cumentation for Blockchain-Based Job Directory Application

Overview: This application simulates a blockchain-based job directory where each job listing is treated as a block in the chain. The blockchain guarantees data integrity, ensuring no modification of job listings. Users can add, search, and verify the integrity of job listings.

Cryptographic Hashing: We use SHA-256 hashing to ensure the integrity of each block. Each job listing's data is hashed and linked to the previous block. If a job listing is modified, its hash changes, making the entire chain invalid, thus maintaining the integrity of the directory.

Challenges and Solutions: - One challenge was ensuring the cryptographic integrity of the job listings. The use of SHA-256 hashing ensures that any changes to the listing are immediately detected by comparing the hashes. - Another challenge was linking blocks together, which was solved using pointers to the previous block's hash.

Conclusion: This job directory blockchain application successfully demonstrates blockchain principles such as immutability, data integrity, and decentralized record-keeping using SHA-256 hashing. ~