COMP3611

Assignment 4

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2. What normal form is this design? Why? What should be done to correct the design? (*2 marks*)

The normal form of this design is UNF. Firstly, this is an unnormalized table created by the information source. Secondly, it contains some multi-valued attributes or repeating groups (Starring). To correct this design, we should remove the repeating groups.

4. For the corrected design, please answer the following: (*5 marks*)

* 1. What normal form is this corrected design? Why?

The design is 2NF because the primary key is a single attribute (ID).

* 1. Can it handle a movie being coded for multiple Genres?

Yes. For example，there are four rows related to the movie star trek in the table. If we add one more genre “drama” to this movie，we can insert four more rows in which all the columns except the genre are the same

* 1. Does it have minimal data changes if a Genre name was changed (e.g., Thriller becomes Suspense)?

No. If the genre of the movie is changed，all rows related to that movie will change

* 1. Can it handle a person being associated with a movie multiple ways (e.g., Clint Eastwood both directed and played the role of Bill Munny in “Unforgiven”)?

Yes. The name of a person can show both in actor and director attributes

* 1. Can it handle a person playing multiple characters (e.g., Eddie Murphy in “The Nutty Professor” played seven different roles: Sherman Klump, Buddy Love, Lance Perkins, etc.)?

No. If a person plays too many roles in a movie，the length of the starring attribute will not be enough.

* 1. What further corrections need to be made to this design? Why?

There are too many rows in this design and it can not handle a person playing multiple roles in a movie. To fix these problems，we need to create other entities such as directors. Also，an entity character is needed to handle the roles that an actor plays in a movie