Weak entities are always double boxes

Any line connecting to a weak entity must be total participation (double line)

You don’t have to put cardinality if it’s not in the specifications

Construct an E-R diagram for a car insurance company where:

* Customers own one or more cars each
* Each car has associated with it zero to any number of recorded accidents.
* Each insurance policy covers one or more cars, and has one or more premium payments associated with it.
* Each payment is for a particular period of time, and has an associated due date, and the date when the payment was received

A picture containing shirt

Description automatically generated

Customer (CustomerID)

Car (VIN)

Accident (AccidentID)

Policy (PolicyID)

Payment (Time\_Period, Due\_Date, Received\_Date, PolicyID)

Foreign Key: (PolicyID) References Policy (PolicyID)

On Delete Cascade

Midterm Questions

Movie   (*title*: string, *year*: integer, *length*: integer, *studioName*: string, *budget*: integer)

Movie Star   (*name*: string, *netWorth*: integer)

StarsIn   (*movieTitle*: string, *movieYear*: integer, *starName*: string)

Studio  (*name*: string, *totalBudgetPerYear*: integer)

Which movie stars appeared in movies produced by *JafariStudios*in 2014?

Which movie stars have the highest net worth?

Which studio spent the most in the year 2014 (i.e. the sum of the budgets of the movies that the studio produced was the highest)?

Which movies have the average *netWorth* of the movie stars greater than 300?

Find the movies whose title starts with ‘Bo’ and were released in 2014.

1:

Select SI.starName

From StarsIn S, Movie M

Where M.title = S.movieTitle and M.studioName = ‘JafariStudios’ and M.year = 2014;

2:

Select MS.name

From Movie Star MS

Where MS.netWorth = (select Max(MS.netWorth) From Movie Star MS2);

3:

Create view V1 as (select M.studioName, SUM(M.budget) as Budget2014

From Movie M

Where M.year = 2014;

Group by M.studioName);

Select \* from V1 where V1.Budget2014 = (select MAX(V1.Budget2014 from V1);

4:

Select SI.movieTitle, AVG(MS.netWorth)

From StarsIn SI, MovieStar MS

Where SI.starName = MS.name

Group by SI.movieTitle

Having AVG(MS.netWorth) > 300;

5:

Select M.title

From Movie M

Where M.title like ‘Bo%’ and M.year = 2014;

6: