HOSPITAL MANAGEMENT SYSTEM DATABASE

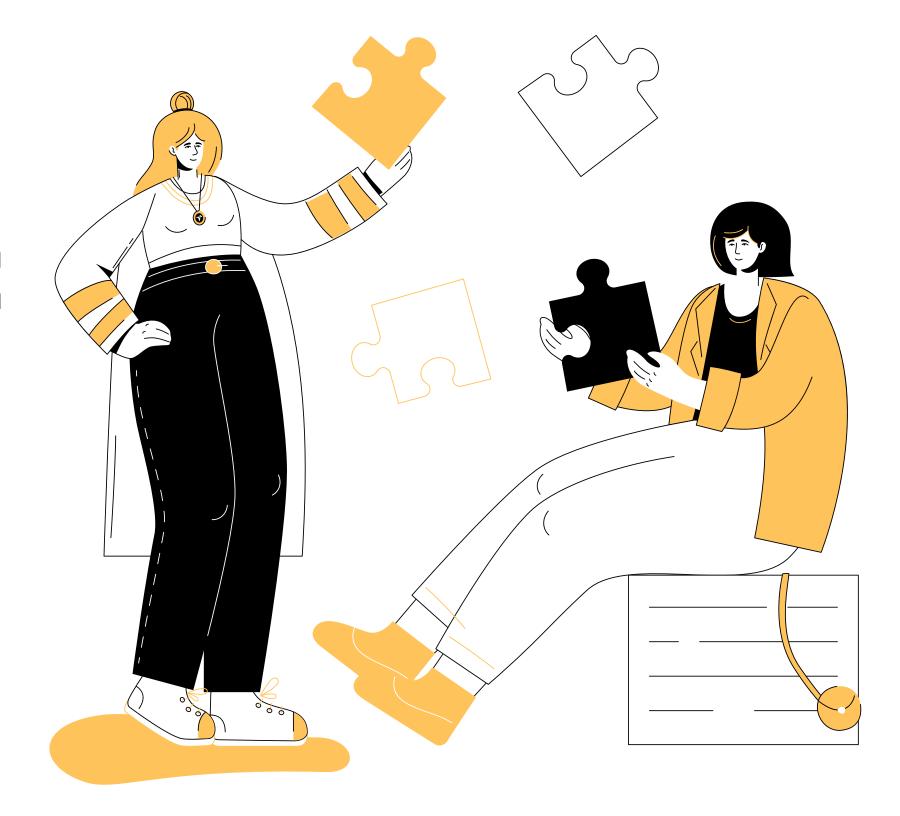
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OVERVIEW

- This is a project about Hospital Management System.
- Our project shows how each patient has been treated in a period of time.
- One medicine is used for one disease and one disease is treated by one doctor.
- There are 6 tables: Patient, History Record, Medicine, Doctor, Bill, and TP (Treatment Procedure), illustrating the system in detail over the next slides.



Entities

PATIENT

Patient_ID

FirstName

LastName

Gender

DOCTOR

Doctor_ID

FirstName

LastName

DOB

TREATMENTPROCEDURE

TP_ID

Reg_ID

Doctor_ID

MEDICINE

Medicine_ID

MName

BILL

Bill_ID

Reg_ID

Price

PATIENT_REGISTRATION

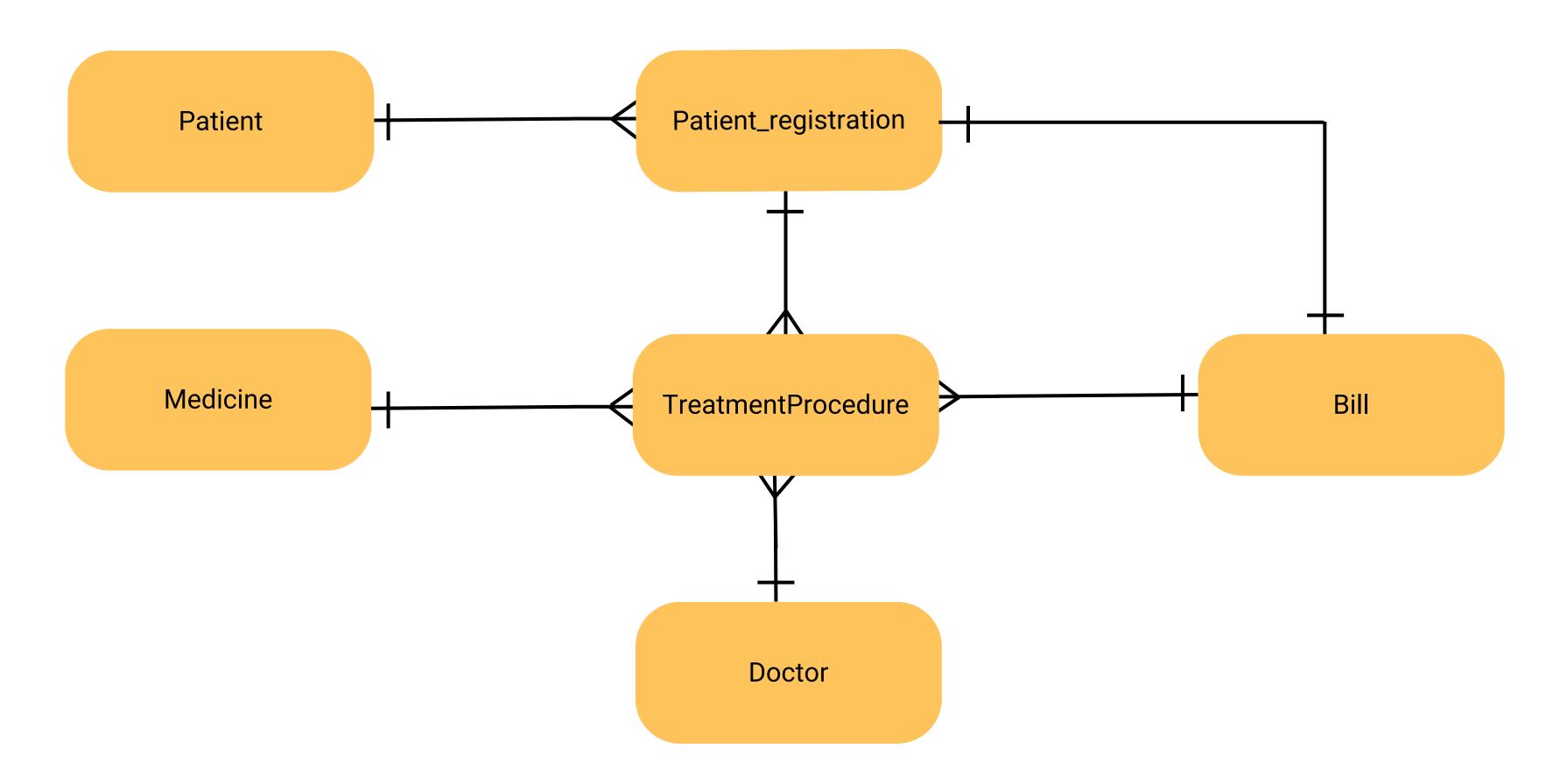
Reg_ID

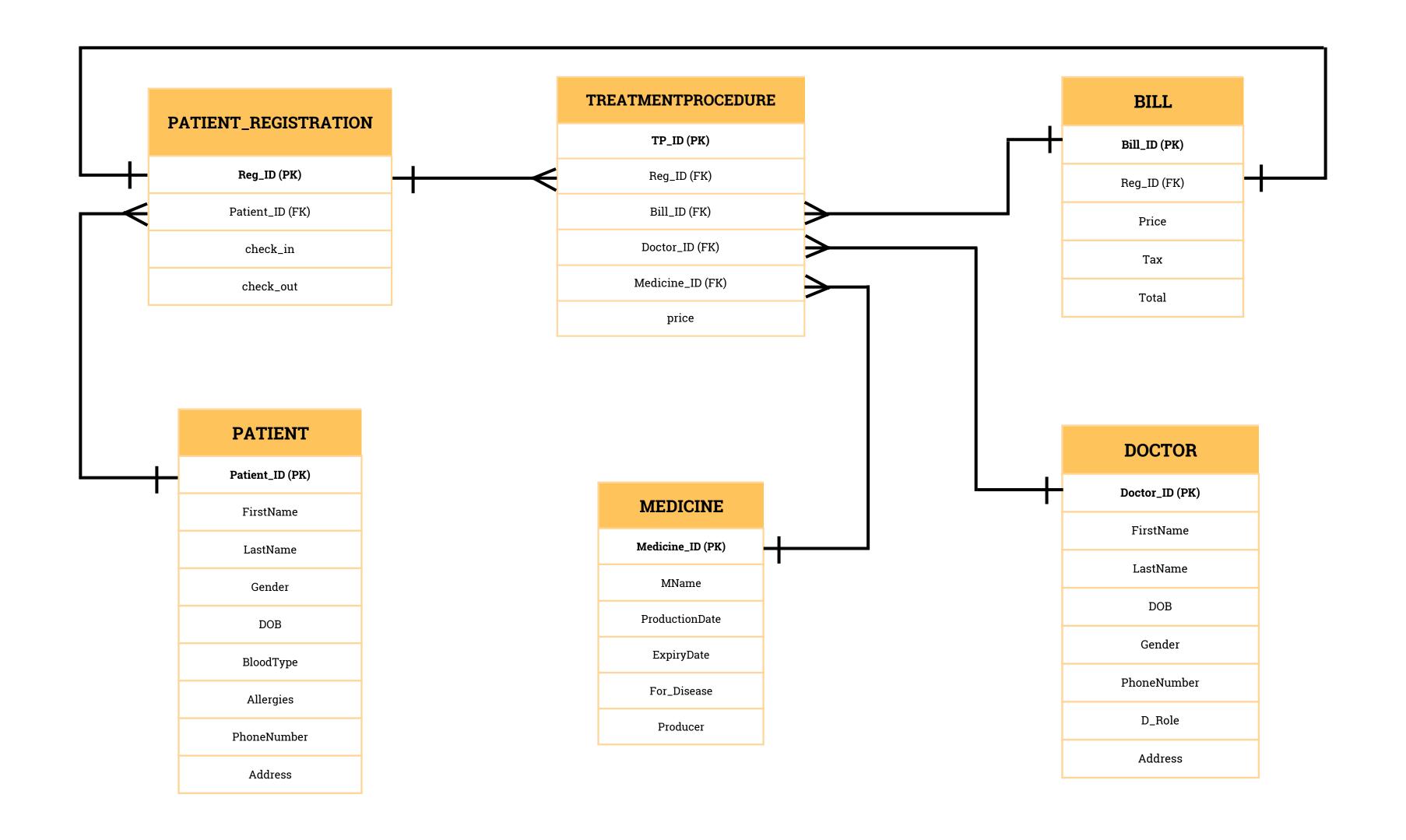
Patient_ID

check_in

check_out

ERD





Tables

PATIENT

Patient_ID (PK)

FirstName

LastName

Gender

DOB

BloodType

Allergies

PhoneNumber

Address

DOCTOR

Doctor_ID (PK)

FirstName

LastName

DOB

Gender

PhoneNumber

D_Role

Address

MEDICINE

Medicine_ID (PK)

MName

ProductionDate

ExpiryDate

For_Disease

Producer

BILL

Bill_ID (PK)

Reg_ID (FK)

Price

Tax

Total

PATIENT_REGISTRATION

Reg_ID (PK)

Patient_ID (FK)

check_in

check_out

TREATMENTPROCEDURE

TP_ID (PK)

Reg_ID (FK)

Doctor_ID (FK)

Medicine_ID (FK)

Bill_ID (FK)

price

Normalization form of the tables

All the tables are in 2NF because:

- Each table contains a single value.
- Each record is unique
- Every non-key attribute is fully dependent on primary key.

The table TREATMENTPROCEDURE is in BCNF, because:

- It is in 2NF
- It has no transitive dependencies
- For any dependencies, TP_ID must be a super key.



Data Dictionary

| Entities | Field | Type | Length | Constraint |
|----------|-------------|---------|--------|-----------------------|
| | Patient_ID | int | | not null |
| | FirstName | varchar | 32 | not null |
| | LastName | varchar | 32 | not null |
| | Gender | varchar | 10 | ("Female", "Male") |
| Patient | DOB | date | | |
| | BloodType | varchar | 3 | |
| | Allergies | varchar | 20 | |
| | PhoneNumber | int | | not null |
| | Address | varchar | 252 | |

| Entities | Field | Type | Length | Constraint |
|----------|-------------|---------|--------|--------------------|
| Doctor | Doctor_ID | int | | not null |
| | FirstName | varchar | 32 | |
| | LastName | varchar | 32 | |
| | DOB | date | | |
| | Gender | varchar | 10 | ("Female", "Male") |
| | PhoneNumber | int | | not null |
| | D_Role | varchar | 30 | not null |
| | Address | varchar | 252 | |

Data Dictionary

| Entities | Field | Type | Length | Constraint |
|-----------------------|----------------|---------|--------|----------------------------|
| | Medicine_ID | int | | not null |
| | Mname | varchar | 42 | |
| | ProductionDate | date | | not null |
| Medicine | ExpiryDate | date | | not null |
| | For_Disease | varchar | 50 | not null |
| | Producer | varchar | 32 | not null |
| | Reg_ID | int | | not null AUTO_INCREMENT |
| Patient_registration | Patient_ID | int | | not null |
| r attent_registration | check_in | date | | |
| | check_out | Date | | |

| Entities | Field | Type | Length | Constraint |
|--------------------|-------------|------|--------|----------------------------|
| | TP_ID | int | | not null AUTO_INCREMENT |
| | Reg_ID | int | | not null |
| TweetweetDreedure | Doctor_ID | int | | not null |
| TreatmentProcedure | Medicine_ID | int | | not null |
| | Bill_ID | int | | |
| | price | int | | |
| | Bill_ID | int | | not null |
| | Reg_ID | int | | not null |
| Bill | Price | int | | not null |
| | Tax | int | | not null |
| | Total | int | | not null |



THANK YOU FOR READING!