**Introduction to Team Project Three:**

Read about the project described here, and also read the sample project for this chapter. Use the sample project as a model in carrying out the steps for your team project. If you can do so, interview people who are familiar with the environment described in your project. Based on your interviews, the written descriptions, and your own analysis of the project, do the following four steps. Remember that you should not make any assumptions about the internal structure of the database at this point. Your reports and forms should be based on user’s needs, not on what you think the eventual structure of the database might be. Do not create a database at this point.

**Step 1.1 – Draw (sketch out) every input document that provides information to be stored in the database. For each input document, also provide a description/purpose (write out) of every input document.**

**Step 1.2 – Draw (sketch out) every routine report to be produced using the database. For each routine report, also provide a description/purpose (write out) of each routine report.**

**Step 1.3 – Draw (sketch out) the input and output screens for every routine transaction to be performed against the database. For each input and output screens, provide a description/purpose (write out) of each input and output screens for every routine transaction.**

**Step 1.4 – Provide a description (write out) of the initial list of assumptions for the project.**

## Project Three: Friendly Cars Dealership

* **General Description**

Friendly Cars is a dealership that offers new cars from a single manufacturer. The dealership is located in a suburb of a large city. Its gross sales exceed one million dollars per year. It has ten employees – Jim Friendly (the owner/manager), eight salespeople, and an office manager. Most of its customers are from the surrounding area, and they learn about the dealership by word of mouth, from newspaper, radio, and television advertisements, via the Internet, or by referral from buying services.

* **Basic Operations**

Potential customers usually come in person to the showroom to browse and test-drive the cars. They comparison shop, visiting many dealerships of several manufacturers. They usually have a list of features they wish, and some knowledge of the models the dealership offers. They are greeted by whichever salesperson is free when they walk into the showroom. In a few cases, they specify which salesperson they wish to deal with. They work with a single salesperson until the deal is completed, because all sales are done on a commission basis. There is a sticker price on each car, prominently displayed in the side window. Customers negotiate with the salesperson to get a better price. If the proposed price is significantly below the sticker price, the salesperson has to get Jim Friendly’s approval before agreeing to the deal. Financing can be arranged with the manufacturer through the dealership, or the customer can get financing through his or her own bank. All taxes and license fees are paid through the dealership. The customer can have additional customization of the car, including special trim, alarm system, audio system, etc. done at the dealership before picking up the car. All the new cars come with a standard warranty, but customers can opt for an extended warranty at an additional cost. Trade-ins are accepted as partial payment for new cars. The dealership also sells these trade-ins as used cars, which can be from a variety of manufacturers. No maintenance is done on the trade-ins; they are sold “as-is”, with a limited 30-day warrantee.

* **Information Needs**

The dealership has a database management system that currently keep track of the cars and sales information. However, Jim wishes to develop a new database that can provide more information more efficiently than the current system. The current system stores information about the cars, the customers, the salespeople, and the sales of cars.

* **The following forms and reports are needed:**

**Price Sticker -** The price sticker that comes with the car when it is shipped from the manufacturer contains all the basic information about the car itself. It includes a VehicleID, that identifies the car uniquely, and is physically embedded in the car’s body. The sticker also gives the list price, model, date of manufacture, place of manufacture, number of cylinders, number of doors, weight, capacity, options, color, etc. The dealership adds the date the car was delivered and the mileage at the time of delivery.

**Customer Data -** Basic contact information about customers is obtained by salespeople when they greet them at the showroom. Additional customer information is gathered when a sale is made. Jim also seeks to gather names and addresses of potential customers using referrals, reply cards from newspapers and magazines, and other sources. These are used to mail promotional material to prospective customers.

**License, Tax and Insurance Documents -** The dealership is required to submit information about each sale to the state prior to issuing a license plate for the car. They must also remit the state sales tax and license fee on each sale directly to the state. They are required to obtain and submit proof of insurance coverage to the state before releasing the car to the new owner.

**Bill of Sale** - When the car is delivered to the customer, a completed bill of sale, showing the customer information, salesperson name, VehicleID, current mileage, and all the specifications, including any extra customization, financing, warrantee information, license and insurance information, price, etc. is provided to the customer, with a copy kept in the dealership. This bill of sale is the same whether the car is new or used.

**Salesperson Performance Report** - Jim would like a monthly report summarizing each salesperson’s sales for the previous month. The amount of commission earned is also shown on the report.

**Customer Satisfaction Survey** - Within a month after each sale, the dealership sends a survey to the new owner, asking questions about the customer’s opinion of the car, the dealership, and the salesperson.