Requirement Document

Project Topic: Hospital Management System

Description:

The Hospital Management System is a cutting-edge solution designed to streamline and optimize various aspects of healthcare administration. It facilitates seamless coordination between different departments within a hospital or healthcare facility, enhancing operational efficiency and improving patient care. Our system aims to revolutionize healthcare management by providing intuitive tools for patient registration, appointment scheduling, electronic health record management, billing, and staff administration. With a focus on simplicity and effectiveness, our solution empowers healthcare professionals to deliver high-quality services while maximizing resource utilization.

Scope:

The scope of the Hospital Management System encompasses a wide range of functionalities tailored to meet the diverse needs of healthcare providers. Our system aims to optimize workflow processes, improve patient outcomes, and enhance the overall efficiency of healthcare operations. By offering a comprehensive and user-friendly platform, we seek to support healthcare institutions in delivering exceptional care to patients while ensuring seamless coordination among healthcare staff.

Features:

1. Patient Registration
2. Patient Login
3. Patient Profile Management
4. Feedback and Rating
5. Appointment Booking
6. Patient Check-in/Check-out
7. Diagnostic Tests Scheduling
8. Medical Records Management
9. Prescription Management
10. Medical History Tracking
11. Automated billing
12. Generate invoices with payment due dates
13. Support for multiple payment methods
14. Maintain staff profiles
15. Manage staff roles and permissions
16. Track staff attendance and performance

Requirement details with Actors (External Entitites):

#	External Entity (Actors)	Initial Requirements
1	System	The System "shall" only allow the registered user to access the website platform.
2	Patient	Patients "shall" register to access the platform, providing personal and medical information including username, email, password, and additional details about their medical history.
2.1	Patient	Patients "shall" have the capability to update their profile information, including contact details, medical history, and insurance information.
3	Doctor	Doctors "shall" register to access the platform, providing necessary credentials and professional details.
3.1	Doctor	Doctors "shall" have the capability to update their profile information, including contact details, medical specialties, and professional certifications.
4	Administrator	Administrators "shall" have access to system administration functionalities, including user management, data access control, and system configuration.
5	System	Upon successful login, the system "shall" render the home page/dashboard of the website.
5.1	System	The system "shall" display relevant information on the dashboard, including upcoming appointments, pending tasks, and notifications.
5.2	System	The dashboard "shall" provide separate views for patients, doctors, and administrators, with tailored functionalities and information.
6	Patient/Doctor	Registered users "shall" be able to log in using their username/email and password credentials.
7	Administrator	Administrators "shall" be able to log in to the system using their designated credentials.

#	External Entity (Actors)	Initial Requirements
8	System	The system "shall" allow users to update their personal and medical information, including profile details and medical records.
9	System	Patients "shall" have the capability to search for doctors based on specialization, availability, and location.
9.1	System	The search functionality "shall" support filters such as doctor's name, specialty, location, availability, and patient reviews.
10	Patient/Doctor	Users "shall" have access to a dashboard displaying relevant information such as appointments, medical records, and notifications.
11	Patient	Patients "shall" be able to schedule appointments with doctors based on availability and specialization.
11.1	Patient	Patients "shall" receive confirmation notifications upon successful appointment scheduling, containing details such as date, time, and doctor's name.
12	System	The system "shall" facilitate the creation, management, and storage of electronic health records (EHR) for each patient.
12.1	System	Electronic health records "shall" include comprehensive patient information, medical history, diagnoses, treatments, prescriptions, and test results.
13	Patient	Patients "shall" have access to their medical records, including diagnoses, treatments, prescriptions, and test results.
13.1	Patient	Patients "shall" have the ability to request copies of their medical records for personal reference or transfer to other healthcare providers.
14	Doctor	Doctors "shall" have access to patient medical records, enabling them to review medical history, make diagnoses, and prescribe treatments.

#	External Entity (Actors)	Initial Requirements
14.1	Doctor	Doctors "shall" have the capability to update patient medical records with new diagnoses, treatments, and progress notes after each consultation.
15	System	The system "shall" generate invoices for medical services rendered to patients and manage billing cycles.
15.1	System	Invoices "shall" include details of medical services provided, associated costs, payment due dates, and accepted payment methods.
15.2	System	The billing module "shall" support multiple payment methods, including cash, credit/debit cards, and online transfers.