



DEPARTMENT OF COMPUTER SCIENCE AND
ENGINEERING
ANNA UNIVERSITY, Chennai

CS6106: Database Management Systems

“HOSPITAL MANAGEMENT SYSTEM”

TEAM MEMBERS:

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Abstract:

The Hospital Management System is a database management system designed to optimize and streamline the operations of a healthcare facility or hospital. This project includes registration of patients, storing their details into the system, and also computerized billing in the pharmacy. This portal has the facility to give a unique id for every patient and stores the clinical details of every patient and hospital tests done earlier. Patients can check their medical history using their id. The data can be retrieved easily and the interface is very user-friendly. The Hospital Management System can be entered using a username and password. It is accessible either by an administrator or receptionist. Only they can add data into the database. The data can be retrieved easily.

The system's core entities include Patient, Doctor, Appointment, Medical Record, Hospital and Pharmacy. The Patient entity stores comprehensive information about each patient, including personal details and contact information. The Doctor entity contains details about including personal details and their area of specialization, contact information, and availability. The Appointment entity manages the scheduling and tracking of appointments, associating patients with doctors and maintaining appointment dates and times. The Medical Record entity stores patient-specific medical records, including diagnoses, test results, and prescriptions. The Pharmacy entity handles the management of medical supplies, tracking stock levels.

The system aims to enhance patient care, improve administrative efficiency, and facilitate effective management of medical resources. It encompasses various functionalities, including patient management, appointment scheduling, medical billing, and inventory control.

TABLES USED:

Patient:

Field Name	Data Type	Constraint
pat_id	INT	Primary Key
name	VARCHAR(20)	Not Null
address	VARCHAR(50)	Not Null
age	INT	Not Null
gender	VARCHAR(1)	Not Null
ph_no	INT	Not Null

Doctor:

Field Name	Data Type	Constraint
doc_id	INT	Primary Key
name	VARCHAR(20)	Not Null
address	VARCHAR(50)	Not Null
age	INT	Not Null
gender	VARCHAR(1)	Not Null
ph_no	INT	Not Null
specialization	VARCHAR(20)	Not Null
status	VARCHAR(3)	Not Null

Staff:

Field Name	Data Type	Constraint
staff_id	INT	Primary Key
name	VARCHAR(20)	Not Null
address	VARCHAR(50)	Not Null
age	INT	Not Null
gender	VARCHAR(1)	Not Null
ph_no	INT	Not Null
role	VARCHAR(15)	Not Null

Appointment:

Field Name	Data Type	Constraint
pat_id	INT	Primary Key (Combined)
doc_id	VARCHAR(20)	Primary Key (Combined)
date_time	DATETIME	Not Null

Pharmacy:

Field Name	Data Type	Constraint
med_id	INT	Primary Key
med_name	VARCHAR(20)	Not Null
med_qty	INT	Not Null
bill	NUMERIC(10,2)	Not Null

Medical record:

Field Name	Data Type	Constraint
pat_id	INT	Primary Key (Combined)
doc_id	INT	Primary Key (Combined)
disease_name	VARCHAR(20)	Not Null
date	DATE	Not Null
test	VARCHAR(10)	Not Null

Hospital:

Field Name	Data Type	Constraint
hos_id	INT	Primary Key
hos_branch	INT	Not Null
hos_addr	VARCHAR(20)	Not Null

Login:

Field Name	Data Type	Constraint
username	VARCHAR(15)	Not Null
password	VARCHAR(10)	Not Null

Languages used:

- HTML
- CSS
- Bootstrap
- JavaScript
- SQL

ER DIAGRAM: