

INFO 6210

DATA MANAGEMENT AND DATABASE DESIGN

SPRING 2021

FINAL ER REPORT

TEAM 10

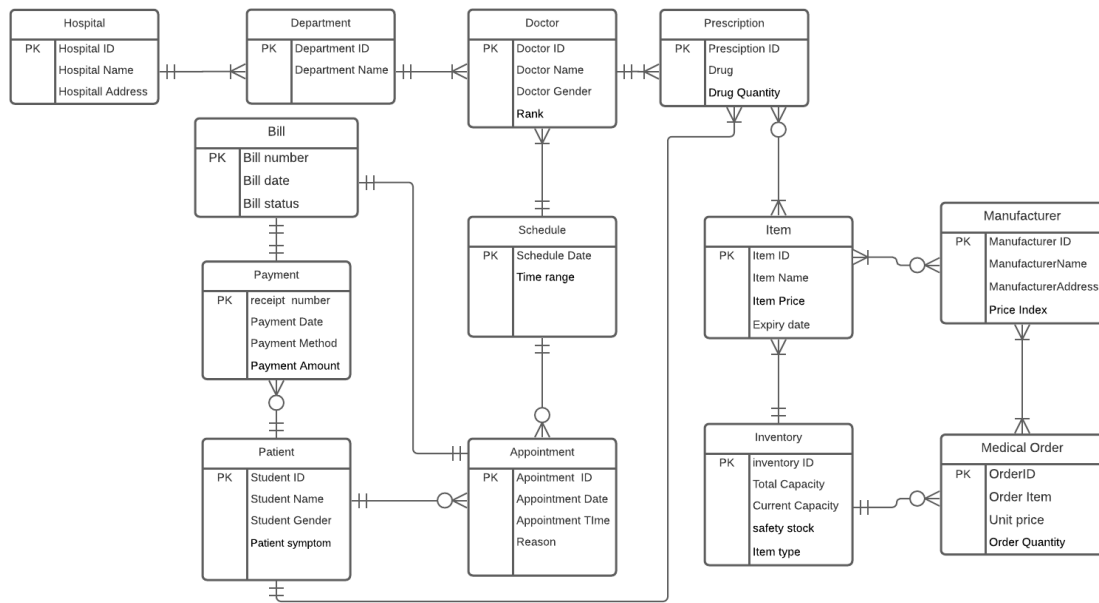
TEAM MEMBERS

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Final ERD:



Changes :

1. We deleted some unnecessary attribute: the attribute of DEPARTMENT 'doctor ID', the attribute of APPOINTMENT 'doctor'.

2. We changed the relationship between entities: HOSPITAL-INVOICE-PATIENT-APPOINTMENT to make their relationship clearer. In order to achieve this goal, We divided the INVOICE entity into BILL and PAYMENT. We also changed the relationship between them. APPOINTMENT will schedule PATIENTS. And the PATIENTS make PAYMENT to pay BILLS. In the end, BILLS will automatically generate and update the APPOINTMENT information in database.

3. We deleted some part of attributes of SCHEDULE and PATIENT in order to change it to 3NF.

4. We have changed the relationship between entities: ITEM-MANUFACTURER-INVENTORY-ORDER to make their relationship more reasonable and clearer. At first, the MEDICAL ORDER doesn't made by hospital anymore. The INVENTORY will automatically generate order according to the safety stock and current inventory level. Second, the system of hospital will update the inventory level of medical items when DOCTORS make PRESCRIPTION for PATIENTS. And each item has unique ID which

can be tract to make sure that the system can track their inventory precisely. Manufactured item can also update the inventory of each item in the database.

5. We have changed some attribute names so that it can express the meaning more clearly.