Abstract

The **Global Medifile** is an innovative digital platform designed to centralize and streamline the management of patient medical records on a global scale. This system ensures secure access to patient files, enabling authorized users such as doctors, hospitals, laboratories, and individual users to upload, manage, and retrieve patient data efficiently. Each patient is assigned a **unique identity number**, ensuring privacy and accessibility only to authorized entities. The application facilitates seamless collaboration among healthcare professionals, allowing doctors to access a patient's complete medical history even when consulting across different locations. Developed using **Python (Django)** as the backend framework, along with **HTML, CSS, and JavaScript** for a responsive and user-friendly interface, Global Medifile aims to revolutionize patient data management in the healthcare industry.

Module Descriptions

1. Doctors Module

- **Purpose**: Enables doctors to view, update, and manage patient medical records.
- **Key Features**:
    - Access patient history via the unique identity number.
    - Upload prescriptions, diagnosis reports, and treatment plans.
    - Collaborate with other doctors for referrals or second opinions.
    - Secure login with role-based access.
    - Generate and manage electronic health reports.

2. Hospitals Module

- **Purpose**: Facilitates hospitals in managing patient records and ensuring efficient collaboration across departments.
- **Key Features**:
    - Maintain a database of inpatients and outpatients.
    - Manage patient admission and discharge summaries.
    - Store and share lab results, imaging reports, and billing details.
    - Provide access to patient records for authorized personnel.

3. Users (Patients) Module

- **Purpose**: Provides patients with a secure platform to access and manage their medical records.
- **Key Features**:
    - View and download personal medical history, lab reports, and prescriptions.
    - Share unique identity numbers with doctors or hospitals for consultations.
    - Update personal details and medical preferences.
    - Receive notifications for appointments, lab results, or medication reminders.

4. Labs Module

- **Purpose**: Allows laboratories to upload and manage diagnostic reports for patients.
- **Key Features**:
    - Upload test results directly linked to the patient's unique identity number.
    - Collaborate with doctors and hospitals for test requisitions and result sharing.
    - Maintain a log of all diagnostic tests conducted.
    - Ensure data accuracy and compliance with privacy standards.

System Workflow

1. Patients are assigned a **unique identity number** upon registration.
2. Authorized users (doctors, hospitals, labs, or patients) log in to access the system.
3. Relevant entities upload, update, or retrieve patient records as required.
4. The system ensures data security and access control based on user roles.
5. Patients retain control over their data, allowing them to share it as needed.

This project aims to enhance healthcare outcomes by ensuring that patient data is accessible, organized, and secure across the global medical ecosystem.