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From page 575 in your textbook, please answer the following questions:

1. What subclass of report would you design for the sales manager of a car dealership whose job it is to review vehicle sales each week and year to date? What data elements should be included in the report? What should you ask the sales manager before you design the report?

I would design a summary report for this sales manager. Quantity sold and revenue generated from sales seem like obvious data elements; however, this manager would also be interested in having the report break down the data into what salesperson was responsible for the various number and what automobile models were selling as well.

I would ask the manager what kind of decisions they are trying to inform with this data. Are they looking for data specifically about automobile models, salespeople, demographics on customers, or peak sales times for tailoring the report to their specific needs.

6. The sales manager also has to know, on a weekly basis, who didn't make their sales quota for the previous week and/or for the year to date. What subclass of report is needed in this situation? What data elements would you include, and how would you group them?

This would require an exception report, because we are flagging specific instances of data to bring attention to issues requiring timely resolution. The salespeople in question would be listed, ranked according to how badly behind they are in their sales quotas. I would also present a summary table of median sales per salesperson for at-a-glance comparisons and so the manager does not see these salespeople entirely out of the context of the dealership as a whole.

From page 608 in your textbook, please answer the following questions:

1. What overriding goal should every systems designer, in performing input design, never lose site of?

Designing inputs that flow intuitively and ensure the accuracy of data being entered as well as possible.

6. Think about the best and worst data input screens that you have used, heard about, and/or worked on. Using your own experience, as well as this chapter, list at least five input screen requirements and/or principles that you consider to be important and why.

I don't know that I can agree completely with the books recommendation to "use known metaphors" for data entry. When I switched from writing checks to online banking, if the interface to pay my bills online was designed to look like a bunch of checks, it would have cluttered up the layout. Instead, the interface lists people I pay with a single textbox to enter an amount to pay them. The system takes advantage of the electronic format by eliminating redundant data, hiding everything it's going to enter behind the scenes. Metaphors are great for their familiarity, but not at the expense of screen simplicity.

When possible, the system should always enter data for the user. Some of my favorite screens are a collection of select boxes. When the user selects something from the first box, the options in the other select boxes are narrowed to the options related to the first selection.

Similarly, this method also allows for showing what other data will be entered for the user using plain text. Data is entered in one box, and the associated data is shown dynamically so they know what else will be entered. My bank does this with "Payee" information. Enter a company name, and they show you the name and address your check will be sent, or a list to choose from if results cannot be narrowed.

Google now implements an AJAX method of showing common search requests. When a user types in the first word of a query, a dropdown of suggestions appears that narrows down as the query is typed out. This is a fantastic form element that should be used whenever possible.

Expandable form elements are also great. If a section of a form is optional, don't display it to the user, but give them a button to push that will expand that section of the form, so the user may enter the additional data.

9. Text boxes may be the most frequently used control for data input in GUI Interfaces. What conventions and guidelines should the system designer follow when designing input screens that include text boxes?

Be sure to caption the text box descriptively in order to help ensure the user enters the appropriate data. The issue with text boxes is that they are a free-form element. Validating what the user enters in one is very difficult and requires behind the scenes programming to handle. The textbox should be large enough to allow entering the appropriate data and provide scrolling should the amount of potential data exceed the displayable space available in the text box.