Course Project ER diagram (UML notation)

Megan Jane Thompson | July 19, 2020

PATIENT

PK	p_ID	int
	p_fname	varchar(25)
	p_lname	varchar(25)
U	p_ssn	bigint
	p_dob	date
	p_age	int
	p_sex	char
U	p_phone	bigint
	p_add_street	varchar(100)
	p_add_city	varchar(30)
	p_add_state	char(2)
	p_add_zip	int

PAT_RECORD

PK	rec_num	int
FK	p_ID	int
	date_admit	date
	appt_date	date
	observations	varchar(250)
FK	staff_ID	int

ADMITTANCE

PK	p_ID	int
PK	date_admit	date
	date_disch	date
	er_admit	boolean
FK	r_num	int
FK	doctor_ID	int

ROOM

PK	r_num	int
	num_beds	int
	r_type	varchar(15)
FK	nurse_ID	int

MEDICINE

PK	med_ID	varchar(7)
	med_desc	varchar(200)
	price_per	int

TREATMENT

PK	p_ID	int
PK	med_ID	varchar(7)
PK	quantity	int
	cost	int

EMPLOYEE

PK	emp_ID	int
FK	type_ID	int
	emp_fname	varchar(25)
	emp_lname	varchar(25)
U	emp_ssn	bigint
	emp_dob	date
	emp_sex	char
	emp_salary	int
U	emp_phone	bigint
	emp_add_street	varchar(100)
	emp_add_city	varchar(30)
	emp_add_state	char(2)
	emp_add_zip	int

SPECIALTY

PK	emp_ID	int
PK	spec_type	varchar(20)

EMP_TYPE

PK	type_ID	int
U	e_type	varchar(20)

Relationships:
- PATIENT 1..1 — has_a — 1..1 PAT_RECORD
- PAT_RECORD 0..* — fills_out
- PATIENT 1..* — is_admitted — 1..* ADMITTANCE
- ADMITTANCE 0..*
- PATIENT 0..* — stays_in — 1..1 ROOM
- ROOM 0..* — governs
- PATIENT 0..* — observes — 1..* EMPLOYEE
- PATIENT 1..1 — is_prescribed — 0..* EMPLOYEE
- ROOM 0..* — TREATMENT 0..*
- TREATMENT 0..* — contains — 1..* MEDICINE
- EMPLOYEE 0..1
- EMPLOYEE 1..1 — assigned_to
- EMPLOYEE 0..* — specializes_in — 0..1 SPECIALTY
- EMPLOYEE 0..* — is_a — 1..1 EMP_TYPE