

مشروع قواعد البيانات

(HOSPITAL)

إعداد الطالبين/

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ER-Description

-The hospital has (id,name) each hospital has many branches .

*ID must be unique and not null.

-Each hospital branch has (BNumber ,Location) and it must have a relation with one hospital.

every branch may have many department .

*Hospital branch number (BNumber) must be unique and not null.

-Each department has (DNumber ,DName) the department must have relation with one branch.

Each department must have a doctor that manage's the department, and it must have at least one doctor works for it.

*Department number (DNumber) must be unique and not null.

-Each doctor has (SSN , FName , LName, Sex) every doctor must have a relation with one department.

Each doctor may manage's a department.

Each doctor has one relation with the patient (appointment)the doctor may have one or more appointments with the patients.

*SSN must be unique and not null.

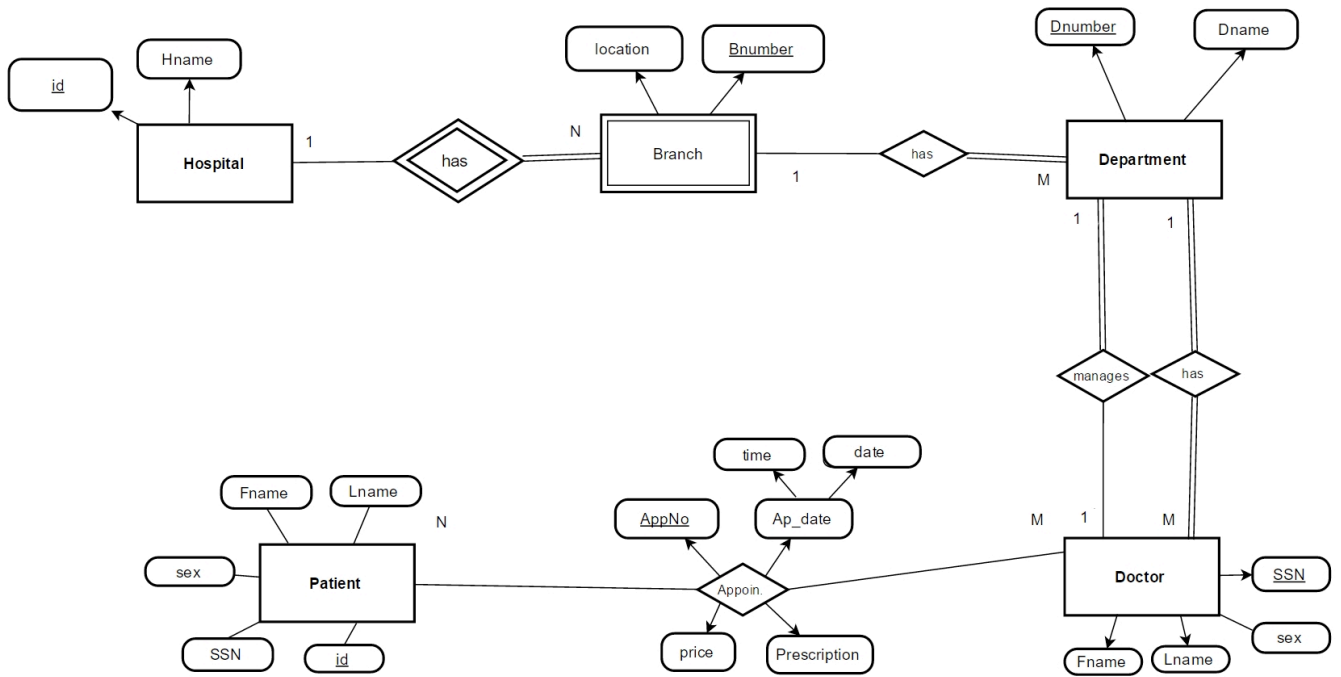
-Each patient has(ID, SSN, sex , FName, Lname) each patient may have one appointment or more with the doctors.

*ID must be unique and not null.

-each appointment has (AppNo,price,Ap_date(time ,date), prescription).

*Appointment number (AppNo) must be unique and not null.

ER- diagram



Relational Schema

Hospital(ID , Hname)

PK

Branch(Bnumber , ID , location)

PK

FK

Department(Dnumber , Dname , Bnumber , ID , SSN) [Bnumber , ID]: not null
[SSN]:not null, unique

PK

Doctor(SSN , Fname , Lname , Sex , Dnumber) Dnumber : not null

PK

Paitient(ID , Fname , Lname , Sex , SSN)

PK

Appoin.(SSN , ID , AppNo, time , date , price)

FK

FK

PK

Our DBMS is MySQL and our environment will be Java.

and the connection was by using the "connection" attribute by importing the library java.sql.connection and using these statements.

```
Class.forName("com.mysql.jdbc.Driver");  
con=DriverManager.getConnection("jdbc:mysql://localhost:3306/Hospital" , "root", "*****");  
st = con.createStatement();
```

The methods that we are going to implement are:

getData()

this method will print information from the Database.

Search()

This method searches for the element\item that the user needs

Insert()

This method inserts tuples to the database

Delete()

This method deletes information from the database

We might also implement the method **edit()** .. that edits an information in the database