

# Assignment\_1 Entity Descriptions

- PERSON:** Person is an entity with attributes (personID: int, age: int, gender: str, ethnicity: str and phoneNO: str). The primary key for the entity is personID.  
It has a ISA relationship with *PATIENT* and *EMPLOYEE* (ie. Patient is a Person and Employee is a Person)
- PATIENT:** Patient is an entity with attributes (personID: int, dateOfDeath: Date)  
personID is a foreign key from PERSON  
The primary key for Patient is personID  
Patient has a "ISA" relationship with *PERSON*  
Patient has a many-to-many relationship with DISEASE  
Patient has a total many-to-one relation with LABRECORD  
Patient has a total many-to-one relation with ADMISSIONRECORD
- EMPLOYEE:** Employee is an entity with attributes (personID: int, role: str, hName: str, deptID: int)  
personID is a foreign key from PERSON  
hName is a foreign key from HOSPITAL  
deptID is a foreign key from DEPARTMENT  
The primary key for Employee is personID  
Employee has a "ISA" relationship with PERSON  
Employee has a partial Many-to-One relationship with DEPARTMENT  
Employee has a total Many-to-One relationship with HOSPITAL
- DISEASE:** Disease is an entity with attributes (diseaseID: int, category: str, name: str)  
The primary key for Disease is DiseaseID  
Disease has a many to many relationship with PERSON
- LABRECORD:** LABRECORD is an entity with attribues (labID: int, personID: int)  
personID is a foreign key from PERSON  
The primary key for LABRECORD is labID  
LABRECORD has a total Many-to-One relationship with PATIENT  
LABRECORD has a Totally Participation Many-to-Many relation with MEDICALTEST
- MEDICALTEST:** MedicalTest is an entity with attributes (mtID: int, mtName: str, mtType: str)  
The primary key for MedicalTest is mtID  
MedicalTest has a Totally Particiaption Many-to-Many relation with LABRECORD

*ADMISSIONRECORD*: *ADMISSIONRECORD* is an entity with attributes (aID: int, aDate: Date, dDate: Date, personID: int, hName: str)  
personID is a foreign key from PERSON  
hName is a foreign key from HOSPITAL  
The primary key for *ADMISSIONRECORD* is aID  
*ADMISSIONRECORD* has a total many-to-one relationship with HOSPITAL  
*ADMISSIONRECORD* has a many-to-many relationship with ICU  
*ADMISSIONRECORD* has a total many-to-one relationship with PRESCRIPTION  
*ADMISSIONRECORD* has a total many-to-one relationship with PATIENT

*PRESCRIPTION*: *PRESCRIPTION* is an entity with attributes (rxNO: int, startDate: date, endDate: date, aID: int)  
aID is a foreign key from *ADMISSIONRECORD*  
Primary key for *Prescription* is rxNO  
*PRESCRIPTION* has a total many-to-one relationship with *ADMISSIONRECORD*  
*PRESCRIPTION* has a Totally Participation many-to-many relationship with *DRUG*

*DRUG*: *DRUG* is an entity with attributes (dID: int, dName: str, dType: str, dManf: str)  
*DRUG* primary key is D\_ID  
*DRUG* has a totally participation many-to-many relationship with *PRESCRIPTION*

*HOSPITAL*: *HOSPITAL* is an entity with attributes (hName: str, hAddress: str)  
*HOSPITAL* primary key is hName  
*HOSPITAL* has a many-to-many relationship with DEPARTMENT  
*HOSPITAL* has a total many-to-one relationship with EMPLOYEE  
*HOSPITAL* has a total many-to-many relationship with *ADMISSIONRECORD*  
*HOSPITAL* has a total many-to-one relationship with ICU  
*HOSPITAL* is a supporting entity for ICU

*DEPARTMENT*: *DEPARTMENT* is an entity with attributes (deptID: int, deptName: str)  
Primary key for *Department* is deptID  
*DEPARTMENT* has a partial many-to-one relationship with EMPLOYEE  
*DEPARTMENT* has a many-to-many relationship with *HOSPITAL*

*ICU*: *ICU* is a weak entity with attributes (hName: str, icuName: str, icuCap: int)  
hName is a foreign key from *HOSPITAL*  
*ICU* primary key is (hName, icuName) hName supports icuName  
*ICU* has a total many-to-one relationship with *HOSPITAL*  
*ICU* has a many-to-many relationship with *ADMISSIONRECORD*

*HOSPDEPT:* HOSPDEPT is an entity on the relationship between HOSPITAL and DEPARTMENT  
its attributes are (hName: str, deptID: int, capacity: int)  
hName is a foreign key from HOSPITAL  
deptID is a foreign key from DEPARTMENT  
HOSPDEPT primary key is (hName, deptID)

*DIAGNOSIS:* DIAGNOSIS is an entity on the relationship between PATIENT and DISEASE its  
Attributes are (personID: int, diseaseID: int, diagData: str)  
personID is a foreign key from PATIENT  
diseaseID is a foreign key from DISEASE  
DIAGNOSIS primary key is (personID, diseaseID)

*PATIENTTEST:* PATIENTTEST is an entity on the relationship between LABRECORD and  
MEDICALTEST. Its attributes are (labID: int, mtID: int, dateOfTest: date,  
valOfTest: int, outcome: str)  
labID is a foreign key from LACRECORD  
mtID is a foreign key from MEDICALRECORD

*ICUADMISSION:* ICUADMISSION is an entity on the relationship between ADMISSIONRECORD  
ICU. Its attributes are (aID: int, hName: str, icuName: str, enterDate: Date,  
leaveDate: date)  
aID is a foreign key from ADMISSIONRECORD  
(hName, icuName) is a foreign key from ICU  
ICUADMISSION primary key is (aID, hName, icuName)

*PRESCRIBED:* PRESCRIBED is an entity on the relationship between PRESCRIPTION and DRUG  
Its attributes are (rxNO: int, dID: int, dosage: int)  
rxNO is a foreign key from PRESCRIPTION.  
dID is a foreign key from DRUG  
PRESCRIBED primary key is (rxNO, dID)