DBMS ASSIGNMENT- I

Topic: Suggestion Bot for Interview Skills Management

Abstract

This database takes the skills of the user and the choice of company from the user. Then comparing the given skills with the required skills of the user. The database provides the user with suggestions to improve their skills and the level to which they should be improved. It takes basic information from the user such as name and email-id and allots each user an id. This id is used to the compare the given skills to the skills required and suggestions will be provided accordingly.
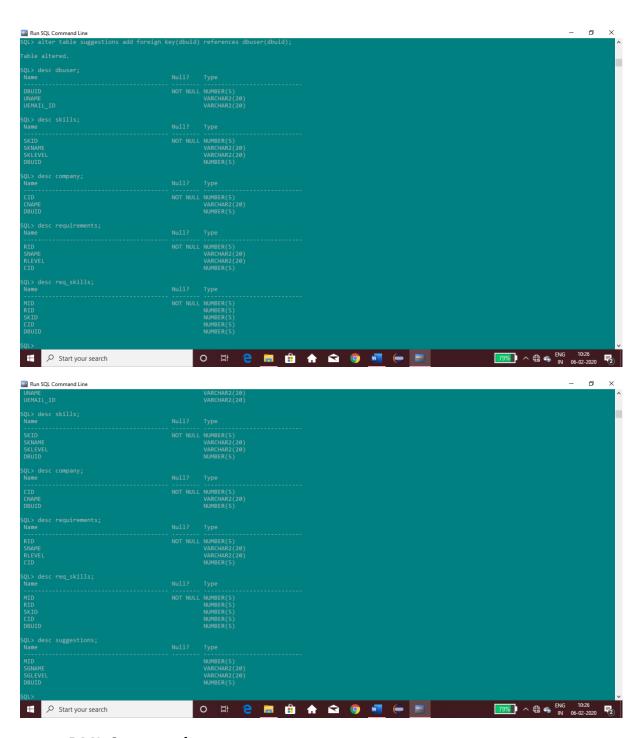
Requirements

Table	Attributes
User	uid number(5) uname varchar2(20) uemail_id varchar(20)
Skills	skid number(5) skname varchar2(20) sklevel varchar2(20) usid number(5) **[foreign key]**
Company	cid number(5) cname varchar2(20) uid number(5) **(foreign key)**
Requirements	rid number(5) rname varchar2(20) rlevel varchar2(20) cid number(5) **[foreign key]**
Suggestions	sgskill varchar2(20) sglevel varchar2(20) mid number(5) **(foreign key)**
Req_skills	mid number(5) sid number(5) slevel varchar2(20) sname varchar2(20) rid number(5) rlevel varchar2(20) **(foreign keys)**

- **Creation of tables with primary key constraint:**

1) create table dbuser (

dbuid number(5), uname varchar2(20), uemail_id varchar2(20));

Alter table dbuser add constraint dbuid primary key (dbuid);

2) create table skills (

skid number(5), skname varchar2(20), sklevel varchar2(20), dbuid number(5), primary key(skid));

3) create table company (

cid number(5), cname varchar2(20), dbuid number(5), primary key(cid));

4) create table requirements (

Rid number(5), rname varchar2(20), rlevel varchar2(20), cid number(5), primary key(rid));

5) create table suggestions (

Sgskill varchar2(20), sglevel varchar2(20));

6) create table req_skills (

mid number(5), sid number(5), cid number(5), rid number(5),dbuid number(5),

primary key(mid));

- **Altering table to add other constraints like foreign key:**

alter table skills add foreign key (dbuid) references dbuser;

alter table company add foreign key(dbuid) references dbuser;

alter table requirements add foreign key(cid) references company;

alter table req_skills add foreign key(sid) references skills;

alter table req_skills add foreign key (rid) references requirements;

alter table req_skills add foreign key(cid) references company;

alter table req_skills add foreign key(dbuid) references dbuser;

alter table suggestions add foreign key (mid) references req_skills;

alter table suggestions add foreign key (dbuid) references dbuser(dbuid);

- **DML Commands:**
1. User Table

Uid	Uname	uemail_id
101	Riya	Riya1@gmail.com
102	Sameera	Sameera2@gmail.com
103	Mihir	Mihir1345@gmail.com
104	Amit	samit@gmail.com
105	Jessica	jessyb@gmail.com

2. Skills Table

Uid	Skid	sname	Slevel
101	1	programming	Beginner
101	2	aptitude	Beginner
102	3	programming	Intermediate
102	4	communication	Expert
103	5	programming	Intermediate
103	6	Aptitude	Beginner
104	7	communication	Beginner
104	8	programming	Intermediate
105	9	communication	Beginner
105	10	aptitude	Intermediate

3. Companies Table:

Uid	cid	Cname
101	001	Oracle
102	002	Microsoft
103	005	Google
104	003	Zenser Technologies
105	004	Deloitte

4. Requirements Table

cid	Rid	rname	Rlevel
001	1001	Programming	Expert
001	1002	Aptitude	Expert
002	1003	Programming	Expert
002	1004	Communication	Expert
003	1005	Programming	Expert
003	1006	Aptitude	Expert
004	1007	Communication	Intermediate
004	1008	Programming	Intermediate
005	1009	Communication	Expert
005	1010	aptitude	Intermediate

5. Req_sugg Table

Mid	sid	cid	rid	Dbuid
01	1	001	1001	101
02	2	001	1002	101
03	3	002	1003	102
04	4	002	1004	102

05	5	005	1005	103
06	6	005	1006	103
07	7	003	1007	104
08	8	003	1008	104
09	9	004	1009	105
10	10	004	1010	105

6. Suggestions Table

Mid	Sgskill	sglevel	Dbuid
01	Programming	Expert	101
02	Aptitude	Expert	101
03	Programming	Expert	102
04	Communication	Expert	102
05	Programming	Expert	103
06	Aptitude	Expert	103
07	Communication	Intermediate	104
08	Programming	Intermediate	104
09	Communication	Expert	105
10	Aptitude	intermediate	105

Run SQL Command Line   — ☐ ✕

```
Enter value for skname: aptitude
Enter value for sklevel: intermediate
Enter value for dbuid: 105
old   1: insert into skills values (&skid,'&skname','&sklevel',&dbuid)
new   1: insert into skills values (10,'aptitude','intermediate',105)

1 row created.

SQL> select * from skills;

     SKID SKNAME            SKLEVEL              DBUID
---------- ----------------- -------------------- ----------
        1 programming       beginner                  101
        2 aptitude          beginner                  101
        3 programming       intermediate              102
        4 communication     expert                    102
        5 programming       intermediate              103
        6 aptitude          beginner                  103
        7 communication     beginner                  104
        8 programming       intermediate              104
        9 communication     beginner                  105
       10 aptitude          intermediate              105

10 rows selected.

SQL> commit;

Commit complete.

SQL>
```

Run SQL Command Line   — ☐ ✕

```
new   1: insert into requirements values(1008, 'programming','intermediate',4)

1 row created.

SQL> /
Enter value for rid: 1009
Enter value for sname: communicaton
Enter value for rlevel: expert
Enter value for cid: 5
old   1: insert into requirements values(&rid, '&sname','&rlevel',&cid)
new   1: insert into requirements values(1009, 'communicaton','expert',5)

1 row created.

SQL> /
Enter value for rid: 1010
Enter value for sname: aptitude
Enter value for rlevel: intermediate
Enter value for cid: 5
old   1: insert into requirements values(&rid, '&sname','&rlevel',&cid)
new   1: insert into requirements values(1010, 'aptitude','intermediate',5)

1 row created.

SQL> seelct * from requirements;
SP2-0734: unknown command beginning "seelct * f..." - rest of line ignored.
SQL> select * from requirements;

       RID SNAME          RLEVEL            CID
---------- -------------- ------------- ----------
      1001 programming    expert                 1
      1002 aptitude       expert                 1
      1003 programming    expert                 2
      1004 communication  expert                 2
      1005 programming    expert                 3
      1006 aptitude       expert                 3
      1007 communication  intermediate           4
      1008 programming    intermediate           4
      1009 communicaton   expert                 5
      1010 aptitude       intermediate           5

10 rows selected.

SQL>
```
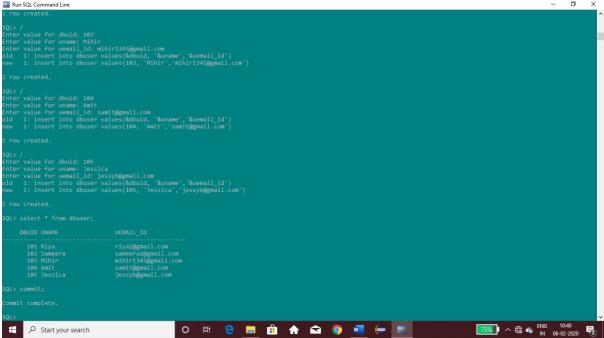
```
Enter value for dbuid: 104
old   1: insert into suggestions values(&mid, '&sgname' ,'&sglevel',&dbuid)
new   1: insert into suggestions values(8, 'programming' ,'intermediate',104)

1 row created.

SQL> /
Enter value for mid: 9
Enter value for sgname: communication
Enter value for sglevel: expert
Enter value for dbuid: 105
old   1: insert into suggestions values(&mid, '&sgname' ,'&sglevel',&dbuid)
new   1: insert into suggestions values(9, 'communication' ,'expert',105)

1 row created.

SQL> /
Enter value for mid: 10
Enter value for sgname: aptitude
Enter value for sglevel: intermediate
Enter value for dbuid: 105
old   1: insert into suggestions values(&mid, '&sgname' ,'&sglevel',&dbuid)
new   1: insert into suggestions values(10, 'aptitude' ,'intermediate',105)

1 row created.

SQL> select * from suggestions;

     MID SGNAME          SGLEVEL              DBUID
---------- --------------- -------------------- ----------
       1 programming     expert                  101
       2 aptitude        expert                  101
       3 programming     expert                  102
       4 communication   expert                  102
       5 programming     expert                  103
       6 aptitude        expert                  103
       7 communication   intermediate            104
       8 programming     intermediate            104
       9 communication   expert                  105
      10 aptitude        intermediate            105

10 rows selected.

SQL>
```

```
new   1: insert into req_skills values(8,1008,8,004,104)

1 row created.

SQL> /
Enter value for mid: 9
Enter value for rid: 1009
Enter value for skid: 9
Enter value for cid: 005
Enter value for dbuid: 105
old   1: insert into req_skills values(&mid,&rid,&skid,&cid,&dbuid)
new   1: insert into req_skills values(9,1009,9,005,105)

1 row created.

SQL> /
Enter value for mid: 10
Enter value for rid: 1010
Enter value for skid: 10
Enter value for cid: 005
Enter value for dbuid: 105
old   1: insert into req_skills values(&mid,&rid,&skid,&cid,&dbuid)
new   1: insert into req_skills values(10,1010,10,005,105)

1 row created.

SQL> select * from req_skills;

     MID        RID       SKID        CID      DBUID
---------- ---------- ---------- ---------- ----------
       1       1001          1          1        101
       2       1002          2          1        101
       3       1003          3          2        102
       4       1004          4          2        102
       5       1005          5          3        103
       6       1006          6          3        103
       7       1007          7          4        104
       8       1008          8          4        104
       9       1009          9          5        105
      10       1010         10          5        105

10 rows selected.

SQL>
```

```
Enter value for dbuid: 104
old   1: insert into company values (&cid, '&cname', &dbuid)
new   1: insert into company values (003, 'zenser technologies', 104)

1 row created.

SQL> /
Enter value for cid: 004
Enter value for cname: deloitte
Enter value for dbuid: 105
old   1: insert into company values (&cid, '&cname', &dbuid)
new   1: insert into company values (004, 'deloitte', 105)

1 row created.

SQL> select * from company;

     CID CNAME              DBUID
---------- --------------- ----------
       1 oracle              101
       2 microsoft           102
       5 google              103
       3 zenser technologies 104
       4 deloitte            105

SQL> commit;

Commit complete.

SQL>
```

E-R Diagram