WTIST Stablecoin:
The future of trading oil

Introducing a stablecoin tied to the price of Western Texas Intermediate (WTI) crude oil, featuring a rebalancing mechanism to maintain price stability.

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Project Overview

Stablecoin

Represents the price of WTI crude oil and is traded on a DEX.

Rebalancing Mechanism

Automatically adjusts token quantities to maintain price stability.

Goals

- Design a stablecoin that represents a crude oil index
- Frontend functionalities
  - Swap token
  - Status and process
- Include a public blockchain:
  - Arbitrum (L2 on Ethereum)
- Rebalancer Service

Tech Stack

1

Frontend

Vue.js, Vite, Typescript, ethers.js, PrimeVue.

2

Backend

REST API, Python, Web3.py, Flask

3

Uniswap

Uniswap contracts for pool creation and swapping.

4

Blockchain

Smart Contracts (Solidity, Hardhat, multisol, Arbitrum)

Backend Key Features

1 **Real-time WTI Price Tracking**

Monitors WTI prices using Chainlink's price feed.

2 **Liquidity Pool Ratio Analysis**

Checks the liquidity pool ratio ratio every 5 minutes.

3 **Automated Swap Mechanisms**

Adjusts token quantities to stabilize the stablecoin's price.

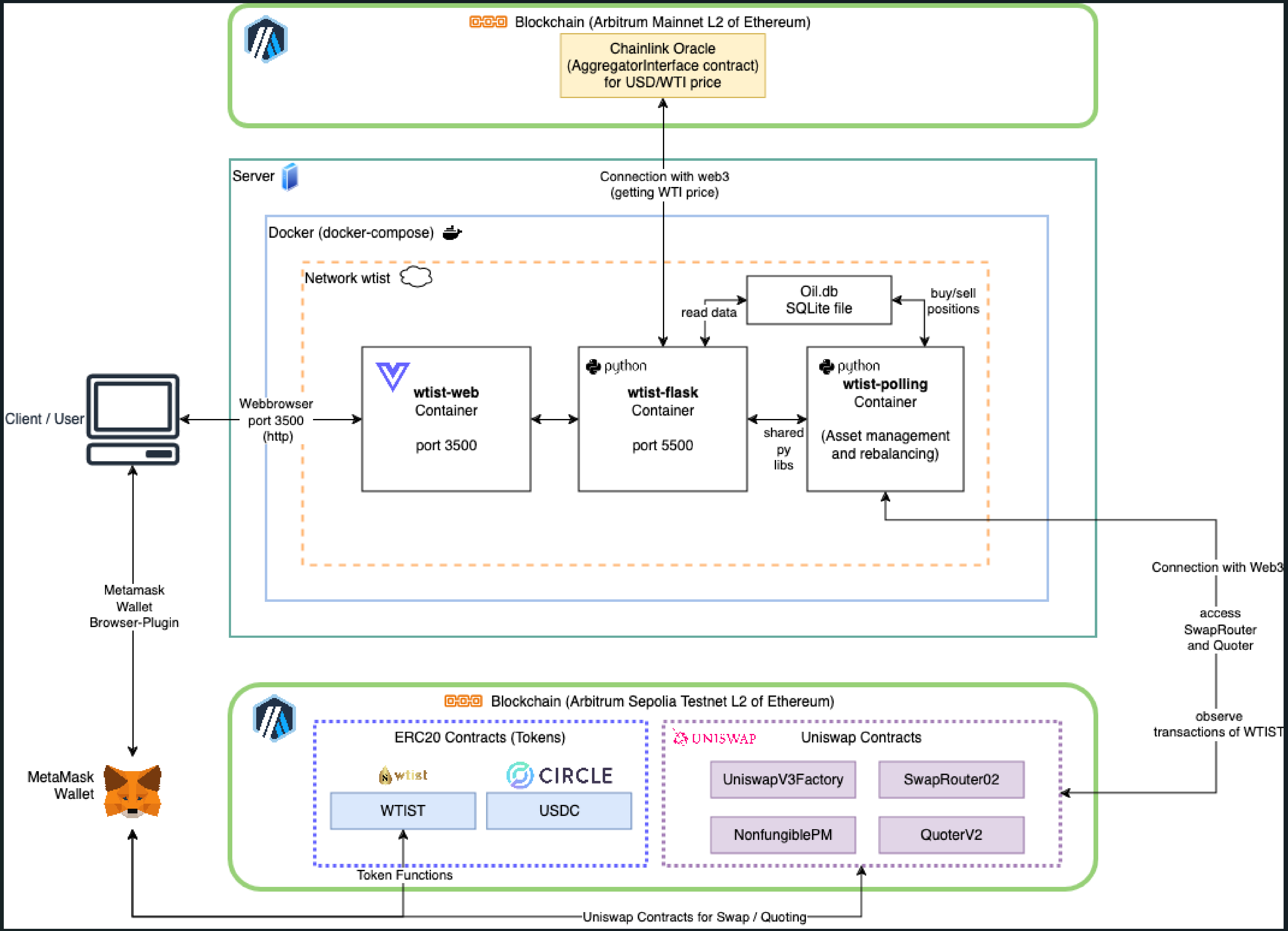
Frontend Key Features

1. **Connect with Metamask**
   - Display your WTIST balance
   - Real-world asset equivalence

2. **Interactions**
   - Swap Tokens
   - Transfer Tokens

3. **Transparency & Stability**
   - Display total oil reserve

Architecture



Future Opportunities

Liquidity Pool Incentives

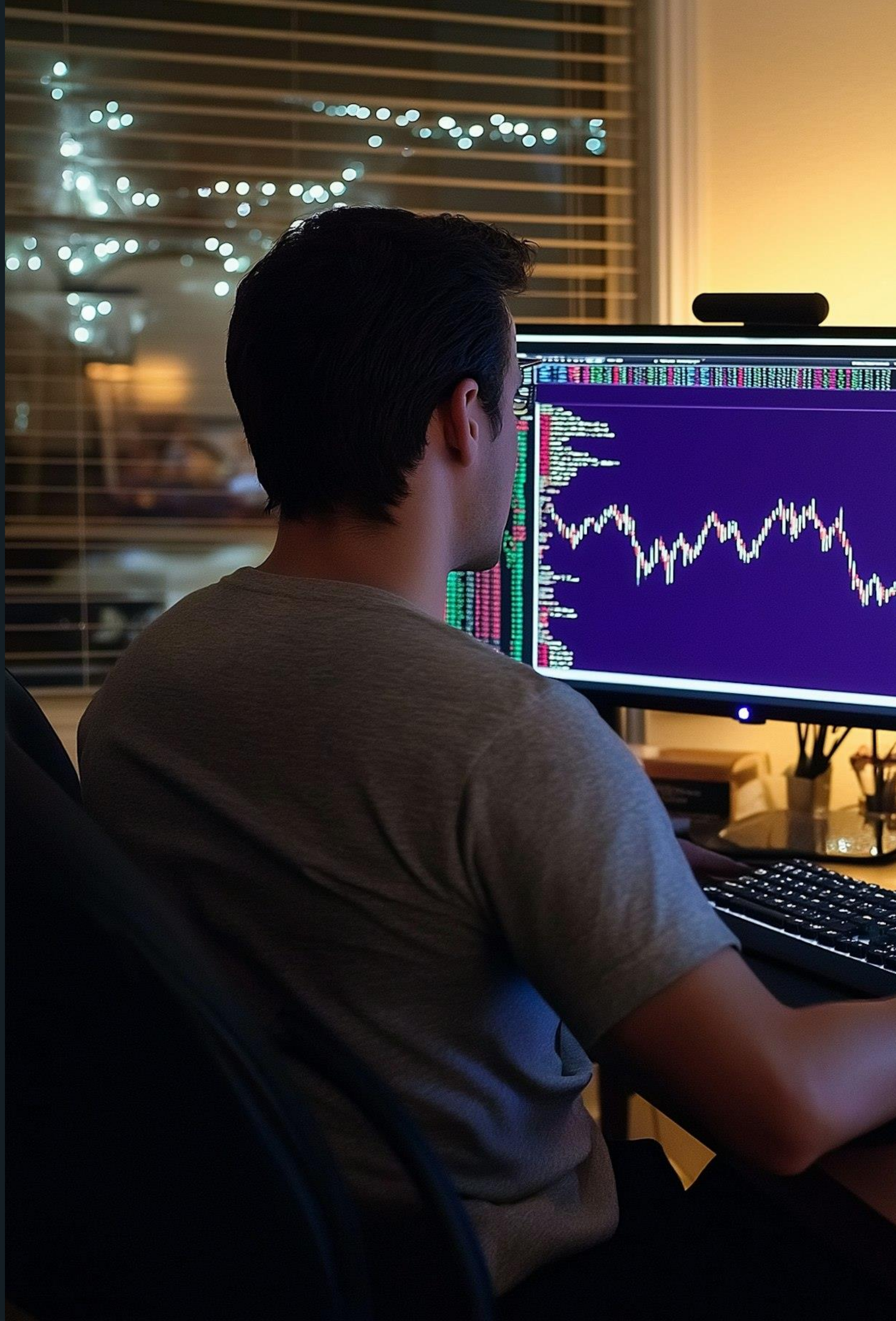
Implement Uniswap staking rewards for long-term token holding.

Direct Trading Integration

Add in-app buy/sell functionality for seamless trading.

Advanced Risk Mitigation

Expand over-collateralization strategy and develop hedging mechanisms.



Conclusion