IST 256

Assignment 3

# EMPLOYEE SALES REPORTS

***Assignment 3 due November 23, Section 1 at the beginning of class***

***Assignment 3 due November 24, Section 2***

*Revised 11/16/09*

In this application, there is an input file of employee sales data, and the program must read in the file and prepare two reports: one report is displayed on the form and the other report is written to an output file.

The form for this application will allow the user to type in the name of both the input and output files. (While you are developing the program, you may want to disable this part to avoid typing in file names every time, but it is essential that the final version of the program allow the user to type in the input and output file names for grading purposes. That is, we are going to run your program on an input file that we have prepared.) The form needs

- one button to perform the computation,
- three multiline labels or textboxes to display employees as described below,
- two more labels to display the number of male and female employees, and
- a close button.

The input file will have one employee's data on each line, consisting of the employee name, the gender as a single character either M or F, the number of years of service, and 4 quarterly sales figures. The format of each line will be like the following example

Jessie Jones, F, 3, 1500, 4000, 7500, 4200

To test your application, make up an input file that has about 9-10 employees. Please make sure that you have several people that fit each of the three categories for number of years, and for people who get bonuses or not. *Your program should work correctly for up to 20 employees in the input file.*

The button procedure should get the input and output file names from textboxes and should give an alert if there are not two file names given.

The program then reads data from the input file, reading all the employee data items on a line. You should design a record structure that will hold the data for one employee. While reading the data, the data should be saved in an array of these employee records.

In addition, the button should display employee data on the form. The data displayed in the employee part of the form should have each employee listed with their name and their total sales for all quarters in one of the labels according to their years of service. An employee with fewer than 2 years should be listed in one multiline label or text box, with 2 to 4 years in another label or text box, and with at least 5 years to a third label or text box.

The number of male and female employees should also be displayed.

The output file will give a report on total sales and employee bonuses calculated from the data in the array.

- There should be a first line that gives the name of the report
- The next line should report the total number of sales for all employees
- Skip two lines
- Give a line of data for each employee consisting of
    - The employee name
    - The gender, written out as "Male" or "Female"
    - The total sales for that employee
    - A bonus amount of $500 if the employee had total sales of over $20,000 for the year.

An example line in the output file would be:

Jesse Jones Female $26,200 with bonus $500

## GRADING

All programs should have comments that contain the name of the programmer and that explain the entire program and the role of each procedure, including buttons. Additional comments must be added as necessary to explain the actions of the program. The form must have a Close button.

The following additional items will be included in the grading

- allow the user to specify file names and check for missing file names
- read in the data properly from the input file
- save employee data into an array of records
- display the three different categories of employees with their total sales
- compute the number of males and females and display them
- compute the overall sales and write into the output file
- correctly format each line of the output file with the name, gender, total sales and awarding discounts based on the sales

Section 1: As usual, zip your entire Visual Basic project folder and submit it to the iLMS assignment dropbox. Hand in a hard copy printout of the program at the beginning of class on November 23 or submit it to Prof. McCracken's mailbox in the faculty services.