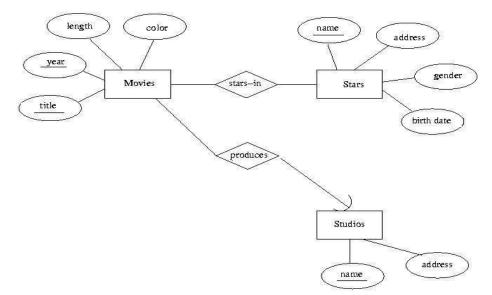
Entity Relationship Model for Movie Database



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-toone 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)