Lodz University of Technology

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Database System

Game directory

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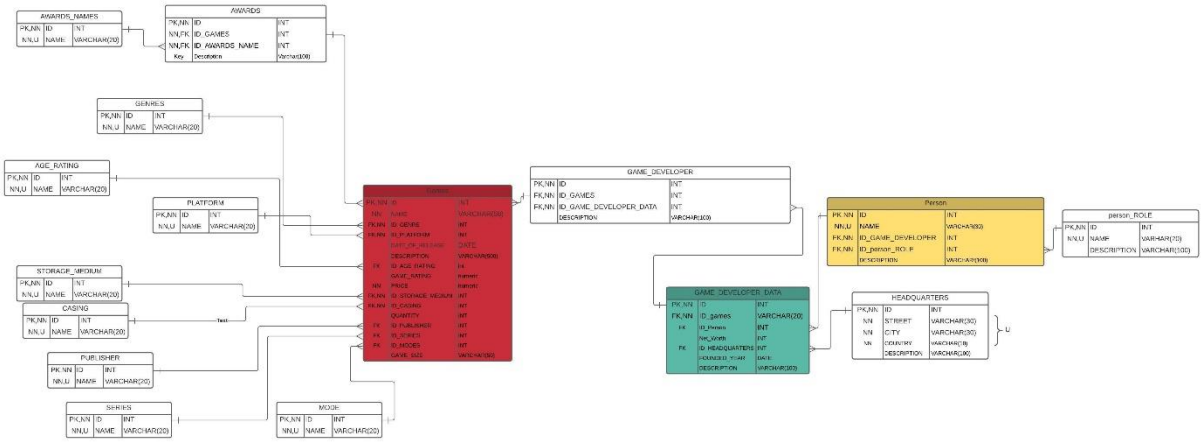
Database chart

I have created a database to keep record of games for my personal use. I have 16 tables in my design. Each of which have different roles. Chart for my database is presented below.

Figure 1 Lucid chart for database



I have 16 tables purpose of which are presented below.

1. Games: It stores the data about the game for example Name, Release data, Price and other data provided my the tables connected to left.
2. Awards: It has many to many connection to store the id of game and the awards.
3. Awards_Name: It stores the names of awards given to a game.
4. Genres: It stores the genres of a game.
5. Age_rating: It is use to store age rating of a game.
6. Platform: It is used to store for what platform the game is for example Ps4, Ps5, Xbox one, PC or further platforms like this.
7. Storage_medium: It tell where the game is stored either it is a cd or dvd or if it is stored online.
8. Casing: it stores the information about the packing of the game so it is easy to find the game when you are looking for it .
9. Publisher: It stored the Information about the publisher of the game.
10. Series: It has the information about the sequel of the game.
11. Mode: it stores the information if it is Single-player game or Multi-player or if it is online game.
12. Game_Developer: It stores the information about the ids of game_developer_data and games and description about them.
13. Game_Developer_Data: It has information about the game developer like people, its net_worth founded year and Description.
14. Person: It has the information about the person working there their roles and description.
15. Person_role: it stores the information about the roles of person.
16. HeadQuarters: It has the address for the Game developer

SQL Code for tables

```sql
create table Genres
(
    ID INT NOT NULL,
    NAME VARCHAR(20) NOT NULL,
    CONSTRAINT Genres_PK PRIMARY KEY(ID),
    CONSTRAINT Genres_NAME UNIQUE(NAME)
);

create table Age_Rating
(
    ID INT NOT NULL,
    NAME VARCHAR(20) NOT NULL,
    CONSTRAINT Age_Rating_PK PRIMARY KEY(ID),
    CONSTRAINT Age_Rating_NAME UNIQUE(NAME)
);

create table Platform
(
    ID INT NOT NULL,
    NAME VARCHAR(20) NOT NULL,
    CONSTRAINT Platform_PK PRIMARY KEY(ID),
    CONSTRAINT Platform_NAME UNIQUE(NAME)
);

create table Storage_Medium
(
    ID INT NOT NULL,
    NAME VARCHAR(20) NOT NULL,
    CONSTRAINT Storage_Medium_PK PRIMARY KEY(ID),
    CONSTRAINT Storage_Medium_NAME UNIQUE(NAME)
);

create table Casing
(
    ID INT NOT NULL,
    NAME VARCHAR(20) NOT NULL,
    CONSTRAINT Casing_PK PRIMARY KEY(ID),
    CONSTRAINT Casing_NAME UNIQUE(NAME)
);

create table Publisher
(
    ID INT NOT NULL,
    NAME VARCHAR(20) NOT NULL,
    CONSTRAINT Publisher_PK PRIMARY KEY(ID),
    CONSTRAINT Publisher_NAME UNIQUE(NAME)
);

create table Series
(
    ID INT NOT NULL,
    NAME VARCHAR(20) NOT NULL,
    CONSTRAINT Series_PK PRIMARY KEY(ID),
    CONSTRAINT Series_NAME UNIQUE(NAME)
);

create table Mode
(
    ID INT NOT NULL,
    NAME VARCHAR(20) NOT NULL,
    CONSTRAINT Mode_PK PRIMARY KEY(ID),
    CONSTRAINT Mode_NAME UNIQUE(NAME)
);

create table Award_Name
(
```

Figure 2 page 1

```sql
create table Award_Name
(
    ID INT NOT NULL,
    NAME VARCHAR(20) NOT NULL,
    CONSTRAINT Award_Name_PK PRIMARY KEY(ID),
    CONSTRAINT Award_Name_NAME UNIQUE(NAME)
);

create table Person_Role
(
    ID INT NOT NULL,
    NAME VARCHAR(20) NOT NULL,
    Description VARCHAR(100),
    CONSTRAINT Person_Role_PK PRIMARY KEY(ID),
    CONSTRAINT Person_Role_NAME UNIQUE(NAME)
);


create table Games
(
    ID INT NOT NULL,
    Name VARCHAR(100) NOT NULL,
    ID_Genres INT NOT NULL,
    ID_Platform INT NOT NULL,
    Date_Of_Realease DATE,
    Description varchar(500),
    ID_Age_Rating INT,
    Game_Rating NUMERIC,
    Price NUMERIC NOT NULL,
    ID_Storage_Medium INT NOT NULL,
    ID_Casing INT NOT NULL,
    Quantity INT,
    ID_Publisher INT,
    ID_Series INT,
    ID_Mode INT,
    Game_Size VARCHAR(50),
    CONSTRAINT Games_PK PRIMARY KEY(ID),
    CONSTRAINT Games_ID_Genres_FK FOREIGN KEY(ID_Genres) REFERENCES Genres(ID) ON UPDATE CASCADE ON DELETE SET NULL,
    CONSTRAINT Games_ID_Platform_FK FOREIGN KEY(ID_Platform) REFERENCES Platform(ID) ON UPDATE CASCADE ON DELETE SET NULL,
    CONSTRAINT Games_ID_Age_Rating_FK FOREIGN KEY(ID_Age_Rating) REFERENCES Age_Rating(ID) ON UPDATE CASCADE ON DELETE SET NULL,
    CONSTRAINT Games_ID_Storage_Medium_FK FOREIGN KEY(ID_Storage_Medium) REFERENCES Storage_Medium(ID) ON UPDATE CASCADE ON DELETE SET NULL,
    CONSTRAINT Games_ID_Casing_FK FOREIGN KEY(ID_Casing) REFERENCES Casing(ID) ON UPDATE CASCADE ON DELETE SET NULL,
    CONSTRAINT Games_ID_Publisher_FK FOREIGN KEY(ID_Publisher) REFERENCES Publisher(ID) ON UPDATE CASCADE ON DELETE SET NULL,
    CONSTRAINT Games_ID_Series_FK FOREIGN KEY(ID_Series) REFERENCES Series(ID) ON UPDATE CASCADE ON DELETE SET NULL,
    CONSTRAINT Games_ID_Mode_FK FOREIGN KEY(ID_Mode) REFERENCES Mode(ID) ON UPDATE CASCADE ON DELETE SET NULL
);

create table Awards
(
    ID INT NOT NULL,
    Description VARCHAR(100),
    ID_Games INT NOT NULL,
    ID_Award_Name INT NOT NULL,
    CONSTRAINT Award_PK PRIMARY KEY(ID),
    CONSTRAINT Award_Games_FK FOREIGN KEY(ID_Games) REFERENCES Games(ID) ON UPDATE CASCADE ON DELETE SET NULL,
    CONSTRAINT Award_Award_Name_FK FOREIGN KEY(ID_Award_Name) REFERENCES Award_Name(ID) ON UPDATE CASCADE ON DELETE SET NULL
);
create table Headquarters
(
    ID INT NOT NULL,
    Street VARCHAR(30) NOT NULL,
    city VARCHAR(30) NOT NULL,
    Contry VARCHAR(30) NOT NULL,
    Description VARCHAR(100),
    CONSTRAINT Headquarters_PK PRIMARY KEY(ID),
    CONSTRAINT Headquarters Address Unique UNIQUE(Street,City,Contry)
```

Figure 3 page 2

```sql
create table Person
(
    ID INT NOT NULL,
    Name VARCHAR(30) NOT NULL,
    ID_Person_Role INT NOT NULL,
    Description VARCHAR(100),
    CONSTRAINT Person_PK PRIMARY KEY(ID),
    CONSTRAINT Person_Person_Role_FK FOREIGN KEY(ID_Person_Role) REFERENCES Person_Role(ID) ON UPDATE CASCADE ON DELETE SET NULL
);
create table Game_Dev_Data
(
    ID INT NOT NULL,
    ID_Person INT NOT NULL,
    Net_Worth VARCHAR(20),
    ID_Headquarters INT NOT NULL,
    Fonded_Year Date,
    Description VARCHAR(100),
    CONSTRAINT Game_Dev_Data_PK PRIMARY KEY(ID),
    CONSTRAINT Game_Dev_Data_Person_FK FOREIGN KEY(ID_Person) REFERENCES Person(ID) ON UPDATE CASCADE ON DELETE SET NULL,
    CONSTRAINT Game_Dev_Data_Headquarters_FK FOREIGN KEY(ID_Headquarters) REFERENCES Headquarters(ID) ON UPDATE CASCADE ON DELETE SET NULL
);
create table Game_Dev
(
    ID INT NOT NULL,
    ID_Games INT NOT NULL,
    ID_Game_Dev_Data INT NOT NULL,
    Description VARCHAR(100),
    CONSTRAINT Game_Dev_PK PRIMARY KEY(ID),
    CONSTRAINT Game_Dev_Game_FK FOREIGN KEY(ID_Games) REFERENCES Games(ID) ON UPDATE CASCADE ON DELETE SET NULL,
    CONSTRAINT Game_Dev_Game_Dev_Data_FK FOREIGN KEY(ID_Game_Dev_Data) REFERENCES Game_Dev_Data(ID) ON UPDATE CASCADE ON DELETE SET NULL
);
```

Figure 4 page 3

In above figures I have written SQL code to create tables for my database. The database is created in the order the code is written.it is not a random creation

Now I will enter following data in database

Awards: Best Sports Game, Generally favorable, Fighting title, Nagtr, Best Story, Best Gameplay, Game of the Year, Best Technology, Best British Game, Game Design, Game Innovation, Best Original Music, Best Design Audio of the Year, Best Sound Design

Genres: Racing, Action, first-person, Shooting, Sports, Fighting

Age Rating: Everyone, 13 ,16+, 18+,12

Platform: PS4, Nintendo Switch, Xbox One, Xbox X, PC

Storage Medium: CD, DVD, Online

Casing: Plastic Soft, Plastic Hard, Online, No Casting

Publisher: EA Sports, Bandai Namco, 2k Sports, Rockstar Games, Warner Bros

Series: FIFA, NFS, DBZ, WWE, GTA, LA Noire, Mortal Kombet

Mode: Single-player, Multi-player, Single and Multi-Player, Online

Person Role: CEO, Engineer, Artists

Headquarters: New York, Vancover, Bucuresti, Osaka, vastra frolunda, Minato City, Edinburg, Sydney, Chicago

Games: FIFA20, FIFA19 , NFS Payback, WWE 2K19, DBZ Xenovrse 2,DBZ Xenoverse, GTA 4, GTA 5,LA Noire, Mortal Kombet

```sql
INSERT INTO Genres (ID, NAME) VALUES(1, 'Racing');
INSERT INTO Genres (ID, NAME) VALUES(2, 'Action');
INSERT INTO Genres (ID, NAME) VALUES(3, 'First Person');
INSERT INTO Genres (ID, NAME) VALUES(4, 'Shooting');
INSERT INTO Genres (ID, NAME) VALUES(5, 'Sports');
INSERT INTO Genres (ID, NAME) VALUES(6, 'Fighting');

INSERT INTO AGE_RATING (ID, NAME) VALUES(1, 'Everyone');
INSERT INTO AGE_RATING (ID, NAME) VALUES(2, '13');
INSERT INTO AGE_RATING (ID, NAME) VALUES(3, '16+');
INSERT INTO AGE_RATING (ID, NAME) VALUES(4, '18+');
INSERT INTO AGE_RATING (ID, NAME) VALUES(5, '12');
INSERT INTO AGE_RATING (ID, NAME) VALUES(6, '17+');

INSERT INTO PLATFORM (ID, NAME) VALUES(1, 'PS4');
INSERT INTO PLATFORM (ID, NAME) VALUES(2, 'Nintendo Switch');
INSERT INTO PLATFORM (ID, NAME) VALUES(3, 'Xbox One');
INSERT INTO PLATFORM (ID, NAME) VALUES(4, 'Xbox X');
INSERT INTO PLATFORM (ID, NAME) VALUES(5, 'PC');


INSERT INTO STORAGE_MEDIUM (ID, NAME) VALUES(1, 'CD');
INSERT INTO STORAGE_MEDIUM (ID, NAME) VALUES(2, 'DVD');
INSERT INTO STORAGE_MEDIUM (ID, NAME) VALUES(3, 'ONLINE');

INSERT INTO CASING (ID, NAME) VALUES(1, 'Plastic Soft');
INSERT INTO CASING (ID, NAME) VALUES(2, 'Plastic Hard');
INSERT INTO CASING (ID, NAME) VALUES(3, 'Online');
INSERT INTO CASING (ID, NAME) VALUES(4, 'No Casing');

INSERT INTO PUBLISHER (ID, NAME) VALUES(1, 'EA Sports');
INSERT INTO PUBLISHER (ID, NAME) VALUES(2, 'Bandai Namco');
INSERT INTO PUBLISHER (ID, NAME) VALUES(3, '2k Sports');
INSERT INTO PUBLISHER (ID, NAME) VALUES(4, 'Rockstar Games');
INSERT INTO PUBLISHER (ID, NAME) VALUES(5, 'Warner Bros');

INSERT INTO SERIES (ID, NAME) VALUES(1, 'FIFA');
INSERT INTO SERIES (ID, NAME) VALUES(2, 'NFS');
INSERT INTO SERIES (ID, NAME) VALUES(3, 'WWE');
INSERT INTO SERIES (ID, NAME) VALUES(4, 'DBZ');
INSERT INTO SERIES (ID, NAME) VALUES(5, 'GTA');
INSERT INTO SERIES (ID, NAME) VALUES(6, 'LA Noire');
INSERT INTO SERIES (ID, NAME) VALUES(7, 'Mortal Kombet');

INSERT INTO MODE (ID, NAME) VALUES(1, 'SINGLE Player');
INSERT INTO MODE (ID, NAME) VALUES(2, 'Multi Player');
INSERT INTO MODE (ID, NAME) VALUES(3, 'Single and Multi');
INSERT INTO MODE (ID, NAME) VALUES(4, 'Online');

INSERT INTO PERSON_ROLE (ID, NAME) VALUES(1, 'CEO');
INSERT INTO PERSON_ROLE (ID, NAME) VALUES(2, 'Engineer');
INSERT INTO PERSON_ROLE (ID, NAME) VALUES(3, 'Artish');

INSERT INTO PERSON (ID, NAME, ID_Person_Role, Description ) VALUES(1, 'Andrew Wilson', 1,'Current CEO' );
INSERT INTO PERSON (ID, NAME, ID_Person_Role, Description ) VALUES(2, 'Dave Steaveson', 2, NULL );
INSERT INTO PERSON (ID, NAME, ID_Person_Role, Description ) VALUES(3, 'Mathew anderson', 2, NULL );
INSERT INTO PERSON (ID, NAME, ID_Person_Role, Description ) VALUES(4, 'David Carmon', 3, NULL );
INSERT INTO PERSON (ID, NAME, ID_Person_Role, Description ) VALUES(5, 'Takashi Nishiyama', 1, NULL );
INSERT INTO PERSON (ID, NAME, ID_Person_Role, Description ) VALUES(6, 'Sam Houser', 1, NULL );
INSERT INTO PERSON (ID, NAME, ID_Person_Role, Description ) VALUES(7, 'Chee Kin Chan', 3, NULL );
INSERT INTO PERSON (ID, NAME, ID_Person_Role, Description ) VALUES(8, 'ED Boon', 1, NULL );

INSERT INTO AWARD_NAME (ID, NAME) VALUES(1, 'Best Sports Game');
INSERT INTO AWARD_NAME (ID, NAME) VALUES(2, 'Generally favorable');
INSERT INTO AWARD_NAME (ID, NAME) VALUES(3, 'Fighting title');
```

Figure 5 First page of inserts

```sql
INSERT INTO AWARD_NAME (ID, NAME) VALUES(4, 'Magic');
INSERT INTO AWARD_NAME (ID, NAME) VALUES(5, 'Best Story');
INSERT INTO AWARD_NAME (ID, NAME) VALUES(6, 'Best Gameplay');
INSERT INTO AWARD_NAME (ID, NAME) VALUES(7, 'Game of the Year');
INSERT INTO AWARD_NAME (ID, NAME) VALUES(8, 'Best Technology');
INSERT INTO AWARD_NAME (ID, NAME) VALUES(9, 'Best British Game');
INSERT INTO AWARD_NAME (ID, NAME) VALUES(10, 'Game Design');
INSERT INTO AWARD_NAME (ID, NAME) VALUES(11, 'Game Innovation');
INSERT INTO AWARD_NAME (ID, NAME) VALUES(12, 'Best Original Music');
INSERT INTO AWARD_NAME (ID, NAME) VALUES(13, 'Best Design');
INSERT INTO AWARD_NAME (ID, NAME) VALUES(14, 'Audio of the Year');
INSERT INTO AWARD_NAME (ID, NAME) VALUES(15, 'Best Sound Design');


INSERT INTO HEADQUARTERS (ID, Street, City, Country, Description) VALUES(1, '8A', 'Redwood City', 'USA', 'American Address');
INSERT INTO HEADQUARTERS (ID, Street, City, Country, Description) VALUES(2, '8A', 'Vancouver', 'Canada', NULL);
INSERT INTO HEADQUARTERS (ID, Street, City, Country, Description) VALUES(3, 'Bulevardul General 4', 'Bucuresti', 'Romainia', NULL);
INSERT INTO HEADQUARTERS (ID, Street, City, Country, Description) VALUES(4, '8A', 'Osaka', 'Japan', NULL);
INSERT INTO HEADQUARTERS (ID, Street, City, Country, Description) VALUES(5, 'Rasengerns gata 29c', 'vastra frolunda', 'Sweden', NULL);
INSERT INTO HEADQUARTERS (ID, Street, City, Country, Description) VALUES(6, '1 Chome-1-4', 'Minato City', 'japan', NULL);
INSERT INTO HEADQUARTERS (ID, Street, City, Country, Description) VALUES(7, '108 Holyrood Rd', 'Edinburg', 'United Kingdom', NULL);
INSERT INTO HEADQUARTERS (ID, Street, City, Country, Description) VALUES(8, '8A', 'Sydney', 'Australia', NULL);
INSERT INTO HEADQUARTERS (ID, Street, City, Country, Description) VALUES(9, '2650 w Bradly', 'Chicago', 'USA', NULL);

INSERT INTO GAMES (ID, NAME, ID_Genres, ID_Platform, Date_of_Realease, Description, ID_Age_Rating, Price, ID_Storage_Medium, ID_Casing, Quantity, ID_Publisher, ID_Series, ID_Mode, Game_Size) VALUES(1, 'FIFA20', 5, 1, DATE'2019-09-27','Latest Ffia i have', 2, '100', 2, 2, 1, 1, 1,2, '42.97 GB' );
INSERT INTO GAMES (ID, NAME, ID_Genres, ID_Platform, Date_of_Realease, Description, ID_Age_Rating, Price, ID_Storage_Medium, ID_Casing, Quantity, ID_Publisher, ID_Series, ID_Mode, Game_Size) VALUES(2, 'FIFA19', 5, 2, DATE'2018-08-28',Null , 2, '100', 2, 2, 1, 1, 1,2, '39.6 GB' );
INSERT INTO GAMES (ID, NAME, ID_Genres, ID_Platform, Date_of_Realease, Description, ID_Age_Rating, Price, ID_Storage_Medium, ID_Casing, Quantity, ID_Publisher, ID_Series, ID_Mode, Game_Size) VALUES(3, 'WWE 2k19', 5, 1, DATE'2018-10-9',Null , 2, '100', 2, 2, 1, 2, 2,2, '42.91 GB' );
INSERT INTO GAMES (ID, NAME, ID_Genres, ID_Platform, Date_of_Realease, Description, ID_Age_Rating, Price, ID_Storage_Medium, ID_Casing, Quantity, ID_Publisher, ID_Series, ID_Mode, Game_Size) VALUES(4, 'NFS Payback', 1, 5, DATE'2017-10-11',Null , 5, '110', 2, 4, 1, 1, 2,2, '42.91 GB' );
INSERT INTO GAMES (ID, NAME, ID_Genres, ID_Platform, Date_of_Realease, Description, ID_Age_Rating, Price, ID_Storage_Medium, ID_Casing, Quantity, ID_Publisher, ID_Series, ID_Mode, Game_Size) VALUES(5, 'DBZ Xenoverse 2', 6, 1, DATE'2016-10-28',Null , 5, '232', 2, 2, 1, 2, 2,2, '13.12 GB' );
INSERT INTO GAMES (ID, NAME, ID_Genres, ID_Platform, Date_of_Realease, Description, ID_Age_Rating, Price, ID_Storage_Medium, ID_Casing, Quantity, ID_Publisher, ID_Series, ID_Mode, Game_Size) VALUES(6, 'DBZ Xenoverse', 6, 2, DATE'2015-02-27',Null , 5, '75', 2, 4, 1, 2, 4,2, '9 GB' );
INSERT INTO GAMES (ID, NAME, ID_Genres, ID_Platform, Date_of_Realease, Description, ID_Age_Rating, Price, ID_Storage_Medium, ID_Casing, Quantity, ID_Publisher, ID_Series, ID_Mode, Game_Size) VALUES(7, 'GTA 4', 2, 2, DATE'2008-11-2',Null , 6, '213', 2, 4, 2, 4, 5,1, '22 GB' );
INSERT INTO GAMES (ID, NAME, ID_Genres, ID_Platform, Date_of_Realease, Description, ID_Age_Rating, Price, ID_Storage_Medium, ID_Casing, Quantity, ID_Publisher, ID_Series, ID_Mode, Game_Size) VALUES(8, 'GTA 5', 2, 1, DATE'2012-09-17',Null , 6, '149', 2, 4, 1, 4, 5,1, '95 GB' );
INSERT INTO GAMES (ID, NAME, ID_Genres, ID_Platform, Date_of_Realease, Description, ID_Age_Rating, Price, ID_Storage_Medium, ID_Casing, Quantity, ID_Publisher, ID_Series, ID_Mode, Game_Size) VALUES(9, 'LA Noire', 2, 5, DATE'2011-05-17',Null , 6, '90', 2, 2, 1, 4, 6,1, '17.8 GB' );
INSERT INTO GAMES (ID, NAME, ID_Genres, ID_Platform, Date_of_Realease, Description, ID_Age_Rating, Price, ID_Storage_Medium, ID_Casing, Quantity, ID_Publisher, ID_Series, ID_Mode, Game_Size) VALUES(10, 'Mortal Kombet 11', 6, 2, DATE'2019-05-10',Null , 2, '131', 3, 3, 1, 3, 7,1, '22.6 GB' );

INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(1, 'IMDB AWARDS', 1, 1);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(2, 'IMDB AWARDS', 2, 1);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(3, 'Game choice', 3, 2);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(4, 'IMDB AWARDS', 3, 3);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(5, 'IMDB AWARDS', 4, 4);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(6, 'BAFTA Games Award', 7, 5);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(7, 'BAFTA Games Award', 7, 6);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(8, 'Game Developers Choice Award', 7, 7);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(9, 'Game Developers Choice Award', 7, 8);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(10, 'BAFTA Games Award', 8, 10);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(11, 'BAFTA Games Award', 8, 9);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(12, 'Game Developers Choice Award', 8, 8);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(13, 'Game Developers Choice Award', 8, 7);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(14, 'BAFTA Games Award', 8, 11);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(15, 'BAFTA Games Award', 9, 12);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(16, 'BAFTA Games Award', 9, 13);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(17, 'GANG Award', 10, 14);
INSERT INTO AWARDS (ID, DESCRIPTION, ID_GAMES, ID_AWARD_NAME) VALUES(18, 'GANG Award', 10, 15);

INSERT INTO GAME_DEV_DATA (ID, ID_Person, NET_Worth, ID_Headquarters, Fonded_Year , Description) VALUES(1, 1, 500000000 , 2, DAte'1991-01-01','EA Vancover');
INSERT INTO GAME_DEV_DATA (ID, ID_Person, NET_Worth, ID_Headquarters, Fonded_Year , Description) VALUES(2, 2, 500000000 , 3, DAte'2006-01-01','EA Romania');
INSERT INTO GAME_DEV_DATA (ID, ID_Person, NET_Worth, ID_Headquarters, Fonded_Year , Description) VALUES(3, 3, 523000000 , 4, DAte'1993-02-26','Yukes');
INSERT INTO GAME_DEV_DATA (ID, ID_Person, NET_Worth, ID_Headquarters, Fonded_Year , Description) VALUES(4, 4, 500000000 , 5, DAte'2011-01-01','EA Hothenburg');
INSERT INTO GAME_DEV_DATA (ID, ID_Person, NET_Worth, ID_Headquarters, Fonded_Year , Description) VALUES(5, 5, Null , 6, DAte'2000-03-06','Dimps');
INSERT INTO GAME_DEV_DATA (ID, ID_Person, NET_Worth, ID_Headquarters, Fonded_Year , Description) VALUES(6, 6, 1500000000 , 7, DAte'1984-01-01','Rockstar North');
INSERT INTO GAME_DEV_DATA (ID, ID_Person, NET_Worth, ID_Headquarters, Fonded_Year , Description) VALUES(7, 7, null , 8, DAte'2003-01-01','Team Bondi');
INSERT INTO GAME_DEV_DATA (ID, ID_Person, NET_Worth, ID_Headquarters, Fonded_Year , Description) VALUES(8, 8, null , 9, DAte'2010-04-20','NetherRealm Studios');

INSERT INTO GAME_DEV (ID, ID_GAMES, ID_GAME_DEV_DATA, Description) VALUES(1, 1, 1, NULL);
INSERT INTO GAME_DEV (ID, ID_GAMES, ID_GAME_DEV_DATA, Description) VALUES(2, 1, 2, NULL);
INSERT INTO GAME_DEV (ID, ID_GAMES, ID_GAME_DEV_DATA, Description) VALUES(3, 2, 1, NULL);
INSERT INTO GAME_DEV (ID, ID_GAMES, ID_GAME_DEV_DATA, Description) VALUES(4, 2, 2, NULL);
INSERT INTO GAME_DEV (ID, ID_GAMES, ID_GAME_DEV_DATA, Description) VALUES(5, 3, 3, NULL);
INSERT INTO GAME_DEV (ID, ID_GAMES, ID_GAME_DEV_DATA, Description) VALUES(6, 4, 4, NULL);
INSERT INTO GAME_DEV (ID, ID_GAMES, ID_GAME_DEV_DATA, Description) VALUES(7, 5, 5, NULL);
INSERT INTO GAME_DEV (ID, ID_GAMES, ID_GAME_DEV_DATA, Description) VALUES(8, 6, 5, NULL);
INSERT INTO GAME_DEV (ID, ID_GAMES, ID_GAME_DEV_DATA, Description) VALUES(9, 7, 6, NULL);
INSERT INTO GAME_DEV (ID, ID_GAMES, ID_GAME_DEV_DATA, Description) VALUES(10, 8, 6, NULL);
INSERT INTO GAME_DEV (ID, ID_GAMES, ID_GAME_DEV_DATA, Description) VALUES(11, 9, 7, NULL);
INSERT INTO GAME_DEV (ID, ID_GAMES, ID_GAME_DEV_DATA, Description) VALUES(12, 10, 8, NULL);
```

Figure 6 2nd Page of Inserts

Tables

Statistics | Data

	ID	NAME	GENRES	PLATFORM	DATE_OF_REALEASE	DESCRIPTION	Age Rating	GAME_RATING	PRICE	Storage medium	CASING	QUANTITY	NAME	SERIES	MODE	GAME_SIZE
1	1	FIFA20	Sports	PS4	27.09.2019	Latest Ffia i have	13	[null]	100	DVD	Plastic Hard	1	EA Sports	FIFA	Single and Multi	42.97 GB
2	2	FIFA19	Sports	Xbox One	28.09.2018	[null]	13	[null]	100	DVD	Plastic Hard	1	EA Sports	FIFA	Single and Multi	39.6 GB
3	4	NFS Payback	Racing	PC	11.10.2017	[null]	12	[null]	110	DVD	No Casing	1	EA Sports	NFS	Single and Multi	42.91 GB
4	5	DBZ Xenoverse 2	Fighting	PS4	28.10.2016	[null]	12	[null]	232	DVD	Plastic Hard	1	Bandai Namco	DBZ	Single and Multi	13.12 GB
5	6	DBZ Xenoverse	Fighting	Xbox One	27.02.2015	[null]	12	[null]	75	DVD	No Casing	1	Bandai Namco	DBZ	Single and Multi	9 GB
6	7	GTA 4	Action	Xbox One	03.11.2008	[null]	17+	[null]	213	DVD	No Casing	2	Rockstar Games	GTA	SINGLE Player	22 GB
7	8	GTA 5	Action	PS4	17.09.2013	[null]	17+	[null]	149	DVD	No Casing	1	Rockstar Games	GTA	SINGLE Player	95 GB
8	3	WWE 2k19	Sports	PS4	09.10.2018	[null]	13	[null]	100	ONLINE	Online	1	2k Sports	WWE	Single and Multi	42.91 GB
9	9	LA Noire	Action	PC	17.05.2011	[null]	17+	[null]	90	ONLINE	Online	1	Rockstar Games	LA Noire	SINGLE Player	17.8 GB
10	10	Mortal Kombet 11	Fighting	Nintendo Switch	10.05.2019	[null]	13	[null]	131	ONLINE	Online	1	Warner Bros	Mortal Kombet	SINGLE Player	22.6 GB

Figure 7 Everything From Games

	ID	Game	Employee	Role	Net worth is USD	Country of headquater	City of headquater	Street of headquater	Foundation Date	Developer Name
1	1	FIFA20	Andrew Wilson	CEO	500000000	Canada	Vancouver	NA	01.01.1991	EA Vancover
2	1	FIFA19	Andrew Wilson	CEO	500000000	Canada	Vancouver	NA	01.01.1991	EA Vancover
3	5	DBZ Xenoverse 2	Takashi Nishiyama	CEO	[null]	japan	Minato City	1 Chome-1-4	06.03.2000	Dimps
4	5	DBZ Xenoverse	Takashi Nishiyama	CEO	[null]	japan	Minato City	1 Chome-1-4	06.03.2000	Dimps
5	6	GTA 4	Sam Houser	CEO	1500000000	United Kingdom	Edinburg	108 Holyrood Rd	01.01.1984	Rockstar North
6	6	GTA 5	Sam Houser	CEO	1500000000	United Kingdom	Edinburg	108 Holyrood Rd	01.01.1984	Rockstar North
7	8	Mortal Kombet 11	ED Boon	CEO	[null]	USA	Chicago	2650 w Bradly	20.04.2010	NetherRealm Studios
8	2	FIFA20	Dave Steaveson	Engineer	500000000	Romainia	Bucuresti	Bulevardul General 4	01.01.2006	EA Romania
9	2	FIFA19	Dave Steaveson	Engineer	500000000	Romainia	Bucuresti	Bulevardul General 4	01.01.2006	EA Romania
10	3	WWE 2k19	Mathew anderson	Engineer	523000000	Japan	Osaka	NA	26.02.1993	Yukes
11	4	NFS Payback	David Carmon	Artish	500000000	Sweden	vastra frolunda	Rasengerns gata 29c	01.01.2011	EA Hothenburg
12	7	LA Noire	Chee Kin Chan	Artish	[null]	Australia	Sydney	NA	01.01.2003	Team Bondi

Figure 8 Everything from Game_Dev_Data

	ID	DESCRIPTION	GAME	Award
1	1	IMDB AWARDS	FIFA20	Best Sports Game
2	2	IMDB AWARDS	FIFA19	Best Sports Game
3	3	Game choice	WWE 2k19	Generally favorable
4	4	IMDB AWARDS	WWE 2k19	Fighting title
5	5	IMDB AWARDS	NFS Payback	Nagtr
6	6	BAFTA Games Award	GTA 4	Best Story
7	7	BAFTA Games Award	GTA 4	Best Gameplay
8	8	Game Developers Choice Award	GTA 4	Game of the Year
9	9	Game Developers Choice Award	GTA 4	Best Technology
10	10	BAFTA Games Award	GTA 5	Game Design
11	11	BAFTA Games Award	GTA 5	Best British Game
12	12	Game Developers Choice Award	GTA 5	Best Technology
13	13	Game Developers Choice Award	GTA 5	Game of the Year
14	14	BAFTA Games Award	GTA 5	Game Innovation
15	15	BAFTA Games Award	LA Noire	Best Original Music
16	16	BAFTA Games Award	LA Noire	Best Design
17	17	GANG Award	Mortal Kombet 11	Audio of the Year
18	18	GANG Award	Mortal Kombet 11	Best Sound Design

Figure 9 Everything from Awards

Above figures shows all the data I have in the main tables for Games, Awards and Game_Dev_Data. I have used quires to replace Id's with the actual data which was inside the tables linked to them.

Quires

In this section I used some Queries to show how the data in my Database can be manipulated. I have 4 different Examples 2 with Count and other 2.

```
SELECT g.name as Game, gn.name as Genres, g.price as "Price", g.DATE_OF_REALEASE as "Release" from games g
join genres gn on gn.ID=g.ID_GENRES
where gn.NAME='Fighting' and g.PRICE>100 and g.DATE_OF_REALEASE>'2012-01-01'
```

Statistics Data

	GAME	GENRES	Price	Release
1	DBZ Xenoverse 2	Fighting	232	28.10.2016
2	Mortal Kombet 11	Fighting	131	10.05.2019

Figure 10 Query 1

In the above Example I wrote Query to search for all the Games that are of Genres 'Fighting' , are above 100 in price are Released after 2012-01-01. We can clearly see the Name of Games and Genres which is Fighting as well as price which are for sure above 100 and in last Release date which are after 2012-01-01

```
SELECT count(g.name) from games g
join PLATFORM p on p.ID=g.ID_PLATFORM
join MODE m on m.id=g.ID_MODE

where p.name='PS4' and m.id=3

group by p.ID

```

Statistics | Data

	COUNT
1	3

Figure 11 Query 2

In above Example I am counting the games for ‘PS4’which are of Mode ‘Single and Multiplayer’. In this example I had to join Platform and Mode from games and the give the condition using where. We can see total number of Games which are for ‘PS4’ and have mode ‘Single and Multiplayer’ which is 3.

```sql
SELECT g.name, count(r.ID_AWARD_NAME)
FROM AWARDS r
join games g on g.id=r.ID_GAMES
group by g.name
```

Statistics | Data

	NAME	COUNT
1	FIFA19	1
2	FIFA20	1
3	GTA 4	4
4	GTA 5	5
5	LA Noire	2
6	Mortal Kombet 11	2
7	NFS Payback	1
8	WWE 2k19	2

Figure 12 Query 3

In this example I counted the Number of Awards Games Won. It includes only the games which have won at least one award this is because I am using inner join. So we connected games and Awards and simply counted the id for awards name. We can see we have name of each game as well as number of awards each one of them Won.

```sql
SELECT g.name, h.Street as Street, h.city as City , h.Contry as Country from games g
join GAME_DEV gd on g.id=gd.ID_GAMES
join GAME_DEV_DATA gdd on gd.ID_GAME_DEV_DATA=gdd.ID
join HEADQUARTERS h on gdd.ID_HEADQUARTERS=h.ID
```

Statistics Data

	NAME	STREET	CITY	COUNTRY
1	FIFA20	NA	Vancouver	Canada
2	FIFA19	NA	Vancouver	Canada
3	FIFA20	Bulevardul General 4	Bucuresti	Romainia
4	FIFA19	Bulevardul General 4	Bucuresti	Romainia
5	WWE 2k19	NA	Osaka	Japan
6	NFS Payback	Rasengerns gata 29c	vastra frolunda	Sweden
7	DBZ Xenoverse 2	1 Chome-1-4	Minato City	japan
8	DBZ Xenoverse	1 Chome-1-4	Minato City	japan
9	GTA 4	108 Holyrood Rd	Edinburg	United Kingdom
10	GTA 5	108 Holyrood Rd	Edinburg	United Kingdom
11	LA Noire	NA	Sydney	Australia
12	Mortal Kombet 11	2650 w Bradly	Chicago	USA

Figure 13 Query 4

In this last example I Searched for Address for Headquarters for the developers of each game. For this purpose we joined gamed to Game_Dev and then to Game_Dev_Data and then finally to Headquarters and then in select we showed Name of game, Street, City and Country. We can see clearly the we have all those in Table Below

Conclusions

I Created the database for my personal use to sort Games . I created some Basic to NOT NULL so that can help me keep record of my collection. For Example the Casing so that I know in Which casing I have the game to it is easy to look out for it. My database have basic information about the game like Name, Size, Price and Mode as well as More than basic information like Awards Won, Publishers, Developers and Address of their Headquarters etc.

I learned a lot during the Creation of database. And Came across some mistakes and I corrected most of them. Few I couldn't correct because I already had created the database. It was really nice experience to work on the Project.