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December 5, 2019

Professor Erickson

393 Project

SLO Vintage Auto’s New Database

**Assumptions:**

When creating the database, I had to make a few assumptions regarding the business. Firstly, any customers stored in the database are assumed to have either bought a car from the business or had a car serviced by the business. Second, I assume the Auto Shop has to make purchase orders for car parts for the servicing part of the business, and also receives purchase orders for cars to sell to customers. Hence, there is a PO-out table (ordering car parts) and a PO-in table (car purchases from customers). Other general assumptions include: a car is only sold once, all commission from sales is 15%, employees are paid monthly, and purchase orders are for cars only not service requests.

**Statement of Understanding:**

SLO Vintage Autos is a vintage automobile car dealership located in San Luis Obispo, CA. It is owned by Encrico Luisa and Larry Hernandez and managed by Larry Hernandez. Larry and Enrico are looking to update their outdated system and replace it with a newer, error free database system with strong data integrity and a better control of who can access the data.

The business operates in three main sectors: vehicle sales, car acquisitions, and the service business. Vehicle sales operate through two documents. First, the Sales Invoice holds information about the price, salesperson, add-ons and whether it is a trade-in. This Sales Invoice is all done on paper before being entered into the system. The second document is the Vehicle Inventory Record which gets updated as sales and trade-ins occur. This process could be sped up and would ultimately be more organized if it went paperless. Car acquisitions can happen in three different ways: auction, individual transactions, and trade-ins. Larry will travel throughout California, purchasing cars at auctions and having them shipped back to SLO where the maintenance staff will make additions or changes for a better mark-up price. Larry has built up a network of car dealership owners over the years and uses that network to do individual transactions. In a similar process the cars are either shipped to SLO or driven back to SLO to the maintenance staff. Finally, cars can be acquired via trade-ins, where a customer buying a car from SLO Vintage Autos will also sell their old car to the business. This process can be helpful for the business and customer. The service business sector allows customers to make additions to any vehicles they purchase or bring their vehicles back for future maintenance.

Ultimately, Luisa and Hernandez have enough difficulties with their current system that they are requesting a newer, easier to use system. Ideally the new system will be smaller but still cover facets of the business including sales and service invoicing, car purchasing and acquisition, inventory management, and customer relations. Larry is particularly focused on making all processes within the business more formal and online. He is also focused on customer tracking and marketing, looking for better ways to remember customer preferences and remembering old customers if and when they come back to the business. Ultimately, this new system should be more organized and allow Larry and Enrico to grow their sales while the SLO community continues to grow.

**Extra Credit:**

I feel that extra credit is deserved because of the complexity and level of detail the database contains. The database schema covers everything Mr. Luisa and Mr. Hernandez need in a new system. We went above and beyond by adding hundreds of lines of data in a few tables and input ample data into the database to be able to run interesting queries. We even looked up when all the car models were produced so the information regarding cars would be correct. Many hours were devoted towards creating this complex database and reporting on it’s contents.