

## **DDL FOR HOSPITAL MANAGEMENT SYSTEM**

```
drop table doctor;  
drop table doctor_class;  
drop table doctor_contact;  
drop table hospital;  
drop table medicine_store;  
drop table operates;  
drop table order_master;  
drop table patient;  
drop table qualification;  
drop table room_type;  
drop table staff;  
drop table staff_contact;  
drop table user_contact;  
drop table user_master;
```

### **1.Hospital Table**

```
create SEQUENCE hospital_id_seq start with 0001  
INCREMENT BY 1 MAXVALUE 5000 NOCYCLE nocache ORDER;
```

```
CREATE TABLE hospital  
(  
    hospital_id VARCHAR(10),  
    hospital_name VARCHAR(20),  
    hospital_branch VARCHAR(20),
```

```
PRIMARY KEY(hospital_id)

);

alter table hospital modify (hospital_id varchar(30));
```

## **2.Admin Table**

```
create SEQUENCE admin_id_seq start with 0001

INCREMENT BY 1 MAXVALUE 5000 NOCYCLE nocache ORDER;
```

```
CREATE TABLE admin_master

(

  admin_id VARCHAR(10),

  admin_first_name VARCHAR(20),

  admin_mid_name varchar(20),

  admin_last_name varchar(20),

  admin_password VARCHAR(10),

  hospital_id REFERENCES hospital(hospital_id),

  PRIMARY KEY(admin_id)

);
```

```
alter table admin_master modify (admin_id varchar(30));

alter table admin_master modify (hospital_id varchar(30));
```

## **3.Department Table**

```
create SEQUENCE dept_id_seq start with 0001
```

```
INCREMENT BY 1 MAXVALUE 5000 NOCYCLE nocache ORDER;
```

```
CREATE TABLE department_master
```

```
(  
    dept_id          VARCHAR(10),  
    dept_name        VARCHAR(15),  
    no_of_doctors     INT,  
    no_of_operation_theater INT,  
    hospital_id REFERENCES hospital(hospital_id),  
    PRIMARY KEY(dept_id)  
);
```

```
alter table department_master modify (dept_name varchar(30));
```

```
alter table department_master modify (doct_id varchar(30));
```

```
alter table department_master modify (hospital_id varchar(30));
```

#### **4.Doctor Table**

```
create SEQUENCE doct_id_seq start with 0001
```

```
INCREMENT BY 1 MAXVALUE 5000 NOCYCLE nocache ORDER;
```

```
CREATE TABLE doctor_master
```

```
(  
    doct_id VARCHAR(10),  
    doct_first_name VARCHAR(30),  
    doct_mid_name varchar(30),  
    doct_last_name varchar(30),
```

```
dept_id REFERENCES department_master(dept_id),
PRIMARY KEY(doct_id)
);
```

```
alter table doctor_master modify (doct_id varchar(30));
alter table doctor_master modify (doct_id varchar(30));
```

### **5.Contact for Doctor**

```
create table doctor_contact (
doct_id varchar(10) references doctor_master(doct_id),
doct_contact_no int
constraint cont_cons CHECK(REGEXP_LIKE(doct_contact_no,'^[1-9]{1}[0-9]{9}$'))
);
```

```
alter table doctor_contact modify (doct_id varchar(30));
```

### **6.Qualifications for perticutlar Doctor**

```
CREATE TABLE qualification
(
doct_id varchar(10) REFERENCES doctor_master(doct_id),
qualification VARCHAR(25)
);
```

```
alter table qualification modify (doct_id varchar(30));
```

### **7.Class Of Doctor**

```
CREATE TABLE doctor_class
```

```
(
doct_id REFERENCES doctor_master(doct_id),
visiting_time VARCHAR2(25),
availability VARCHAR2(25) check in('temporary','full service','special service')),
    avail_count int,
PRIMARY KEY(doct_id)
);
alter table doctor_class modify (doct_id varchar(30));
alter table doctor_class modify (visiting_time varchar(100));
```

## 8.User Table

```
create SEQUENCE user_id_seq start with 0001
INCREMENT BY 1 MAXVALUE 5000 NOCYCLE nocache ORDER;

CREATE TABLE user_master
(
    user_id VARCHAR(10) primary key,
    user_first_name VARCHAR(20),
    user_mid_name varchar(20),
    user_last_name varchar(20),
    user_password varchar(30) CHECK (REGEXP_LIKE(user_password,'^([a-zA-Z0-9@*#]
{7,14})$')),
    user_age INT,
    user_gender VARCHAR(2) CHECK (user_gender IN ('M','F','O')),
    user_blood_grp VARCHAR(10),
```

```

user_description VARCHAR(30),

user_city VARCHAR(30),

user_street varchar(30),

user_pincode int check(REGEXP_LIKE(user_pincode,'^[0-6]{6}')),

user_email varchar(50) check (REGEXP_LIKE(user_email,'^[a-zA-Z0-9_
\-.]+)@((gmail.com)|(yahoo.com))$'))

);

alter table user_master modify (user_id varchar(30));

alter table user_master modify (user_pincode int check(REGEXP_LIKE(user_pincode,'^[0-6]{6})$'));

ALTER TABLE user_master MODIFY (user_email VARCHAR(50) CHECK
(REGEXP_LIKE(user_email,'^[a-zA-Z0-9_-\.\.]+)@((gmail.com)|(yahoo.com))$'));

```

## **9.Contact\_no of user**

```

create table user_contact

(

    user_id varchar(10) references user_master(user_id),

    user_contact_no int,

    constraint cont1_cons CHECK(REGEXP_LIKE(user_contact_no,'^[1-9]{1}[0-9]{9})$'))

);

alter table user_contact modify (user_id varchar(30));

```

## **10.Patient Table**

```

create SEQUENCE pt_id_seq start with 0001

INCREMENT BY 1 MAXVALUE 5000 NOCYCLE nocache ORDER;

```

```

CREATE TABLE patient_master
(
    pt_id VARCHAR(10) PRIMARY KEY,
    user_id REFERENCES user_master(user_id)
);

alter table patient_master modify(pt_id varchar(30));

alter table patient_master modify(user_id varchar(30));

```

## **11.Appointment Table**

```

create SEQUENCE apt_id_seq start with 0001

INCREMENT BY 1 MAXVALUE 5000 NOCYCLE nocache ORDER;

CREATE TABLE appointment
(
    apt_id NUMBER(10),
    doct_id REFERENCES doctor_master(doct_id),
    pt_id REFERENCES patient_master(pt_id),
    apt_status VARCHAR(20),
    apt_date DATE,
    apt_time VARCHAR(10),
    PRIMARY KEY(apt_id)
);

alter table appointment modify(pt_id varchar(30));

alter table appointment modify(doct_id varchar(30));

alter table appointment modify(apt_id varchar(30));

```

```
alter table appointment modify(apt_status varchar(20) check(apt_status in('appointed','in progress','completed','cancelled')));
```

## **12.Staff Table**

```
create sequence staff_id_seq start with 0001  
increment by 1 maxvalue 5000 nocycle nocache order;
```

```
CREATE TABLE staff  
(  
    staff_id VARCHAR(10),  
    staff_first_name VARCHAR(30),  
    staff_last_name varchar(30),  
    staff_mid_name varchar(30),  
    dept_id REFERENCES department_master(dept_id),  
    staff_address VARCHAR(35),  
    PRIMARY KEY(staff_id)  
);  
alter table staff modify(staff_id varchar(30));  
alter table staff modify(dept_id varchar(30));
```

## **13.Contact\_no.s of staff members**

```
create table staff_contact  
(  
    staff_id varchar(10) references staff(staff_id),  
    staff_contact_no int,  
    constraint cont_cons2 CHECK(REGEXP_LIKE(staff_contact_no,'^([1-9]{1}[0-9]{9})$'))
```



);

alter table staff\_contact modify(staff\_id varchar(30));

#### **14.Medicine Information data**

create sequence med\_id\_seq start with 0001

maxvalue 5000 increment by 1 nocycle nocache order;

CREATE TABLE medicine\_store

(

med\_id VARCHAR(10),

med\_name VARCHAR(25),

dept\_id REFERENCES department\_master(dept\_id),

company\_name VARCHAR(30),

med\_price NUMBER(8,3),

med\_mfd DATE,

med\_expd DATE,

PRIMARY KEY(med\_id)

);

alter table medicine\_store modify(med\_id varchar(30));

alter table medicine\_store modify(dept\_id varchar(30));

#### **15.Order Information**

create sequence order\_id\_seq start with 0001

maxvalue 5000 increment by 1 nocycle nocache order;

CREATE TABLE order\_master

```
(
    order_id VARCHAR2(15),
    med_id REFERENCES medicine_store(med_id),
    user_id REFERENCES user_master(user_id),
    deli_address VARCHAR2(30),
    status    VARCHAR2(30),
    PRIMARY KEY(order_id)
);

alter table order_master modify(med_id varchar(30));
alter table order_master modify(user_id varchar(30));
alter table order_master modify(order_id varchar(30));
```

## **16.Room and Bed Information**

```
CREATE TABLE dept_facility

(
    room_no INT,
    dept_id REFERENCES department_master(dept_id),
    tot_bed INT,
    PRIMARY KEY(room_no)
);

alter table dept_facility modify(dept_id varchar(30));
```

## **17.Current Room and Bed Status**

```
CREATE TABLE room_status

(
    room_no REFERENCES dept_facility(room_no),
```

```

room_type_ac VARCHAR(10) default ('AC'),
room_type_delux varchar(10) default ('NON-DELUX'),
available_bed int,
constraint roomtype1cons check(room_type_ac in('AC','NON-AC')),
constraint roomtype2cons check(room_type_delux in('TV-REFRIGERATOR','NON-DELUX'))
);

```

## **18.Operation Table**

```

create sequence op_id_seq start with 0001
maxvalue 5000 increment by 1 nocycle nocache order;

CREATE TABLE operates
(
    doct_id REFERENCES doctor_master(doct_id),
    pt_id REFERENCES patient_master(pt_id),
    op_id    VARCHAR2(20),
    op_date  DATE ,
    op_start_time VARCHAR2(20),
    op_end_time  VARCHAR2(20),
    status    VARCHAR2(15) CHECK (status IN ('Success','Failed','In Progress')),
    PRIMARY KEY(op_id)
);

alter table operates modify(doct_id varchar(30));
alter table operates modify(pt_id varchar(30));
alter table operates modify(op_id varchar(30));

```

# **DML**

## **1.Hospital**

- insert into hospital(HOSPITAL\_ID,HOSPITAL\_NAME,hospital\_branch) values  
(to\_char(sysdate,'YYYYMMDD'))||'HOSPITAL'||hospital\_id\_seq.nextval,'sterling','Bhavna gar');
- insert into hospital(HOSPITAL\_ID,HOSPITAL\_NAME,hospital\_branch) values  
(to\_char(sysdate,'YYYYMMDD'))||'HOSPITAL'||hospital\_id\_seq.nextval,'sterling','Surat');

## **2.Admin**

- insert into admin\_master  
(admin\_id,ADMIN\_FIRST\_NAME,admin\_mid\_name,admin\_last\_name,admin\_password,  
hospital\_id)  
values(to\_char(sysdate,'YYYYMMDD'))||'ADMIN'||admin\_id\_seq.nextval,'Keval','Rajyag  
uru','Atulkumar','mypassword','20171101HOSPITAL2');

## **3.Department**

- insert into  
department\_master(dept\_id,dept\_name,no\_of\_doctors,no\_of\_operation\_theater,hosp  
ital\_id)  
  
values(to\_char(sysdate,'YYYYMMDD'))||'DEPT'||dept\_id\_seq.nextval,'Dental  
Department',2,1,'20171101HOSPITAL2');
- insert into  
department\_master(dept\_id,dept\_name,no\_of\_doctors,no\_of\_operation\_theater,hosp  
ital\_id)  
  
values(to\_char(sysdate,'YYYYMMDD'))||'DEPT'||dept\_id\_seq.nextval,'Neuro  
Department',2,1,'20171101HOSPITAL2');

## **4.Doctor**

- insert into doctor\_master

```
(doct_id,doct_first_name,doct_mid_name,doct_last_name,dept_id)
values
(to_char(sysdate,'YYYYMMDD'))||'DOCT'||doct_id_seq.nextval,'Hardik','Upadhyay','Nar
eshBhai','20171102DEPT3');
```

## 5.Doctor\_contact

- insert into doctor\_contact (doct\_id,doct\_contact\_no)  
values('20171102DOCT5',9598789565);

## 6.Doctor\_Qualification

- insert into qualification (doct\_id,QUALIFICATION) values('20171102DOCT5','MBBS');
- insert into qualification (doct\_id,QUALIFICATION) values('20171102DOCT5','MD');

## 7.Doctor\_class

- insert into doctor\_class (doct\_id,visiting\_time,availability)  
values('20171102DOCT5','8a.m. to 1p.m. and 4 to 7p.m.','every day');

## 8.User

- insert into  
user\_master(USER\_ID,USER\_FIRST\_NAME,USER\_MID\_NAME,USER\_LAST\_NAME,USER\_  
PASSWORD,USER\_AGE,USER\_GENDER,USER\_BLOOD\_GRP,USER\_DESCRIPTION,USER\_CI  
TY,USER\_STREET,USER\_PINCODE,USER\_EMAIL)  
values(to\_char(sysdate,'YYYYMMDD'))||'USER'||user\_id\_seq.nextval,'Sandhya','Suraj','R  
athi','ascvdgfdks',27,'F','B+',null,'Pushkar','Hanuman  
Gali',436036,'diyaaurbati@gmail.com');
- insert into  
user\_master(USER\_ID,USER\_FIRST\_NAME,USER\_MID\_NAME,USER\_LAST\_NAME,USER\_  
PASSWORD,USER\_AGE,USER\_GENDER,USER\_BLOOD\_GRP,USER\_DESCRIPTION,USER\_CI  
TY,USER\_STREET,USER\_PINCODE,USER\_EMAIL)  
values(to\_char(sysdate,'YYYYMMDD'))||'USER'||user\_id\_seq.nextval,'Sandhya','Suraj','R  
athi','ascvdgfdks',27,'F','B+',null,'Pushkar','Hanuman Gali',436036,null);

## 9.User\_contact

- insert into user\_contact (user\_id,user\_contact\_no)  
values('20171103USER59',8248648624);

## 10.Patient

- insert into patient\_master(pt\_id,user\_id)  
values(to\_char(sysdate,'YYYYMMDD')||'PT'||pt\_id\_seq.nextval,'20171103USER59');

## 11.Appointment

- insert into appointment (APT\_ID,DOCT\_ID,PT\_ID,APT\_STATUS,APT\_DATE,APT\_TIME)  
values(to\_char(sysdate,'YYYYMMDD')||'APT'||apt\_id\_seq.nextval,'20171102DOCT5',  
'20171103PT90','appointed','03-Nov-2017','03 p.m.');

## 12.Staff

- insert into  
staff(STAFF\_ID,STAFF\_FIRST\_NAME,STAFF\_LAST\_NAME,STAFF\_MID\_NAME,DEPT\_ID,STAFF\_ADDRESS) values  
(to\_char(sysdate,'YYYYMMDD')||'STAFF'||staff\_id\_seq.nextval,'Bhargav','Rathod','N','20171102DEPT2','add1');

## 13.Staff\_contact

- insert into staff\_contact (staff\_id,staff\_contact\_no)  
values('20171103STAFF2',1123456789);

## 14.Medicine

- insert into  
medicine\_store(MED\_ID,MED\_NAME,DEPT\_ID,COMPANY\_NAME,MED\_PRICE,MED\_MFD,MED\_EXPD)  
values(to\_char(sysdate,'YYMMDD')||'MED'||med\_id\_seq.nextval,'med1','20171102DEPT2','comp1',123,'01-Jan-2015','01-Jan-2017');

## 15.Order

- insert into order\_master(ORDER\_ID,MED\_ID,USER\_ID,DELI\_ADDRESS,STATUS)values  
(to\_char(sysdate,'YYMMDD')||'ORDER'||order\_id\_seq.nextval,'171103MED1','20171103',

```
3USER59','add1','completed');
```

## 16.Fecility

- insert into dept\_facility(ROOM\_NO,DEPT\_ID,TOT\_BED)  
values(1,'20171102DEPT2',10);

## 17.Status

- insert into room\_status(ROOM\_NO,AVAILABLE\_BED)values (1,7);

## 18.Operation

- insert into  
operates(DOCT\_ID,PT\_ID,OP\_ID,OP\_DATE,OP\_START\_TIME,OP\_END\_TIME,STATUS)  
values('20171102DOCT5','20171103PT1',to\_char(sysdate,'YMMDD')||'OP'||op\_id\_seq  
.nextval,'21-Oct-2017',null,null,null);

# Report

See Hospital List: select \* from Hospital

See Department List For Selected Hospital id:select \* from Department\_master where  
hospital\_id=:h\_id

See Doctors Details from Department id:select \* from doctor\_master where dept\_id=:de\_id

see Doctor Qualification from Doctor id:select \* from qualification where doct\_id =:d\_id

## Some Examples of SRS Queries

### 1 Authanticate user

```
create view user_credential as select user_id,user_password from  
user_master;
```

```
Select user_id,user_password from user_credential  
where user_id='20171103USER69' and  
user_password='ascvdgfdks';
```

## 2 Update

*Query: update user\_master set user\_street='galaxy road' where  
user\_id='201710040001';*

## 3 Appointment Check

*create index app\_index on appointment(apt\_date,apt\_time,apt\_status);*

*select user\_first\_name,user\_mid\_name,user\_last\_name from  
appointment natural join patient\_master natural join user\_master where  
apt\_date='03-NOV-17';*

## 4 Appointment Update

*update appointment set  
apt\_status='cancelled' where apt\_id='apt1';*

## 5 Doctor Details

*create index doc\_search\_index on  
doctor\_master(doct\_id,doct\_first\_nm,doct\_mid\_nm,doct\_last\_nm,);*

*select distinct(dept\_id),visiting\_time,availability from doctor\_master  
natural join  
doctor\_class where doct\_first\_name=:d\_nm and  
doct\_last\_name=:dl\_nm and doct\_mid\_name=:dm\_nm;*

## 6 Staff Details

*create index on input and fetch output  
from staff join  
staff\_contact same as above*

## 7 Medicine

*create index med\_nm on medicine\_store(med\_name);*

*select med\_id from medicine\_store where med\_name='abc';*

## 8 Medicine Quality

*select company\_name,med\_price,med\_mfd,med\_expd from  
medicine\_store where med\_id='123';*

## 9 Invoice Generate

*select sum(med\_price) from order\_master natural join*



```
medicine_storewhere user_id=:u_id group by(order_id);
```