

Aether Wallet | Grant Proposal

Contact Details:

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Summary

This proposal aims to develop a user-friendly wallet for the Aztec network—Aether Wallet. The wallet will provide core functionalities such as account creation, import, transactions, and asset management, supporting both private and public transactions on the Aztec network. Our goal is to develop an MVP that meets the Aztec team's requirements within 12 weeks and continue to enhance it thereafter. Aether Wallet will focus on user experience, security, and developer friendliness, offering an SDK for easy integration into other applications.

Estimated Start and End Dates

- Start Date

: October 4, 2024

- End Date

: December 27, 2024

About Us

We are a development team from China, consisting of three experienced engineers:

- Blockchain Engineer

: Specializes in blockchain technology development, familiar with the Aztec network and privacy technologies.

- Full-Stack Engineer

: Experienced in both front-end and back-end development, responsible for system architecture, API and frontend development .

- Front-End Engineer

: Proficient in React and wallet development, responsible for UI/UX design.

Team members have multiple years of development experience in blockchain and Web3, and have participated in the award-winning Namada Shielded Expedition. We have an in-depth understanding of privacy technologies and account abstraction.

Detailed Plan

Technical Architecture

- Front-End

: Utilize React and ShadnUI to develop a responsive web application providing functionalities like account creation, import, transactions, and asset viewing.

- Back-End

: Use Node.js to provide necessary API services and signature verification functionalities.

- SDK Development

: Offer an easy-to-use SDK to help developers integrate wallet functionalities into their applications.

Features

- Account Management

: Support account creation and import, leveraging Passkey technology to enhance security and user experience.

- Transaction Functionality

: Support both public and private transactions on the Aztec network, providing a user-friendly transaction interface.

- Asset Viewing

: Display users' public and private asset balances, provide transaction history.

- PXE Integration

: Directly call the PXE library provided by Aztec to interact and handle the simulation and proof generation of private transactions.

- Developer Support

: Offer an SDK to help other developers integrate wallet functionalities.

Design Preview

We have completed part of the wallet interface design to demonstrate our commitment to this development. Below are some interface previews.

[

](<https://i.ibb.co/ZBkk6Yv/image.png>)Figure 1: Account Creation Interface

[

](<https://i.ibb.co/JRrVWdJ/image-1.png>)Figure 2: Asset Viewing Interface

Development Schedule

Week 1 - Week 2 (2024.10.04 - 2024.10.17): Project Kickoff, Architecture Design, and UI/UX Design

- Architecture Design

:* Determine technology stack and system architecture, including the overall design of front-end, back-end and SDK.

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- UI/UX Design

:* Complete the design of main interfaces.

- Define brand style and visual elements to ensure consistency with Aztec's branding.
- Gather user requirements and feedback to optimize the design.
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Week 3 - Week 5 (2024.10.18 - 2024.11.07): Core Functionality Development

- Front-End Development

:* Implement account creation and import interfaces, integrate Passkey functionality.

- Develop basic UI components, ensure responsive design.
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- Develop basic UI components, ensure responsive design.
- Back-End Development

:* Set up server environment, develop API services related to account management and authentication.

- Implement communication interfaces with PXE to handle account and transaction operations.
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Week 6 - Week 8 (2024.11.08 - 2024.11.28): Feature Enhancement and Integration

- Front-End Development

:* Develop transaction interface supporting public and private transactions.

- Implement asset viewing functionality, displaying users' balances and transaction history.
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- Back-End Development

:* Enhance transaction-related API services, handle transaction verification and submission.

- Strengthen communication with PXE to handle simulation and proof generation of private transactions.
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- SDK Development

:* Start developing the SDK, providing interfaces for account management and transaction functionalities.

- Write example code and documentation for developers.
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Week 9 - Week 10 (2024.11.29 - 2024.12.12): Testing and Optimization

- Functional Testing

:* Conduct comprehensive unit and integration testing to ensure all modules function correctly.

- Address discovered bugs, optimize code quality.
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- Performance Optimization

:* Optimize front-end loading speed and responsiveness.

- Improve the processing efficiency of back-end APIs.
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- User Experience Improvement

:* Enhance UI and interaction design based on testing results and user feedback.

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Week 11 - Week 12 (2024.12.13 - 2024.12.27): MVP Release and Documentation

- MVP Release

:* Complete the MVP version that meets the Aztec team's requirements.

- Deploy the wallet application, conduct final checks and verifications.

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- Documentation

:* Write user manuals to guide users in using the wallet's features.

- Write developer documentation detailing how to use the SDK.
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- Open Source Preparation

:* Organize the codebase to ensure code quality and readability.

- Choose an appropriate open-source license, prepare to open source on platforms like GitHub.
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Future Plans

After December, we will continue to enhance the following features:

- Advanced Security Features

: Modules such as multi-signature and batch transfers, etc.

- Key Recovery Mechanism

: Improve the key recovery process to enhance security.

- User Experience Optimization

: Continuously improve UI and interactions based on user feedback.

- Multi-Language Support

: Add support for other languages to expand the user base.

Grant Amount Requested: \$90,000

Budget Breakdown

Item

Unit Price

Quantity

Amount

Blockchain Engineer

\$2,000/week

12 weeks

\$24,000

Full-Stack Engineer

\$2,000/week

12 weeks

\$24,000

Front-End Engineer

\$1,600/week

12 weeks

\$19,200

Designer

\$2,000 (one-time)

1 time

\$2,000

Infrastructure Costs

-

-

\$3,000

Further Development Funds

-

-

\$17,800

Total

\$90,000

Grant Budget Rationale

- Personnel Costs

: Cover the salaries of the three engineers and designer to ensure high-quality project completion.

- Infrastructure Costs

: For necessary hardware and services like servers and testing environments.

- Further Development Funds

: Used for continuous improvement and support after the MVP release, including bug fixes, new feature development, and user support.

Questions and Requests

1. Communication Method

: As a development team based in China, we have strong proficiency in reading and writing English; however, our spoken English may not be as fluent. To ensure clear and accurate communication, we prefer to interact primarily through written correspondence when collaborating with your team.

1. PXE Browser Support Timeline

: Could you please inform us when the Aztec team expects to support PXE in browsers? This information will help us better plan our integration with PXE.

1. Open Source License

: Our code will be open-sourced. Does Aztec have a preferred open-source license, or can we decide on the license ourselves?

We believe that Aether Wallet will provide a secure and convenient experience for Aztec network users, promoting the development of the Aztec ecosystem. We look forward to collaborating with the Aztec team to achieve this goal.