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| database Design Project |

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# Database Design Project Overview

* Each group is assigned a product by the instructor.
* A database is to be designed and implemented based on the Customer Sales Invoice in Week 4 and other information.
* The project must consist of your own work completed according to schedule
* The requirements below are an outline of the minimum requirements
* All weekly dropbox due dates are Friday 8:00 p.m. on the week specified
* The weekly dropbox submissions keep you on track to complete the project on time.
* Weekly submissions are graded on a submitted/not submitted basis
* The mark for the final database design project is evaluated independently from the weekly submissions. In other words, getting 100% on the weekly dropbox submissions does not guarantee any mark on the final project mark.
* Final database design project includes:
  + Database design technical document (Word/PDF file)
  + Database SQL file (.sql)

# Database Requirements (Project 1, Project 2)

* Minimum of 8 tables (including at least 4 intersection tables)
* Minimum of 16 rows in the PRODUCTS/PARTS tables
* Minimum of 10 rows in the other primary tables
* Minimum of 6 rows in the associative tables
* At least 2 forms to enter data in the main tables (in more than one table at a time)
* At least 2 reports to retrieve data from the main tables (from more than one table per report)
* A user manual if you believe it is necessary. Assume users do not read help or user manuals. As much as possible, the interface should be self-evident and require no additional information to learn how to use.

# Company Overview and Product

1. Create a Word document (.docx) called DB1\_C00000, where C00000 is your student number. This document is a database proposal developed for the Vice President of IT and contains the components for the database design.
2. Format the document as follows:
   1. Front cover page including your name, student number, project name, term, and professor name
   2. Styles for titles, headings, and so on
   3. A header that contains the project title
   4. A footer that contains your name, student number, and page number
   5. Table of contents generated from the heading styles
3. Include the headings identified by (H) and content from each milestone

## Company Name

* Must be a unique name that is not an existing company name

## Company Overview/Description

* Include an overview/description of the company that is unique and not from an existing website

## Product

* Identity your product

## Product Attributes

* List at least 8-10 attributes (characteristics), such as model, brand, type, serial number, description, size, color, height, width, price, and so on. Example attributes can be found on many websites.
* Identify the primary unique identifier (UID). This UID can be called product id, product code, or something similar. You decide.

# Customer Sales Invoice

## Customer Sales Invoice

* Modify the sample Customer Sales Invoice to reflect your company and the company's product. The invoice must be based on the assigned product only.
* In addition to product id, quantity, unit price, and extended price, include three attributes that identify the product purchased. Use the three attributes that best describes the product purchased. It is not necessary to include all product attributes on the invoice.
* Include at least five products on the invoice.

# Entity Relationship Diagrams

## ER Diagram including M:M Relationships

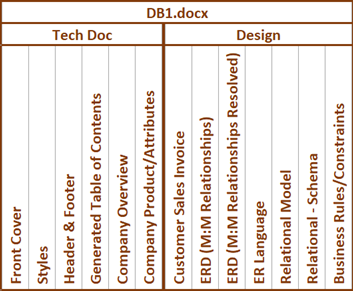
* Create an ER diagram based on the customer sales invoice and the product attribute list. Include many-to-many relationships:
  + Entities
  + Attributes (mandatory or optional)
  + Unique Identifiers
  + Relationship cardinality
  + Optionality
  + Identifying and non-identifying relationships
  + Foreign Keys
  + Named Relationships
  + ERD language
* Additional requirements:
  + The company operates warehouses in different regions of the country
  + Each warehouse stores products and each product may be stored at each warehouse. Not all products are stored at each warehouse. In addition, a warehouse could store a product, but be out of stock of that product. The company wants to maintain the inventory of each product at each warehouse.

## ER Diagram including M:M Relationships Resolved

* Create a second ER diagram with many-to-many relationships resolved

# Final Database Design Project Submission

* The final database design project includes:
  + Database Design Technical Document (Word/PDF file)
* Suggested marking scheme. Your professor will provide the making scheme used.



* Technical Document: One mark for each task. Either one (100%) or zero
* Design components are is marked out of two as follows:
  + Two marks if component completed 100% according to the specifications
  + One mark if component is included but one item is incomplete or incorrect
  + Zero if component not included or more than one item is incomplete or incorrect