DeFi Case Study

Task 1. Smart Contract

As a defi developer for a trading company, you have to create a smart contract that will allow traders to:

- deposit and withdraw funds (ETH and ERC20 tokens)
- wrap and unwrap ETH (or another native token if contract is on another EVM chain)

Requirement 1: Account for solidity and security best practices.

Requirement 2: Provide a link to a repository containing your solution; the repo should be private.

Assumption 1: only a limited number of traders should be able to withdraw and wrap/unwrap.

Task 2. Deployment
Deploy the contract on a test network of your choosing (Ropsten, Kovan, etc.) and provide a link to the deployment transaction.

Task 3. Optional

a) Modify the contract so that traders will be able to execute trades against Uniswap or another Uniswap alternative.

   ◦ Assumption: Every trader should be able to trade the entire balance of the contract.

b) If we were to expand to other trading platforms, explain how we could do that with the smart contract you have written.

c) If we were to deploy the contract to another blockchain (such as Bitcoin, BSC, Polygon, Solana, etc.), explain how we could achieve that.

Guide/instructions

Do not spend more than half a workday on it, if you don't manage to finish it – do provide a written explanation of what was hard and what else you would have done if you had more time.

Share code with:

https://github.com/pkostov-wmt

https://github.com/kayinnn