Medical Report Management & Distribution System on Blockchain

1) Background/ Problem Statement

In the current era of advanced technology, patient data such as name, personal information, and ailment condition are highly insecure and frequently violated. Patients' Electronic Health Records (EHR) are easily accessible to unauthorized external parties and are easily accessed by hackers. This results in an imbalance between data accessibility and security. This is something that blockchain technology can help with.

Our project, Medical Report Management & Distribution System on Blockchain, is designed to secure medical reports and provide a safe way of accessing the clinical data of patients for their caretakers and doctors using cryptography and decentralization.

The proposed system also maintains the balance between data accessibility and security. The proposed framework helps doctors, patients and caretakers to securely store and access patients' medical data in EHR.

2) Working of the Project

This Python-based project is designed to maintain and distribute patients' medical records efficiently and effectively. It consists of 3 modules: Hospital, Pharmacy and Pathology Lab.

Hospital administrators can manage all the data related to Pharmacies, Pathology labs and Patients. Pharmacy can add and view patients' bills. The Pathology Lab add and view patients' reports in this system.

In this project, Html, CSS and JavaScript are used in the front end and Dotnet is used in the back end. The Database used is MSQL and the IDE used is Visual Studio.

3) Advantages

- It is easy to maintain.
- The system is user-friendly.
- Doctors can keep track of their patient's medical.
- The system facilitates accurate decision-making in diagnosis by accessing up-to-date medical history.
- Patients' medical records are maintained and distributed securely.