# Assignment 1

Ansh Prakash, 2016CS10367

Due date: January 13, 2020, 11:55pm IST

# 1 Answer 1

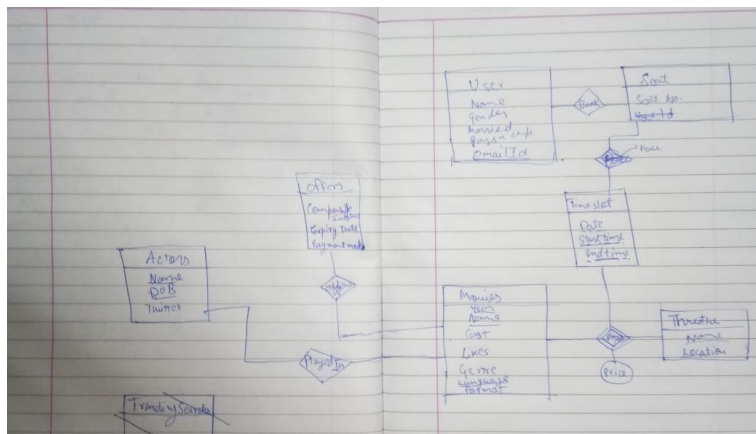## 1.1 ER Diagram



Figure 1: ER Diagram.

## 1.2 Set of relations

| Entity | Attributes |
|---|---|
| Movies | Year, Name, Cast, Likes, Genre, Language, Format |
| Threatre | Name, Location |
| TimeSlot | Date, Start_time, End_time |
| Seat | SeatNo |
| User | Name, Gender, Married, Password, emailId |
| Offers | CompanyInvolved, ExpiryDate,PaymentMode |
| Actor | Name, DoB, TwitterAccount |
| PlayedIn | Year, Name, Cast, Likes, Genre, Language, Format, ActorName, DoB, Twitter |
| Plays | Name, Location, Year, Name, Cast, Likes, Genre, Language, Format, Date, Start_time, End_time |
| Place | Date, Start_time, End_time, SeatNo |
| Book | SeatNo, Name, Gender, Married, Password, emailId |
| offers | CompanyInvolved, ExpiryDate,PaymentMode, Year, Name, Cast, Likes, Genre, Language, Format |

## 1.3 Keys and FDs

| Entity | Keys | FD |
|---|---|---|
| Movies | Year, Name | Cast, Likes, Genre, Language, Format |
| Threatre | Name, Location | - |
| TimeSlot | Date, Start_time, End_time | - |
| Seat | SeatNo | - |
| User | emailId | Name, Gender, Married, Password |
| Offers | CompanyInvolved, ExpiryDate,PaymentMode | - |
| Actor | Name, DoB | TwitterAccount |

## 1.4 Sample Data

## 1.5 List of various relationships

| RelationShip | Entity |
|---|---|
| Weak entity set | TimeSlot, Seat |
| Non-binary relationship | Plays |
| Hierarchical relationships | - |
| referential constraints | Threatre, User |

# 2 Answer 2

| Universal Table |
|---|
| Year, MovieName, Cast, Likes, Genre, Language, Format , ActorName, DoB,Twitter, ThreatreName, Location |

2NF ,3NF,BCNF all three at the same time

| Table1 |
|---|
| Year, Name, Cast, Likes, Genre, Language, Format, TreatreName, Location |

| Table2 |
|---|
| Year, Name, Cast, Likes, Genre, Language, Format, ActorName, DoB, TwitterAccount |

| Table3 |
| --- |
| Year, Name, Cast, Likes, Genre, Language, Format |
| Table4 |
| ActorName, DoB, TwitterAccount |
| Table5 |
| THreatreName, Location |

# 3   Answer 3

## 3.1   Schema

id rated created_at last_move_at turns victory_status winner
increment_code white_id white_rating black_id black_rating moves
opening_eco opening_name opening_ply

## 3.2   Various insert modes

### 3.2.1   Bulk Load

sudo -u postgres psql create database dbhw1; dbhw1; create table hw1_table (c1 varchar,c2 varchar,c3 varchar,c4 varchar,c5 varchar,c6 varchar,c7 varchar,c8 varchar,c9 varchar,c10 varchar,c11 varchar,c12 varchar,c13 varchar,c14 varchar,c15 varchar,c16 varchar); COPY hw1_table FROM '/home/ansh/8thSem/COL362/homework/games.csv' WITH (FORMAT csv);

### 3.2.2   Insert statements

### 3.2.3   using JDBC

## 3.3   Statistics

Dataset: games.csv

# 4   Answer 4