

Login Page:

The login page is the gateway for users to access the Patient Data Management System. It typically consists of a username and password field where users input their credentials. Some login pages may also incorporate additional security features such as multi-factor authentication like a secret key.

Behind the scenes, the login page interacts with the system's authentication mechanism to verify the user's credentials. This process involves comparing the entered username and password against stored credentials in the system's database.

Upon successful authentication, users are granted access to the system and directed to their respective dashboards or landing pages based on their roles and permissions.

Patient Login:

Patients utilize their unique login credentials to access the system and manage their related information. Upon logging in, patients are presented with a personalized dashboard where they can enter their details and get bills from the medical department and they will add the bills to the blockchain. There is another option for them to view the result from the cross verification done by Insurance company.

Hospital Department:

The Hospital Department is one of the key entities within the Patient Data Management System responsible for managing patient data within the hospital's infrastructure. Staff members in the Hospital Department are tasked with creating and maintaining patient IDs, which serve as unique identifiers for individuals within the system. Staff members collaborate with medical professionals to

ensure that accurate and up-to-date information is recorded for each patient, contributing to effective patient database management

The Hospital Department interface may include features such as patient Id creation, modification.

Medical Department:

The Medical Department works closely with the Hospital Department to input medical information and add bills into the block chain along with unique patient Id. This department ensures that all medical bills and treatment details are accurately recorded and associated with the corresponding patient IDs.

Medical staff members play a critical role in maintaining transparency and integrity in billing processes, reducing the risk of errors, inaccuracies, or fraudulent activities.

Insurance Company:

The Insurance Company interacts with the Patient Data Management System to verify medical bills submitted for insurance claims.

Insurance agents and claims processors access patient records to review and cross-check bills provided by healthcare providers against those submitted by patients.

By leveraging the system's capabilities, insurance companies can streamline the claims verification process, identify any discrepancies or irregularities in billing, and prevent fraudulent activities.

The Insurance Company interface may include features such as claims processing tools, bill verification functionalities, data analytics dashboards, and communication channels with healthcare providers to facilitate efficient claims management.

Blockchain:

Blockchain technology serves as the underlying framework of the Patient Data Management System, ensuring the security, immutability, and transparency of patient data and financial transactions.

Each transaction, such as the creation of patient IDs, addition of medical bills, and verification of insurance claims, is recorded as a block on the blockchain.

The decentralized nature of blockchain eliminates the risk of data manipulation or tampering, enhancing trust among all parties involved in the healthcare ecosystem, including patients, healthcare providers, and insurance companies.

Blockchain technology provides a secure and transparent platform for managing patient data and financial transactions, reducing the risk of fraud, errors, or unauthorized access to sensitive information.