**Assignment 1 –ER Diagrams**

Total points: 50

**Review the scenario and business rules provided and draw a Crow’s foot ERD.**

Instructions for the ERDs:

1. List the entities ***AND*** attributes.
2. Show the relationships, connectivity, ***AND*** cardinality. Be sure to label all relationships
3. Convert all M:N relationships using composite entities.
4. Identify the primary key(s) in each entity. (underline with solid line or notate with PK indicator).
5. Place foreign keys as necessary and notate the foreign key (underline with dotted line or notate with FK indicator).
6. Include all other extended ER modeling notations as necessary.
7. All attributes should be single valued attributes.
8. Use proper naming conventions for entities and attributes.
9. Use a data modeling tool to create your ERD. **NOTE: HAND DRAWN ERDs will not be accepted.**
10. Copy and paste your ERD into a Word or PDF document. Save the document and upload using the assignment link provided in eLearning.

You will be graded on appropriate naming conventions for entities, attributes, and relationships and an appropriate representation of the business rules. State any assumptions you have made.

**Create a complete Crow’s Foot ERD with the following business rules:**

The University would like to track information about Student Organizations. Specifically, they would like to track students in each student organization, the student leaders, and the different events that are hosted throughout the year.

1. A student organization has a name, a brief description, a category (professional, academic, athletic, etc.), and a general target audience (undergraduates, graduates).
2. Each student organization has at least 5 or more student members. A student can be a member of zero or more organizations. At a minimum, the system needs to report on student name, email, phone, major, and classification (undergraduate, graduate).
3. Each student organization has at least one or more student leaders. A student can be a leader in multiple student organizations. For each student organization, the university needs to know the student leaders and the position they hold. Leadership position titles and the number of leaders varies by each student organization.
4. A student organization hosts various events throughout the year. The university would like to know about these events. They would like to know the date, time, location, semester, and event type. A student organization can host zero or more events throughout the year. An event is only hosted by one student organization.
5. Students attend these events. The university would like to know how many students are attending the events. A student can attend zero or more events and an event can be attended by zero or more students. Students do not have to be a member of the student organization to attend an event.
6. Finally, sometimes the student organizations have special guests at their events. The university would like to track information about these guests such as the guest name, email, company, and if they are an alumni. An event can have zero or more special guests and a guest may attend many events. They would also like to know the reason for attending an event (Note, this will vary by event by guest).

Submit your completed ERD as a word or .pdf document using the link provided in eLearning.