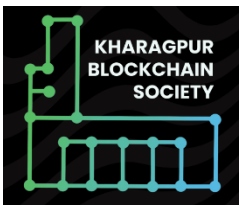

Kharagpur Blockchain Society

Task 1-

Read the Bitcoin white paper

write 1 page report on any of the following areas

1. Halving of Bitcoin
2. On Chain performance of Bitcoin
3. Technical Architecture of Bitcoin
4. Proof of work vs proof of stake and Hybrid consensus mechanisms
5. Price sensitivity of Bitcoin using technical parameters of trading (like Bollinger bands, SMA, moving averages etc)

Task 2-

Please go through the course material up to Chapter 4. In Lesson 4, there's a fund-me contract that you should understand. Take the time to grasp how the contract is created and then proceed to complete the given task. (Although you can directly jump to Lesson 4 but It's recommended to watch the entire course from the beginning to Lesson 4 better comprehend the code and successfully accomplish the task)

Reference video

Learn Blockchain, Solidity, and Full Stack Web3 Development with JavaScript – 32-Hour Course - YouTube

Github link associated with the course

GitHub - smartcontractkit/full-blockchain-solidity-course-js: Learn Blockchain, Solidity, and Full Stack Web3 Development with Javascript

a: **Ensure Unique Addresses in the Funders Array**
In the provided Fund-Me contract, you need to modify the Funders array to ensure that it only contains unique addresses. This modification will prevent the inclusion of duplicate addresses in the array. By making this change, the contract will maintain an accurate record of individual funders, avoiding any potential discrepancies or errors. Ensuring unique addresses will enhance the integrity and reliability of the Fund-Me contract.

b: **Transfer Ownership Functionality**
The current implementation of the Fund-Me contract designates ownership solely to the address that deployed the contract. However, as part of the task, you are required to either create a new function or modify an existing function to enable the transfer of ownership to another address. This modification will allow the contract deployer to transfer ownership rights to a different address, facilitating the delegation of responsibilities and ensuring smooth contract management. By implementing this functionality, the Fund-Me contract becomes more versatile and adaptable to changing ownership dynamics.

c: **Removal of Chain-Link Integration**
In order to simplify the contract implementation, you are requested to remove the Chain-Link integration from the Fund-Me contract. Although Chain-Link provides powerful external data integration capabilities, eliminating this aspect will streamline the contract's complexity. By removing the Chain-Link integration, the contract's focus will primarily be on handling the funders' contributions and maintaining ownership functionality.

How to submit ?

Make a github Repo for the code and doc link for the research(remember to select anyone with the link can view) and
paste the link in the form- https://forms.gle/diCVrWgqLbwahnPu6

Note:-Please understand that it's alright if the code is not perfect or if there are some parts missing. What matters most is your enthusiasm and effort towards learning blockchain concepts although we would be glad to see the perfect code .
We appreciate your dedication and look forward to seeing your passion for exploring the world of blockchain and expanding your knowledge.

All the best !