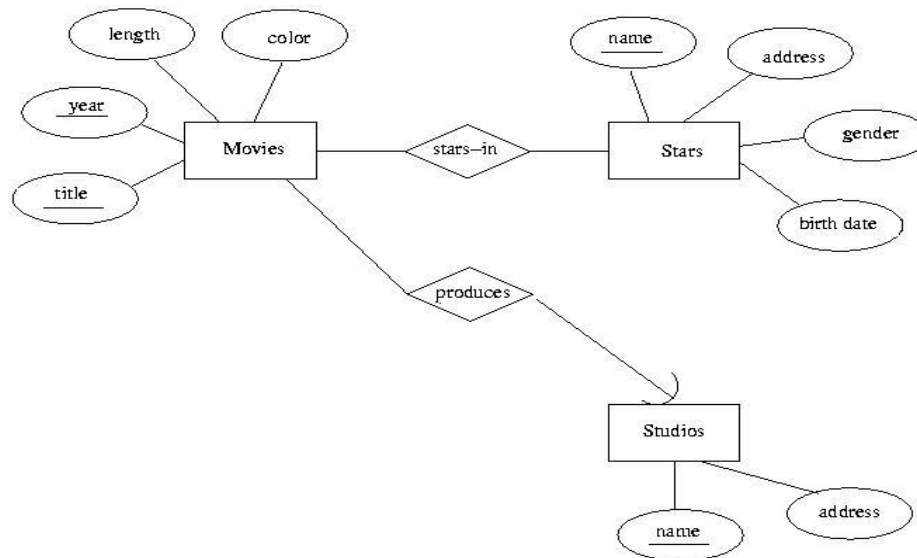


Entity Relationship Model for Movie Database



Conversion to the relational model

We convert each entity set into a relation and use the attributes of the entity set as attributes of the relation. We also convert each relationship into a relation and as attributes we have the keys of the connecting entity sets. The key for the many-to-many relationship *Stars-in* is the union of both keys. For the case of the many-to-one relationship, *Produces*, the key is only the key corresponding to the "many" side.

Movies(**title**, **year**, length, color)

Stars(**name**, address, gender, birthdate)

Studios(**name**, address)

StarsIn(**movieTitle**, **movieYear**, **starName**)

Produces(studioName, **movieTitle**, **movieYear**)

We can simplify the model by eliminating the relation corresponding to the many-to-one relationship *Produces* by adding the attribute *studioName* to the *Movies* relation.

The final relational model consists of the following 4 relations.

Movies(**title**, **year**, length, color, studioName)

Stars(**name**, address, gender, birthdate)

Studios(**name**, address)

StarsIn(**movieTitle**, **movieYear**, **starName**)