**Development of a Dual-Currency HD Wallet with Standard Operations**

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**GitHub:** <https://github.com/garbuzshay/HD-Wallet.git>

**Deploy:** <https://hd-wallet-wm7w.vercel.app/>

**Description**

The Wallet Project is a secure and easy-to-use web application designed for managing cryptocurrencies. It allows users to create and restore wallets, monitor balances in real-time, and conduct secure transactions. Built with React.js, the application interacts seamlessly with blockchain networks using Ethers.js. Tailwind CSS is used for styling, ensuring that the app looks good on any device. The app supports the Ethereum and Arbitrum coins, making it versatile for different blockchain ecosystems.

**Key Features**

1. **Wallet Creation and Restoration**: Users can securely generate new wallets or restore existing ones using mnemonic phrases, with all sensitive data encrypted for security.
2. **Balance Viewing and Management**: Provides the functionality to view real-time cryptocurrency balances and manage assets across different blockchain networks.
3. **Transaction Execution**: Enables users to securely send cryptocurrencies, supported by real-time transaction status updates.
4. **Responsive Design**: Utilizes Tailwind CSS to deliver a responsive layout that adjusts and optimizes the user experience across desktops, tablets, and mobile devices.

**Technologies Used**

* **React.js**: Utilized for building the dynamic user interface.
* **Ethers.js**: Manages interactions with Ethereum and other compatible blockchain networks.
* **React Router DOM**: Handles navigation and routing within the application, ensuring efficient user flow.
* **Crypto-JS**: Used for encrypting and decrypting sensitive information, enhancing security.
* **Tailwind CSS**: Provides the responsive and customizable styling framework that adapts the application’s design to any screen size.

**Architecture**

The application’s structure revolves around a central App.js file, which employs React Router for navigation and a WalletProvider for managing global state related to wallet operations.

The project is divided into several key components and pages, including Home, Wallet Dashboard, Create/Restore Wallet, and Send Transaction pages, each designed to handle specific functionalities within the wallet ecosystem.

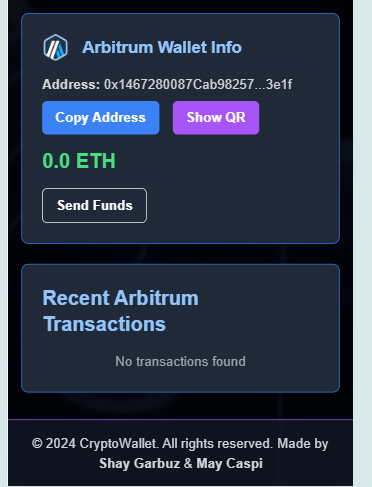
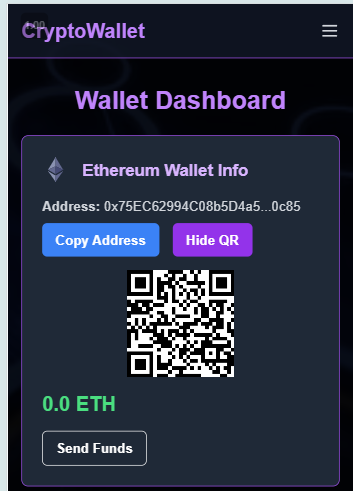
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