TxShield (Predict the Risk. Prevent the Loss.)

Introducing TxShield: A Comprehensive Approach to Enhancing Security and Efficiency in Decentralized Transactions

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Problem: Gas Fees and Contract Scams in Web3

Gas Fee Loss

Web3 users often incur losses from gas fees on failed transactions.

This issue stems from wallets not fully simulating transaction behavior before execution.

Contract Scams

Users risk financial loss from contract scams, such as honeypots.

These scams exploit the lack of transparency in smart contract interactions.

Solution: Introducing TxShield

Outcome Preview

TxShield is a transaction simulation platform that previews outcomes before execution.
This empowers users to make informed decisions.

Revert Detection

TxShield identifies reverts and contract traps during simulations. This feature alerts users to potential issues in advance.
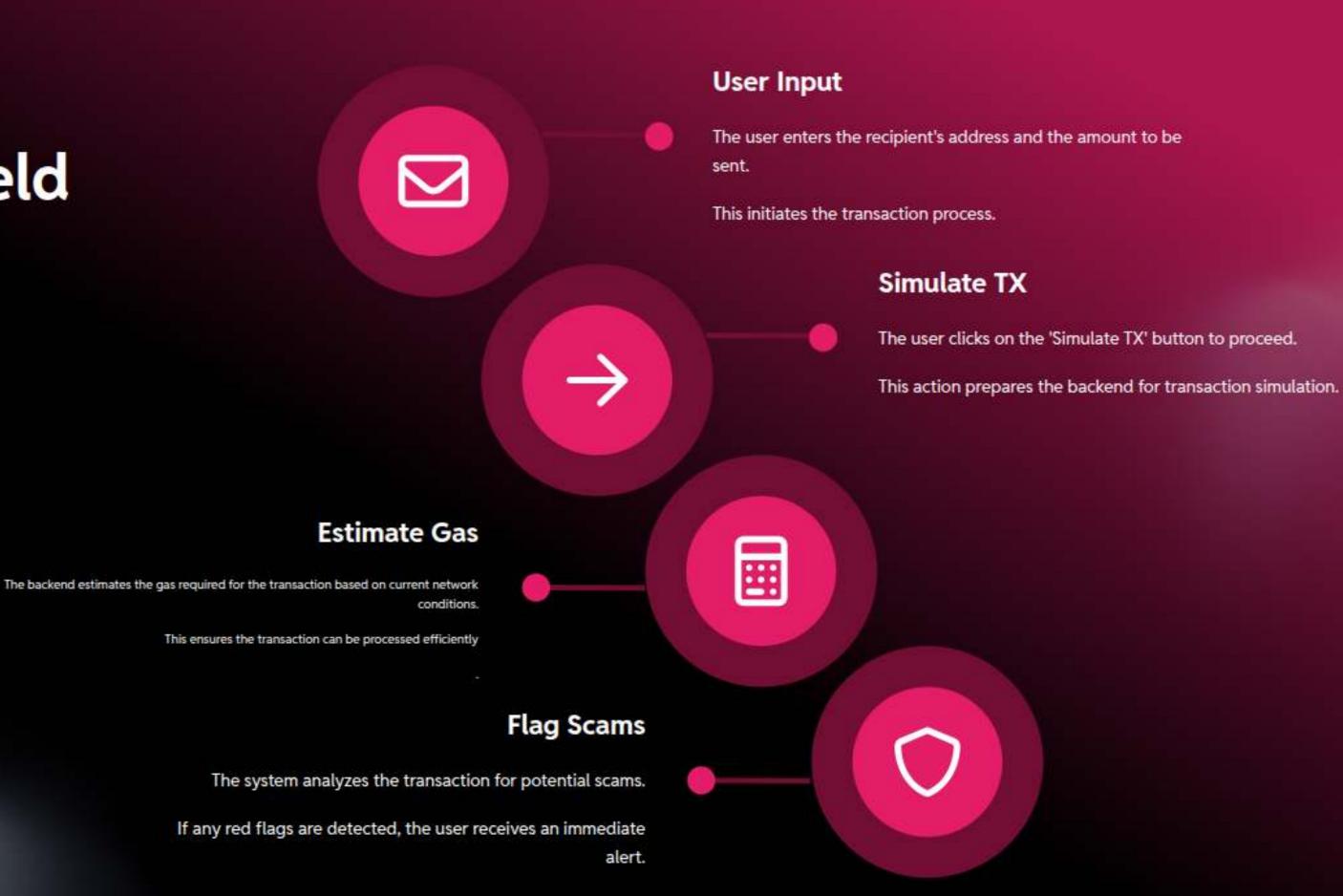
Gas Estimation

TxShield offers precise gas estimates using Ethers.js. This enables users to optimize their transaction costs effectively.

How TxShield Works

User Input

The user enters the recipient's address and the amount to be sent.

This initiates the transaction process.

Simulate TX

The user clicks on the 'Simulate TX' button to proceed.

This action prepares the backend for transaction simulation.

Estimate Gas

The backend estimates the gas required for the transaction based on current network conditions.

This ensures the transaction can be processed efficiently

Flag Scams

The system analyzes the transaction for potential scams.

If any red flags are detected, the user receives an immediate alert.

Market Opportunity in Web3

Wallet Users

50M

There are approximately 21 million monthly active metamask wallet users in the Web3

Failed Transactions

$100K

In a single instance, users lost over $100,000 due to failed transactions on the Ethereum network.

Honey Pot Scams

$103M

Between 2018 and 2024, scams exploiting Ethereum's slow liquidity drain resulted in cumulative losses exceeding $103 million.

Tech Stack of TxShield

NEXT Framework

Used with react custom hooks,different libraries.

Ethers.js Integration

Ethers.js enables interactions with the Ethereum blockchain.

It provides a secure way to manage accounts and transactions.

Contract Scanner

A contract scanner analyzes smart contracts for vulnerabilities.

This tool identifies potential risks before deployment.

Honeypot Checks

Honeypot checks detect malicious contracts that trap users' funds.

This feature enhances user security by preventing fraudulent activities.

MVP Prototype Ready

The Minimum Viable Product (MVP) prototype is fully developed and ready for testing.

It showcases the core functionalities of TxShield.

Vision and Roadmap for TxShield

MVP Completion

The Minimum Viable Product (MVP) has been successfully completed.

Wallet API

The Wallet API is under development.

AI Prediction

We plan to integrate AI for contract prediction in the future.

Contract Analysis

We will enhance contract analysis features for better insights.

UI/UX Overhaul

A comprehensive UI/UX overhaul is planned for next quarter to improve user experience.

Funding Request and Utilization

🛡 Threat Detection

We aim to enhance our threat detection capabilities with advanced algorithms.

This will allow us to identify and mitigate risks more effectively.

🗄 Contract Database

The funding will help us expand our contract signature database.

This expansion will streamline our operations and improve compliance.

🖴 Backend Optimization

We plan to optimize our backend systems for better performance.

This will lead to faster processing times and improved user experience.

$ Beta Launch

The funds will support the launch of our beta program for early users.

This initiative will provide valuable feedback for further development.

Business Model

API Licensing

- API licensing enables seamless integration for wallet providers.
- This model generates steady revenue based on usage.
- It allows access to a broader market of wallet services.
- The focus is on establishing scalable, long-term partnerships.

Premium Feature Fees

- Charging for premium features offers flexibility to users.
- This model targets those requiring advanced functionalities.
- It can result in higher revenue per user compared to licensing.
- The emphasis is on improving user experience and satisfaction.