

Hospital Management System Data Dictionary

Patient Table

Field Name	Data Type	Field Length	Key Type	Description
patient_id	INT	11	Primary Key	Unique identifier for each patient
name	VARCHAR	100	Not Null	Full name of patient
date_of_birth	DATE	-	Not Null	Date of birth of patient
gender	CHAR	1	Not Null, Check(M/F)	Patient gender (M/F)
address	VARCHAR	255	Nullable	Patient's home address
phone	VARCHAR	20	Not Null, Unique	Patient's contact phone number

Doctor Table

Field Name	Data Type	Field Length	Key Type	Description
doctor_id	INT	11	Primary Key, Auto Increment	Unique identifier for each doctor
name	VARCHAR	100	Not Null	Doctor's full name
specialization	VARCHAR	100	Not Null	Doctor's area of specialization
phone	VARCHAR	20	Not Null, Unique	Doctor's phone number
department_id	INT	11	Foreign Key	Foreign key linking to Department

Department Table

Field Name	Data Type	Field Length	Key Type	Description
department_id	INT	11	Primary Key, Auto Increment	Unique identifier for each department
name	VARCHAR	100	Not Null, Unique	Department name
location	VARCHAR	100	Nullable	Physical location of the department

Appointment Table

Field Name	Data Type	Field Length	Constraint	Description
appointment_id	INT	11	Primary Key, Auto Increment	Unique identifier for each appointment
patient_id	INT	11	Foreign Key	Patient attending the appointment
doctor_id	INT	11	Foreign Key	Doctor handling the appointment
appointment_date	DATETIME	-	Not Null	Date and time of the appointment

Treatment Table

Field Name	Data Type	Field Length	Key Type	Description
treatment_id	INT	11	Primary Key	Unique identifier for each visit
patient_id	INT	11	Foreign Key	Patient being treated
doctor_id	INT	11	Foreign Key	Doctor providing treatment
Treatment_date	DATETIME	-	Not Null	Date of visit/treatment
Medicine_id	INT	11	Foreign Key	Medicine being provided
notes	TEXT	-	Nullable	Additional notes

Prescription Table

Field Name	Data Type	Field Length	Key Type	Description
prescription_id	INT	11	Primary Key, Auto increment	Unique identifier for each prescription
treatment_id	INT	11	Foreign Key	Visit linked to prescription
medicine_id	INT	11	Foreign Key	Medicine prescribed
Quantity	Int	11	Not null	Amount of medicine to consume
dosage	VARCHAR	50	Not Null	Dosage instructions
Instructions	VARCHAR	50	Not Null	Duration instructions

Medicine Table

Field Name	Data Type	Field Length	Key Type	Description
medicine_id	INT	11	Primary Key	Unique identifier for each medicine
name	VARCHAR	100	Not Null	Medicine name
description	VARCHAR	255	Not Null	Description or purpose of medicine
stock_quantity	INT	11	Default = 0	Available stock quantity

Room Table

Field Name	Data Type	Field Length	Constraint	Description
room_id	INT	11	Primary Key, Not Null, Auto Increment	Unique identifier for each room
room_type	VARCHAR	50	Not Null, Check((General/ICU/Private)	Room type (General / ICU / Private)
availability_status	VARCHAR	20	Not Null, Default = Vacant Check (‘Occupied/Vacant/Cleaning)	Occupied / Vacant / Cleaning

Admission Table

Field Name	Data Type	Field Length	Key Type	Description
admission_id	INT	11	Primary Key	Unique identifier for each admission
patient_id	INT	11	Foreign Key	Patient admitted
room_id	INT	11	Foreign Key	Room assigned
admission_date	DATETIME	-	Not Null	Date of admission
discharge_date	DATETIME	-	Nullable	Date of discharge (nullable)

Payment Table

Field Name	Data Type	Field Length	Key Type	Description
bill_id	INT	11	Primary Key, Autoincrement	Unique identifier for each bill
patient_id	INT	11	Foreign Key	Patient being billed
amount	DECIMAL	10,2	Not Null	Amount of the bill
payment_status	VARCHAR	20	Default = Unpaid Check (Paid/Unpaid/Pending)	Paid / Unpaid / Pending
payment_date	DATETIME	-	Nullable	Date payment was made (nullable)

Lab Tests Table

Field Name	Data Type	Field Length	Key Type	Description
Test_id	INT	11	Primary Key, Autoincrement	Unique identifier for each test
patient_id	INT	11	Foreign Key	Patient undergoing the test
Test_type	VARCHAR	50	Not Null	Type of test (e.g., Blood, X-ray, Urine)
Results	VARCHAR	255	Nullable	Test results (can be filled after test completion)
Charges	DECIMAL	10,2	Default = 0.00 Not Null	Test charges
test_date	DATETIME	-	Not Null	Date and time of the test

History Table

Field Name	Data Type	Length	Constraint	Description
history_id	INT	11	Primary key, auto_increment, not null	Unique identifier for each history record
patient_id	INT	11	Not null, Foreign key	Patient whose history is being recorded
condition	VARCHAR	100	Not null	Medical condition
diagnosis_date	DATE	-	Not null	Date condition was diagnosed
notes	VARCHAR	255	Nullable	Additional notes

Staff Table

Field Name	Data Type	Length	Constraint	Description
staff_id	INT	11	Primary key, auto_increment, not null	Unique identifier for each staff member
department_id	INT	11	Not null, Foreign key	Department staff belongs to
name	VARCHAR	100	Not null	Full name of the staff member
role	VARCHAR	50	Not null	Role of staff (e.g., Doctor, Nurse, Technician)
working_shift	VARCHAR	20	Not null, Check (morning/evening/night')	Staff working shift