

Name – Sumedh Kute Roll No. - 12

Name – Vineet Poojary Roll No. – 23

Name – Ankit Pandey Roll No. – 16

Scenario –

Draw an entity relationship diagram for given scenario:

Suppose that you are designing schema to record information about reality show on TV. Your database needs to record the following information.

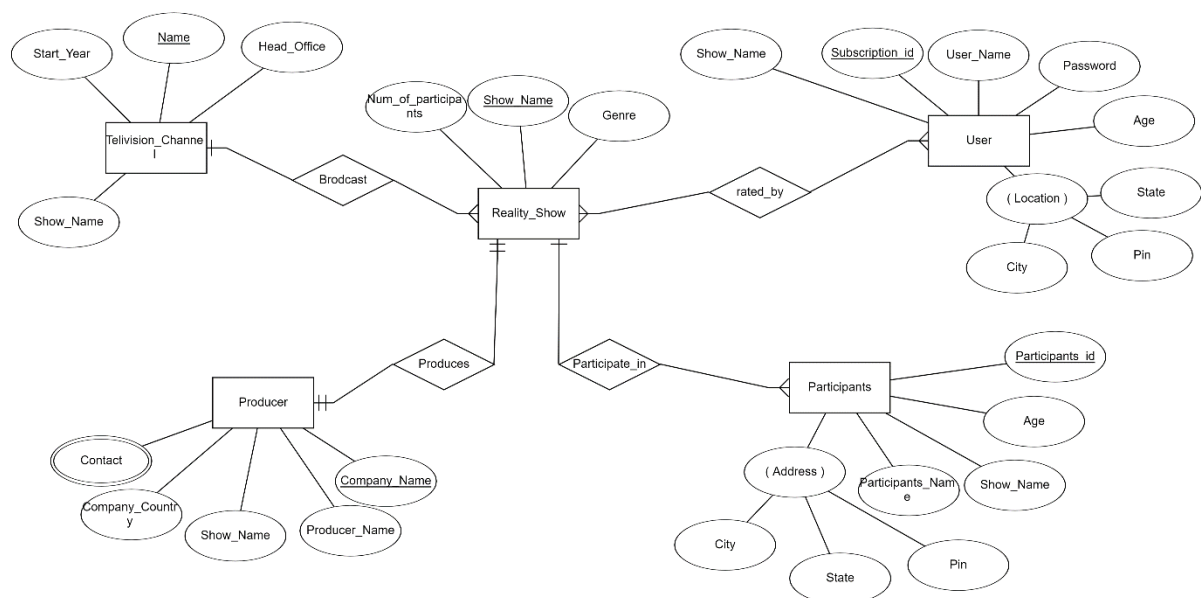
Firstly, each of the reality tv show should be differentiated by its name, genre and basic info and also participants name and there should be at least 2 or more of them (participants).

There is a producer for each reality tv show who has his own company with a name, company's country and a show on the tv is produced exactly by one producer and one producer as well can only produce one tv show.

Now television has name, start year and head office and a television can put up multiple shows but one show can be broadcasted by one television.

Now this reality tv show is watched by user having username, password and age can be taken a parameter as well as location too which can be further attributed to one or more attributes. Now user may rate multiple shows and show may be rated by multiple users.

E-R Diagram –



So In the ER Diagram we have put up around 5 entities named as Reality Show, Producer, Participants, Television Channel and User. We have considered Reality Show here as parent table and it has 3 attributes with show_name being its primary key.

Then we have participants entity which has a composite attribute as an address and primary key as participants_id with show_name as foreign key and more attributes as well.

We have an entity of producer and it has attributes like contact which is multivalued and producer_name with primary key as company_name and foreign key as show_name.

Then there is television channel with its name being primary key and then user entity as well which again has many attributes with his subscription_id being primary key, Both these attributes as well have foreign key as show_name. So in all show_name is foreign key for all of the entities.

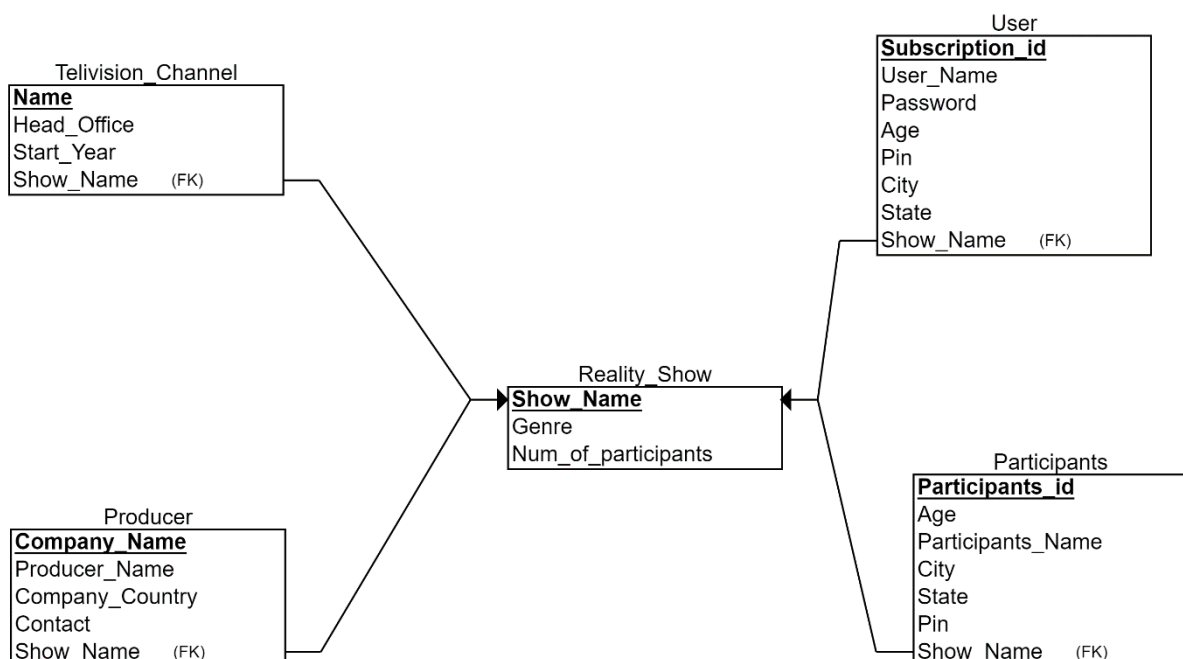
Relationships – Firstly there is relationship of participants with the reality show that is participants participates in the show. And according to our scenario on show should have more than 2 participants so we have went with many to one relationship which is many participants participate in one show.

Then there is one to one relationship of producer with the reality show and this is also based on the scenario which tells each show can be produced by only one producer and each producer can produce only one show.

Now onto another relationship which is of television channel and reality show which is one to many as one channel might broadcast multiple shows.

Lastly, user rates a particular reality show and this is a many to many as many user can rate multiple reality shows.

Relational Schema:



Creation of Table & Insertion of Values in the Table:

```
CREATE TABLE Reality_Show
(
    Show_Name varchar2(20) primary key,
    Genre varchar2(20),
    Num_of_participants number(10) not null
);
insert into reality_show values('Big_Boss17','Reality',7);
insert into reality_show values('Shark Tank2','Business',5);
insert into reality_show values('Dance India Dance','Entertainment',6);
insert into reality_show values('Roadies S19','Adventure',5);
insert into reality_show values('The Voice IndiaS3','Entertainment',6);
insert into reality_show values('Dance Plus Pro7','Entertainment',7);

CREATE TABLE User_R
(
    Subscription_id number(10) primary key,
    User_Name varchar2(20),
    Passwords varchar2(20),
    Age number(5),
    Pin number(8),
    City varchar2(20),
    States varchar2(20),
    Show_Name varchar2(20),
    FOREIGN KEY (Show_Name) REFERENCES Reality_Show(Show_Name)
);
```

```
insert into user_r values(201,'Ankit','Ankit@123',19,845455,'Narkatiaganj','Bihar','Big_Boss17');
insert into user_r values(202,'Vinit','Vinny@123',18,400061,'Kandivali Mumbai','Maharashtra','Shark Tank2');
insert into user_r values(203,'Sumedh','Sumedh@123',18,400050,'Panvel','Maharashtra','Dance India Dance');
insert into user_r values(204,'Amaan','Ammy@123',18,400061,'Goregaon West','Maharashtra','Roadies S19');
insert into user_r values(205,'Ayush','Ayush@123',19,800061,'Patna','Bihar','The Voice IndiaS3');
insert into user_r values(206,'Ajmal','Ajju@123',19,400061,'Mira Road','Maharashtra','Dance Plus Pro7');
```

```
CREATE TABLE Participants
(
    Participants_id number(10) primary key,
    Age number(5),
    Participants_Name varchar2(20),
    City varchar2(20),
    States varchar2(20),
    Pin number(8),
    Show_Name varchar2(20),
    FOREIGN KEY (Show_Name) REFERENCES Reality_Show(Show_Name)
);
```

```

insert into participants values(101,31,'Munawar Faruqui','Mumbai','Maharashtra',400001,'Big_Boss17');
insert into participants values(102,35,'Ankita Lokhande','Mumbai','Maharashtra',400001,'Big_Boss17');
insert into participants values(103,38,'Vicky Jain','Bilas Pur','Jharkhand',565777,'Big_Boss17');
insert into participants values(104,23,'Abhishek Kumar','ChandiGarh','Punjab',800001,'Big_Boss17');
insert into participants values(105,30,'Mannara Chopra','ChandiGarh','Punjab',800001,'Big_Boss17');
insert into participants values(106,19,'Isha Malviya','Bhopal','Madhya Pradesh',860001,'Big_Boss17');
insert into participants values(107,23,'Samarth Jurel','Bhopal','Madhya Pradesh',860001,'Big_Boss17');

```

```

insert into participants values(121,30,'Rajesh Singh','Mumbai','Maharashtra',400001,'Shark Tank2');
insert into participants values(122,27,'Keshav Solanki','Jaipur','Rajasthan',546754,'Shark Tank2');
insert into participants values(123,30,'Simran Joshi','Kurukshetra','Haryana',9786543,'Shark Tank2');
insert into participants values(124,30,'Rajesh Singh','Mumbai','Maharashtra',400001,'Shark Tank2');
insert into participants values(125,25,'Keshav Ankit','Mumbai','Maharashtra',400001,'Shark Tank2');

```

```

insert into participants values(131,15,'Rahul Raj','Mumbai','Maharashtra',400001,'Dance India Dance');
insert into participants values(132,17,'Priya Mohan','Patna','Bihar',576564,'Dance India Dance');
insert into participants values(133,20,'Manisha Rani','Muzaffarpur','Bihar',845301,'Dance India Dance');
insert into participants values(134,18,'Vaibhav Jain','Ahemdabaad','Gujrat',213781,'Dance India Dance');
insert into participants values(135,19,'Raunak Siway','Pune','Maharashtra',400004,'Dance India Dance');
insert into participants values(136,20,'Rimmi Sinha','Mumbai','Maharashtra',400001,'Dance India Dance');

```

```

insert into participants values(141,22,'Prince Singh','Lukhnow','UP',883456,'Roadies S19');
insert into participants values(142,25,'Rinku Singh','Hyderbaad','AndhraPradesh',345678,'Roadies S19');
insert into participants values(143,23,'Aniket Kamble','Mumbai','Maharashtra',400001,'Roadies S19');
insert into participants values(144,22,'Gautam','Pune','Maharashtra',400003,'Roadies S19');
insert into participants values(145,23,'Priya Sanvi','Mumbai','Maharashtra',400001,'Roadies S19');

```

```

insert into participants values(151,17,'Salman Ali','Jaipur','Rajasthan',675643,'The Voice IndiaS3');
insert into participants values(152,18,'Pawandeep Rajan','Dehradun','Uttarakhand',675667,'The Voice IndiaS3');
insert into participants values(153,20,'Ashish Kulkarni','Varansi','UP',675890,'The Voice IndiaS3');
insert into participants values(154,21,'Arunita Kanjilal','Kolkata','Pashchim Bengal',675766,'The Voice IndiaS3');
insert into participants values(155,22,'Karishma Shah','Jaipur','Rajasthan',675643,'The Voice IndiaS3');
insert into participants values(156,19,'Riya Shankar','Noida','UP-Delhi',543643,'The Voice IndiaS3');

```

```

insert into participants values(161,21,'Raghav Sharma','Dehradun','Uttarakhand',675667,'Dance Plus Pro7');
insert into participants values(162,22,'Ramya Sharma','Jaipur','Rajasthan',675643,'Dance Plus Pro7');
insert into participants values(163,23,'Dharmesh Raj','Vadodra','Gujrat',778956,'Dance Plus Pro7');
insert into participants values(164,25,'DhanaShree Verma','Dehradun','Uttarakhand',675667,'Dance Plus Pro7');
insert into participants values(165,26,'Rivava Sharma','Jaipur','Rajasthan',675643,'Dance Plus Pro7');
insert into participants values(166,23,'Shakti Mohan','Varansi','UP',675890,'Dance Plus Pro7');
insert into participants values(167,21,'Shreya Raghvi','Noida','UP-Delhi',543643,'Dance Plus Pro7');

```

```

CREATE TABLE Producer

```

```

(
    Company_Name varchar2(20)primary key,
    Producer_Name varchar2(20),
    Company_Country varchar2(20),
    Contact number(10),
    Show_Name varchar2(20),
    FOREIGN KEY (Show_Name) REFERENCES Reality_Show(Show_Name)
);

```



```
--inserting the values in prodcer
insert into producer values('Ambiguous','Abhiraj Sinha','India',7070981302,'Big_Boss17');
insert into producer values('R Studio','Remo Decuza','India',7208035956,'Shark Tank2');
insert into producer values('Viocom18','Kaushal Kumar','India',9702636585,'Dance India Dance');
insert into producer values('Disney','Michal Phillips','USA',9326936727,'Roadies S19');
insert into producer values('T Series','Bhushan Kumar','India',8591275316,'The Voice IndiaS3');
insert into producer values('KAP Studio','KAP','India',9619664108,'Dance Plus Pro7');
```

```
CREATE TABLE Television_Channel
(
    Channel_Name varchar2(20)primary key,
    Head_Office varchar2(20),
    Start_Year number(5),
    Show_Name varchar2(20),
    FOREIGN KEY (Show_Name) REFERENCES Reality_Show(Show_Name)
);

--Inserting Values in Television_Channel
insert into television_channel values('Colors TV','Mumbai',2008,'Big_Boss17');
insert into television_channel values('SonyLiv','Malad West',2013,'Shark Tank2');
insert into television_channel values('Zee TV','Lower Parel',2009,'Dance India Dance');
insert into television_channel values('MTV','Vile Parle',1996,'Roadies S19');
insert into television_channel values('And TV','Mumbai',2015,'The Voice IndiaS3');
insert into television_channel values('Star Plus','Lower Parel',1992,'Dance Plus Pro7');
```

Checking If The Table Exists or Not :

```
--Checking if the table exist or not
desc Reality_Show;
desc User_R;
desc Participants;
desc Producer;
desc Television_Channel;
```

Output :

Name	Null?	Type
SHOW_NAME	NOT NULL	VARCHAR2(20)
GENRE		VARCHAR2(20)
NUM_OF_PARTICIPANTS	NOT NULL	NUMBER(10)
Name	Null?	Type

Name	Null?	Type
SUBSCRIPTION_ID	NOT NULL	NUMBER(10)
USER_NAME		VARCHAR2(20)
PASSWORDS		VARCHAR2(20)
AGE		NUMBER(5)
PIN		NUMBER(8)
CITY		VARCHAR2(20)
STATES		VARCHAR2(20)
SHOW_NAME		VARCHAR2(20)

Name	Null?	Type
PARTICIPANTS_ID	NOT NULL	NUMBER(10)
AGE		NUMBER(5)
PARTICIPANTS_NAME		VARCHAR2(20)
CITY		VARCHAR2(20)
STATES		VARCHAR2(20)
PIN		NUMBER(8)
SHOW_NAME		VARCHAR2(20)

Name	Null?	Type
COMPANY_NAME	NOT NULL	VARCHAR2(20)
PRODUCER_NAME		VARCHAR2(20)
COMPANY_COUNTRY		VARCHAR2(20)
CONTACT		NUMBER(10)
SHOW_NAME		VARCHAR2(20)

Name	Null?	Type
CHANNEL_NAME	NOT NULL	VARCHAR2(20)
HEAD_OFFICE		VARCHAR2(20)
START_YEAR		NUMBER(5)
SHOW_NAME		VARCHAR2(20)

Selecting Query :

```
--Select Query
select *
from reality_show
where show_name in('Big_Boss17','Shark Tank2','The Voice IndiaS3');
```

Output :

	SHOW_NAME	GENRE	NUM_OF_PARTICIPANTS
1	Big_Boss17	Reality	7
2	Shark Tank2	Business	5
3	The Voice IndiaS3	Entertainment	6

Query 2:

```
select subscription_id,passwords,show_name
from user_r
where subscription_id in(201,202,205,203);
```

	SUBSCRIPTION_ID	PASSWORDS	SHOW_NAME
1	201	Ankit@123	Big_Boss17
2	202	Vinny@123	Shark Tank2
3	203	Sumedh@123	Dance India Dance
4	205	Ayush@123	The Voice IndiaS3

Query 3:

```
select *
from participants
where show_name in('Big_Boss17','Shark Tank2','Dance India Dance','Roadies S19','The Voice IndiaS3','Dance Plus Pro7')
and city in('Mumbai','Varansi','Vadodra','Bhopal');
```

	PARTICIPANTS_ID	AGE	PARTICIPANTS_NAME	CITY	STATES	PIN	SHOW_NAME
1	101	31	Munawar Faruqui	Mumbai	Maharashtra	400001	Big_Boss17
2	102	35	Ankita Lokhande	Mumbai	Maharashtra	400001	Big_Boss17
3	106	19	Isha Malviya	Bhopal	Madhya Pradesh	860001	Big_Boss17
4	107	23	Samarth Jurel	Bhopal	Madhya Pradesh	860001	Big_Boss17
5	121	30	Rajesh Singh	Mumbai	Maharashtra	400001	Shark Tank2
6	124	30	Rajesh Singh	Mumbai	Maharashtra	400001	Shark Tank2
7	125	25	Keshav Ankit	Mumbai	Maharashtra	400001	Shark Tank2
8	131	15	Rahul Raj	Mumbai	Maharashtra	400001	Dance India Dance
9	136	20	Rimmi Sinha	Mumbai	Maharashtra	400001	Dance India Dance
10	143	23	Aniket Kamble	Mumbai	Maharashtra	400001	Roadies S19
11	145	23	Priya Sanvi	Mumbai	Maharashtra	400001	Roadies S19
12	153	20	Ashish Kulkarni	Varansi	UP	675890	The Voice IndiaS3

Query 4 :

```
select producer_name,contact,show_name
from producer
where company_name in('Disney','T Series','KAP Studio','Ambiguous');
```

Output :

	PRODUCER_NAME	CONTACT	SHOW_NAME
1	Abhiraj Sinha	7070981302	Big_Boss17
2	Michal Phillips	9326936727	Roadies S19
3	KAP	9619664108	Dance Plus Pro7
4	Bhushan Kumar	8591275316	The Voice IndiaS3

Query 5 :

```
select *
from television_channel
where head_office in('Mumbai','Malad West');
```

Output :

	CHANNEL_NAME	HEAD_OFFICE	START_YEAR	SHOW_NAME
1	Colors TV	Mumbai	2008	Big_Boss17
2	SonyLiv	Malad West	2013	Shark Tank2
3	And TV	Mumbai	2015	The Voice IndiaS3

Update Query :

Query 1 :

```
--Updation QUery
update user_r
set user_name = 'Shashank'
where user_name = 'Ayush';
```


Query 2 :

```
update producer
set company_name = 'Iqra',
producer_name = 'Aryan Dev'
where show_name = 'Big_Boss17';
```

Query 3 :

```
update television_channel
set head_office = 'Andheri West'
where head_office = 'Malad West';
```

Query 4 :

```
update participants
set participants_name = 'Advika Sen',
age = 20
where participants_id = 132;
```

Query 5 :

```
update user_r
set user_name = 'Shashank',
passwords = 'Shashank@123'
where subscription_id = 205;
```

Outputs of the 5 update Query :

```
1 row updated.
```

```
1 row updated.
```

```
1 row updated.
```

```
1 row updated.
```

```
1 row updated.
```

Subqueries :

1)

```
--Subquery  
  
select show_name,num_of_participants from reality_show  
where show_name in  
(select show_name from participants where participants_id in(101,121,131));
```

Output :

	SHOW_NAME	NUM_OF_PARTICIPANTS
1	Big_Boss17	7
2	Shark Tank2	5
3	Dance India Dance	6

2)

```
select participants_id,participants_name,show_name from participants  
where show_name = (select show_name from reality_show where genre = 'Reality');
```

Output :

	PARTICIPANTS_ID	PARTICIPANTS_NAME	SHOW_NAME
1	101	Munawar Faruqui	Big_Boss17
2	102	Ankita Lokhande	Big_Boss17
3	103	Vicky Jain	Big_Boss17
4	104	Abhishek Kumar	Big_Boss17
5	105	Mannara Chopra	Big_Boss17
6	106	Isha Malviya	Big_Boss17
7	107	Samarth Jurel	Big_Boss17

3)

```
select * from user_r
where show_name in(select distinct show_name from participants);
```

Output :

	SUBSCRIPTION_ID	USER_NAME	PASSWORDS	AGE	PIN	CITY	STATES	SHOW_NAME
1	203	Sumedh	Sumedh@123	18	400050	Panvel	Maharashtra	Dance India Dance
2	202	Vinit	Vinny@123	18	400061	Kandivali Mumbai	Maharashtra	Shark Tank2
3	204	Amaan	Ammy@123	18	400061	Goregaon West	Maharashtra	Roadies S19
4	201	Ankit	Ankit@123	19	845455	Narkatiaganj	Bihar	Big_Boss17
5	205	Shashank	Shashank@123	19	800061	Patna	Bihar	The Voice IndiaS3
6	206	Ajmal	Ajju@123	19	400061	Mira Road	Maharashtra	Dance Plus Pro7

4)

```
select p.producer_name,t1.channel_name,p.show_name
from producer p
join television_channel t1 on p.show_name = t1.show_name
where p.show_name in (select distinct show_name from participants);
```

Output :

	PRODUCER_NAME	CHANNEL_NAME	SHOW_NAME
1	Abhiraj Sinha	Colors TV	Big_Boss17
2	Remo Decuza	SonyLiv	Shark Tank2
3	Kaushal Kumar	Zee TV	Dance India Dance
4	Michal Phillips	MTV	Roadies S19
5	Bhushan Kumar	And TV	The Voice IndiaS3
6	KAP	Star PLus	Dance Plus Pro7

5)

```
select participants_name,show_name from participants
where((city) in(select city from
participants where participants_id in(101,103,106,121,122,125,131,136,141,144,155,153,163))));
```

Output :

	PARTICIPANTS_NAME	SHOW_NAME
1	Rahul Raj	Dance India Dance
2	Rimmi Sinha	Dance India Dance
3	Rajesh Singh	Shark Tank2
4	Rajesh Singh	Shark Tank2
5	Keshav Ankit	Shark Tank2
6	Aniket Kamble	Roadies S19
7	Munawar Faruqui	Big_Boss17
8	Ankita Lokhande	Big_Boss17
9	Priya Sanvi	Roadies S19
10	Keshav Solanki	Shark Tank2
11	Salman Ali	The Voice IndiaS3
12	Karishma Shah	The Voice IndiaS3
13	Ramya Sharma	Dance Plus Pro7
14	Rivava Sharma	Dance Plus Pro7
15	Prince Singh	Roadies S19
16	Raunak Siway	Dance India Dance
17	Gautam	Roadies S19
18	Vicky Jain	Big_Boss17
19	Isha Malviya	Big_Boss17
20	Samarth Jurel	Big_Boss17
21	Ashish Kulkarni	The Voice IndiaS3
22	Shakti Mohan	Dance Plus Pro7
23	Dharmesh Raj	Dance Plus Pro7