

Database design of O Casino Club

Our club is all about gambling and relaxing. In our club we have many game activities that you can play for fun and excited we have Blackjack, Poker, slot machine and many more.

Business rules

A room has at least one tables.

A table must be in one and only one room.

A table must play one and only one game.

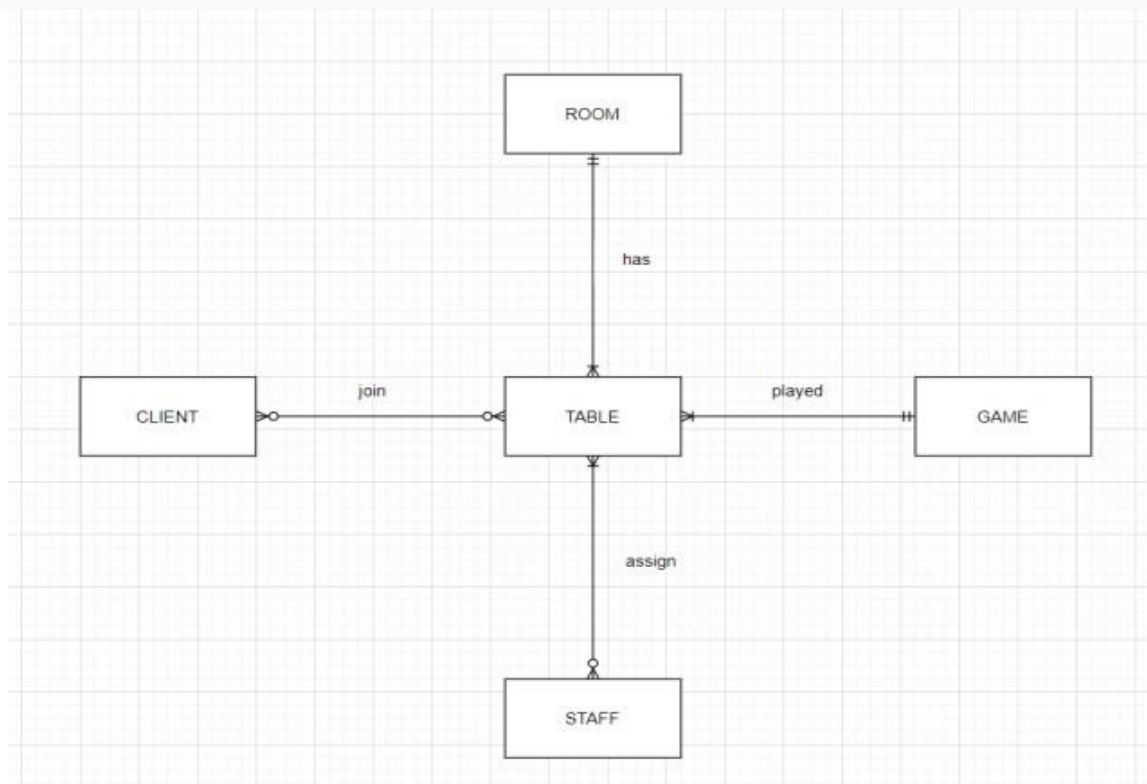
A game is played at least one tables.

A table is assigned to many staffs but some table is not assigned to any staff.

A staff is assigned at at least one tables.

A client may join many tables but some clients do not join any tables.

A table is joined by many clients by some tables are not joined by any clients.



CLIENT	
PK	client_id
	first_name last_name chip_in_hand phone_number regist_data

ROOM	
PK	room_id
	number_of_table room_name

JOIN	
PK,FK1 PK,FK2	client_id table_id
	chip_add join_data

TABLE	
PK	table_id
FK1 FK2	room_id game_id

GAME	
PK	game_id
	game_name

STAFF	
PK	staff_id
	first_name last_name salary hire_data

ASSIGN	
PK,FK1 PK,FK2	staff_id table_id
	chip_in_hand join_data

refer to

appears

appears

refer to

is in

is played at

--Create table room

```
CREATE TABLE ROOM (  
    ROOM_ID VARCHAR2(10) PRIMARY KEY,  
    NUM_OF_TABLE NUMBER(4) NOT NULL,  
    ROOM_NAME VARCHAR2(25) NOT NULL);  
/
```

--Insert table

```
INSERT INTO ROOM VALUES('1', 2, 'king');  
INSERT INTO ROOM VALUES('2', 3, 'queen');  
INSERT INTO ROOM VALUES('3', 4, 'jack');  
/
```

--Create table GAME

```
CREATE TABLE GAME (  
    GAME_ID VARCHAR2(10) PRIMARY KEY,  
    GAME_NAME VARCHAR2(25) NOT NULL,  
    MIN_BET NUMBER(10) NOT NULL);  
/
```

--Insert GAME

```
INSERT INTO GAME VALUES('101', 'poker', 1000000);  
INSERT INTO GAME VALUES('102', 'blackjack', 50000);  
INSERT INTO GAME VALUES('103', 'Roulette', 100000);  
INSERT INTO GAME VALUES('104', 'poker', 100000);  
INSERT INTO GAME VALUES('105', 'blackjack', 5000);  
INSERT INTO GAME VALUES('106', 'Roulette', 10000);  
/
```

--Create table staff

```
CREATE TABLE STAFF (  
    STAFF_ID VARCHAR2(10) PRIMARY KEY,  
    FIRST_NAME VARCHAR2(25) NOT NULL,  
    LAST_NAME VARCHAR2(25) NOT NULL,  
    SALARY NUMBER(10) NOT NULL,  
    HIRE_DATE DATE );  
/
```

--Insert Staff

```
INSERT INTO STAFF VALUES('1001', 'walter', 'white' , 25000, '16-FEB-2000');  
INSERT INTO STAFF VALUES('1002', 'jessie', 'pinkman' , 25000, '11-MAR-2000');  
INSERT INTO STAFF VALUES('1003', 'skylar', 'blue' , 25000, '27-OCT-2000');  
INSERT INTO STAFF VALUES('1004', 'saul', 'goodman' , 25000, '1-APR-2001');  
INSERT INTO STAFF VALUES('1005', 'alot', 'ofbar' , 25000, '9-NOV-2001');  
INSERT INTO STAFF VALUES('1006', 'peter', 'parker' , 25000, '8-AUG-2002');  
INSERT INTO STAFF VALUES('1007', 'dexter', 'morgan' , 25000, '14-DEC-2003');
```

```

--Create table client
CREATE TABLE CLIENT (
  CLIENT_ID VARCHAR2(10) PRIMARY KEY,
  FIRST_NAME VARCHAR2(25) NOT NULL,
  LAST_NAME VARCHAR2(25) NOT NULL,
  CHIP_IN_HAND NUMBER(10) NOT NULL,
  PHONE_NUMBER NUMBER(10) NOT NULL,
  REGIST_DATE DATE);
/
--Insert client
INSERT INTO CLIENT VALUES('2001', 'henry', 'help' , 50020, 0909022455, '16-FEB-2000');
INSERT INTO CLIENT VALUES('2002', 'kentuckey', 'chicken' , 22500, 0812132456, '18-MAR-2001');
INSERT INTO CLIENT VALUES('2003', 'luke', 'skywalker' , 122000, 0877495000, '21-APR-2001');
/

--Create table table
CREATE TABLE TABLE_ (
  TABLE_ID VARCHAR2(10) PRIMARY KEY,
  ROOM_ID VARCHAR2(10) NOT NULL,
  GAME_ID VARCHAR2(10) NOT NULL,
  FOREIGN KEY (ROOM_ID) REFERENCES ROOM(ROOM_ID),
  FOREIGN KEY (GAME_ID) REFERENCES GAME(GAME_ID));
/

--Insert Table
--ROOM_01
INSERT INTO TABLE_ VALUES('201', '1', '101');
INSERT INTO TABLE_ VALUES('202', '1', '103');
--ROOM_02
INSERT INTO TABLE_ VALUES('203', '2', '101');
INSERT INTO TABLE_ VALUES('204', '2', '102');
INSERT INTO TABLE_ VALUES('205', '2', '103');
--ROOM_03
INSERT INTO TABLE_ VALUES('206', '3', '104');
INSERT INTO TABLE_ VALUES('207', '3', '105');
INSERT INTO TABLE_ VALUES('208', '3', '105');
INSERT INTO TABLE_ VALUES('209', '3', '106');
/

```

```
--Create table JOIN
CREATE TABLE JOIN_ (
  TABLE_ID VARCHAR2(10) ,
  CLIENT_ID VARCHAR2(10),
  FOREIGN KEY (TABLE_ID) REFERENCES TABLE_(TABLE_ID),
  FOREIGN KEY (CLIENT_ID) REFERENCES CLIENT(CLIENT_ID),
  CHIP_ADD NUMBER(10)NOT NULL,
  JOIN_DATE DATE NOT NULL,
  constraint JOIN_PK primary key (CLIENT_ID,TABLE_ID) );
/
```

```
--Insert JOIN_
INSERT INTO JOIN_ VALUES('201', '2001', 0, '16-FEB-2000' );
INSERT INTO JOIN_ VALUES('201', '2002', 0, '16-FEB-2000' );
INSERT INTO JOIN_ VALUES('201', '2003', 5000, '16-FEB-2000' );
INSERT INTO JOIN_ VALUES('207', '2001', 0, '16-FEB-2000' );
INSERT INTO JOIN_ VALUES('202', '2003', 5000, '17-FEB-2000' );
/
```

```
--Create table ASSIGN
CREATE TABLE ASSIGN (
  STAFF_ID VARCHAR2(10) ,
  TABLE_ID VARCHAR2(10),
  FOREIGN KEY (STAFF_ID) REFERENCES STAFF(STAFF_ID),
  FOREIGN KEY (TABLE_ID) REFERENCES TABLE_(TABLE_ID),
  CHIP_IN_HAND NUMBER(10),
  JOIN_DATE DATE NOT NULL,
  constraint ASSIGN_pk primary key (STAFF_ID,TABLE_ID) );
/
```

```
--Insert JOIN_
INSERT INTO ASSIGN VALUES('1004', '201', 0, '16-FEB-2000' );
INSERT INTO ASSIGN VALUES('1005', '207', 0, '16-FEB-2000' );
INSERT INTO ASSIGN VALUES('1001', '201', 5000, '16-FEB-2000' );
INSERT INTO ASSIGN VALUES('1002', '202', 5000, '17-FEB-2000' );
/
```

```
DROP TABLE JOIN_;
DROP TABLE ASSIGN;
```