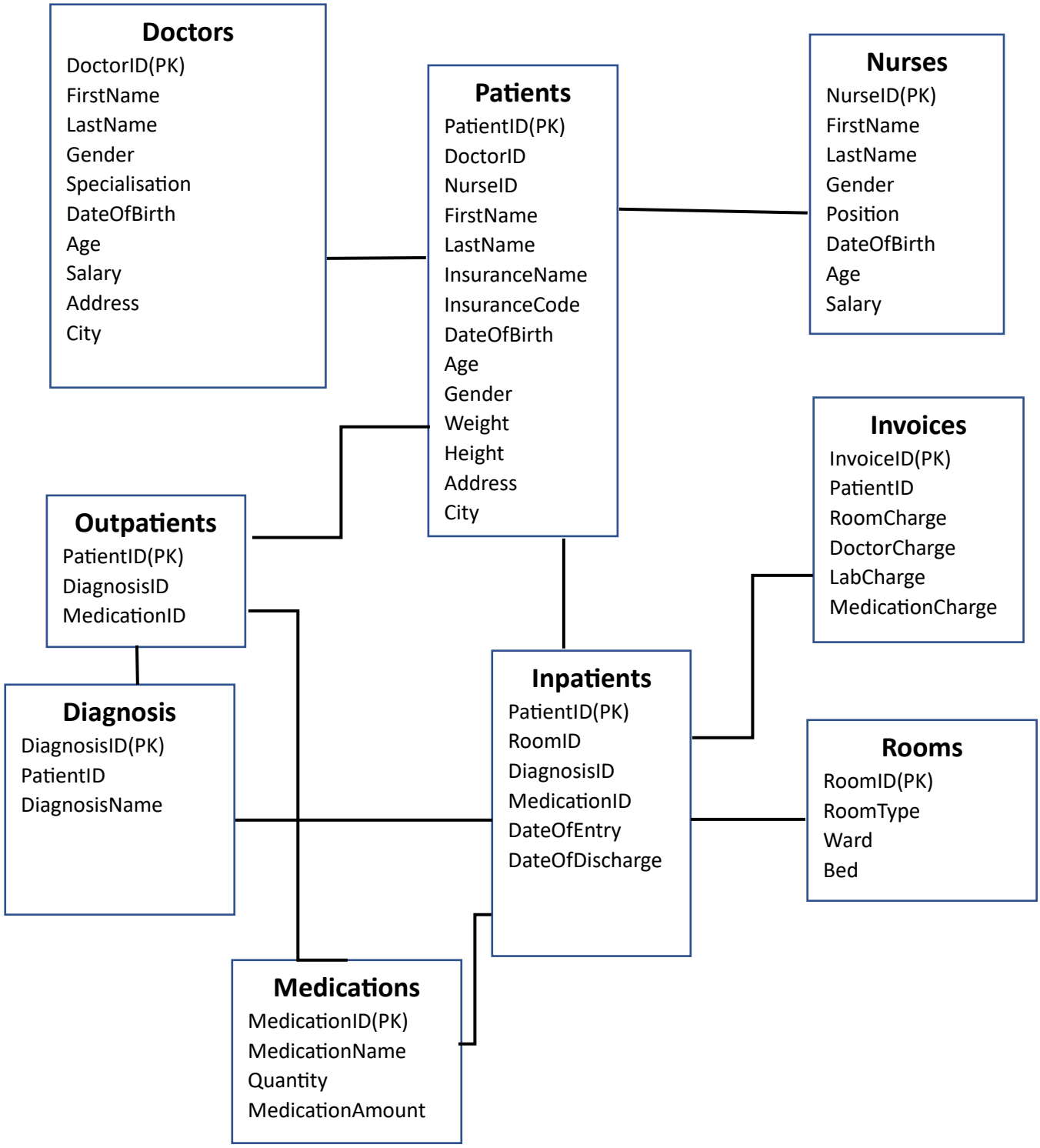
HOSPITAL DATABASE By Nyengeterayi Mawire(w66964)



Relationships

1. Doctors and Patients: (1 to Many). One doctor can have many patients but 1 patient can only be assigned 1 doctor.
2. Nurses and Patients: (1 to Many). One nurse can have many patients but 1 patient can only be assigned 1 nurse.
3. Inpatients and Rooms: (Many to 1). Many patients can be assigned to 1 room, but 1 patient cannot be assigned to many rooms.
4. Inpatients and Invoices: (1 to 1). Only 1 invoice can be assigned to 1 patient and vice versa.

SQL CODE

- Creation Of Database called Hospital

```
Create Database Hospital

Create table Doctors(
DoctorID int not null  PRIMARY KEY,
FirstName varchar(20) not null,
LastName varchar(20) not null,
Gender varchar(10) not null,
Specialisation varchar(20) not null,
DateOfBirth date not null,
Age int not null,
Salary int not null,
Address varchar(24) ,
City varchar(24)
)

Create table Patients(
PatientID int not null PRIMARY KEY ,
DoctorID int,
NurseID int,
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FirstName varchar(20) not null,
LastName varchar(20) not null,
InsuranceName varchar(20),
InsuranceCode varchar(20),
Gender varchar(10) not null,
DateOfBirth date not null,
Age int not null,
Weight decimal not null,
Height decimal not null,
Address varchar(24) ,
City varchar(24),
FOREIGN KEY (DoctorID) REFERENCES Doctors(DoctorID)
FOREIGN KEY (NurseID) REFERENCES Nurses(NurseID))
)

Create table Nurses(
NurseID int not null  ,
FirstName varchar(20) not null,
LastName varchar(20) not null,
Gender varchar(10) not null,
Position varchar(20) not null,
DateOfBirth date not null,
Age int not null,
Salary int not null,
Address varchar(24) ,
City varchar(24),
Constraint PK_Nurse PRIMARY KEY (NurseID)
)

Create table Diagnosis(
DiagnosisID int not null PRIMARY KEY,
PatientID int
DiagnosisName varchar(30),
FOREIGN KEY (PatientID) REFERENCES Patients(PatientID))
```

```
)

Create table Medications(
MedicationID int not null PRIMARY KEY,
PatientID  int not null,
MedicationName varchar(30),
)

Create table Inpatients(
PatientID int not null,
RoomID int not nul,
DiagnosisID int not null,
MedicationID int,
DateOfEntry date not null,
DateOfDischarge date not null,
FOREIGN KEY (PatientID) REFERENCES Patients(PatientID))
FOREIGN KEY (RoomID) REFERENCES Rooms(RoomID))
FOREIGN KEY (DiagnosisID) REFERENCES Diiagnosis(DiagnosisID))
FOREIGN KEY (MedicationID) REFERENCES Medications(Medication
ID))

)

Create table OutPatients(
PatientID int not null,
DiagnosisID int,
MedicationID int,
FOREIGN KEY (PatientID) REFERENCES Patients(PatientID)),
FOREIGN KEY (DiagnosisID) REFERENCES Diiagnosis(DiagnosisID))
,
FOREIGN KEY (MedicationID) REFERENCES Medications(Medication
ID))
)

Create table Rooms(
```

```
RoomID int not null,
RoomType varchar(20),
Ward varchar (24),
Bed int not null,
)

Create table Invoices(
InvoiceID int not null PRIMARY KEY,
PatientID int,
RoomCharge int not null,
DoctorCharge int not null,
LabCharge int not null,
MedicationCharge int not null,
FOREIGN KEY (PatientID) REFERENCES Patients(PatientID))
)
```

JOINING TABLE QUERY

```
Select*
From Patients
Join Doctors ON Patients.DoctorID = Doctors.DoctorID
Join Nurses ON Patients.NurseID = Nurses.NurseID

Select*
From Invoices
Join InPatients ON Invoices.PatientID = InPatients.PatientID


Select*
From InPatients
Join Patients ON InPatients.PatientID = InPatients.PatientID
Join Medications ON InPatients.MedicationID =Medications.MedicationID
Join Rooms ON InPatients.RoomID = Rooms.RoomID
Join Diagnosis ON InPatient.DiagnosisID = Diagnosis.DiagnosisID
```

```
Select*
From Diagnosis
Join InPatients ON Diagnosis.PatientID = InPatients.PatientID
Join OutPatients ON Diagnosis.PatientID = OutPatients.PatientID

Select*
From OutPatients
Join Patients ON OutPatients.PatientID = Patients.PatientID
Join Diagnosis ON OutPatients.PatientID = Diagnosis.PatientID
Join Medications ON OutPatients.PatientID = Medications.PatientID
```