DATABASE SYSTEMS

PROJECT

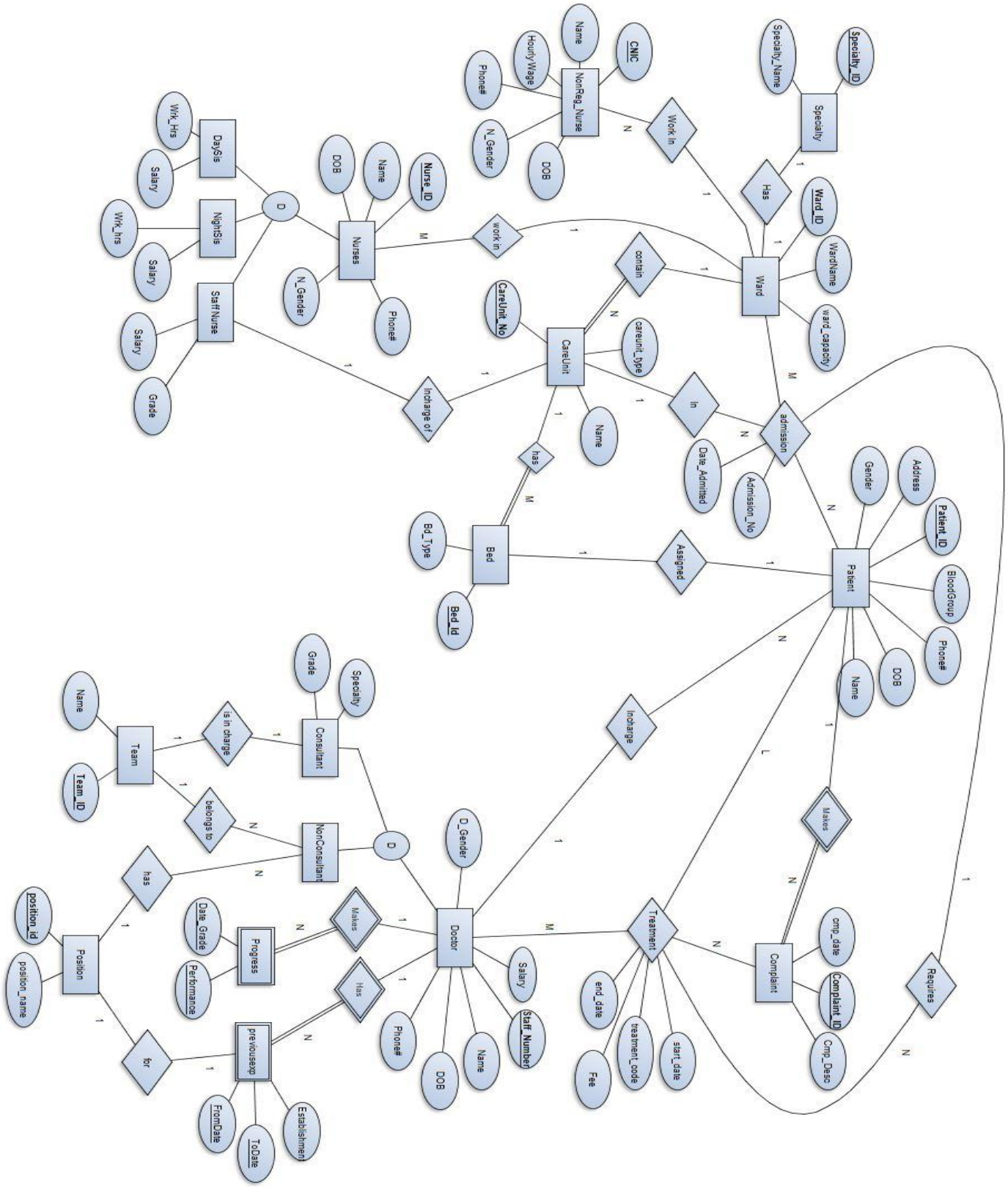
Member1: Hamza Azam 16i-0163 A

Member2: Shariq Waseem 16i-0257 A

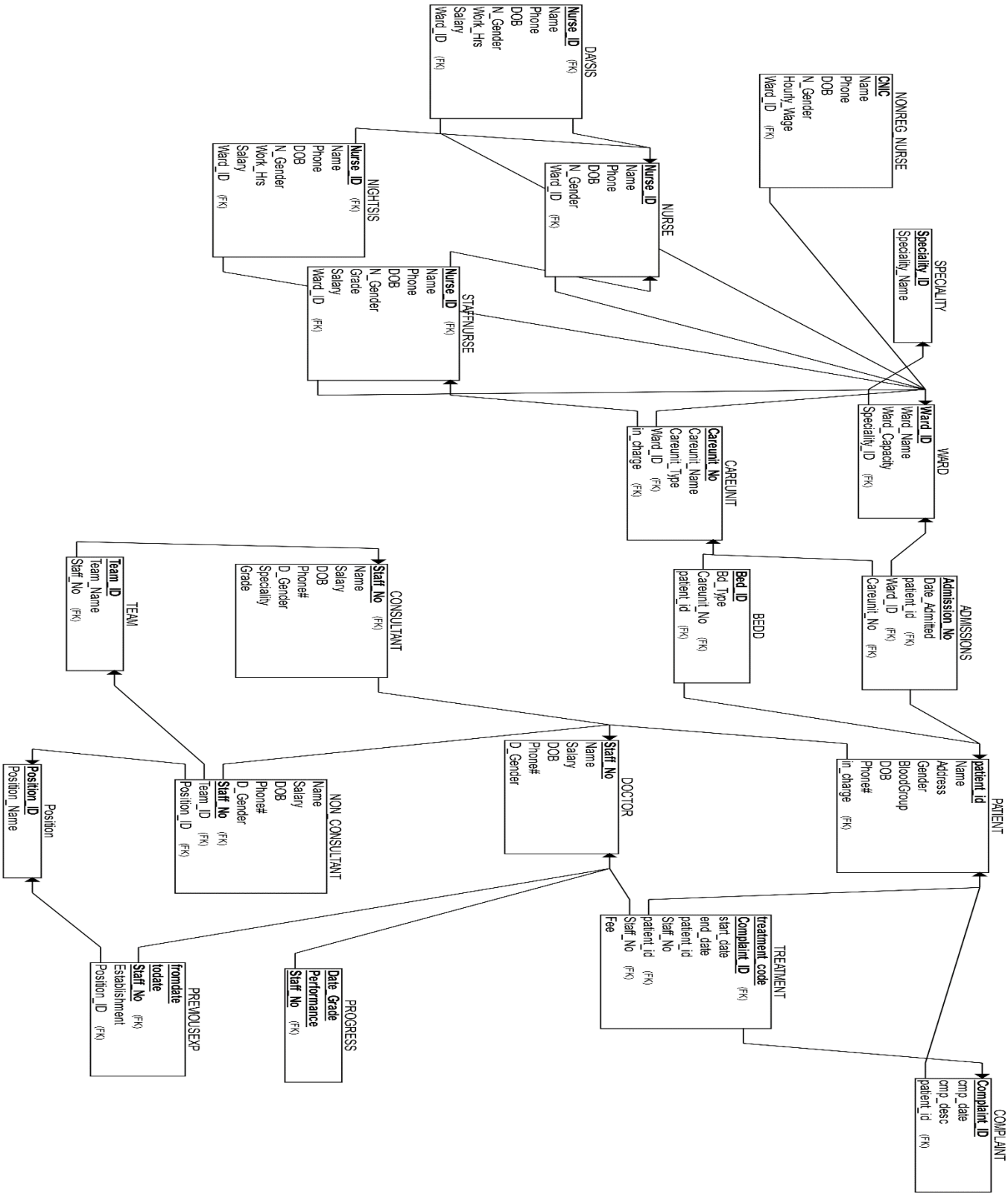
Member3: Anees ul Anwar 16i-0096 A

Member4: Hashaam Ahsan 16i-0095 C

ER/EER Diagram

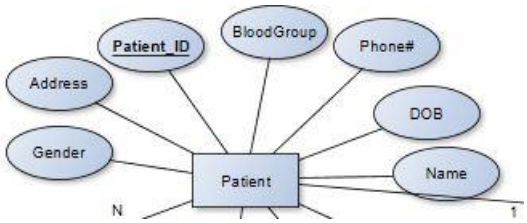


MAPPING


DAYSIS
Nurse_ID (FK)
Name
Phone
DOB
N_Gender
Work_Hrs
Salary
Ward_ID (FK)
NONREG_NURSE
CNIC
Name
Phone
DOB
N_Gender
Hourly_Wage
Ward_ID (FK)
NIGHTSIS
Nurse_ID (FK)
Name
Phone
DOB
N_Gender
Work_Hrs
Salary
Ward_ID (FK)
NURSE
Nurse_ID (FK)
Name
Phone
DOB
N_Gender
Ward_ID (FK)
SPECIALITY
Speciality_ID
Speciality_Name
STAFFNURSE
Nurse_ID (FK)
Name
Phone
DOB
N_Gender
Grade
Salary
Ward_ID (FK)
WARD
Ward_ID
Ward_Name
Ward_Capacity
Speciality_ID (FK)
CAREUNIT
Careunit_No
Careunit_Name
Careunit_Type
Ward_ID (FK)
In_charge (FK)
BEDD
Bed_ID
Bd_Type
Careunit_No (FK)
patient_id (FK)
ADMISSIONS
Admission_No
Date_Admitted
patient_id (FK)
Ward_ID (FK)
Careunit_No (FK)
TEAM
Team_ID
Team_Name
Staff_No (FK)
CONSULTANT
Staff_No (FK)
Name
Salary
DOB
Phone#
D_Gender
Speciality
Grade
PATIENT
patient_id
Name
Address
Gender
BloodGroup
DOB
Phone#
In_charge (FK)
DOCTOR
Staff_No
Name
Salary
DOB
Phone#
D_Gender
NON_CONSULTANT
Name
Salary
DOB
Phone#
D_Gender
Staff_No (FK)
Team_ID (FK)
Position_ID (FK)
Position
Position_ID
Position_Name
TREATMENT
treatment_code
Complaint_ID (FK)
start_date
end_date
patient_id
Staff_No
patient_id (FK)
Staff_No (FK)
Fee
PROGRESS
Date_Grade
Performance
Staff_No (FK)
PREVIOUSEXP
fromdate
todate
Staff_No (FK)
Establishment
Position_ID (FK)
COMPLAINT
Complaint_ID
cmp_date
cmp_desc
patient_id (FK)

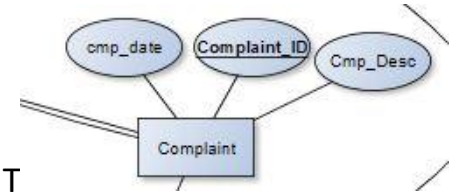
DESCRIPTION OF TABLES

1. PATIENT

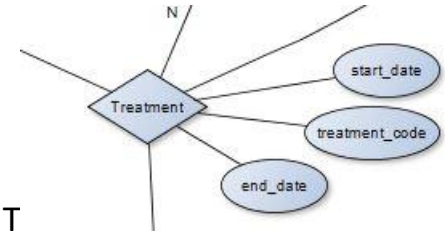


- Holds personal details about Patient which includes NAME, ADDRESS, PHONE#, DOB(Date of Birth), GENDER, BLOODGROUP.
- Attribute PATIENT_ID is used as primary key to identify different patients. (Example PK0002 where 'P' is for patient and 'K' is for city Karachi where the patient belongs/registers from) .
- RELATIONSHIPS :
  - PATIENT : COMPLAINT 1:N
  - PATIENT : BED 1:1
  - PATIENT : DOCTOR N:1
  - PATIENT : COMPLAINT : DOCTOR L:M:N (Ternary with TREATMENT table).
  - PATIENT : WARD N:M (ADMISSION table created)

2. COMPLAINT

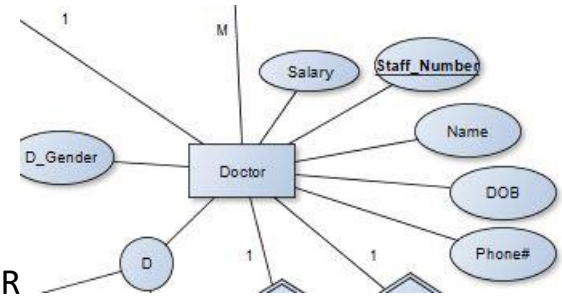


- Complaint is made by Patient in which CMP_DATE (Complaint Date), CMP_DESC (Complaint Description) is stored. PATIENT_ID is stored as Foreign key from PATIENT table.
- Attribute COMPLAINT_ID is used as primary key to identify different complaints. (Example C00001 where 'C' is for Complaint by a particular patient).
- RELATIONSHIPS :
  - PATIENT : COMPLAINT 1:N
  - PATIENT : COMPLAINT : DOCTOR L:M:N (Ternary with TREATMENT table)



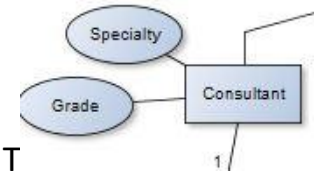
3. TREATMENT

- Many TREATMENT can be done on PATIENT through one COMPLAINT. START_DATE, END_DATE are stored. PATIENT_ID, COMPLAINT_ID,ADMISSION_NO are stored as Foreign key from PATIENT, COMPLAINT and ADMISSION table.
- Attribute TREATMENT_CODE, COMPLAINT_ID are used as composite primary keys. (Example T000002,C00001 is composite key which means treatment 2 for complaint 1).
- RELATIONSHIPS :
    - PATIENT : COMPLAINT : DOCTOR L:M:N (Ternary with TREATMENT table)
    - ADMISSION : TREATMENT 1:N



4. DOCTOR

- DOCTOR treats PATIENT or can be in charge of a PATIENT. Table Holds personal details about Doctor which includes NAME, ADDRESS, PHONE#, DOB(Date of Birth), D_GENDER, SALARY.
- Attribute STAFF_NO is used as primary key. (Example SIC002 is primary key in which 'S' means staff/doctor, 'I' means Incharge and 'C' means consultant).
- SUBTYPES: CONSULTANT, NON_CONSULTANT
- RELATIONSHIPS :
    - PATIENT : COMPLAINT : DOCTOR L:M:N (Ternary with TREATMENT table)
    - PATIENT : DOCTOR N:1
    - DOCTOR : PROGRESS 1:N
    - DOCTOR : EXPERIENCE 1:N

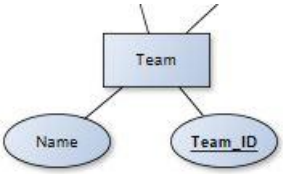


5. CONSULTANT

- DOCTOR can be a CONSULTANT. Holds all the DOCTOR attributes plus SPECIALITY and GRADE.
- Attribute STAFF_NO is used as primary key. (Example SIC002 is primary key in which 'S' means staff/doctor, 'I' means Incharge and 'C' means consultant).
- RELATIONSHIPS :
  - CONSULTANT : TEAM 1:1

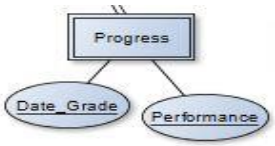
6. NON_CONSULTANT

- DOCTOR can be a NON_CONSULTANT. Holds all the DOCTOR attributes plus TEAM_ID as foreign key from TEAM table and POSITION_ID as foreign key from POSITION table.
- Attribute STAFF_NO is used as primary key. (Example SNN002 is primary key in which 'S' means staff/doctor, 'N' means Not-Incharge and 2nd 'N' means non-consultant).
- RELATIONSHIPS :
  - NON_CONSULTANT : TEAM N:1
  - NON_CONSULTANT : POSITION N:1



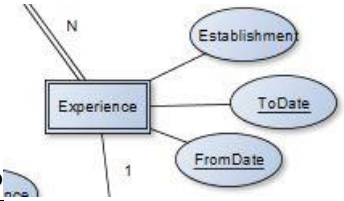
7. TEAM

- TEAM is made up of one CONSULTANT who is in charge and number of NON_CONSULTANTS. Holds TEAM_NAME and STAFF_NO as foreign key from CONSULTANT table.
- Attribute TEAMI_ID is used as primary key.
- RELATIONSHIPS :
  - NON_CONSULTANT : TEAM N:1
  - CONSULTANT : TEAM 1:1



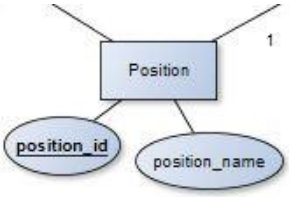
8. PROGRESS

- PROGRESS is made by DOCTOR. Holds DATE_GRADE and PERFORMANCE as attributes. Also holds STAFF_NO from DOCTOR as foreign key. All three attributes are made composite primary keys.
- RELATIONSHIPS :
  - DOCTOR : PROGRESS 1:N



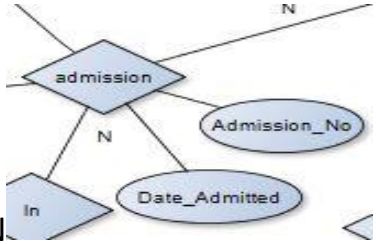
9. PREVOIOUSEXP

  - DOCTOR has EXPERINCE. Holds TO_DATE , FROM_DATE and ESTABLISHMENT as attributes. These three as primary composite keys. Also POSITION_ID from POSITION is stored as foreign key.
- RELATIONSHIPS :
  - DOCTOR : EXPERIENCE 1:N
  - EXPERIENCE : POSITION 1:1

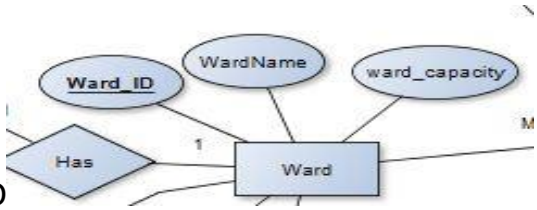


10. POSITION

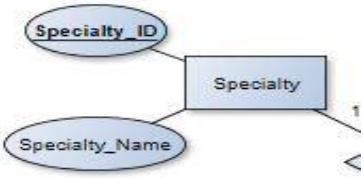
  - DOCTOR is given a position and can upgrade to another in accordance to the grade. POSITION_NAME as attribute. POSITION_ID from POSITION is stored as Primary key(Examples s,jh,sh,a,ar).
- RELATIONSHIPS :
  - NON_CONSULTANT : POSITION N:1
  - EXPERIENCE : POSITION 1:1

11.ADMISSION 

- PATIENT is admitted into WARD after COMPLAINT for TREATMENT. DATE_ADMITTED is stored. PATIENT_ID, WARD_ID, CAREUNNIT_NO are stored as Foreign key from PATIENT, WARD and CAREUNIT table.
- Attribute ADMISSION_NO is used as primary key.
- RELATIONSHIPS :
  - PATIENT : WARD N:M (ADMISSION table created)
  - ADMISSION : TREATMENT 1:N
  - ADMISSION : CAREUNIT N:1

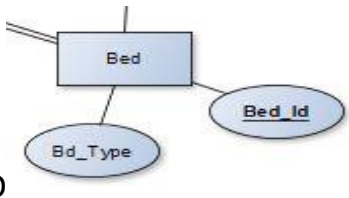
12.WARD 

- PATIENT is admitted into WARD which has a SPECIALITY and number of CAREUNITS and NURSE. WARDNAME, WARD_CAPACITY is stored. SPECIALITY_ID is stored as Foreign key from SPECIALITY table.
- Attribute WARD_ID is used as primary key.
- RELATIONSHIPS :
  - PATIENT : WARD N:M (ADMISSION table created)
  - WARD : SPECIALITY 1:1
  - WARD : CAREUNIT 1:N
  - WARD : NURSE 1:N



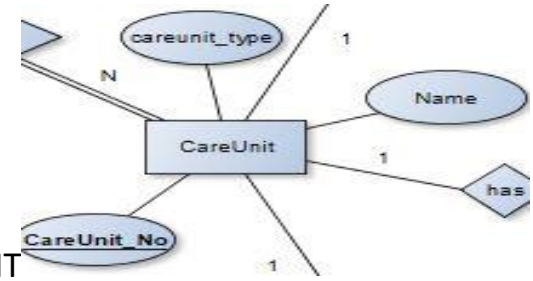
13.SPECIALITY

- WARD has a SPECIALITY. SPECIALITY_NAME is stored.
- Attribute SPECIALITY_ID is used as primary key.
- RELATIONSHIPS :
    - WARD : SPECIALITY 1:1



14.BEDD

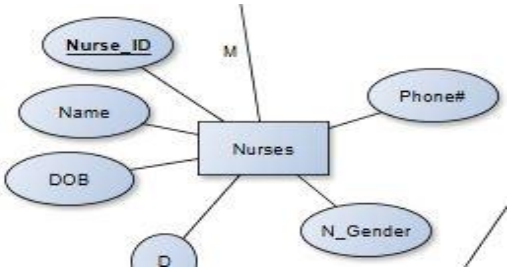
- BED is assigned to a PATIENT and CAREUNIT has number of BED. BED_TYPE is stored. PATIENT_ID and CAREUNIT_NO are stored as Foreign key from PATIENT and CAREUNIT table.
- Attribute BED_ID is used as primary key.
- RELATIONSHIPS :
    - PATIENT : BED 1:1
    - BED : CAREUNIT N:1



15.CAREUNIT

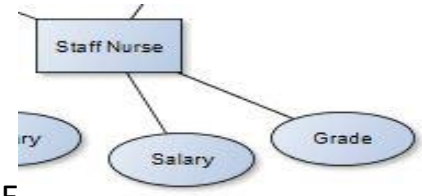
- WARD has CAREUNITs and CAREUNITs have BEDs. NAME, CAREUNIT_TYPE are stored in CAREUNIT. WARD_ID, IN_CHARGE stored as Foreign key from WARD and STAFFNURSE table.
- Attribute CAREUNIT_NO is used as primary key.
- RELATIONSHIPS :
    - CAREUNIT : ADMISSION 1:N
    - WARD : CAREUNIT 1:N

- CAREUNIT : BED 1:N
- CAREUNIT : STAFFNURSE 1:1



16.NURSE

- NURSE work in WARD. Personal details of NURSE are stored, which include NAME, DOB, PHONE#, N_GENDER. WARD_ID stored as Foreign key from WARD table.
- Attribute NURSE_ID is used as primary key.
- SUBTYPES: DAYSIS, NIGHTSIS, STAFFNURSE
- RELATIONSHIPS :
  - WARD : NURSE 1:N



17.STAFFNURSE

- NURSE can be a STAFFNURSE. One STAFFNURSE is in charge of one CAREUNIT. All Personal details of NURSE are stored plus SALARY and GRADE are also stored. WARD_ID stored as Foreign key from WARD table.
- Attribute NURSE_ID is used as primary key.
- RELATIONSHIPS :
  - CAREUNIT : STAFFNURSE 1:1

18.DAYSIS

- NURSE can be a DAYSIS(work in day shift). All Personal details of NURSE are stored plus SALARY and WRK_HRS are also stored. WARD_ID stored as Foreign key from WARD table.
- Attribute NURSE_ID is used as primary key.

19.<u>NIGHTSIS</u>

- NURSE can be a NIGHTSIS(work in night shift). All Personal details of NURSE are stored plus SALARY and WRK_HRS are also stored. WARD_ID stored as Foreign key from WARD table.
- Attribute NURSE_ID is used as primary key.

20.<u>NONREG_NURSE</u>

- NONREG_NURSE work in WARD. Personal details of NONREG_NURSE are stored, which include NAME, DOB, PHONE#, N_GENDER, HOURLY_WAGE. WARD_ID stored as Foreign key from WARD table.
- Attribute CNIC is used as primary key.
- <u>RELATIONSHIPS :</u>
    - WARD : NONREG_NURSE 1:N

QUERIES

1.

```
SQL> break on c.staff_no on c.name
SQL> select c.staff_no consultant_id,c.name consultant_name,n.staff_no,n.name
  2  from consultant c inner join team t on c.staff_no=t.staff_no join non_consultant n on t.team_id=n.team_id
  3  order by c.staff_no;

CONSUL CONSULTANT_NAME                                    STAFF_ NAME
------ -------------------------------------------------- ------ --------------------------------------------------
SIC001 MANSOOR AHMED                                      SIN002 AHMED RAZA
SIC001 MANSOOR AHMED                                      SIN003 AISHA WAQAR
SIC002 FAHAD DAR                                          SNN005 DANYAL HAIDER
SIC003 MEESHA SHAFI                                       SNN004 HASSAN RAZA
SIC003 MEESHA SHAFI                                       SIN004 AMNA WAQAR
SIC004 FARAH NASIR                                        SIN005 SHAHEEN AKHTAR
SNC001 JOHN WICK                                          SNN001 ALI ZAFAR
SNC001 JOHN WICK                                          SNN002 GLORIA BORGER
SNC002 WILLIAM BELL                                       SNN003 MISA HOARES
SNC003 AHMED SHAHZAD                                      SNN006 ABIDA G

10 rows selected.
```

2.

```
SQL> Break on ward_id on ward_name
SQL> select w.ward_id Ward#,w.ward_name WNAME,d.nurse_id Day_Sis,n.nurse_id Night_Sis,c.careunit_no care#,c.in_charge INCRU
  2  from ward w inner join DaySis d on w.ward_id=d.ward_id inner join NightSis n on w.ward_id=n.ward_id inner join careunit c
on w.ward_id=c.ward_id
  3  order by w.ward_id;

WARD#  WNAME                                              DAY_SI NIGHT_ CARE#  INCRU
------ -------------------------------------------------- ------ ------ ------ ------
WF_001 DERMATOLOGY WARD                                   NSD016 NSN016 CG_013 NS0016
WF_001 DERMATOLOGY WARD                                   NSD016 NSN016 CG_004 NS0004
WF_002 ONCOLOGY WARD                                      NSD026 NSN026 CG_005 NS0020
WF_002 ONCOLOGY WARD                                      NSD026 NSN026 CG_006 NS0018
WG_001 CARDIOLOGY WARD                                    NSD013 NSN013 CG_007 NS0009
WG_001 CARDIOLOGY WARD                                    NSD013 NSN013 CG_001 NS0013
WG_001 CARDIOLOGY WARD                                    NSD013 NSN013 CG_003 NS0001
WG_002 CHEMO WARD                                         NSD014 NSN014 CG_015 NS0010
WG_002 CHEMO WARD                                         NSD014 NSN014 CG_009 NS0014
WG_002 CHEMO WARD                                         NSD014 NSN014 CG_017 NS0006
WG_003 SURGERY WARD                                       NSD024 NSN024 CG_008 NS0011
WG_003 SURGERY WARD                                       NSD024 NSN024 CG_002 NS0005
WS_001 NEUROLOGY WARD                                     NSD015 NSN015 CG_010 NS0003
WS_001 NEUROLOGY WARD                                     NSD015 NSN015 CG_012 NS0015
WS_002 PEDIATRICS WARD                                    NSD025 NSN025 CG_014 NS0019
WS_002 PEDIATRICS WARD                                    NSD025 NSN025 CG_016 NS0012

16 rows selected.
```

3.

```
SQL> select p.patient_id,p.patient_name,c.complaint_id,t.treatment_code,t.start_date,t.end_date
  2  from patient p inner join complaint c on p.patient_id=c.patient_id join treatment t on c.complaint_id=t.complaint_id
  3  order by p.patient_id;

PATIEN PATIENT_NAME                  COMPLA TREATM START_DAT END_DATE
------ ----------------------------- ------ ------ --------- ---------
PF0007 ADAM                          C00010 T00001 11-AUG-18 16-AUG-18
PI0001 SAQIB IJAZ                    C00001 T00001 24-APR-18 02-MAY-18
PI0001 SAQIB IJAZ                    C00001 T00002 03-MAY-18 04-MAY-18
PI0001 SAQIB IJAZ                    C00004 T00001 15-JUN-18 25-JUN-18
PI0002 AYESHA KHURAM                 C00007 T00001 27-JUL-18 28-JUL-18
PI0003 HAMZA Butt                    C00008 T00001 29-JUL-18 12-SEP-18
PI0004 ALI NOOR                      C00003 T00001 24-APR-18 25-APR-18
PK0002 ALI ANWAR                     C00009 T00001 04-AUG-18 19-AUG-18
PK0005 ALI HAMZA                     C00002 T00001 22-APR-18 06-MAY-18
PK0005 ALI HAMZA                     C00002 T00002 23-APR-18 12-MAY-18
PL0001 MUNEEBA ALI                   C00011 T00001 08-SEP-18 09-SEP-18
PL0001 MUNEEBA ALI                   C00011 T00004 09-DEC-18 10-DEC-18
PL0001 MUNEEBA ALI                   C00011 T00003 08-NOV-18 09-NOV-18
PL0001 MUNEEBA ALI                   C00011 T00002 08-OCT-18 09-OCT-18
PL0006 ZAINAB ALI                    C00006 T00001 03-MAR-18 04-JUN-18
PM0001 M AZAM                        C00012 T00001 18-AUG-18 22-AUG-18
PM0002 NOOR UL AMIN                  C00013 T00001 22-SEP-18 10-OCT-18
PR0002 MARIUM ANWAR                  C00005 T00001 26-APR-18 28-MAY-18
PR0002 MARIUM ANWAR                  C00014 T00001 28-OCT-18 02-NOV-18

19 rows selected.
```

4.

```
SQL> select n.staff_no,n.name,p.patient_id,c.careunit_no,s.nurse_id,s.name
  2  from non_consultant n inner join treatment t on n.staff_no=t.staff_no join patient p on t.patient_id=p.patient_id join adm
issions a on a.patient_id=p.patient_id join careunit c on a.careunit_no=c.careunit_no join staffnurse s on c.in_charge=s.nurse_
id
  3  where n.position_id='jh'
  4  order by n.staff_no;

STAFF_ NAME                                               PATIEN CAREUN NURSE_ NAME
------ -------------------------------------------------- ------ ------ ------ ------------------------------
SIN003 AISHA WAQAR                                        PK0002 CG_003 NS0001 ZARA
SIN003 AISHA WAQAR                                        PR0002 CG_014 NS0019 SALWA
SIN003 AISHA WAQAR                                        PI0002 CG_006 NS0018 SHAKEEBA
SIN003 AISHA WAQAR                                        PR0002 CG_004 NS0004 LOLA CERSIE
```

5.

```
SQL> select staff_no,name,speciality
  2  from consultant
  3  where speciality in(select speciality
  4  from consultant
  5  having count(speciality)=1
  6  group by speciality);

STAFF_ NAME                                               SPECIALITY
------ -------------------------------------------------- --------------------
SIC001 MANSOOR AHMED                                      DERMATOLOGIST
SIC003 MEESHA SHAFI                                       CARDIOLOGY
SNC001 JOHN WICK                                          ORTHAPAMOLOGY
SIC004 FARAH NASIR                                        ENDOCRINOLOGY
SNC003 AHMED SHAHZAD                                      HISTO-PATHOLOGY
```

6.

```
SQL> break on complaint_id on staff_no on treatment_code
SQL> select c.complaint_id,t.treatment_code,t.staff_no,p.fromdate,p.todate,p.position_id
  2  from complaint c inner join treatment t on c.complaint_id=t.complaint_id inner join previousexp p on t.staff_no=p.staff_no
  3  order by c.complaint_id;

COMPLA TREATM STAFF_ FROMDATE  TODATE    PO
------ ------ ------ --------- --------- --
C00001 T00002 SNN002 01-JUN-10 01-DEC-10 s
                     01-JUN-11 01-DEC-11 sh
                     01-DEC-10 01-JUN-11 jh
       T00001 SNN001 05-JUN-16 05-DEC-16 ar
C00003 T00001 SNN003 25-OCT-16 25-APR-17 r
                     25-APR-16 25-OCT-16 ar
C00004 T00001 SNN003 25-OCT-16 25-APR-17 r
                     25-APR-16 25-OCT-16 ar
C00005 T00001 SIN003 01-JAN-13 01-JUL-13 s
                     01-JUL-13 01-JAN-14 jh
C00006 T00001 SNN003 25-OCT-16 25-APR-17 r
                     25-APR-16 25-OCT-16 ar
C00007 T00001 SIN003 01-JUL-13 01-JAN-14 jh
                     01-JAN-13 01-JUL-13 s
C00009 T00001 SIN003 01-JAN-13 01-JUL-13 s
                     01-JUL-13 01-JAN-14 jh
C00010 T00001 SNN002 01-JUN-11 01-DEC-11 sh
                     01-JUN-10 01-DEC-10 s
                     01-DEC-10 01-JUN-11 jh
C00011 T00002 SNN003 25-OCT-16 25-APR-17 r
       T00001        25-OCT-16 25-APR-17 r
       T00003        25-OCT-16 25-APR-17 r
       T00004        25-APR-16 25-OCT-16 ar
       T00001        25-APR-16 25-OCT-16 ar
       T00002        25-APR-16 25-OCT-16 ar
       T00003        25-APR-16 25-OCT-16 ar
       T00004        25-OCT-16 25-APR-17 r

27 rows selected.
```

7.

```
SQL> Break on patient_id on patient_name
SQL> select p.patient_id,p.patient_name,c.complaint_id,t.treatment_code
  2  from patient p inner join complaint c on p.patient_id=c.patient_id join treatment t on c.complaint_id=t.complaint_id
  3  where p.patient_id in (select patient_id
  4  from complaint
  5  having count(patient_id)>1
  6  group by patient_id)
  7  order by p.patient_id;

PATIEN PATIENT_NAME                   COMPLA TREATM
------ ------------------------------ ------ ------
PI0001 SAQIB IJAZ                     C00001 T00002
                                      C00001 T00001
                                      C00004 T00001
PR0002 MARIUM ANWAR                   C00005 T00001
                                      C00014 T00001
```

8.

```
SQL> select t.patient_id,t.treatment_code,t.complaint_id
  2  from treatment t
  3  group by t.treatment_code,t.patient_id,t.complaint_id
  4  order by t.complaint_id;

PATIEN TREATM COMPLA
------ ------ ------
PI0001 T00001 C00001
       T00002 C00001
PK0005 T00001 C00002
       T00002 C00002
PI0004 T00001 C00003
PI0001 T00001 C00004
PR0002 T00001 C00005
PL0006 T00001 C00006
PI0002 T00001 C00007
PI0003 T00001 C00008
PK0002 T00001 C00009
PF0007 T00001 C00010
PL0001 T00001 C00011
       T00002 C00011
       T00003 C00011
       T00004 C00011
PM0001 T00001 C00012
PM0002 T00001 C00013
PR0002 T00001 C00014

19 rows selected.
```

9.

```
SQL> accept x char prompt 'Please enter staff_no of that doctor: '
Please enter staff_no of that doctor: SNN004
SQL> select s.staff_no,p.date_grade,p.performance
  2  from non_consultant s inner join progress p on s.staff_no=p.staff_no
  3  where s.staff_no='&x';
old   3: where s.staff_no='&x'
new   3: where s.staff_no='SNN004'

STAFF_ DATE_GRAD P
------ --------- -
SNN004 01-DEC-12 A
SNN004 01-JUN-13 B
```

10.

```
SQL> accept x char prompt 'Please enter Patient_id of that Patient: '
Please enter Patient_id of that Patient: PL0006
SQL> select p.patient_id,a.admission_no,a.ward_id,a.careunit_no,t.complaint_id,t.treatment_code,t.staff_no
  2  from patient p inner join admissions a on p.patient_id=a.patient_id inner join treatment t on a.admission_no=t.admission_n
o
  3  where p.patient_id='&x'
  4  order by t.complaint_id;
old   3: where p.patient_id='&x'
new   3: where p.patient_id='PL0006'

PATIEN ADMISS WARD_I CAREUN COMPLA TREATM STAFF_
------ ------ ------ ------ ------ ------ ------
PL0006 000009 WS_001 CG_010 C00006 T00001 SNN003
```

11.

```
SQL> accept x char prompt 'Please enter Complaint_id of that Complaint: '
Please enter Complaint_id of that Complaint: C00002
SQL> select t.treatment_code,c.complaint_id,t.start_date,t.end_date
  2  from complaint c inner join treatment t on c.complaint_id=t.complaint_id
  3  where c.complaint_id='&x' and t.start_date>to_date('07-07-2018','dd-mm-yy') and t.end_date<to_date('07-11-18','dd-mm-yy')
  4  order by t.complaint_id;
old   3: where c.complaint_id='&x' and t.start_date>to_date('07-07-2018','dd-mm-yy') and t.end_date<to_date('07-11-18','dd-mm-y
y')
new   3: where c.complaint_id='C00002' and t.start_date>to_date('07-07-2018','dd-mm-yy') and t.end_date<to_date('07-11-18','dd-
mm-yy')

no rows selected
```

12.

```
SQL> select count(position_id) total_positions
  2  from position;

TOTAL_POSITIONS
---------------
              5

SQL> select position_id,count(position_id)
  2  from non_consultant
  3  group by position_id;

PO COUNT(POSITION_ID)
-- ------------------
sh                  2
s                   2
r                   2
ar                  2
jh                  2
```