Hospital Management System Database Schema:

Link to the schema (drawDB):

https://www.drawdb.app/editor?shareId=27b7a6a5b1e402ea9df444d150a9e4be

Tables:

1) Patients:

Table Structure

Column Name	Data Type	Constraints
ptnt_id	integer	PK, Auto Increment, Not Null, Unique
ptnt_name	char	Not Null
ptnt_dob	date	Not Null
ptnt_ctnt	numeric	Not Null
ptnt_insurance	char	Not Null
ptnt_hist	char	Not Null

Foreign Key Relationships:

None

2) Doctors:

Table Structure

Column Name	Data Type	Constraints
doct_id	integer	PK, Auto Increment, Not Null, Unique

doct_name	char	Not Null
doct_spcl	char	Not Null
doct_cnt	numeric	Not Null
doct_license	varchar	Not Null, Unique
ptnt_id	integer	Not Null

Foreign Key Relationships:

Foreign Key Name	Column	References
fk_Patients_ptnt_id_Doctors	ptnt_id	Patients(ptnt_id)

3) Appointments:

Table Structure

Column Name	Data Type	Constraints
appt_id	integer	PK, Auto Increment, Not Null, Unique
appt_date	date	Not Null
appt_time	timestamp	Not Null
appt_rsn	char	Not Null
appt_stts	char	Not Null
doct_id	integer	Not Null
ptnt_id	integer	Not Null
appt_follow_id	integer	Not Null

Foreign Key Relationships:

Foreign Key Name	Column	References
fk_Patients_ptnt_id_Appointments	ptnt_id	Patients(ptnt_id)

4) Treatment:

Table Structure

Column Name	Data Type	Constraints
tmnt_id	integer	PK, Auto Increment, Not Null, Unique
tmnt_desc	char	Not Null
tmnt_cost	float	Not Null
tmnt_start	datetime	Not Null
tmnt_end	datetime	Not Null

Foreign Key Relationships:

Foreign Key Name	Column	References
fk_Daignosis_tmnt_id_Treatment	tmnt_id	Daignosis(tmnt_id)

5) Wards:

Table Structure

Column Name	Data Type	Constraints
ward_id	integer	PK, Auto Increment, Not Null, Unique
ward_name	char	Not Null
ward_cpt	integer	Not Null
ward_type	char	Not Null
doct_id	integer	Not Null
ptnt_id	integer	Not Null

Foreign Key Relationships:

Foreign Key Name	Column	References
fk_Doctors_doct_id_Wards	doct_id	Doctors(doct_id)

| fk_Patients_ptnt_id_Wards | ptnt_id | Patients(ptnt_id) |

6) Medical_record:

Table Structure

Column Name	Data Type	Constraints
rcrd_id	integer	PK, Auto Increment, Not Null, Unique
ptnt_id	integer	Not Null
doct_id	integer	Not Null
rcrd_date	datetime	Not Null

Foreign Key Relationships:

Foreign Key Name	Column	References
fk_Patients_ptnt_id_Medical_record	ptnt_id	Patients(ptnt_id)

7) Daignosis:

Table Structure

Column Name	Data Type	Constraints
rcrd_id	integer	Auto Increment, Not Null, Unique
tmnt_id	integer	Not Null
doct_id	integer	Not Null
nrse_id	integer	Not Null
ptnt_id	integer	Not Null

Foreign Key Relationships:

Foreign Key Name	Column	References

fk_Doctors_doct_id_Daignosis	doct_id	Doctors(doct_id)
fk_Daignosis_ptnt_id_Patients	ptnt_id	Patients(ptnt_id)
fk_Daignosis_tmnt_id_Treatment	tmnt_id	Treatment(tmnt_id)

8) Records:

Table Structure

Column Name	Data Type	Constraints
rcrd_id	integer	Auto Increment, Not Null, Unique
lab_test	char	Not Null
lab_image	binary	Not Null
lab_rprt	text	Not Null

Foreign Key Relationships:

Foreign Key Name	Column	References
fk_Medical_record_rcrd_id_Records	rcrd_id	Medical_record(rcrd_id)

Relationships:

Entity 1	Entity 2	Relationship Type
Patients	Appointments	1:M
Patients	Wards	M:1
Patients	Medical_record	M:N
Patients	Doctors	M:N
Doctors	Diagnosis	1:M
Diagnosis	Patients	M:N
Doctors	Wards	1:M
Medical_record	Records	M:N