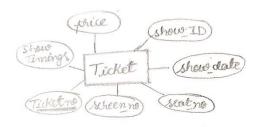
UE19CS301 – DBMS Assignment 1

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Ticket Booking System

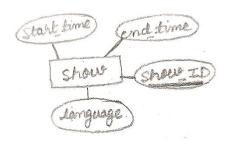
Problem statement

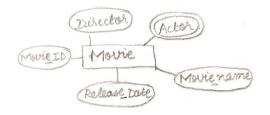
Our DBMS application is designed to tackle the ticket booking system in theatres and cinemas. We have developed a schema to tabularize all important entities that constitute the structure. These include:



The ticket table has multiple important attributes that include ticket number, show ID, seat number, etc.

The show table contains the timings set of the movies throughout the day. There are a total of 4 possible slots. It has a direct relation to the ticket table, wherein a single show can have multiple tickets but one ticket can have only one show.

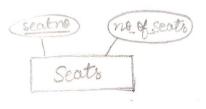




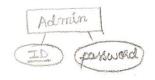
The movie table is another important entity which records the movie details and has a relationship with the show timings. Therefore, every show can have one or more movies running whereas a movie can have 0-4 shows.

The customer table stores records of any person who books/buys a ticket and therefore has a 1:N relation with the ticket table, i.e., A customer can buy many tickets but one ticket can only allow one customer for the show.

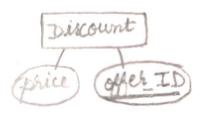


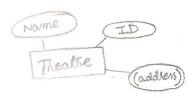


The admin table stores employee data of the theatre who sell the tickets to customers. Therefore, all admins work for a particular theatre. The theatre is in turn related to the



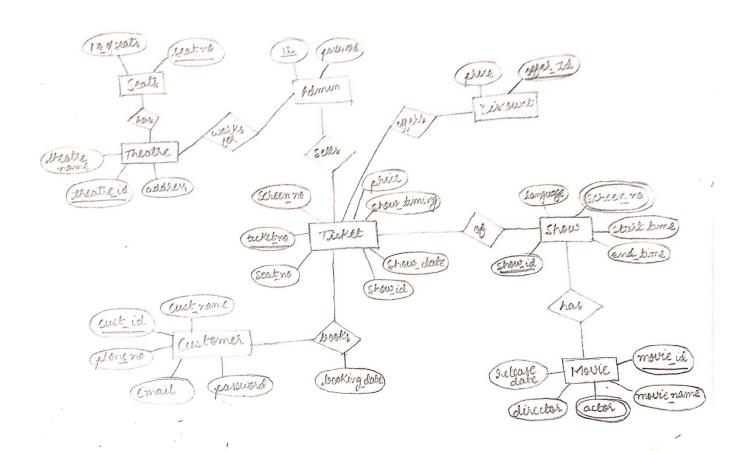
seating information which has its own table that is required to book tickets. The tickets also offer occasional discount on them and



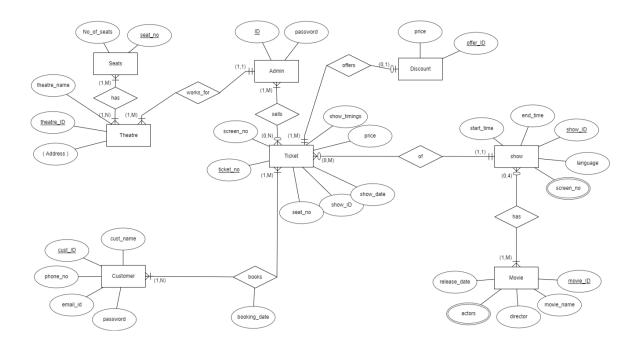


therefore that data is stored on another table called Discounts.

Given below is the linked relation for all the entities mentioned:



The completed Entity relationship diagram is displayed below. This includes all entities with their attributes and cardinality of their relation with other tables/entities.



ERDPlus:

The above ER diagram was made using <u>ERDPlus</u>. ERDPlus is a web-based database modelling tool that lets you quickly and easily create

- Entity Relationship Diagrams (ERDs)
- Relational Schemas (Relational Diagrams)