

[Movie Theatre Database Management Project] & [Database Assignment]

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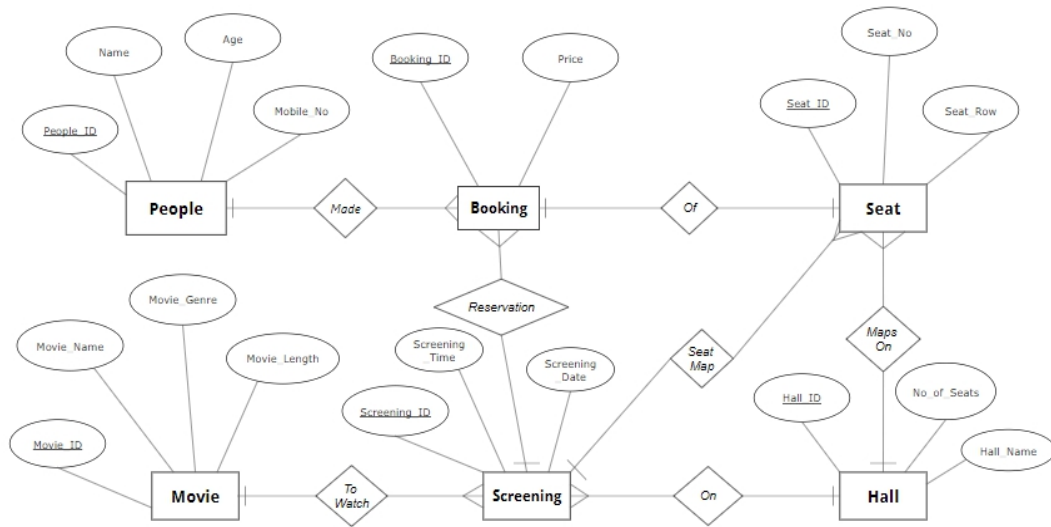
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INTRODUCTION

Multiplex is a movie theatre complex with multiple screens within a single complex. They are usually housed in a specially designed building.

- Movie Theatre Database System is an application of database management system which provides the user to book movie tickets and manager to keep their records.
- Movie Theatre Database system revolutionized the trivial system of distribution of Paper tickets and made it easy for users to book tickets from home.
- This system provides secure, organized and efficient storage of huge data. One does not have to be physically present at the theatre to get their jobs done.
- With the advent of various online platform like BookMyShow and PayTm use type of movie theatre database system, the process became very simple, hustle free and user-friendly.
- This Project aims to provide an insight of such Movie Theatre Database System.

E-R DIAGRAM



DATA DICTIONARY

1. People Table

FieldName	Datatype	FieldLength	Constraint	Description
People_ID	VARCHAR	10	NOT NULL	PeopleID
Name	VARCHAR	20	NOT NULL	Name of the people
Age	Integer		NOT NULL	Age of the people
Mobile_No	CHAR	8	NOT NULL	Mobile Number of the people

2. Booking Table

FieldName	Datatype	FieldLength	Constraint	Description
Booking_ID	VARCHAR	6	NOT NULL	BookingID
Price	Integer		NOT NULL	Price of Ticket
Screening_ID(FK)	VARCHAR	10	NOT NULL	ScreeningID of the movie
People_ID(FK)	VARCHAR	10	NOT NULL	PeopleID

3. Seat Table

FieldName	Datatype	FieldLength	Constraint	Description
Seat_ID	VARCHAR	7	NOT NULL	SeatID
Seat_No	Integer		NOT NULL	Seat Number
Seat_Row	CHAR	1	NOT NULL	Row of the Seats
Hall_ID(FK)	VARCHAR	4	NOT NULL	HallID
Booking_ID(FK)	VARCHAR	6	NOT NULL	BookingID

4. Hall Table

FieldName	Datatype	FieldLength	Constraint	Description
Hall_ID	VARCHAR	4	NOT NULL	HallID
No_of_Seats	Integer		NOT NULL	Number of Seats
Hall_Name	VARCHAR	10	NOT NULL	Hall Name

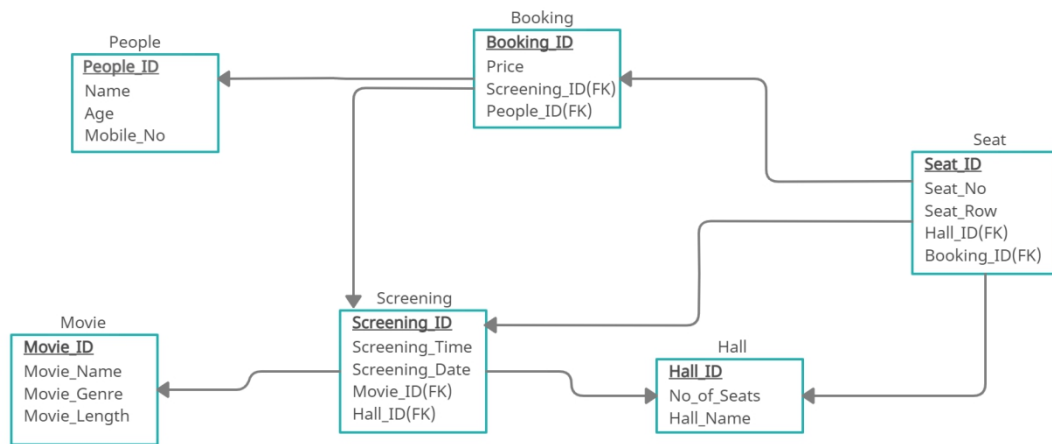
5. Screening Table

FieldName	Datatype	FieldLength	Constraint	Description
Screening_ID	VARCHAR	10	NOT NULL	ScreeningID
Screening_Time	TIME		NOT NULL	Time of the Screening
Screening_Date	DATE		NOT NULL	Date of the Screening
Movie_ID(FK)	VARCHAR	5	NOT NULL	MovieID
Hall_ID(FK)	VARCHAR	4	NOT NULL	HallID

6. Movie Table

FieldName	Datatype	FieldLength	Constraint	Description
Movie_ID	VARCHAR	5	NOT NULL	MovieID
Movie_Name	VARCHAR	20	NOT NULL	Name of the Movie
Movie_Genre	VARCHAR	15	NOT NULL	Genre of the Movie
Movie_Length	Integer		NOT NULL	Length of the Movie

DATABASE SCHEMA



SQL COMMANDS(DDL & DML)

1. PEOPLE TABLE:

SQL command to create People Table:

```
--People Table
CREATE TABLE People
(People_ID VARCHAR(10) NOT NULL PRIMARY KEY,
Name VARCHAR(20) NOT NULL,
Age INT NOT NULL,
Mobile_No CHAR(8) NOT NULL
)

ALTER TABLE People
ALTER COLUMN Mobile_No CHAR(10)

INSERT INTO People(People_ID,Name,Age,Mobile_No)
VALUES('P0','Deba',23,'8240354380')
INSERT INTO People(People_ID,Name,Age,Mobile_No)
VALUES('P1','Anurag',19,'9083217389')
INSERT INTO People(People_ID,Name,Age,Mobile_No)
VALUES('P2','Mehul',20,'9438901012')
INSERT INTO People(People_ID,Name,Age,Mobile_No)
VALUES('P3','Celesta',17,'7890123456')
INSERT INTO People(People_ID,Name,Age,Mobile_No)
VALUES('P4','Kunver',22,'6789012345')
INSERT INTO People(People_ID,Name,Age,Mobile_No)
VALUES('P5','Yogendra',21,'9123456780')
INSERT INTO People(People_ID,Name,Age,Mobile_No)
VALUES('P6','Gaurav',21,'8907654321')
INSERT INTO People(People_ID,Name,Age,Mobile_No)
VALUES('P7','Akim',22,'8102937465')
INSERT INTO People(People_ID,Name,Age,Mobile_No)
VALUES('P8','Saheli',21,'7049012345')
INSERT INTO People(People_ID,Name,Age,Mobile_No)
VALUES('P9','Anam',20,'8240345094')
```

Sample Record of People Table:

	People_ID	Name	Age	Mobile_No
1	P0	Deba	23	8240354380
2	P1	Anurag	19	9083217389
3	P2	Mehul	20	9438901012
4	P3	Celesta	17	7890123456
5	P4	Kunver	22	6789012345
6	P5	Yogendra	21	9123456780
7	P6	Gaurav	21	8907654321
8	P7	Akim	22	8102937465
9	P8	Saheli	21	7049012345
10	P9	Anam	20	8240345094

2. HALL TABLE:

SQL command to create Hall table:

```
--Hall Table
CREATE TABLE Hall
(Hall_ID VARCHAR(4) NOT NULL PRIMARY KEY,
No_of_Seats INT NOT NULL,
Hall_Name VARCHAR(10) NOT NULL
)

INSERT INTO Hall(Hall_ID,No_of_Seats,Hall_Name)
VALUES('H1',20,'Platinum')
INSERT INTO Hall(Hall_ID,No_of_Seats,Hall_Name)
VALUES('H2',30,'Gold')
INSERT INTO Hall(Hall_ID,No_of_Seats,Hall_Name)
VALUES('H3',15,'Royal')
INSERT INTO Hall(Hall_ID,No_of_Seats,Hall_Name)
VALUES('H4',40,'Silver')
```

Sample Record of Hall Table:

	Hall_ID	No_of_Seats	Hall_Name
1	H1	20	Platinum
2	H2	30	Gold
3	H3	15	Royal
4	H4	40	Silver

3. MOVIE TABLE:

Below is the SQL command to Create Movie Table:

```
--Movie Table
CREATE TABLE Movie
(Movie_ID VARCHAR(5) NOT NULL PRIMARY KEY,
Movie_Name VARCHAR(20) NOT NULL,
Movie_Genre VARCHAR(15) NOT NULL,
Movie_Length INT NOT NULL
)

INSERT INTO Movie(Movie_ID,Movie_Name,Movie_Genre,Movie_Length)
VALUES('M0','The Godfather','Drama/Crime','178')
INSERT INTO Movie(Movie_ID,Movie_Name,Movie_Genre,Movie_Length)
VALUES('M1','Avengers Endgame','Superhero','181')
INSERT INTO Movie(Movie_ID,Movie_Name,Movie_Genre,Movie_Length)
VALUES('M2','Avatar','Sci-Fi','162')
INSERT INTO Movie(Movie_ID,Movie_Name,Movie_Genre,Movie_Length)
VALUES('M3','Titanic','Drama','195')
INSERT INTO Movie(Movie_ID,Movie_Name,Movie_Genre,Movie_Length)
VALUES('M4','Inception','Action/Sci-fi','162')
INSERT INTO Movie(Movie_ID,Movie_Name,Movie_Genre,Movie_Length)
VALUES('M5','Interstellar','Sci-Fi/Adventure','169')
INSERT INTO Movie(Movie_ID,Movie_Name,Movie_Genre,Movie_Length)
VALUES('M6','Tenet','Action/Sci-fi','160')
INSERT INTO Movie(Movie_ID,Movie_Name,Movie_Genre,Movie_Length)
```

```
VALUES('M7','Whiplash','Drama/Drama','107')
INSERT INTO Movie(Movie_ID,Movie_Name,Movie_Genre,Movie_Length)
VALUES('M9','Dunkirk','War/Action','107')

DELETE FROM Movie
WHERE Movie_ID='M9'

UPDATE Movie
SET Movie_Name='Pulp Fiction', Movie_Genre='Crime/Thriller'
WHERE Movie_ID='M7'
```

Sample Record of Movie Table:

	Movie_ID	Movie_Name	Movie_Genre	Movie_Length
1	M0	The Godfather	Drama/Crime	178
2	M1	Avengers Endgame	Superhero	181
3	M2	Avatar	Sci-Fi	162
4	M3	Titanic	Drama	195
5	M4	Inception	Action/Sci-fi	162
6	M5	Interstellar	Scifi/Adventure	169
7	M6	Tenet	Action/Sci-fi	160
8	M7	Pulp Fiction	Crime/Thriller	107

4. SCREENING TABLE:

SQL command to create Screening Table:

```
--Screening table
CREATE TABLE Screening
(Screening_ID VARCHAR(10) NOT NULL PRIMARY KEY,
 Screening_Time TIME NOT NULL,
 Screening_Date DATE NOT NULL,
 Movie_ID VARCHAR(5) FOREIGN KEY REFERENCES Movie,
 Hall_ID VARCHAR(4) FOREIGN KEY REFERENCES Hall
)
ALTER TABLE Screening
ALTER COLUMN Screening_Time TIME(0)

INSERT INTO
Screening(Screening_ID,Screening_Time,Screening_Date,Movie_ID,Hall_ID)
VALUES('SCR1','17:30','2021-01-01','M0','H1')
INSERT INTO
Screening(Screening_ID,Screening_Time,Screening_Date,Movie_ID,Hall_ID)
VALUES('SCR2','12:00','2021-01-02','M3','H1')
INSERT INTO
Screening(Screening_ID,Screening_Time,Screening_Date,Movie_ID,Hall_ID)
VALUES('SCR3','14:20','2021-01-01','M1','H3')
INSERT INTO
Screening(Screening_ID,Screening_Time,Screening_Date,Movie_ID,Hall_ID)
VALUES('SCR4','18:00','2021-01-02','M1','H2')
INSERT INTO
Screening(Screening_ID,Screening_Time,Screening_Date,Movie_ID,Hall_ID)
VALUES('SCR5','20:15','2021-01-01','M3','H4')
INSERT INTO
Screening(Screening_ID,Screening_Time,Screening_Date,Movie_ID,Hall_ID)
VALUES('SCR6','23:30','2021-01-01','M2','H2')
INSERT INTO
Screening(Screening_ID,Screening_Time,Screening_Date,Movie_ID,Hall_ID)
```



```
VALUES('SCR7','10:45','2021-01-02','M0','H4')
INSERT INTO
Screening(Screening_ID,Screening_Time,Screening_Date,Movie_ID,Hall_ID)
VALUES('SCR8','16:25','2021-01-02','M4','H3')
```

Sample Record of Screening Table:

	Screening_ID	Screening_Time	Screening_Date	Movie_ID	Hall_ID
1	SCR1	17:30:00	2021-01-01	M0	H2
2	SCR2	12:00:00	2021-01-02	M3	H1
3	SCR3	14:20:00	2021-01-01	M1	H3
4	SCR4	18:00:00	2021-01-02	M1	H2
5	SCR5	20:15:00	2021-01-01	M3	H4
6	SCR6	23:30:00	2021-01-01	M2	H2
7	SCR7	10:45:00	2021-01-02	M0	H4
8	SCR8	16:25:00	2021-01-02	M4	H3

5. BOOKING TABLE:

SQL command to create Booking Table:

```
--Booking Table
CREATE TABLE Booking
(Booking_ID VARCHAR(6) NOT NULL PRIMARY KEY,
Pirce INT NOT NULL,
Screening_ID VARCHAR(10) FOREIGN KEY REFERENCES Screening,
People_ID VARCHAR(10) FOREIGN KEY REFERENCES People
)

INSERT INTO Booking(Booking_ID,Pirce,Screening_ID ,People_ID)
VALUES('B0',550,'SCR3','P5')
INSERT INTO Booking(Booking_ID,Pirce,Screening_ID ,People_ID)
VALUES('B1',700,'SCR1','P0')
INSERT INTO Booking(Booking_ID,Pirce,Screening_ID ,People_ID)
VALUES('B2',1100,'SCR2','P1')
INSERT INTO Booking(Booking_ID,Pirce,Screening_ID ,People_ID)
VALUES('B3',920,'SCR5','P7')
INSERT INTO Booking(Booking_ID,Pirce,Screening_ID ,People_ID)
VALUES('B4',550,'SCR4','P9')
INSERT INTO Booking(Booking_ID,Pirce,Screening_ID ,People_ID)
VALUES('B5',700,'SCR1','P2')
INSERT INTO Booking(Booking_ID,Pirce,Screening_ID ,People_ID)
VALUES('B6',1100,'SCR5','P4')
INSERT INTO Booking(Booking_ID,Pirce,Screening_ID ,People_ID)
VALUES('B7',600,'SCR6','P6')
INSERT INTO Booking(Booking_ID,Pirce,Screening_ID ,People_ID)
VALUES('B8',920,'SCR2','P8')
INSERT INTO Booking(Booking_ID,Pirce,Screening_ID ,People_ID)
VALUES('B9',600,'SCR3','P3')
```

Sample Record of Booking Table:

	Booking_ID	Pirce	Screening_ID	People_ID
1	B0	550	SCR3	P5
2	B1	700	SCR1	P0
3	B2	1100	SCR2	P1
4	B3	920	SCR5	P7
5	B4	550	SCR4	P9
6	B5	700	SCR1	P2
7	B6	1100	SCR5	P4
8	B7	600	SCR6	P6
9	B8	920	SCR2	P8
10	B9	600	SCR3	P3

6. SEAT TABLE:

SQL command to create Seat Table:

```
--Seat Table
CREATE TABLE Seat
(Seat_ID VARCHAR(7) NOT NULL PRIMARY KEY,
Seat_No INT NOT NULL,
Seat_Row CHAR(1) NOT NULL,
Hall_ID VARCHAR(4) FOREIGN KEY REFERENCES Hall,
Booking_ID VARCHAR(6) FOREIGN KEY REFERENCES Booking
)

INSERT INTO Seat(Seat_ID,Seat_No,Seat_Row ,Hall_ID, Booking_ID)
VALUES('H1S1',1,'C','H1','B0')
INSERT INTO Seat(Seat_ID,Seat_No,Seat_Row ,Hall_ID, Booking_ID)
VALUES('H1S2',2,'C','H1','B0')
INSERT INTO Seat(Seat_ID,Seat_No,Seat_Row ,Hall_ID, Booking_ID)
VALUES('H1S3',3,'A','H1','B2')
INSERT INTO Seat(Seat_ID,Seat_No,Seat_Row ,Hall_ID, Booking_ID)
VALUES('H1S4',4,'B','H1','B3')
INSERT INTO Seat(Seat_ID,Seat_No,Seat_Row ,Hall_ID, Booking_ID)
VALUES('H1S5',5,'A','H1','B5')
INSERT INTO Seat(Seat_ID,Seat_No,Seat_Row ,Hall_ID, Booking_ID)
VALUES('H2S1',1,'D','H2','B7')
INSERT INTO Seat(Seat_ID,Seat_No,Seat_Row ,Hall_ID, Booking_ID)
VALUES('H2S2',2,'A','H2','B6')
INSERT INTO Seat(Seat_ID,Seat_No,Seat_Row ,Hall_ID, Booking_ID)
VALUES('H2S3',3,'A','H2','B6')
INSERT INTO Seat(Seat_ID,Seat_No,Seat_Row ,Hall_ID, Booking_ID)
VALUES('H2S4',4,'B','H2','B4')
INSERT INTO Seat(Seat_ID,Seat_No,Seat_Row ,Hall_ID, Booking_ID)
VALUES('H2S5',5,'D','H2','B8')
INSERT INTO Seat(Seat_ID,Seat_No,Seat_Row ,Hall_ID, Booking_ID)
VALUES('H3S1',1,'B','H3','B9')
INSERT INTO Seat(Seat_ID,Seat_No,Seat_Row ,Hall_ID, Booking_ID)
VALUES('H3S2',2,'B','H3','B9')
INSERT INTO Seat(Seat_ID,Seat_No,Seat_Row ,Hall_ID, Booking_ID)
VALUES('H3S3',3,'D','H3','B1')
```

Sample Record of Seat Table:

	Seat_ID	Seat_No	Seat_Row	Hall_ID	Booking_ID
1	H1S1	1	C	H1	B0
2	H1S2	2	C	H1	B0
3	H1S3	3	A	H1	B2
4	H1S4	4	B	H1	B3
5	H1S5	5	A	H1	B5
6	H2S1	1	D	H2	B7
7	H2S2	2	A	H2	B6
8	H2S3	3	A	H2	B6
9	H2S4	4	B	H2	B4
10	H2S5	5	D	H2	B8
11	H3S1	1	B	H3	B9
12	H3S2	2	B	H3	B9
13	H3S3	3	D	H3	B1
