

South Louisiana Community College
ASDV 2540, Database Design
Auto Parts Database

Your assigned partner for PART I of the term project are listed below. Arrange to meet with your partner few times before the due date and develop a common design using the computers of our classroom or your laptops.

Database description:

Consider the online database AUTO_PARTS in which employees take orders for car parts from customers or customers place orders on their own online. The data requirements are as follows:

- The part-store has employees, each identified by a unique employee number, first and last name, Zip Code, telephone number and email address. The employee can be a salesman or an administrator. Supervisors also exist for both salesmen and administrators.
- Each customer is identified by a unique customer number, first and last name and a specific address with Zip Code.
- Each part is identified by a unique part number, a part name, price, and make, model and year of the car it fits. The part is mark sold or not sold. The same type of part can be supplied by multiple suppliers. For example, 2 different suppliers could supply the same type of alternator for a chevy impala 2014. A part has country of origin but they could be more than one country they make the same type of part. For example, Toyota parts can be made in Japan and USA. The price of the part and in the specific currency is exact, US-dollars or yen or both.
- Each order either placed by a customer through an employee or it can be placed without any interaction with an employee(online). The order is given a unique order number. Each order contains specific quantities of one or more parts. Each order has a date of purchase-receipt as well as an expected ship-date. The actual ship-date is also recorded.
- Suppliers supply the auto parts and each supplier is identified by a unique supplier number, first and last name, telephone number, address (city and ZIP included), and email address. The suppliers can supply multiple parts and multiple suppliers can supply the same part. For example, there could be many suppliers who supply Chevy parts. The price the supplier sells a supplied part is also recorded as well as the quantity of each part they supply.

a) Use Visual Paradigm and create the ER model for the database described. Use, 1-to-1, 1-to- m, m-to-m, ternary, specialization, and generalization when required.

b) Use Visual Paradigm and convert the ER of part a) into a simplified ER that has only 1-1, 1-M relationships and any EED structures (super, subs).

c) Use Visual Paradigm and convert the ER of part b)into a Relational Schema.

Submit 3 JPGs