

UNIVERSITY *of* MARYLAND
UNIVERSITY COLLEGE - *Asian Division*

Project 2: Entity Relationship Diagramming

Objective:

Entity Relationship Diagrams are used to plan the database of a DBMS system for business processes of the firm. For this assignment you will create an ERD and a data dictionary.

Requirements:

Project 2 is an individual effort and is not a group project. You will use PowerPoint or some other business graphics application to create an Entity Relationship Diagrams for the following business process:

You begin your first industrial job and are hired by Plyco Corporation, manufacturers of agricultural building products. You are hired as the business office manager. After your first week you go home with a bad headache after discovering how disorganized and low tech the company is run. All order entry, bookkeeping, shipping, and invoicing are performed with paper and pen. All paper is circulated by passing it between people which usually requires the customary coffee break and smoke outside. The only computer in the whole corporation is sitting on the presidents desk. He uses it primarily for afternoon games of solitaire, freecell, and minesweeper.

You decide it is time to promote computers at this "stone age" company and the first project you will attempt will be setting up a database for the order entry, billing, shipping, and inventory department. You ask the president if you can borrow his computer while he is gone playing golf for the afternoon. He offers you his whole office for the afternoon and would like you to install some games that his son gave him while you are at it. You discover he has MS Office on the computer and get to work. Opening PowerPoint you create the ERD for the following business process.

The company has only two major product lines. Barn windows which come in four different sizes (Tiny, Small, Medium, and Large) and hog barn doors with two different sizes (Piglet and Hog).

1. A customer purchases product by submitting purchase orders via U.S. Mail and FAX.
2. The Order Entry Clerk receives a purchase order and creates a sales order.
3. Each sales order contains one or more inventory items.
4. Each sales order represents an addition to accounts receivable.
5. Each sales order generates one shipping invoice.

Create a project report that contains the following:

1. Cover Page: Title, Name, Course, and Date Submitted.
2. ERD similar to Figure A.2 using the scenario described above.
3. Map Data Elements on ERD similar to Figure A.3.
4. Create a Data Structure Dictionary for the sales order similar to Figure A.7.
5. Write a conclusion, which explains the drawings and data dictionary to the president of Plyco Corporation.

Due Date and Grading:

Project 1 is due, the first class of week 5. Late projects will be reduced 20% of the total point value for each class period late.

Grading will be 80% objective (results, explanations, conclusions) and 20% subjective (neatness, clarity, conciseness, extra work). A project report that correctly meets all specifications in a minimal way will receive a score of 80% of the total points.