**Abstract**

The **Hospital Management System (HMS)** is a comprehensive and dynamic web-based application developed using PHP, MySQL, CSS, JavaScript, Bootstrap, and HTML. It is designed to streamline and automate various administrative and clinical operations within a hospital, enhancing overall efficiency and patient care. This system provides a centralized platform for managing patient records, doctor appointments, medical histories, billing information, and inventory management.

Key modules of the application include **Patient Management**, **Doctor Management**, **Appointment Scheduling** and **Admin Management**. The system also supports secure login for different user roles such as administrators, doctors, patient, and receptionists, ensuring role-based access control. Integrated with a robust MySQL database, the HMS ensures secure storage and quick retrieval of data, promoting effective data management.

Bootstrap enhances the user interface by providing a responsive and mobile-friendly design, ensuring seamless user experience across devices. Additionally, the system offers real-time notifications, automated report generation, and analytics to monitor hospital performance and identify areas for improvement.

The Hospital Management System not only reduces manual workload and administrative errors but also ensures timely patient care by facilitating quick access to medical records and diagnostic reports. With its user-friendly interface and modular design, the application is highly scalable and can be easily customized to meet the needs of hospitals, clinics, and healthcare institutions. This system ultimately aims to improve the quality of healthcare services through efficient hospital operations and enhanced patient management.