Your assignment is to read the following scenarios, then create correct and proper EER 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 EERD 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.

EERDs

1) Farmer brown wants to track information about all of his animals. He wants to know such things as how many eggs per day each chicken lays, how much milk each cow produces, what color of wool each sheep grows and the weight of each animal. Farmer Brown also wants to know the gender of each animal and its age.

2) You are working for an athletics department at Major University (MU). As part of the ticketing process, various individuals may purchase season tickets to games for its most popular sports teams. Tickets may be purchased either by individuals or faculty members (who can purchase tickets at half-price). The athletic department wishes to keep track of season ticket holders for all sports, along with contact information (e.g. names and addresses) of those who purchase ticket packages. This database needs to track how many of each type of season ticket holders it has for each sport and which season tickets are actually used at each game (tickets sold as part of a season ticket package are uniquely identifiable). Because ticket discounts are a taxable benefit to the faculty, the faculty’s name, department, campus address and faculty ID must be captured (in addition any identifier assigned to season ticket holder.

3) You are an insurance salesperson. You sell life, home and auto insurance. You want to track the necessary information for each type of insurance as well as Client information. Think broadly about this EERD how would you design it to track the various forms of insurance you sell and the range of customers you service (note: some will purchase life, home and auto while others may only purchase one of the insurance products you offer).

4) This one should look somewhat familiar. Flyer Solutions is a retail store specializing in computer software products. The manager of the store is interested in tracking customer and order information. There are three types of customers who purchase products from Flyer Solutions. These customers are companies, universities, and government agencies. Customer number, address, and credit rating is maintained for customers. Further, government agencies and all not-for-profit organizations have exemption codes. Order information includes order number, date, and required delivery date. Flyer Solutions negotiates with each University (even state Universities) to create a contract that results in a discount percent that is determined based on a variety of factors (none of which you need to track, however you did need to know the discount percent associated with each university).