Hospital Management System

Hospital Management System is used to manage all the hospital operations. We can perform operations such as we can add patients, assign doctor to patient, view patient details, view doctor details, add staff, view staff, assign bed to patients, view bill and payments.

My Project Includes two members

- 1. Aayush Kumar
- 2.Saurabh Ojha

Saurabh will work on Patients and Doctor Entity

Aayush will work on Staff, Bill and Payment Entity

The Hospital Management include 5 entites :-

- Patients
- Doctors
- Staff
- Bills
- Payments

Patients

- Attribues
 - 1. p_id (Primary Key)
 - 2. fname
 - 3. Iname
 - 4. gender
 - 5. disease
 - 6. admitstatus
 - 7. age
 - 8. phone_no
- Relationship
 - 1. Each patient can have only one billing record, and each billing record is associated with exactly one patient. (One-to-One)

2. Each patient can have multiple payment records, but each payment record is associated with exactly one patient. (One-to-Many)

+	Type	Null	Key	Default	+ Extra
p_id fname lname gender disease admitstatus age phone_no	int varchar(255) varchar(255) varchar(10) varchar(255) varchar(3) int bigint	NO YES YES YES YES YES YES YES	PRI	NULL NULL NULL NULL NULL NULL NULL NULL	

Doctors

- Attribues
 - 1. d_id (Primary Key)
 - 2. d_name
 - 3. qualification
 - 4. specilization
 - 5. availability
- Relationship
 - A doctor can be assigned to multiple patients, and a patient can be attended by multiple doctors. This relationship is represented by the doctors and patients tables. (Many-to-Many)

+	 Type 	+ Null +	 Key	 Default	+ Extra
d_id d_name qualification specilization availability	int varchar(255) varchar(255) varchar(255) varchar(3)	NO YES YES YES YES	PRI	NULL NULL NULL NULL NULL	

Staff

- Attribues
 - 1. s_id (Primary Key)
 - 2. fname
 - 3. Iname

- 4. gender
- 5. designation
- 6. age
- 7. salary

Relationship

- 1. Staff members (like nurses or administrators) can be associated with multiple patients, and a patient can interact with multiple staff members. This relationship is represented by the staff and patients tables. (Many-to-Many)
- 2. A staff member can work with multiple doctors, and a doctor can have interactions with multiple staff members. (Many-to-Many)

+	Type	Null	 Key	Default	+ Extra
+	int varchar(255) varchar(255) varchar(1) varchar(255) int int	NO YES YES YES YES YES YES YES	PRI	NULL NULL NULL NULL NULL NULL NULL	

Bills

Attribues

- b_id(Primary Key)
- 2. basicCharges
- 3. additionalCharges
- 4. medicationCharges
- 5. roomCharges
- 6. doctorFees
- 7. totalCharges
- 8. patient_id(Foreign Key)

Relationship

1. Each billing record is associated with a staff member who handles the billing process. This relationship ensures that a billing record has a responsible staff member. (One-to-One)

+	Type	Null	Key	Default	Extra
b_id basicCharges additionalCharges medicationCharges roomCharges doctorFees totalCharges patient_id	int double double double double double int	NO YES YES YES YES YES YES YES YES	PRI MUL	NULL NULL NULL NULL NULL NULL NULL NULL	

Payments

- Attributes
 - 1. p_id (Primary Key)
 - 2. bill_id (Foreign Key)
 - 3. paymentMethod
 - 4. amount
- Relationship
 - a. many payment records is tied with one record in the Billis table.(Many- to-One)

mysql> desc payments;						
Field	Туре	Null	Key	Default	Extra	
pay_id paymentMethod amount bill_id	int varchar(20) double int	NO YES YES YES	PRI HII MUL	NULL NULL NULL NULL		

ER Diagram

