## **Distributed Lab**

## Certificate

This certifies that

## **TOPICS**

Ethereum capabilities and differences from Bitcoin • Ethereum basics (ether currency, gas, EOA, contracts) • Must-know components

(Metamask, Etherscan) • Transaction structure (nonce, value, receiver, gas price, gas limit, data, signature) • Public and private keys for ECDSA

Block structure (timestamp, gas limit, nonce, header) • Lifecycle of the smart contract • Hardhat & Remix • Smart contract ABI

Working with money • Single-threaded development • Constant & static & dynamic data types • Functions (view, payable) • Events and error handling • Calling other contracts • Stack, memory, storage, calldata, returndata • Inline assembly brief • Libraries (external, internal)

Proxy, delegatecall • Working with signatures & precompiled contracts • Bytecode structure • What is tokens ERC20, ERC721, ERC1155



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