

Hospital Database Management using MySQL

Setting up command prompt :

```
cd\  
cd xampp\mysql\bin  
mysql -h localhost -u root
```

Creating new database :

```
create database hospital_management;  
  
show databases;  
  
use hospital_management;
```

Creating Tables :

#1 Doctor

```
create table Doctor(DrID int primary key,DocName varchar(30),Department varchar(30),Experience  
decimal(3,1),Salary float);
```

```
desc doctor;
```

Field	Type	Null	Key	Default	Extra
DrID	int(11)	NO	PRI	NULL	
DocName	varchar(30)	YES		NULL	
Department	varchar(30)	YES		NULL	
Experience	decimal(3,1)	YES		NULL	
Salary	float	YES		NULL	

#2 Patient

create table Patient(PatID int primary key,PatName varchar(30),Gender enum('Male','Female'),Age int,DrID int,foreign key(DrID) references Doctor(DrID));

desc Patient;

Field	Type	Null	Key	Default	Extra
PatID	int(11)	NO	PRI	NULL	
PatName	varchar(30)	YES		NULL	
Gender	enum('Male','Female')	YES		NULL	
Age	int(11)	YES		NULL	
DrID	int(11)	YES	MUL	NULL	

#3 PatientDiagnosis

create table PatientDiagnosis(DiagID int primary key,Diagnosis varchar(30),Date date,PatID int,foreign key(PatID) references Patient(PatID));

desc PatientDiagnosis;

Field	Type	Null	Key	Default	Extra
DiagID	int(11)	NO	PRI	NULL	
Diagnosis	varchar(30)	YES		NULL	
Date	date	YES		NULL	
PatID	int(11)	YES	MUL	NULL	

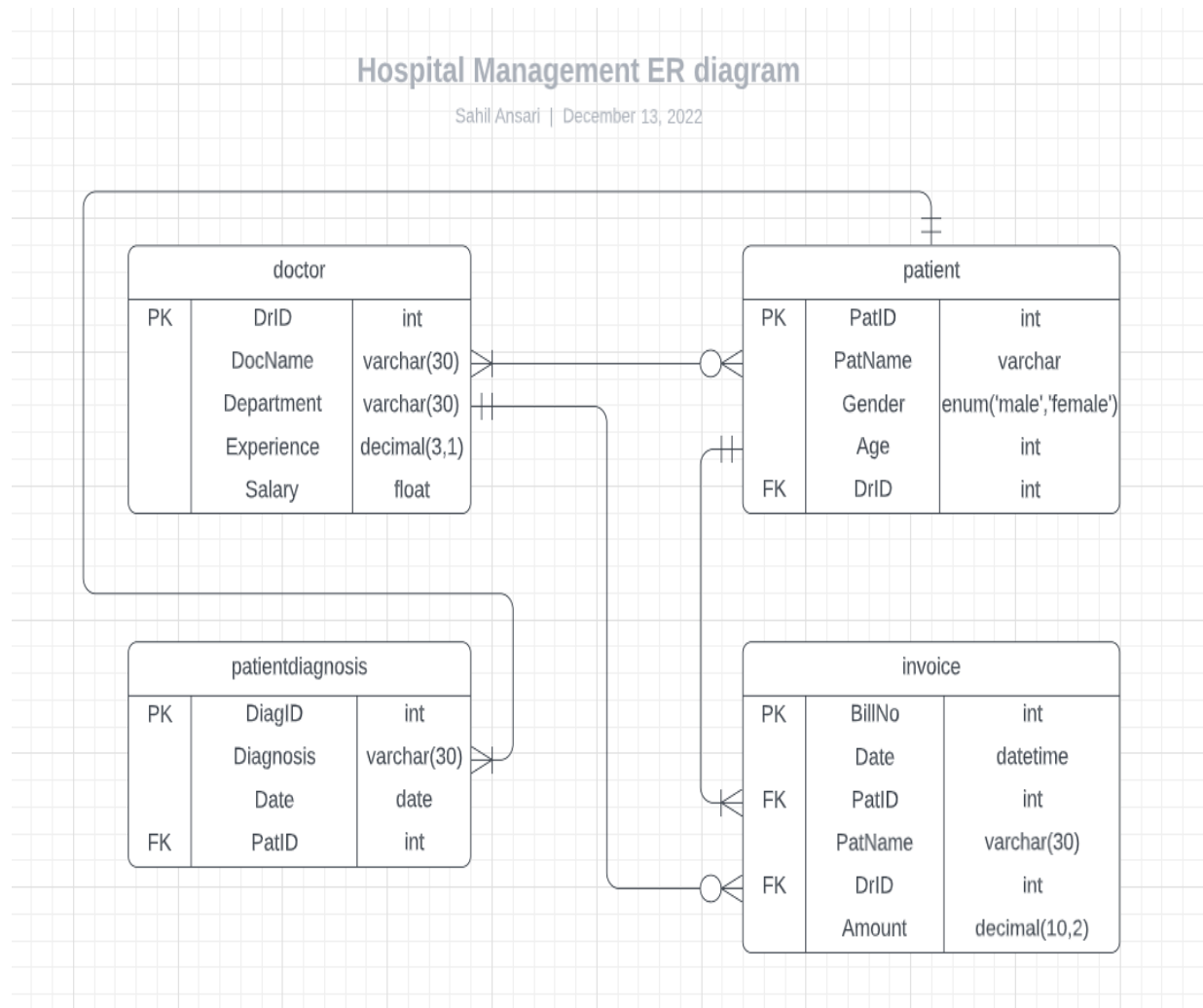
#4 Invoice

```
create table Invoice(BillNo int primary key,Date datetime,PatID int,PatName varchar(30),DrID
int,Amount decimal(10,2),foreign key(DrID) references Doctor(DrID),foreign key(PatID) references
Patient(PatID));
```

```
desc Invoice;
```

Field	Type	Null	Key	Default	Extra
BillNo	int(11)	NO	PRI	NULL	
Date	datetime	YES		NULL	
PatID	int(11)	YES	MUL	NULL	
PatName	varchar(30)	YES		NULL	
DrID	int(11)	YES	MUL	NULL	
Amount	decimal(10,2)	YES		NULL	

Entity Relationship Diagram:



Inserting values into the tables:

#1 Doctor

```
insert into doctor values(1,'Dr. Sadaf','Dentistry',5,50000);
```

```
insert into doctor values(2,'Dr. Alim','General Physician',3.5,70000);
```

```
insert into doctor values(3,'Dr. Sanya','Surgery',7,90000);
```

```
select * from doctor;
```

DrID	DocName	Department	Experience	Salary
1	Dr. Sadaf	Dentistry	5.0	50000
2	Dr. Alim	General Physician	3.5	70000
3	Dr. Sanya	Surgery	7.0	90000

#2 Patient

```
insert into patient values(1,'Anil','male',40,1);
```

```
insert into patient values(2,'Mayank','male',50,1);
```

```
insert into patient values(3,'Pooja','female',45,2);
```

```
insert into patient values(4,'Priya','female',35,2);
```

```
insert into patient values(5,'diya','female',55,3);
```

```
insert into patient values(6,'maya','female',25,3);
```

```

insert into patient values(7,'karan','male',25,3);
insert into patient values(8,'arjan','male',35,2);
insert into patient values(9,'Rekha','female',35,1);
insert into patient values(10,'Vaibhav','male',30,1);
select * from patient;

```

PatID	PatName	Gender	Age	DrID
1	Anil	Male	40	1
2	Mayank	Male	50	1
3	Pooja	Female	45	2
4	Priya	Female	35	2
5	diya	Female	55	3
6	maya	Female	25	3
7	karan	Male	25	3
8	arjan	Male	35	2
9	Rekha	Female	35	1
10	Vaibhav	Male	30	1

#3 PatientDiagnosis

```

insert into patientdiagnosis values(1,'Root Canal','2022-07-01',1);
insert into patientdiagnosis values(2,'Extraction','2022-07-02',2);
insert into patientdiagnosis values(3,'Fever','2022-06-28',3);
insert into patientdiagnosis values(4,'Hypertension','2022-06-25',4);
insert into patientdiagnosis values(5,'Artery Bypass','2022-06-23',5);
insert into patientdiagnosis values(6,'Skin Graft','2022-06-25',6);

```

```
insert into patientdiagnosis values(7,'Liver Resection','2022-06-30',7);
```

```
insert into patientdiagnosis values(8,'Mlaria','2022-07-03',8);
```

```
insert into patientdiagnosis values(9,'Scaling','2022-07-06',9);
```

```
insert into patientdiagnosis values(10,'Extraction','2022-07-06',10);
```

```
select * from patientdiagnosis;
```

DiagID	Diagnosis	Date	PatID
1	Root Canal	2022-07-01	1
2	Extraction	2022-07-02	2
3	Fever	2022-06-28	3
4	Hypertension	2022-06-25	4
5	Artery Bypass	2022-06-23	5
6	Skin Graft	2022-06-25	6
7	Liver Resection	2022-06-30	7
8	Mlaria	2022-07-03	8
9	Scaling	2022-07-06	9
10	Extraction	2022-07-06	10

#4 Invoice

```
insert into invoice values(100,'2022-07-06 18:30:00',1,'Anil',1,4000);
```

```
insert into invoice values(101,'2022-07-02 17:30:00',2,'Anil',1,2000);
```

```
insert into invoice values(102,'2022-06-28 12:00:00',3,'Pooja',2,1000);
```

```
insert into invoice values(103,'2022-06-25 18:00:00',4,'Priya',2,1000);
```

```
insert into invoice values(104,'2022-06-23 20:00:00',5,'diya',3,50000);
```

```
insert into invoice values(105,'2022-06-25 20:30:00',6,'maya',3,20000);
```

```

insert into invoice values(106,'2022-06-30 12:30:00',7,'Karan',3,60000);
insert into invoice values(107,'2022-07-03 12:30:00',8,'arjun',2,2000);
insert into invoice values(108,'2022-07-06 12:30:00',9,'Rekha',1,1500);
insert into invoice values(109,'2022-07-06 13:00:00',10,'Vaibhav',1,2500);

select * from invoice;

```

BillNo	Date	PatID	PatName	DrID	Amount
100	2022-07-06 18:30:00	1	Anil	1	4000.00
101	2022-07-02 17:30:00	2	Anil	1	2000.00
102	2022-06-28 12:00:00	3	Pooja	2	1000.00
103	2022-06-25 18:00:00	4	Priya	2	1000.00
104	2022-06-23 20:00:00	5	diya	3	50000.00
105	2022-06-25 20:30:00	6	maya	3	20000.00
106	2022-06-30 12:30:00	7	Karan	3	60000.00
107	2022-07-03 12:30:00	8	arjun	2	2000.00
108	2022-07-06 12:30:00	9	Rekha	1	1500.00
109	2022-07-06 13:00:00	10	Vaibhav	1	2500.00

Creating a complex view:

```

create view patrecord as select pd.date,pd.PatID,p.PatName,pd.Diagnosis,d.DocName from
patientdiagnosis pd inner join patient p using (PatID) inner join Doctor d using (DrID);

select * from patrecord order by date;

```

date	PatID	PatName	Diagnosis	DocName
------	-------	---------	-----------	---------

2022-06-23	5	diya	Artery Bypass	Dr. Sanya	
2022-06-25	4	Priya	Hypertension	Dr. Alim	
2022-06-25	6	maya	Skin Graft	Dr. Sanya	
2022-06-28	3	Pooja	Fever	Dr. Alim	
2022-06-30	7	karan	Liver Resection	Dr. Sanya	
2022-07-01	1	Anil	Root Canal	Dr. Sadaf	
2022-07-02	2	Mayank	Extraction	Dr. Sadaf	
2022-07-03	8	arjan	Mlaria	Dr. Alim	
2022-07-06	9	Rekha	Scaling	Dr. Sadaf	
2022-07-06	10	Vaibhav	Extraction	Dr. Sadaf	

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Creating Stored Procedure:

#1 patofdoc: returns the list of patient's id and name under the doctor whose name is passed into the stored procedure.

delimiter //

create procedure patofdoc(IN dname varchar(30))

-> begin

-> select p.PatId,p.PatName from patient p inner join doctor d using (DrId) where DocName=dname;

-> end//

call patofdoc('Dr. Sadaf');//

+-----+-----+

PatId	PatName	
-------	---------	--

+-----+-----+

1	Anil	
---	------	--

2	Mayank	
---	--------	--

9	Rekha	
---	-------	--

10	Vaibhav	
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+-----+-----+

#2 totalRevenueperdoc: Returns the total revenue amount the doctor has generated.

create procedure totalRevenueperdoc()

->begin

->select i.DrId,d.DocName,sum(i.Amount) as Revenue from invoice i inner join doctor d using (DrID)
group by DrID;

->end//

call totalRevenueperdoc();//

+-----+-----+-----+

| DrId | DocName | Revenue |

+-----+-----+-----+

| 1 | Dr. Sadaf | 10000.00 |

| 2 | Dr. Alim | 4000.00 |

| 3 | Dr. Sanya | 130000.00 |

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delimiter ;