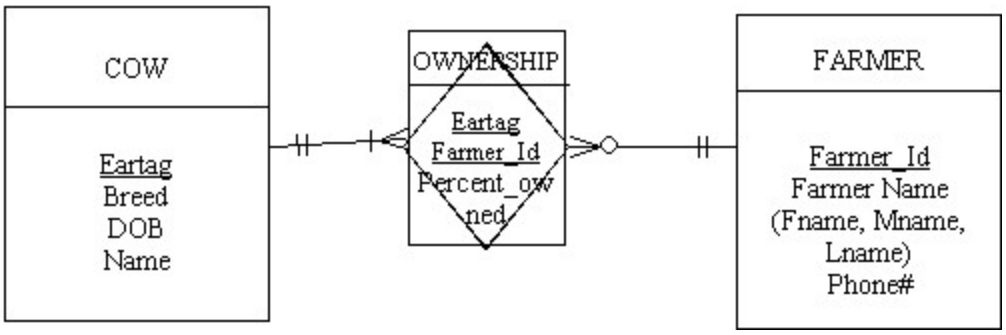
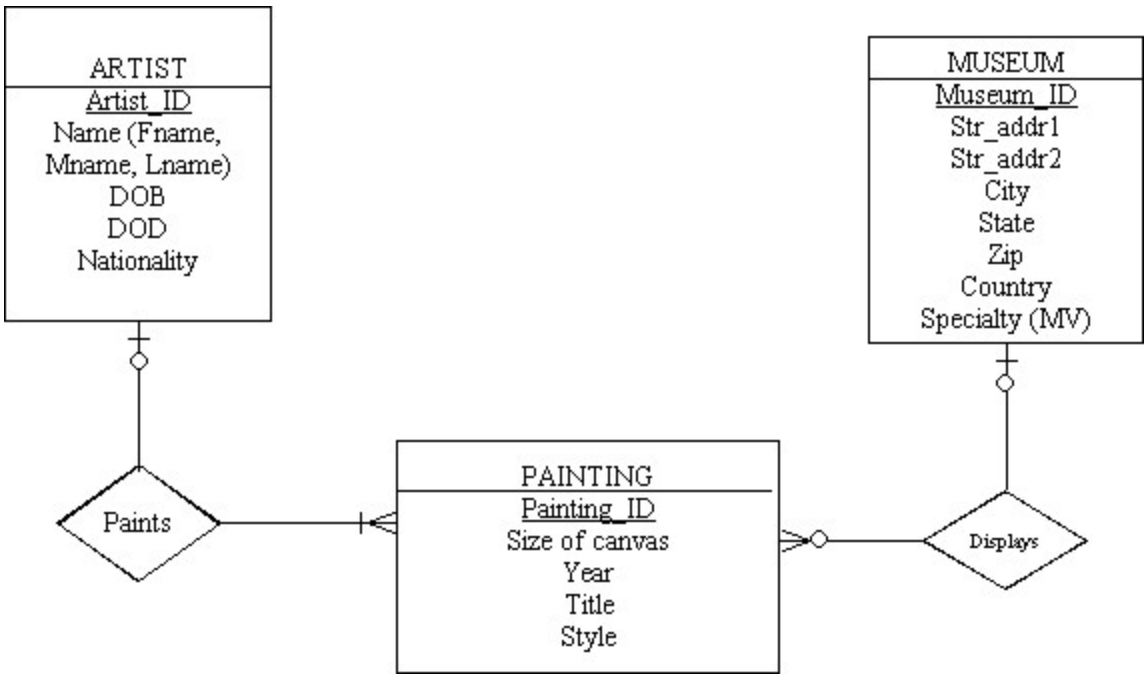
Solutions to in-class ERDs. Remember there are multiple correct solutions (in particular with concern to optionality, naming of relationships and selection of PKs)

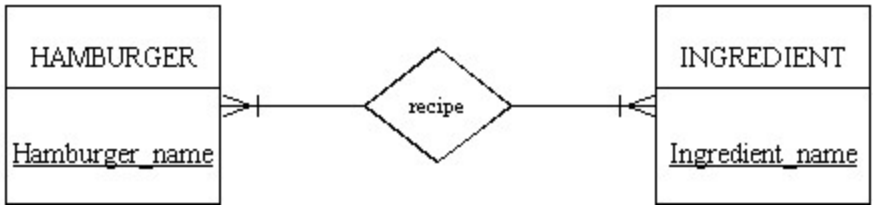
1)



2)



3)



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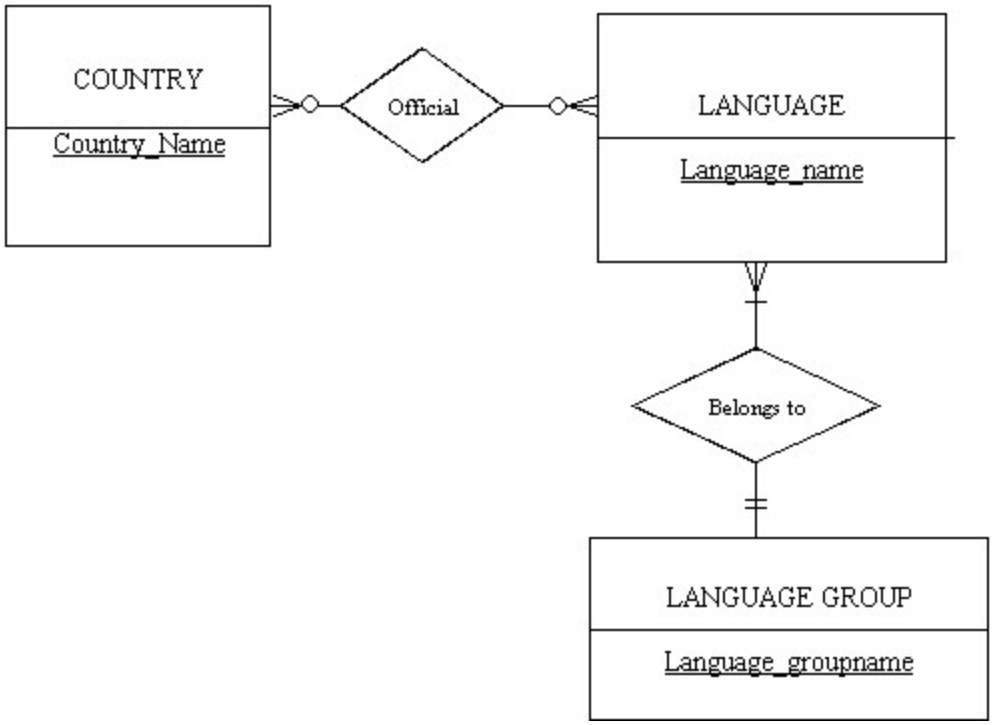
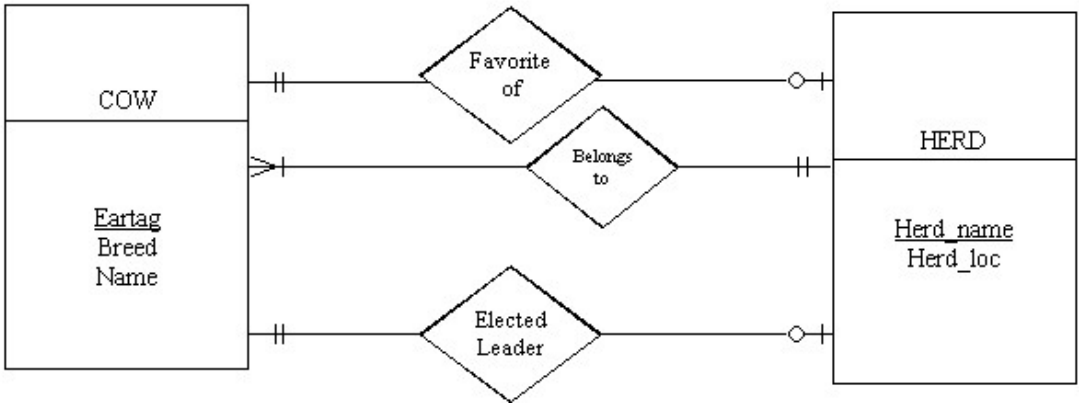
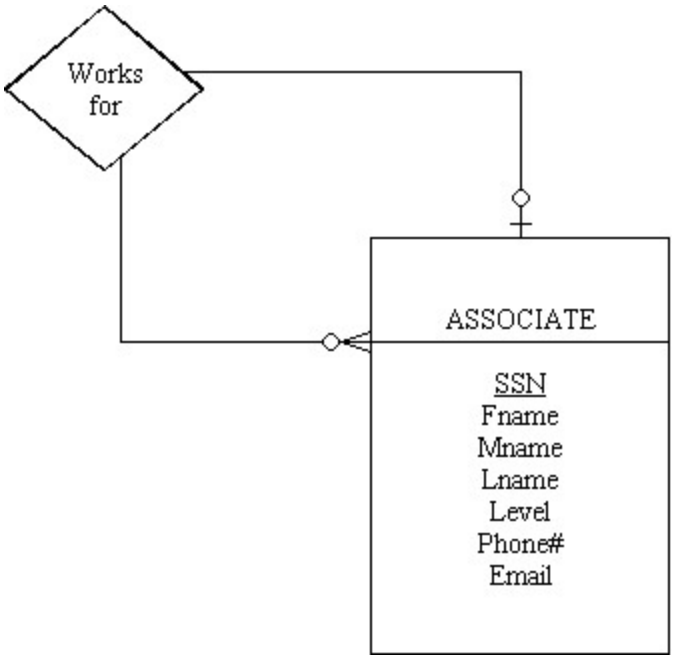
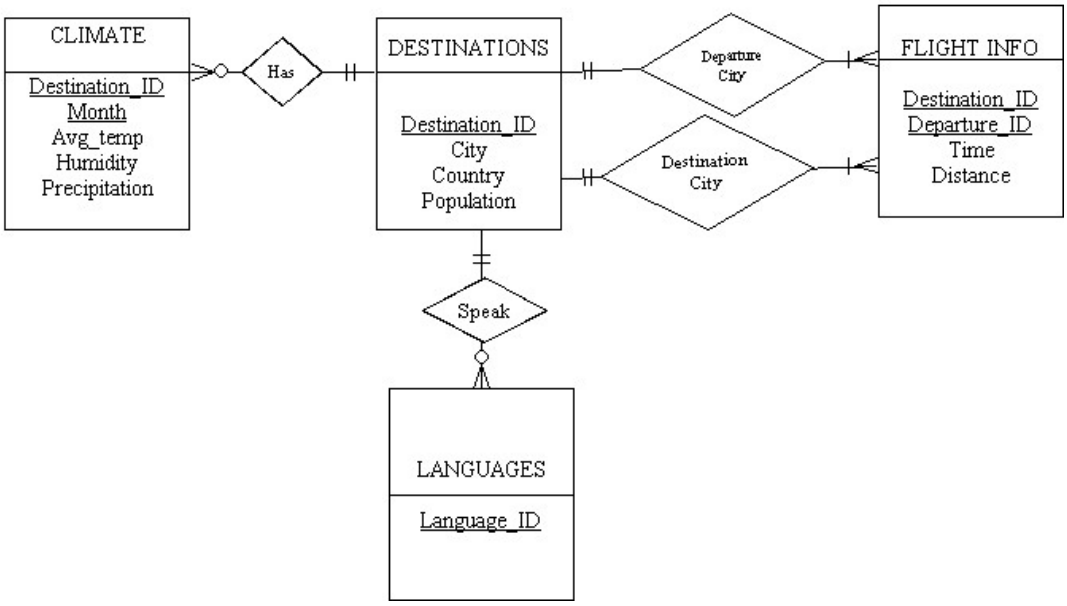

COUNTRY
Country_Name
Official
LANGUAGE
Language_name
Belongs to
LANGUAGE GROUP
Language_groupname

5)

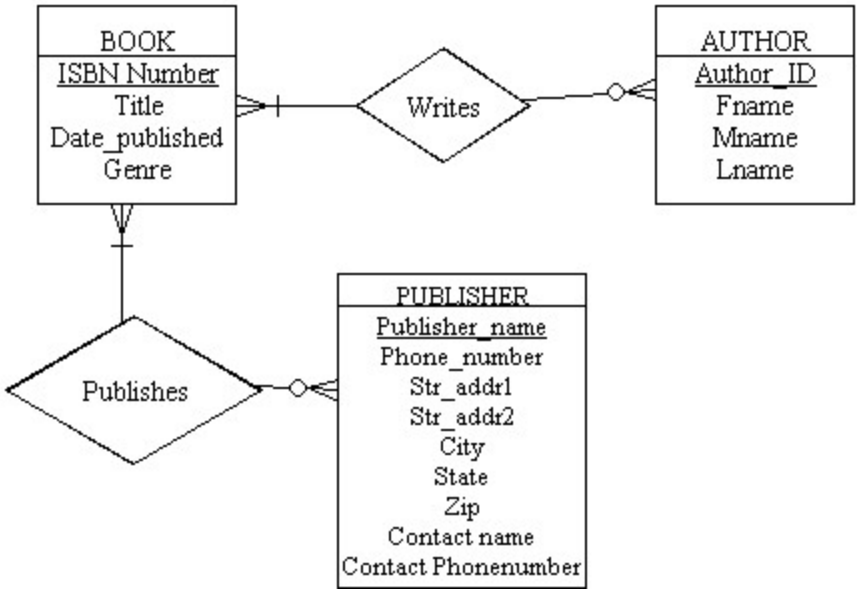

COW
Eartag
Breed
Name
Favorite of
Belongs to
Elected Leader
HERD
Herd_name
Herd_loc


Works for
ASSOCIATE
SSN
Fname
Mname
Lname
Level
Phone#
Email

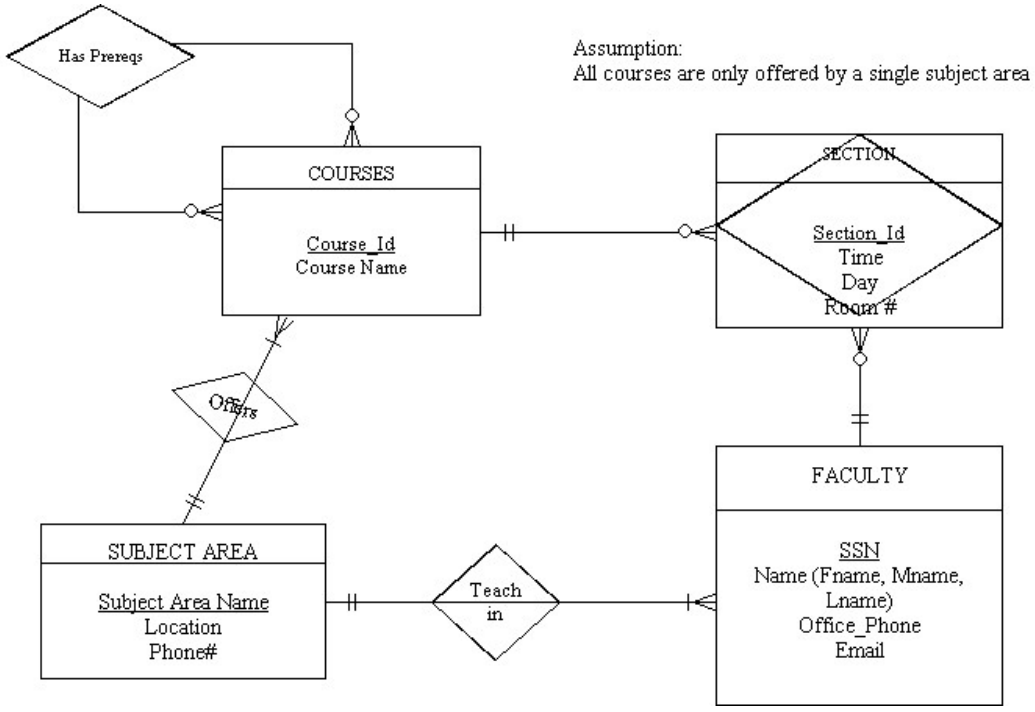
7)


CLIMATE
Destination_ID
Month
Avg_temp
Humidity
Precipitation
Has
DESTINATIONS
Destination_ID
City
Country
Population
Departure City
Destination City
FLIGHT INFO
Destination_ID
Departure_ID
Time
Distance
Speak
LANGUAGES
Language_ID

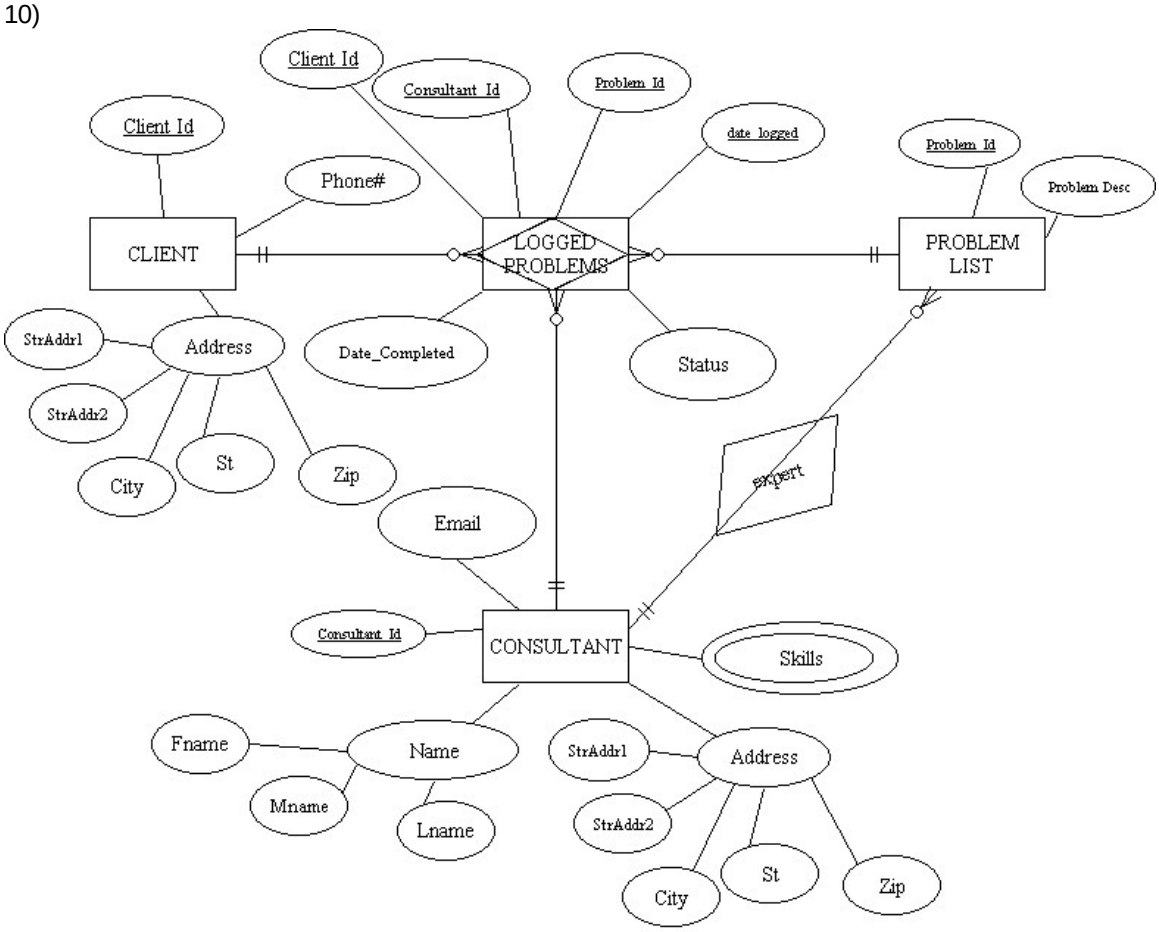
8)


BOOK
ISBN Number
Title
Date_published
Genre
Writes
AUTHOR
Author_ID
Fname
Mname
Lname
Publishes
PUBLISHER
Publisher_name
Phone_number
Str_addr1
Str_addr2
City
State
Zip
Contact name
Contact Phonenumber

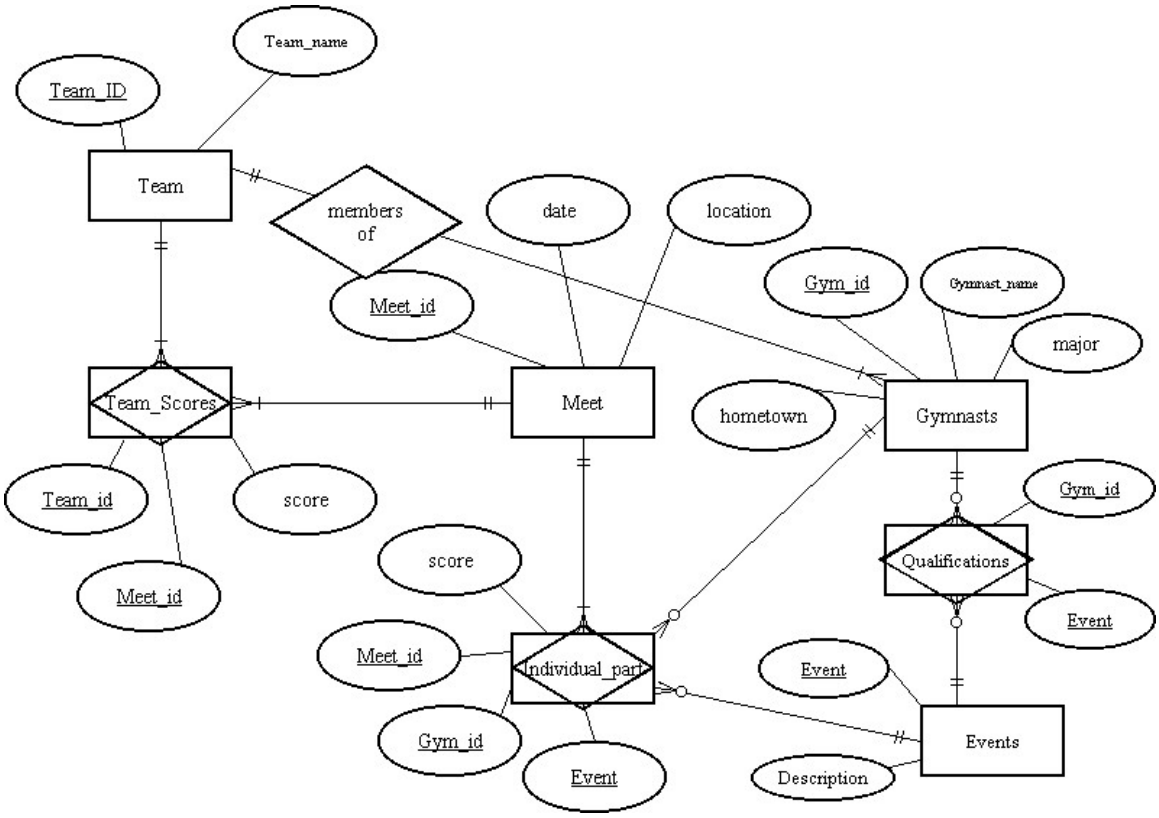
9)


Has Prereqs
Assumption:
All courses are only offered by a single subject area
COURSES
Course_Id
Course Name
SECTION
Section_Id
Time
Day
Room #
Offers
FACULTY
SSN
Name (Fname, Mname, Lname)
Office_Phone
Email
SUBJECT AREA
Subject Area Name
Location
Phone#
Teach in

10)



10) Note: the multi-valued skills attribute is not mentioned in the description of this ERD in your in-class ERD notes (it was put in for doing LDMS later in the semester)

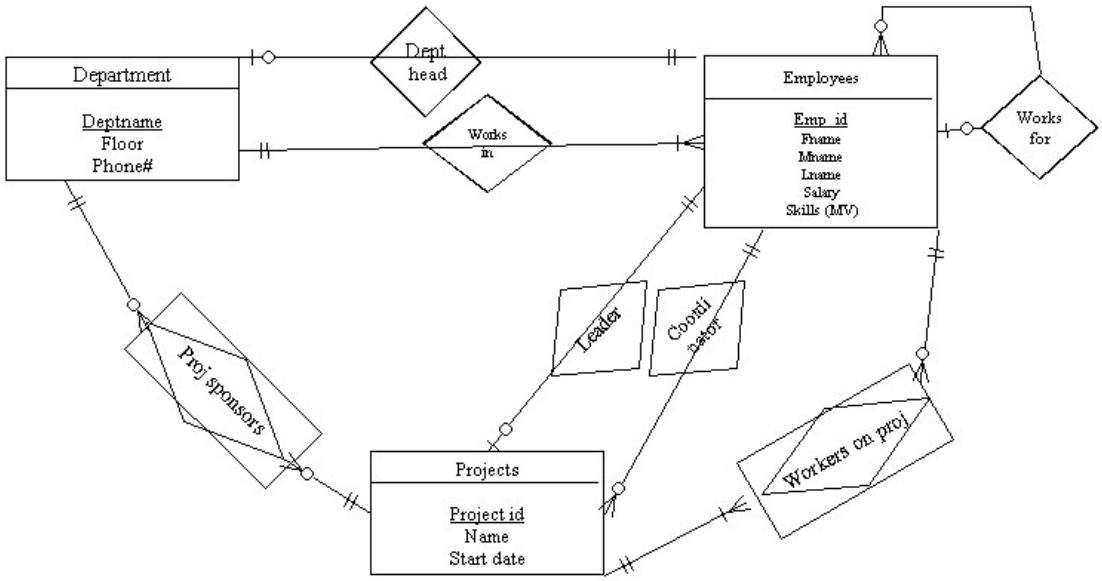


Note: This is a slightly simplified version of #11. The following attributes should be broken down further: Gymnast name (fname, mname, lname), hometown (city, st, country).

It is possible to calculate the team_score by summing all individual participation scores for a particular for each team. So if you choose not to include Team_scores that would be okay too. Remember opponent is just another team.

Assumptions: Location for a meet will be a single field like Smith Gymnasium University of Tennessee

12)



Note: If you using this database to track all projects over time the leader relationship would be a one to many. Because although an employee can only be the leader of one project, once that project ends s/he may be assigned to another project as that project's leader.

Assumption: 1) We want to track which departments are sponsoring which project. All projects can be sponsored by multiple departments (or may not be associated with a department at all).
2) An employee's boss is not necessarily the head of the department.