

# Lab 2 - EERD

## Overview

Wally Los Gatos, owner of Wally's Wonderful World of Wheels, has hired you as a consultant to design a database management system for his chain of stores that sell used vehicles. Wally requires this system to track details about inventory, employees, sales and customers.

## Requirements

Based on the following information, draw an EER diagram.

Please indicate any assumptions that you have made in your diagrams!

After an initial meeting with Wally, you have developed a list of business rules and specification to begin the design of an the EER Model.

- Customers place orders through a dealership. Wally has three dealership locations (Cambridge, Kitchener and London), and may add more in the future
- Wally would like to track the following about customers:  
Name, Street Address, City, Province, Postal Code, Telephone, Date of Birth, Email
- A customer may place many orders
- A customer does not always have to order through the same dealer all the time
- Customer may have an account.  
The following info needs to be recorded about account: Balance, Last Payment, Last Payment Date.
- A dealership may have many customers
- Orders are composed of one or more vehicles from inventory
- The following information about each order needs to be recorded:  
Order Date, Final Sale Price
- We wish to record the following about each vehicle:  
Vehicle Identification Number (VIN), Make, Model, Year, Colour, Km's, Purchase Price, Sticker Price
- Wally obtains vehicles from a range of suppliers, including auctions, bank foreclosures, other dealerships, and private sellers
- Wally employs fifty-six employees
- He would like to track the following information about employees:  
Name, Address (Street, City, Province, Postal Code), Certificates, Telephone, Date of Hire, Title, Age
- If the employee's role is that of a salesperson, we should track their commission and total Vehicles Sold
- If the employee's role is that of a manager, we should track which employees they manage
- For all other employees we need to track yearly salary.
- Each employee works in one and only one dealership
- Each employee may have one or more dependents.  
We wish to record the name of the dependent as well as the age and relationship

## Sample Sales Record:

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Thank you for choosing Wally's World of Wheels at  
Guelph Auto Mall for your quality used vehicle!

**Sales Rep: #3265 - Peter Green**

**Processed By: #5487 - Mary Brown**

Invoice Number: 123654

**Date: On Sept. 20, 2020**

**Customer: John Smith!**

22 Front St W

Kitchner, ON, N2A4G8

jsmith@email.com

2013 Toyota Camry, White

VIN: 27764534RTB KMS: 211023

Purchase Price: \$15,260.00

Trade In: \$ 0.00

**Subtotal = \$ 15,260.00**

**HST (13%) = \$ 1,983.80**

**Sale Total = \$ 17,243.80**