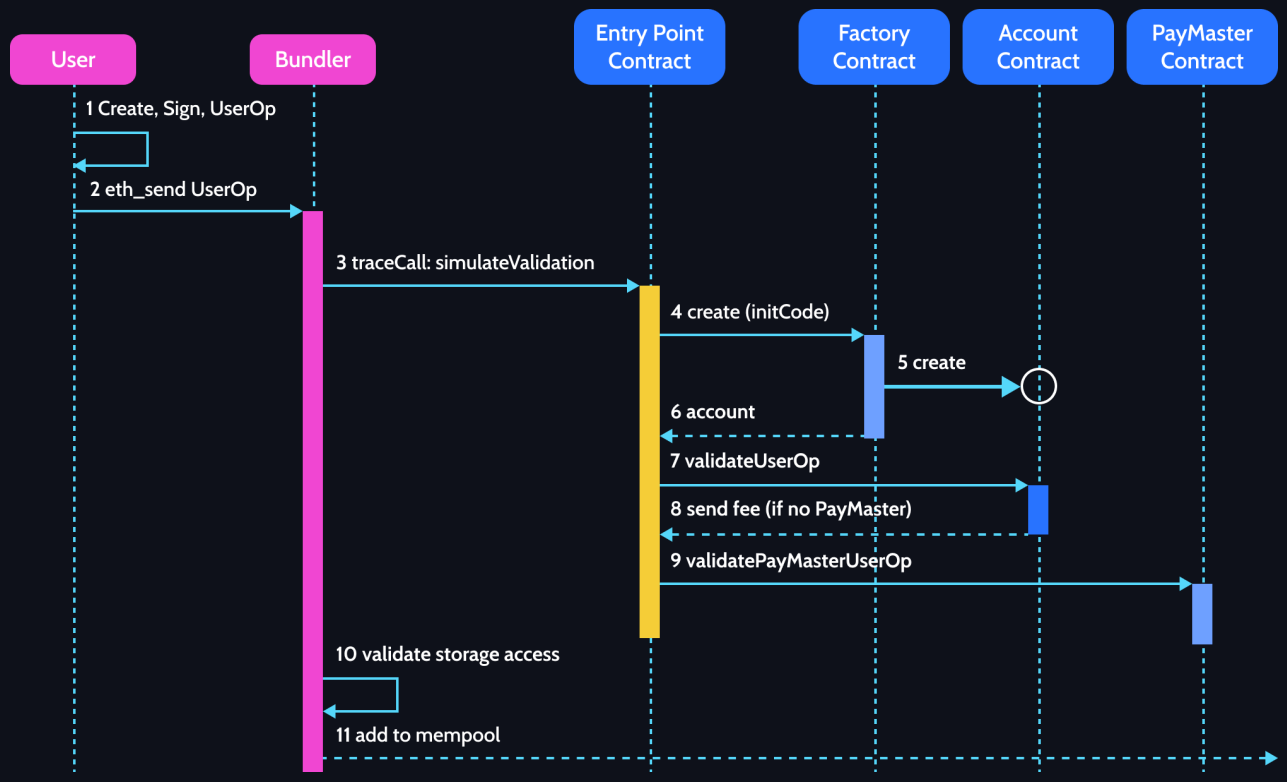
Technology:

A significant pain point in onboarding web2 users into the web3 space is helping them understand what a blockchain wallet is, how to use it, how to buy coins, etc. Historically, blockchain products have tried creating different abstractions around this. One example is how crypto exchanges do it by creating regular EOA custodial wallets and sponsoring the user's transactions by sending coins to their wallet (just enough so that they have them for different types of transactions).

A new approach to handling this problem is by implementing Smart Contract Accounts that support ERC-4337 Account Abstraction. This framework has been deployed on the Ethereum mainnet since March 2023 and allows Paymasters to sponsor transactions for contract wallets.

Zesh leverages ERC-4337 by implementing contract accounts for its users to help with user onboarding and the user experience.

ERC-4337 Overview



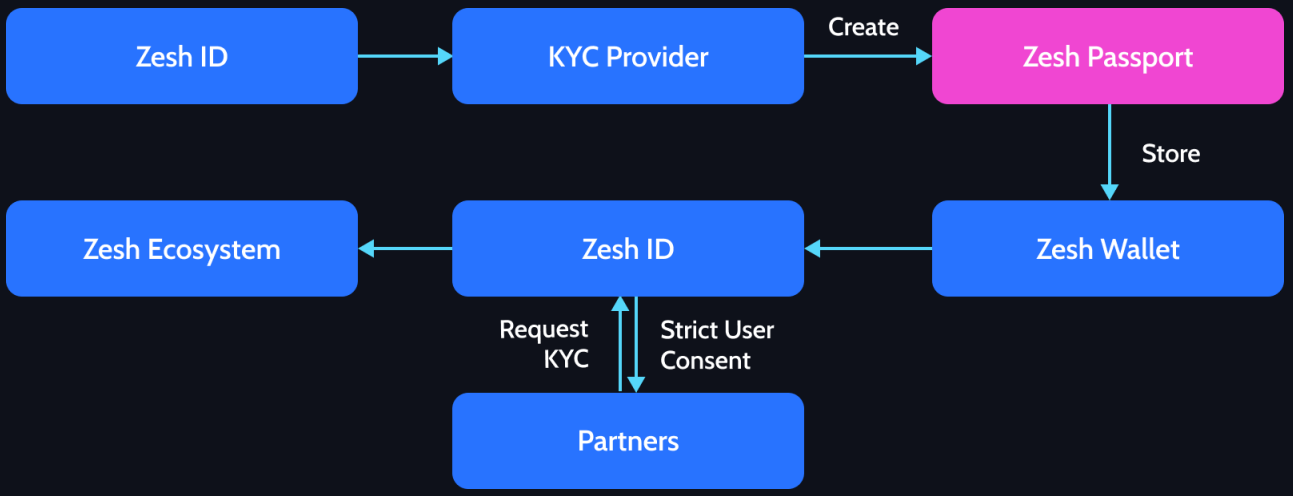
Zesh Wallet use-cases:

- Earn assets after completing a campaign: The main use case of the Zesh Platform for a user will be completing the campaigns as part of the project. The reward for doing so will be different types of assets prepared by project owners and escrowed by Zesh (stablecoins, NFTs, SBTs, etc.). In order to securely store the assets, the Zesh Wallet will be used. Each user will have a unique wallet, and assets will be stored there
- Withdraw assets to an EOA: because the Zesh Wallet will be an actual blockchain account, it can be used to move assets from it to other external accounts
- Deposit and store coins or tokens from different blockchains

5.4 Zesh Passport

Zesh Passport provides a KYC-verified digital identity solution that ensures users have secure and exclusive access to their personal data, stored on-chain. This approach combines the security of blockchain technology with the privacy-preserving capabilities of zkML (zero-knowledge machine learning).

By putting users in control of their identity information, Zesh Passport facilitates secure and private interactions within the Zesh ecosystem.



Key Features:

- Secure Identity Verification: KYC-verified digital identity stored on-chain.
- Exclusive Access: Only users have secure access to their personal data.
- Privacy-Preserving: Utilizes zkML technology to ensure data privacy.
- Enhanced Security: Combines blockchain security with user-controlled data access.

Technology:

Zesh Passport is intricately designed to complement Zesh ID, serving as a user's web3 identity. It functions as a Soul Bound Token (SBT) integrated into the user's Zesh Wallet, securely holding encrypted KYC and personal information. This token is utilized across the Zesh ecosystem and with certified partners.

Moreover, Zesh Passport can act as a Verifiable Credential, cryptographically signed and containing specific user information for KYC purposes.

The holder of this credential can present it to any verifier, ensuring secure, authenticated, and privacy-preserving interactions both within and beyond the Zesh ecosystem.

5.5 Zesh NFT profile with SBTs

We create an NFT profile for each user, stored in their Zesh Wallet, at no cost. This profile serves as their digital identity, housing all achievements and badges as Soulbound Tokens (SBTs) across Zesh apps.

The NFT profile also integrates the user's Zesh Passport status, making it a powerful tool for recognition and participation in web3 projects. Other projects can use it to identify user contributions to web3 and act as a filter for various campaigns.

Key Features:

- Digital Identity: A comprehensive profile integrating achievements and Zesh Passport status.
- Achievements as SBTs: Stores all user badges and accomplishments.
- Free Creation: An NFT profile is generated at no cost to the user.
- Integration: Used by web3 projects to identify and filter campaign participants.
- Recognition: Showcases user contributions and status within the web3 ecosystem.

Technology:

At its core, the Zesh NFT Profile of a user is created as a revolutionary digital identity and reward system designed to enhance user engagement, security, and recognition within the platform and beyond it.

Conceptual Framework

- Zesh ID as a Digital Identity: Zesh ID is an NFT assigned to each user, representing their unique digital identity within the Zesh ecosystem. This NFT is securely stored in the Zesh Wallet, a proprietary digital wallet developed to integrate seamlessly with our platform.

  Zesh ID encapsulates the user's profile, achievements, and engagement history, serving as a verifiable and immutable record of their participation in the Zesh community.

- Soul-Bound Tokens (SBTs) for Rewards: In addition to serving as a digital identity, Zesh ID incorporates a system of Soul-Bound Tokens (SBTs) that function as non-transferable badges and rewards.

  SBTs are assigned to users based on their activities, accomplishments, and contributions to the platform. These tokens are permanently bound to the user's Zesh ID, creating a unique and personalized record of their journey within the ecosystem.

Technical implementation

- Zesh Wallet Integration: Zesh Wallet is a secure digital wallet designed to store Zesh IDs and other digital assets. Built on industry-standard cryptographic principles, it enhances the safety and integrity of users' digital identities and rewards.

  The wallet supports seamless integration with the Zesh platform, allowing users to manage their Zesh ID and view their SBTs effortlessly.

- NFT Technology: Each Zesh ID is implemented as an NFT on SKALE Network, chosen for its security, scalability, and efficiency.

  The NFT standard ensures that each Zesh ID is unique, immutable, and verifiable. Users receive their Zesh ID upon registration and store it in their Zesh Wallet.

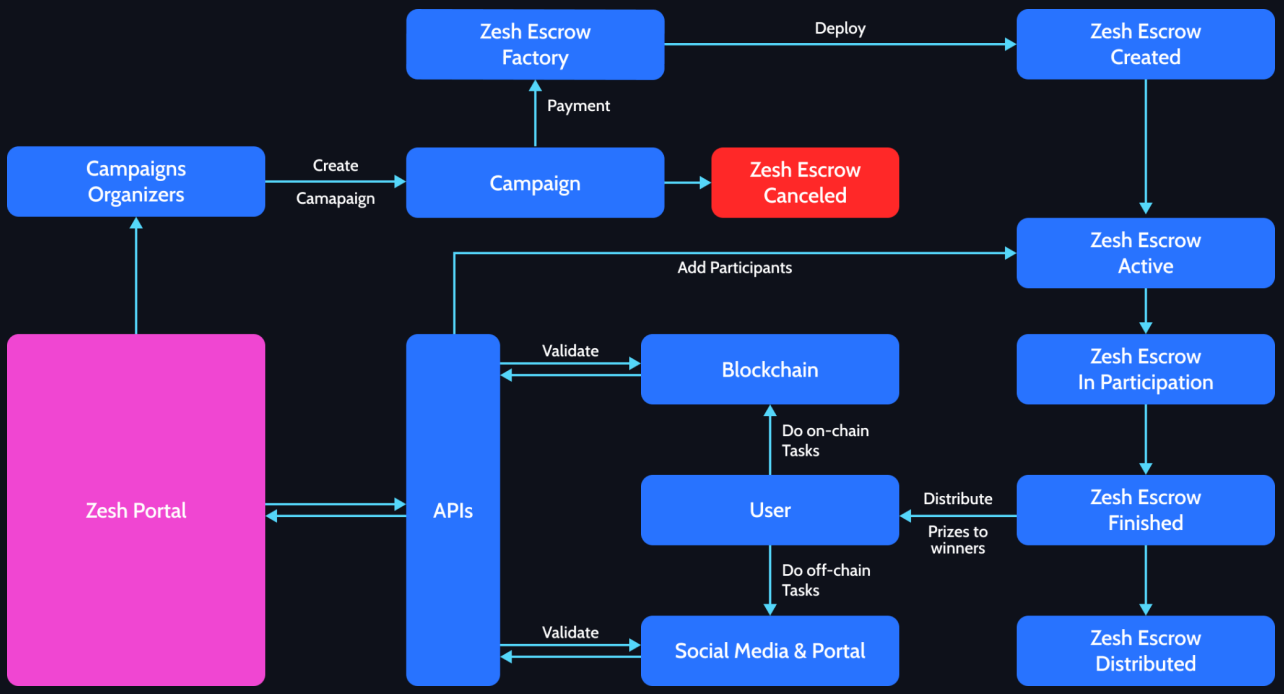
- Soul-Bound Tokens (SBTs): SBTs are special types of tokens that are non-transferable and permanently bound to the user's Zesh ID.

  These tokens are awarded based on predefined criteria such as task completion, event participation, milestones achieved, and contributions to the community.

  The issuance of SBTs is managed by smart contracts, ensuring automated, transparent, and fair distribution.

5.6 Zesh Portal with Escrow Contract

Zesh Portal is a comprehensive and intuitive platform designed to streamline the management of web3 project engagement strategies. It provides an extensive suite of tools for creating and managing campaigns, rewarding loyal users, and engaging with the community through gamification and advanced AI.



Zesh Escrow Contract:

A project manager will create a campaign to incentivize users to take actions that benefit the project. For this, the project/project manager will give users certain rewards like stablecoins, NFTs, etc.

In order for Zesh to be sure that the rewards are given to the users when a campaign is finalized, we will create an escrow contract that will hold the rewards + gas fees for distribution.

After exit conditions are met, Zesh must ensure that Campaign rewards are distributed to all active participants of the campaign. The way this distribution can take place is arbitrary and up to our implementation.

As a high-level description, the distribution can either be made completely on-chain (coins, tokens, NFTs) or off-chain (digital rewards).

The distribution/calculation can also be done on-chain, partly on-chain (using ChainLink Functions), or off-chain (using our backend and the scoring mechanism we have). Zesh's way of implementing rewards is currently going to be off-chain, but the distribution will be done on-chain.

Key Features:

- **Campaign and Reward Management:** Projects can effortlessly create and manage campaigns, offering various rewards to loyal users. This feature allows for the setup of tasks, progress tracking, and efficient reward distribution, ensuring active community participation.
- **Airdrop Campaigns:** Projects can organize their airdrops through a dedicated landing page on Zesh Portal. This feature provides transparency, real-time updates, and visual progress indicators to encourage user participation.
- **Extensive Gamification System:** Employing advanced gamification techniques helps to keep users engaged and maintains high levels of user interaction and excitement. Gamification also helps differentiate between uniquely human factors linked to dopamine reward circuits and bot activity.
- **AI-Driven Contribution Identification**: Zesh Portal utilizes sophisticated AI to identify genuine user contributions. This ensures fair reward distribution, recognizes true engagement, and maintains the quality of community interactions.
- **ZKML for Fair Distribution of rewards:** Zesh Portal integrates Zero-Knowledge Machine Learning (zkML) to ensure the fair distribution of rewards. This technology verifies the fairness of reward allocations, enhancing transparency without compromising user privacy.
- **SmartContract powered reward distribution:** to enhance trust and fair distribution of rewards, the prize pool is secured in an escrow contract and automatically distributed to the winning wallets
- **Ambassador Program:** Leveraging AI analytics, the Ambassador Program rewards top contributors with exclusive campaigns and badges. This program helps in cultivating a loyal and active user base, driving sustained engagement.
- **User Task and Reward System:** Users can earn rewards by completing tasks and supporting their favorite web3 projects. rewards are stored in their Zesh NFT profile, integrating their achievements and contributions into their digital identity.
- **Zesh Wallet Integration:** The Zesh Wallet provides a seamless onboarding experience, storing users' rewards. Users have the flexibility to withdraw their rewards to a bank account, exchange, or other wallets, ensuring ease of use.
- **NFT Profile and SBTs:** Each user has an NFT profile stored in their Zesh Wallet. This profile holds all achievements and badges as Soulbound Tokens (SBTs), creating a powerful digital identity that can be used across Web3 projects to verify contributions and unlock further opportunities.
- **Content Creators Network:** The portal supports a network of content creators by showcasing their contributions across platforms such as YouTube, TikTok, and blogs. This feature enhances project visibility and promotes collaboration with influencers.
- **Advanced Statistics Dashboard:** The dashboard offers comprehensive statistics, including visits, members, campaigns, tasks, participants, and rewards. This allows project managers to monitor performance and make data-driven decisions to optimize engagement and growth, tracking their return on investment across each campaign.

Zesh Portal empowers project managers by giving them the tools needed to effectively engage and reward their community, driving innovation and sustainable growth within the web3 ecosystem.

Technology:

Zesh Portal is one of the main products of the Zesh ecosystem, incorporating advanced technologies and a robust infrastructure to ensure seamless operation and scalability.

- **Frontend:** Built with modern technologies and a focus on user experience (UX), the frontend of Zesh Portal delivers an intuitive and responsive interface that enhances user engagement and accessibility across different devices.
- **Backend:** The backend architecture is composed of a microservice framework, ensuring modularity, scalability, and efficient management of different functionalities within the portal, facilitating smooth and reliable operations.
- **Blockchain Node & Connectivity Providers:** By integrating blockchain nodes and connectivity providers, Zesh Portal ensures secure, efficient, and real-time interaction with multiple blockchain networks, enhancing the platform's interoperability and performance.
- **Cloud Infrastructure:** Leveraging serverless and Platform-as-a-Service (PaaS) cloud infrastructure, Zesh Portal benefits from high availability, scalability, and reduced operational complexity, allowing the platform to handle increased usage and growth efficiently.

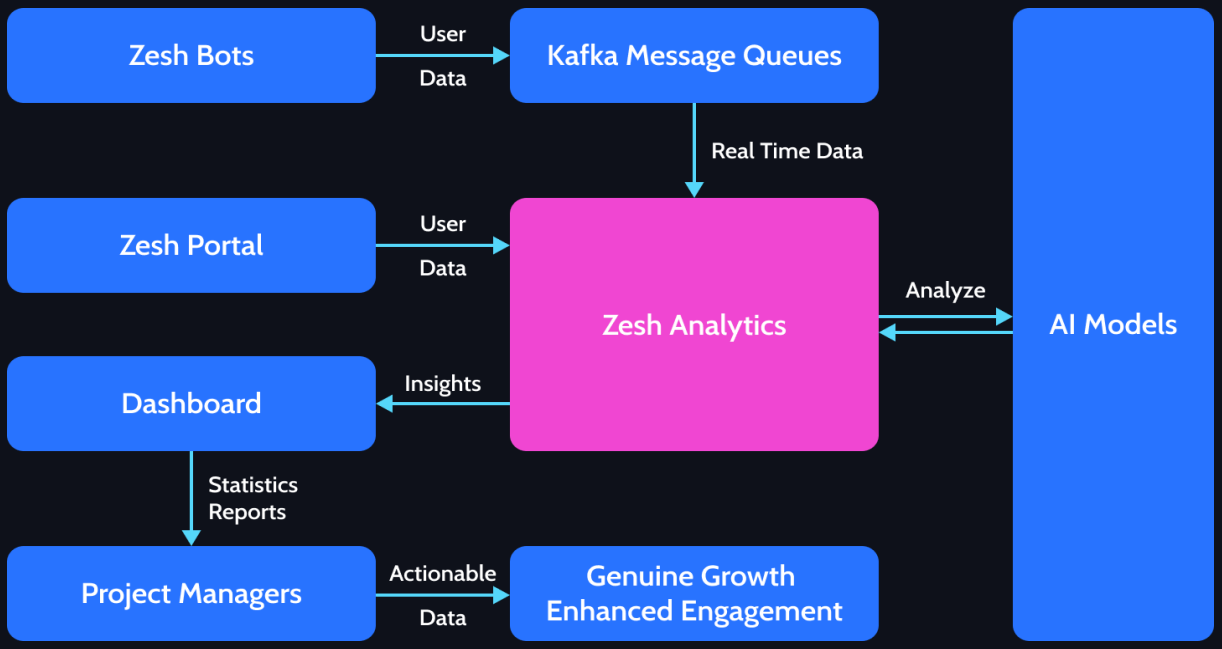
These technologies collectively enable Zesh Portal to provide a powerful, scalable, and user-friendly platform for managing Web3 project engagement strategies.

Use cases for Zesh Portal:

- Project managers can easily add and manage their web3 projects on Zesh Portal, enhancing visibility and user engagement. The portal supports tailored onboarding and engagement campaigns to attract and retain users.
- Zesh Portal's gamified system allows project managers to create interactive campaigns with customized tasks and rewards, driving higher engagement.
- Each project is linked to an escrow contract that securely holds rewards, ensuring transparent and automatic distribution upon campaign completion.
- Users join the Zesh Ecosystem, participate in campaigns, and earn rewards tracked in their Zesh Wallet. Completed campaigns trigger automatic reward distribution from escrow contracts.
- Project managers access a dashboard with comprehensive insights into campaign performance and user engagement, optimizing strategies for sustained growth and satisfaction.
- The portal supports a network of content creators by showcasing their contributions across platforms like YouTube, TikTok, and blogs, enhancing project visibility and promoting collaboration with influencers.
- Zesh Portal enables project managers to run ambassador programs, identifying and rewarding top contributors with exclusive campaigns and badges, cultivating a loyal and active user base.
- Using Zesh Portal, users' contributions are recorded and verifiable, enhancing transparency and trust. Achievements and badges are stored as Soulbound Tokens (SBTs) in users' NFT profiles, showcasing their contributions across web3 projects.

5.7 Zesh Analytics

Zesh Analytics leverages **AI agents** to deliver advanced insights and a comprehensive understanding of web3 communities. By analyzing member activity across Discord, Telegram, X, and other channels, these **AI-driven tools** provide actionable data to enhance community engagement and growth, enabling projects to optimize their campaign budgets.



Key Features:

- **Complex AI Solutions:** Our **AI agents** track and analyze user behavior across multiple platforms.
- **Advanced Insights:** Identify genuine users' contributions and assess community sentiment.
- **Observability**: Using AI Agents, we monitor conversations, popular topics, and overall sentiment.
- **Community Sentiment Analysis:** Gain a clear picture of the collective mood and engagement, identifying viral topics and pre-warning projects of potential missteps.
- **Actionable Campaign Insights: AI-driven analysis** identifies genuine Key Opinion Leaders (KOLs) and campaigns that deliver real results. Distinguish between zero-value invites and active member referrals, optimizing invite-a-friend campaigns.n zero-value invites and active member referrals, optimizing invite-a-friend campaigns.
- **Topic, Sentiment, and Engagement Tracking:** Identify top conversation topics and their sentiment, enabling proactive engagement and early intervention to address declining user involvement.

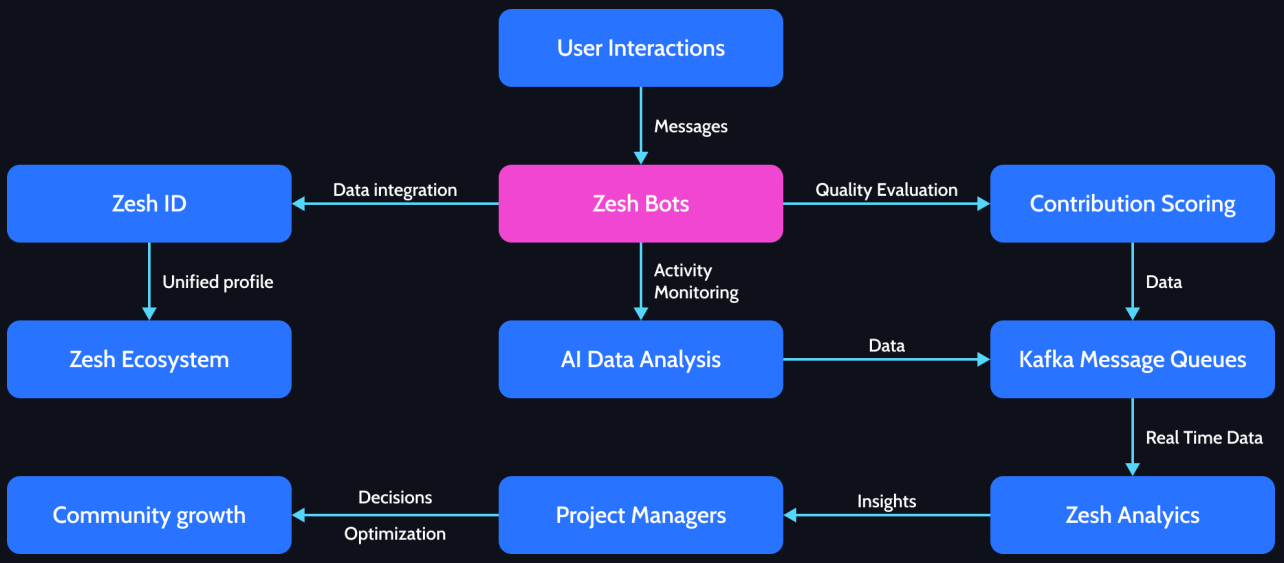
Technology:

Zesh Analytics uses advanced AI models and natural language processing (NLP) to analyze user interactions and community sentiment on Discord and Telegram. These models provide real-time, data-driven insights. Our AI-powered bots monitor and evaluate user activity, performing sentiment analysis and identifying key influencers with machine learning algorithms, ensuring accurate community insights.

5.8 Zesh AI Agents

Zesh Bots, our custom AI Agents will help web3 projects leverage the latest advancements in LLMs to enhance their community engagement strategies.

Telegram and Discord's APIs are an incredible platforms for building AI agents. By leveraging this Zesh will streamline and accelerate many of the tasks involved in managing and growing web3 communities.



Our Implementation Strategy:

- **Seamless Integration:** The APIs allow Zesh to create hybrid AI Agents that will be almost indistinguishable from real humans. These agents will respond to community inputs in a way that offers projects a flexible and reliable approach to many mundane tasks.
- **Customizable AI Models:** By integrating a variety of AI models, Zesh's AI Agents will constantly adapt to their roles through human reinforcement learning. This will ensure they can be used for as many aspects of managing web3 communities as possible.
- **Automation and Efficiency:** Our AI Agents can automate not only routine tasks but also offer real-time data analysis. Zesh will leverage this aspect to not only manage community interactions but also to deliver actionable insights based on real-time community sentiment, helping to capitalize on new trends and rapidly defuse any potentially negative issues.
- **Community and Collaboration:** Many web3 projects currently rely on outsourcing community management roles, which can prove ineffective and increase potential security risks. Zesh's AI Agents not only mitigate these security risks but also improve the reliability of 24/7 community management.

Zesh **AI agents** will become essential for managing and growing web3 communities. With the U.S. adopting a pro-crypto regulatory outlook, 2025 will bring unprecedented numbers of new users into the web3 space. The only cost-effective way for projects to keep up with rapidly growing communities will be to implement AI Agents - Zesh is ideally positioned to meet this growing demand.

Technology:

Our advanced **AI agents** are designed to manage web3 communities effectively on platforms like Telegram and Discord. They leverage a combination of **AI-driven analytics**, real-time data processing, and robust integration capabilities to ensure genuine engagement and recognize valuable contributions.

Activity Monitoring and Sentiment Analysis

- **Natural Language Processing (NLP):** Zesh Bots continuously track user interactions and utilize NLP techniques to analyze the sentiment of each message. This allows the bots to gauge community mood and engagement levels accurately.
- **Real-Time Data Processing**: These **AI agents** perform sentiment analysis dynamically, delivering immediate insights into user interactions and overall community health.

Contribution Scoring

- **Gamified Scoring System**: User interactions are evaluated using a gamified scoring system powered by **AI algorithms**. Scores are assigned based on sentiment analysis, helping identify and reward valuable contributions.
- **Quality Assessment:** The scoring mechanism ensures that only high-quality and relevant user contributions are recognized, fostering a more engaged and supportive community.

Integration with Zesh Analytics

- **Data Integration via Kafka:** Zesh Bots feed collected data into Zesh Analytics through Kafka Message Queues. This ensures efficient and real-time data processing and integration into the broader Zesh Ecosystem, including Zesh ID.
- **Continuous Data Stream:** Kafka facilitates continuous data streaming, allowing Zesh Bots to send real-time updates to Zesh Analytics for comprehensive community insights.

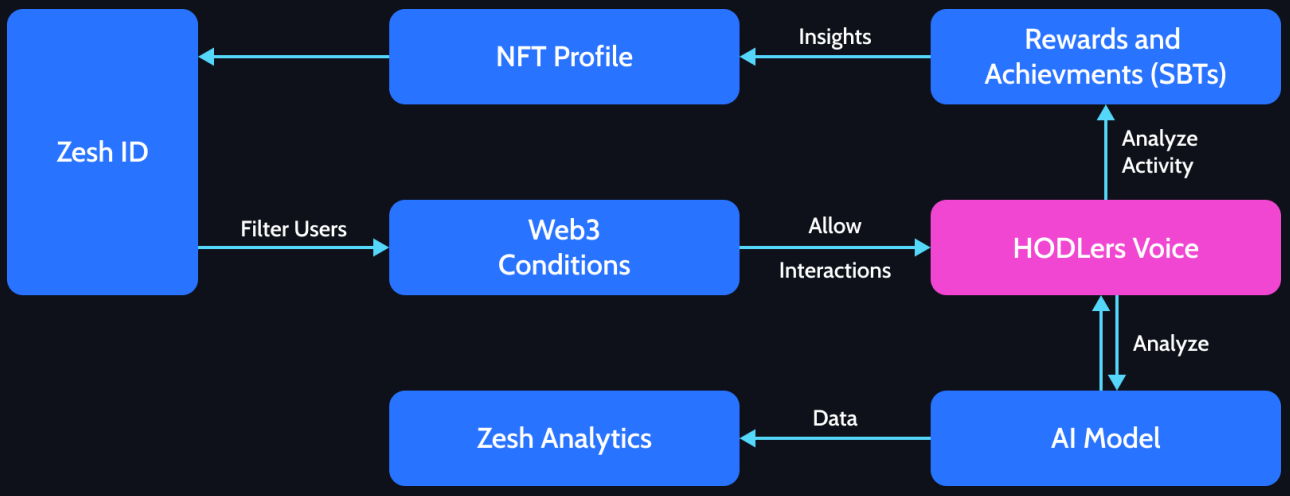
Data Ingestion and Processing

- Kafka Message Queues: Zesh Bots utilize Kafka for data ingestion, ensuring robust and scalable handling of real-time data. Kafka's message queue system allows for efficient streaming and processing of large volumes of data.
- Real-Time Analysis with Kafka: The use of Kafka enables real-time sentiment analysis and task verification. This ensures that data is processed as it is generated, allowing Zesh Agents and Bots to provide immediate and dynamic community management.

By integrating these advanced technologies, Zesh AI Agents serve as comprehensive **AI-driven solutions** for optimizing community management, ensuring genuine engagement, and driving sustainable growth within web3 ecosystems.

5.9 HODLers Voice

HODLers Voice leverages advanced technology to create a platform that fosters trust, transparency, and engagement within web3 communities. By combining blockchain technology, AI automation, and sophisticated web3 filters, HODLers Voice transforms casual users into committed HODLers who actively participate in project governance and development.



Key Features:

Blockchain Integration and SBTs

- Blockchain Storage: HODLers Voice uses blockchain technology to store activity badges as Soulbound Tokens (SBTs). These SBTs are linked to users' NFT profiles, providing a verifiable record of contributions and engagement.
- NFT Profiles: Each user's achievements and badges are stored in their NFT profile, ensuring a transparent and immutable record of their involvement in the community. This enhances user recognition and rewards within the ecosystem.

Web3 Filters

- Ownership-Based Access: HODLers Voice allows project managers to set specific Web3 filters to tailor user interactions. These conditions can include:
    - Holding a specific NFT: Only users who own particular NFTs can participate in certain activities.
    - Minimum Wallet Value: Users must have a minimum wallet value to engage in specific actions, ensuring that only serious participants contribute.
    - Token Ownership: Users must hold a specific token with a minimum amount to interact with the platform's features.

AI Automation and Moderation

- AI-Driven Moderation: HODLers Voice employs AI to automate the moderation of topics and comments. This technology ensures a positive and productive community environment by filtering out inappropriate content and managing discussions effectively.
- Sentiment Analysis: AI algorithms analyze user comments and feedback to gauge community sentiment. This helps project managers understand user perspectives and address concerns proactively.

User Proposals and Feedback Mechanism

- Proposal Submission: Users can propose new features, report bugs, and ask questions. These proposals are recorded on the blockchain, ensuring transparency and immutability.
- Voting and Commenting: The platform enables users to comment on and upvote proposals. This democratic process ensures that the most popular and beneficial ideas are highlighted and considered by the project team.

Interactive Community Engagement

- Real-Time Updates: The platform provides real-time updates on the status of proposals and community discussions, fostering continuous engagement and interaction.
- Progress Tracking: Users can follow the progress of their proposals, creating an unmatched level of trust and transparency. This feature helps maintain high levels of community involvement and satisfaction.

Pre-DAO Training and Engagement

- Skill Bridging: As projects transition to Decentralized Autonomous Organizations (DAOs), HODLers Voice plays a critical role in training and preparing the community. It helps users gain the necessary skills and knowledge to participate effectively in DAO governance.
- Active Participation: By encouraging user engagement and providing tools for meaningful interaction, HODLers Voice ensures that community members are well-prepared to take on active roles in DAO decision-making processes.

Data Security and Privacy

- Encrypted Data Storage: All user data and interactions are securely stored using industry-standard encryption techniques. This ensures that personal information remains private and offers a significant degree of protection from unauthorized access.
- Decentralized Infrastructure: The platform's decentralized architecture enhances security and resilience, minimizing the risk of data breaches and ensuring continuous availability.

HODLers Voice combines cutting-edge blockchain technology, AI-driven automation, and robust web3 filters to create a dynamic and engaging platform for Web3 communities. By providing tools for transparent and democratic interaction, it fosters trust, enhances user engagement, and prepares communities for the transition to DAO governance. This comprehensive technological foundation ensures that HODLers Voice is a vital tool for building and sustaining vibrant Web3 ecosystems.

6. Security Measures

At Zesh, the security of our users' data and assets is of utmost importance. We have implemented a wide range of security measures designed to enhance protections against a variety of threats and vulnerabilities.



Our approach to security encompasses several key areas:

Encryption

We utilize industry-standard encryption techniques to protect all user data both at rest and in transit. Data encryption is implemented using industry-standard algorithms, ensuring that sensitive information remains as secure as reasonably possible from unauthorized access.

Multi-Factor Authentication (MFA)

To enhance account security, Zesh supports multi-factor authentication. This additional layer of security requires users to verify their identity through multiple methods, significantly reducing the risk of unauthorized account access.

Secure Coding Practices

Our development team adheres to secure coding practices and conducts regular code reviews to identify and mitigate potential security vulnerabilities. We follow industry best practices and standards to ensure that our software is as resilient as reasonably possible against common attacks.

Regular Security Audits

We conduct regular security audits and penetration testing to identify and address potential weaknesses in our platform. These audits, which are performed by both internal security experts and external third-party firms, provide an objective assessment of our security posture.

Incident Response Plan

In the event of a security incident, Zesh has a pre-defined incident response plan in place. This plan outlines the steps to be taken to quickly and effectively respond to any security breaches, minimizing potential damage and restoring normal operations as swiftly as possible.

Data Integrity and Protection

To safeguard the integrity and availability of user data, we implement redundancy and backup solutions. Regular data backups ensure that, in the event of a system failure or data corruption, we can restore user data to its original state.

Smart Contract Security

Given the integral role of smart contracts in our platform, we place a strong emphasis on their security. All smart contracts undergo rigorous testing and formal verification processes to ensure they are free from vulnerabilities and function as intended. We also partner with leading security auditors for thorough evaluations and certifications, ensuring the high standards of security for our smart contracts.

Continuous Monitoring

We employ continuous monitoring tools to evaluate our systems for suspicious activity. Real-time alerts and automated responses help us quickly address potential security threats.

Compliance with Standards

Zesh is committed to compliance with relevant industry standards and regulations. We ensure that our security practices align with frameworks such as GDPR, ISO/IEC 27001, and others, providing our users with confidence in our commitment to protecting their data.

User Education and Awareness

We believe that user education is crucial in maintaining a secure environment. Zesh provides regular updates and training sessions to inform users about best practices in security and help them understand potential risks and how to avoid them.

Access Control

Strict access control measures ensure that only authorized personnel have access to sensitive data and critical systems. Role-based access controls (RBAC) and regular access reviews help us maintain a secure and compliant environment.

We understand that security is a continuous journey rather than a final destination. Our unwavering dedication to protecting user data and assets is demonstrated through our persistent efforts to enhance our security measures and adapt to new challenges in the digital landscape.

By integrating advanced technologies, adhering to stringent industry standards, and fostering a culture of security awareness among our users, we strive to create a secure and trustworthy environment for all. Our rigorous security protocols, combined with a proactive approach to incident response and user education, aims to ensure that Zesh remains a safe and reliable platform.

We are steadfast in our commitment to maintaining the high standards of security, thereby providing peace of mind to our users and fostering an ecosystem of trust and confidence in our platform.

7. *Token Utility*

The $ZAI token is the lifeblood of our ecosphere, serving as a multifaceted utility token that powers and enhances the entire platform. This helps to develop and maintain an organic demand for $ZAI.

Its utility extends across various key functions, including:

- **Access to Premium Features**
  Stakers of $ZAI gain access to premium features and services within the ZESH ecosystem. Staking unlocks advanced tools and capabilities to support their Web 3 projects.

- **Staking Rewards**
  Staking $ZAI will also grant the possibility for users to be rewarded for this action with certain non-inflationary rewards in the form of further digital tokens.

- **Payment and Transaction Discounts**
  $ZAI facilitates seamless payments and transactions within the ZESH ecosystem. All core ecosystem elements and features within the ZESH platform will offer discounts if the payment is made in $ZAI.

- **$ZAI Will be Deflationary**
  The ZESH platform will from time to time use its available treasury to purchase from secondary markets $ZAI tokens and burn them, thus putting deflationary pressure on the token.

- **ZESH AI Layer DAO**
  ZESH is not a DAO yet, but it will become one. In the meantime. $ZAI stakers can participate in voting on platform features proposals through the tool HODLers Voice. This tool will help transition towards a DAO, and it helps the community shape the future of the ecosystem.

- **$ZAI Staker Loyalty Program**
  The most loyal $ZAI stakers will receive enhanced rewards based on the duration and quantity of their stakes.

Expansion:

As the ZESH platform continues to grow and evolve, the demand for $ZAI may increase with each new client onboarded and the release of additional tools and services, thus creating a positive demand ecosphere.

In summary, the $ZAI token plays a central and diverse role within the ZESH ecosphere, offering a wide range of benefits and opportunities to token holders. It not only powers the platform but also fosters community engagement and growth.

8. *Use Cases*

Sybil Prevention

Sybil attacks are a significant threat in digital communities, where attackers create multiple fake identities to gain disproportionate influence. Zesh mitigates this risk through the Zesh Passport, a KYC-verified digital identity solution. Utilizing advanced zkML (zero-knowledge machine learning) technology, Zesh helps to ensure secure and privacy-preserving identity verification. This approach prevents the creation of multiple fake identities, maintaining a robust and trusted environment while empowering users to control their identity information.

Reputation System

Traditional reputation systems often operate independently, resulting in fragmented and non-portable reputation information. Zesh introduces a decentralized reputation system that aggregates an individual's contributions across various Web3 platforms using the Zesh Passport. Achievements and contributions are stored as Soulbound Tokens (SBTs), allowing users to showcase their reputation and accomplishments effortlessly. This decentralized approach enhances the trustworthiness and usability of reputation systems, making reputation data more interconnected and valuable.

Community Engagement and Growth

Building and maintaining an engaged community is crucial for Web3 projects. Zesh provides a suite of AI-powered tools designed to foster genuine engagement and growth. The Zesh Portal uses gamification to incentivize participation and loyalty. Users earn rewards by completing tasks and engaging in community activities, tracked through their Zesh Passport. This system ensures that contributions are recognized and fairly rewarded, promoting sustained community growth with comprehensive insights and advanced engagement techniques.

Fair Reward Distribution

Ensuring fairness and transparency in reward distribution is essential for maintaining community trust. Zesh employs zkML to verify and distribute rewards based on genuine user contributions. Advanced analytics provided by Zesh Analytics help identify key contributors and filter out inauthentic engagements. This fair and transparent approach to reward distribution fosters loyalty and trust within the community, ensuring equitable rewards and enhancing the overall engagement experience.

Decentralized Achievement System

Achievements and milestones are important motivators for users. Zesh introduces a decentralized achievement system where users' accomplishments are stored as SBTs in their Zesh Wallet. This system allows users to transfer and showcase their achievements across various web3 projects, enhancing their digital identity. The interoperability of achievements across different platforms adds value and incentivizes users to actively pursue and display their accomplishments.

Identity Verification and Privacy-Enabled Access Control

Traditional methods of identity verification can be cumbersome and prone to fraud. Zesh Passport provides a KYC-verified digital identity that is secure and user-friendly. Utilizing zkML technology, Zesh ensures tamper-proof and privacy-preserving identity verification. This allows users to access various privileges and events without compromising their privacy, enhancing security and user experience in identity verification and access control systems.

Gamified Community Building

Gamification is a powerful tool for enhancing user engagement and participation. Zesh's gamification features integrate seamlessly with community platforms like Telegram and Discord. Users earn rewards by completing tasks and being active on different channels on Telegram and Discord. These rewards are tracked and stored in the user's Zesh Wallet, creating a fun and interactive way to build and sustain community engagement. This gamified approach enhances user experience and fosters a vibrant and active community.

Enhanced Data Privacy and Control

Data privacy is a growing concern in the digital space. Zesh empowers users with control over their personal data through the Zesh Wallet and Zesh Passport. Users decide how their data is shared and utilized, ensuring privacy while participating in community activities and earning rewards. This approach protects user data and provides opportunities for users to monetize their data in a privacy-preserving manner, enhancing trust and engagement within the Zesh ecosystem.

Secure and User-Friendly Staking Mechanisms

Staking is vital for incentivizing token holding and supporting platform sustainability. Zesh offers user-friendly staking mechanisms integrated with the Zesh Wallet. Users can stake $ZAI tokens to earn additional rewards, fostering a committed and engaged user base. This staking system, verified through zkML, ensures fairness and transparency, providing an efficient way to incentivize long-term participation and support for the platform.

Comprehensive Analytics for Community Insights

Understanding community dynamics is essential for optimizing engagement strategies. Zesh Analytics provides advanced AI-driven insights into community sentiment, user behavior, and engagement patterns across multiple platforms like Discord, Telegram, and X. These insights help projects identify genuine Key Opinion Leaders (KOLs), optimize campaign budgets and proactively address declining user involvement. By offering actionable data, Zesh Analytics empowers projects to make informed decisions and drive sustainable community growth, setting it apart with its comprehensive and AI-powered analytical capabilities.

HODLers Voice: Pre-DAO Community Engagement and Feedback Tool

Transitioning to a DAO requires an active, engaged community. Zesh's HODLers Voice helps projects gauge community readiness by collecting and analyzing feedback from multiple channels, including Telegram and Discord. This tool allows users to propose features, report bugs, and ask questions, providing valuable insights into community needs. By tracking engagement metrics and fostering transparent interactions, HODLers Voice ensures projects can make informed decisions before transitioning to a full DAO.

Easy Onboarding with Account Abstraction

One of the significant barriers to entry for new users in the web3 space is the complexity of setting up wallets and managing digital identities. Zesh simplifies this process with account abstraction, creating a wallet and NFT profile for users automatically and at no cost. This easy onboarding experience ensures that even users unfamiliar with web3 can quickly and effortlessly join the ecosystem. The Zesh Wallet stores their digital assets, and the NFT profile keeps track of their achievements as SBTs, making the transition to web3 seamless and user-friendly.

9. *Tokenomics and Vesting*

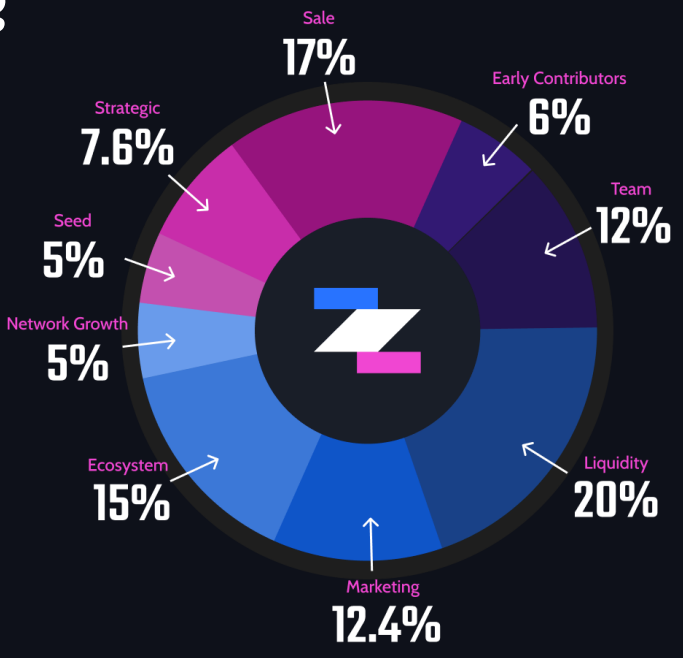
Initial Market Cap

$500,640

Valuation

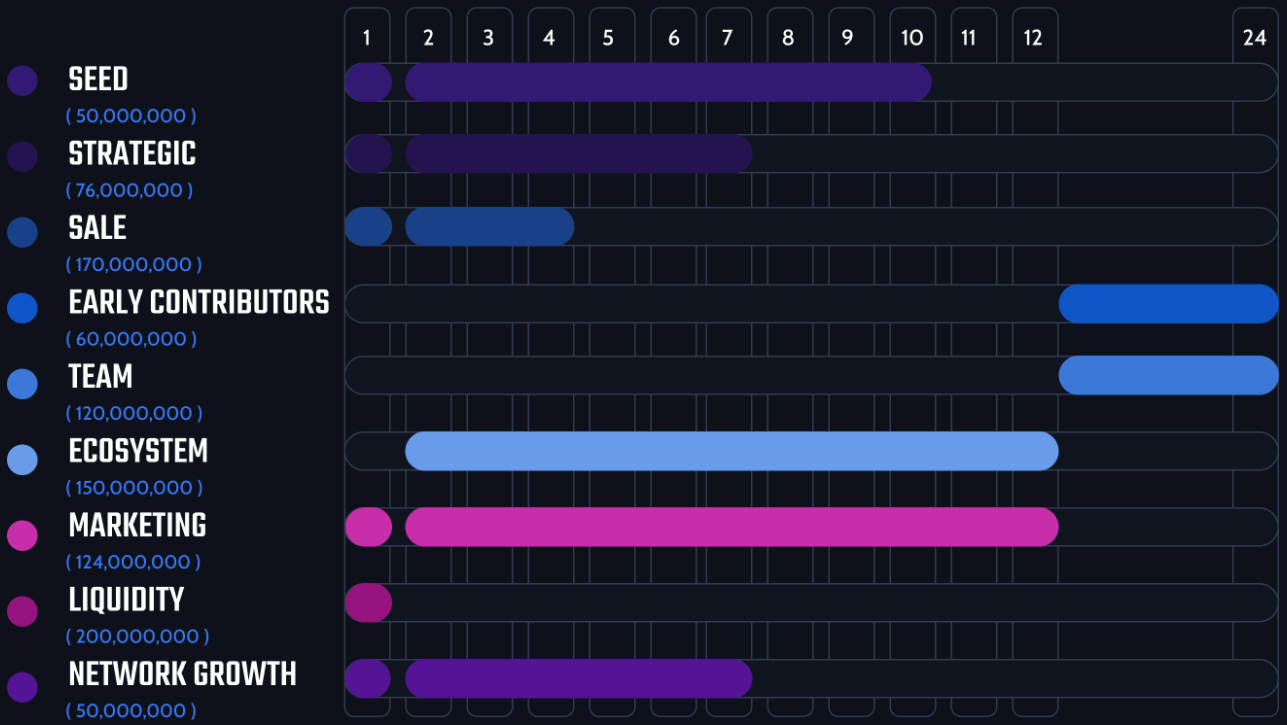
$6,000,000

Round	Price	USD	Tokens
Seed	$0.0025	$125,000	50,000,000
Strategic	$0.0050	$380,000	76,000,000
Sale	$0.0060	$1,020,000	170,000,000
	Total	$1,525,000	296,000,000



ZESH AI

Total Supply 1,000,000,000



SEED
10% initially, then a monthly linear release for 9 months

STRATEGIC
20% initially, then a monthly linear release for 6 months

SALE
35% initially, then a monthly linear release for 3 months

EARLY CONTRIBUTORS
0% at TGE, 12 months cliff, monthly linear release for 12 months

TEAM
0% at TGE, 12 months cliff, monthly linear release for 12 months

ECOSYSTEM
0% at TGE, monthly linear release for 12 months

MARKETING
1% at TGE, then a monthly linear release for 12 months

LIQUIDITY
Per Demand

NETWORK GROWTH
10% at TGE, then a monthly linear release for 6 months

10. *Finance and Profit Model*

Fund Raising: 2,105,000 USD

Fully Diluted Valuation: 10,000,000

Fund allocation

- Engineering: $1,105,000 - Development of core platform features. Integration of advanced AI and machine learning models. Enhancement of blockchain interoperability and scalability.
- Operations, Marketing, and Business Development: $700,000 - Operational expenses to maintain and expand platform capabilities. Comprehensive marketing campaigns to increase user adoption and brand awareness. Business development activities to forge strategic partnerships and expand market reach.
- Security: $125,000 - Implementation of robust security measures to protect user data and assets. Regular security audits and penetration testing by top security auditors.
- Legal & Compliance: $125,000 - Ensuring adherence to regulatory requirements in all target jurisdictions. Legal support for contract management and intellectual property protection.

The amounts of money will be adjusted based on the market updates and project needs.

Profit model

At Zesh, we've designed a profit model that balances user benefits with platform sustainability.

Here's how we do it:

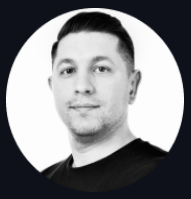
- ZESH's AI Agents will be monetized via ads and subscription fees.
- ZESH's AI ID product will be monetized by taking a flat fee or a percentage of the tokens the project is allocating to their campaign.
- Premium Subscriptions. We offer monthly subscriptions for advanced features like Zesh AI Analytics or HODLers voice. These services provide exclusive insights to keep you ahead.

These are just a few examples from our initial apps. The exact values will be established based on all third-party services, such as APIs we need for our AI Bots, Social Media Task verification, and other factors.

As we expand and introduce more apps, new revenue sources will follow, ensuring Zesh continues to deliver value and innovation.

11. *Core Team*

A skilled team is essential to the success of any project, and this is especially true in the web3 space. The challenges and risks of building a successful project are significant, and it takes a team of talented and experienced individuals to overcome them.



Marius Martocsan CEO

Serial entrepreneur with 20 years of experience building successful web2 businesses, including a bettors community and platform that sold for 7 figures. Proven leader and visionary with the skills to build ZESH and bring real utility and value for web3. LinkedIn

Ian Povey CCO

A seasoned writer and communication professional with a diverse portfolio spanning multiple industries and media formats. Able to leverage over two decades of experience in content creation, storytelling, and narrative shaping. LinkedIn

Ravpreet Grover CMO

Data-driven CMO with a passion for growth strategy, market penetration, and product innovation in the tech and web3 sectors. LinkedIn

Vlad Stanescu CTO

Tech-savvy serial entrepreneur; CEO, CTO and co-founder of ZentoShop / Blugento, founder of CashControl, with a focus on eCommerce, Fintech,
and business software. LinkedIn

Alexandru Ion CISO

Cybersecurity expert with 9 years in the field, seasoned in penetration testing, skilled at identifying web app vulnerabilities. LinkedIn

Ioana Caramavrov CAIO

AI specialist with a Master's in Computer Security & AI, adept in digital security, biometrics, deep learning. Developed security for banking apps, advanced in neural networks and AI research. LinkedIn

12. *Risks and Legal Consideration*

While ZESH is committed to enhancing the Web3 ecosystem and providing innovative tools and services, it's essential to acknowledge the potential risks and challenges that may impact the project's development and success. We believe in transparency and are dedicated to addressing these challenges proactively.

Market Volatility

The cryptocurrency market is known for its extreme volatility. Fluctuations in token prices and overall market conditions can impact the demand for ZESH tokens. We recognize that market volatility can affect the project's financial stability and the perception of its utility.

Regulatory Risks

The cryptocurrency landscape is subject to evolving regulations and government policies worldwide. Changes in regulations may affect our operations, compliance requirements, and the ability to provide certain services in some territories. We are committed to staying informed and adapting to regulatory developments.

Competitive Landscape

The web3 space is highly competitive, with numerous projects offering tools and services. While ZESH combines multiple functionalities, competition remains an ongoing challenge. We aim to differentiate ourselves through innovation, user-centric design, ease and speed of deployment, and blockchain agnosticism.

Technical Challenges

The development of web3 tools and services involves complex technical aspects. Potential challenges may include hitherto unknown security vulnerabilities, ensuring scalability, and maintaining a seamless user experience. Our team is dedicated to mitigating these challenges through rigorous testing and continuous improvement.

User Adoption and Engagement

The success of ZESH relies on user adoption and engagement within the web3 community. Achieving widespread adoption can be challenging, and retaining an active user base requires ongoing efforts. We are committed to fostering a vibrant and engaged community of users. We are poised to leverage our own set of tools, many of which are specifically designed to cultivate and nurture vibrant and thriving user communities.

Funding and Financial Risks

Like many projects, ZESH's progress depends on adequate funding and financial resources. Economic downturns or unforeseen financial challenges may impact our ability to execute our roadmap as quickly as we desire. Our core team is experienced at working within the lean startup environment and we will manage our finances prudently and explore diverse funding sources.

External Factors

ZESH's success can also be influenced by external factors, including macroeconomic conditions and technological developments. We remain vigilant and adaptable to ensure the project's resilience in the face of external uncertainties.

It's important to note that the risks and challenges outlined herein are not exhaustive and may evolve over time. ZESH is committed to proactive risk management, continuous improvement, and a forward-looking approach to overcoming these challenges.

Investors and users are encouraged to perform their own due diligence and consider these factors when engaging with the ZESH platform. We also recommend seeking professional advice before participating in cryptocurrency projects.

Disclaimer

The information provided in this Litepaper is for informational purposes only and may be subject to updates or revisions. Please be aware that the development and success of ZESH's tools and services depend on various factors, including market conditions and available funds. It is important to seek professional advice to assess the risks associated with investing in new crypto projects. ZESH is committed to making every effort for the project's success.