

**MIS 385/MBA 664**  
**ASSIGNMENT 1 (BASIC E-R Diagramming)**  
**See syllabus for due date and point value.**

Your assignment is to read the following scenarios, then create correct and proper E-R diagrams that accurately model the scenario as presented. You may make any **REASONABLE** assumptions, but these **MUST BE STATED**. Your models should fully elaborate any composite attributes, etc. You may rest assured that ERD questions of similar difficulty will appear on your mid-term examination so do try to do your best on these.

**This assignment is an individual assignment – you are to do it yourself, only receiving help from the instructor.**

**ERDs**

1. A country can have many official languages and a language can be the official language in many countries. Each language belongs to a language group.
2. A dairy farmer, who is also a part time cartoonist, has several herds of cows. He has assigned each cow to one and only one herd. Each herd is in a specific location and has a unique name. In each herd, the farmer has one cow that is featured in the cartoon (and the farmer needs to know which cow it is). The cows all have names, plastic ear tags and breeds.

A few cows decide that they do not agree with the farmers choice of favorite cow and they elect their own leader. We want to track this as well.

3. A travel agency is frequently asked questions about tourist destinations. For example, customers want to know details of the monthly climate (avg temp, humidity and precipitation for each month), population, and languages spoken in each location. They also often request fly time and distance between two cities.
4. The president of a book wholesaler has told you that she wants information about the publishers, authors and books that she carries. She knows that publishers publish many books and books can be written by one or more authors (obviously authors can also write more than one book). In order to track accurate information about the publisher the wholesaler want to know the publishers name, their phone number and their address. They also want to know who to call when they need to contact the publisher. The wholesaler also wants to know the book titles, the ISBN number, the date it was published, the genre, and the author of the book. She also wants some basic information about the authors.
5. A university gymnastics team is interested in maintaining information about its current schedule and meet performance. The team is made up of 10 gymnasts. Gymnast information includes name, major, and hometown. The team competes in meets many times during the season. Meet information includes date, location, opponent, and score. A meet can have one or more opponents. The team faces each opponent only once during the season. Meets consist of four events: vault, beam, floor, and uneven bars. A gymnast can compete in all or some of these events. Gymnasts can only compete in events for which they are prepared.