**MS3111 QBA with VBA**

**Assignment 2**

**Instructions**

* Download Assignment2\_2014BPartial.xlsm and SalesData.xlsx from the Assignment 2 folder under the Files section of the course Canvas.
* You must make use of Assignment2\_2014BPartial.xlsm to answer the questions. After answering the questions, save the Excel workbook containing your answers as *nnnnnnnn*.xlsm, where *nnnnnnnn* is your EID. Submit only *nnnnnnnn*.xlsm to the designated link under the course Canvas. The link will be closed at 10:00pm (22:00) on 8th April 2015. Late submission for any reasons will not be accepted.
* Up to 10 Marks will be deducted for poor layout of the program. This includes non-properly named or defined variable, poor flow of the program, lack of comment statements, low readability, not answering the questions in the described sequence, or contains irrelevant statements etc.

**File descriptions, assumptions, and restrictions**

The worksheet “SalesRecords” in workbook SalesData.xlsx contains sales records of each salesperson and the products that have been sold in a company.

* Assume the name of the workbook and its location are both unknown to you at design time but you know that it always contains a worksheet named “SalesRecords” and “Products”. The workbook may contain other worksheets but you do not know what they are at design time.
* Assume the exact contents in “SalesRecords” and “Products” are unknown to you as they may vary from time to time, but the columns in each worksheet are fixed.
* Assume “SalesRecords” and “Products” always contains at least one row of records starting from Row 2.
* Neither “SalesRecords” nor “Products” will be the active worksheet when the workbook is opened.
* **You must not modify the contents of SalesData.xlsx manually or programmatically.**
* **You must not activate any of the worksheets in SalesData.xlsx manually or programmatically.**
* **You must not include the workbook name SalesRecords.xlsx in any executable statements of your submitted code.**

UserForm frmSalesReport in Assignment2\_2014BPartial.xlsm is designed to report each salesperson’s sales as contained in the type of worksheet such as “SalesRecords”. You are asked to provide appropriate code for the tasks as listed below. **All tasks must be completed according to the designated sequence. Inappropriate code will be considered as error.**

**Tasks**

1. When the CommandButton control btnOpenWkbook on page “Open Workbook” of pgeReport is clicked, a standard Open dialog box for the user to select a workbook will be shown (relevant code is already provided). Provide your code for the following:
   1. If the user selects a workbook and then clicks the Open button from the above Open dialog box:
      1. Display the full path and the name of the selected workbook in the caption of Label control lblWkbookName.
      2. Open the selected workbook, and then activate the workbook containing the running code.
      3. If the selected workbook does not contain a worksheet named “SalesRecords”, replace the caption of lblWkbookName by the text “Incorrect workbook. Start again”. Then close the selected workbook without confirmation from the user, and terminates the application.
      4. If the selected workbook contains a worksheet named “SalesRecords”, open a new workbook, and then activate the workbook containing the running code.
      5. For each salesperson that appears in the “SalesPerson” column of the worksheet “SalesRecords”, add a new worksheet into the new workbook created in 1.a.iv. Assign the name of the salesperson to the tab name of the newly added worksheet. Only one worksheet for each salesperson under the same name. Insert the following texts (without the quotes) into cells “A1”, “B1”, and “C1” of each new worksheet respectively: “Product ID”, “Units Sold”, and “Sales Amount”.
      6. Extract each salesperson’s records from “SalesRecords” worksheet and put them into the corresponding worksheet added in (1.a.v.). Starting from Row “2” of the worksheet, put one sales record into each row. There must be no blank rows between any two inserted records. Appropriate value of each record must be put into the respective cell according to its column header. The value of “Sales Amount” for a record equals to the respective “Units Sold” value times the respective “Price Per Unit” value of the product as displayed in the worksheet “Products”.
      7. Add each salesperson’s name to the list of cbxSalesPerson on Page “Report” of pgeReport. Each salesperson’s name will only appear once in the list. One name per item of the list. The list must not contain any blank row.
      8. Display the page “Report” of pgeReport to the user.
   2. If the user clicks the Cancel button or Close button on the Open dialog box, terminate the running event.
2. When the CommandButton btnReport on page “Report” is clicked, provide code for the following:
   1. If the user has selected one of the names from the list of cbxSalesPerson:
      1. Display the value of total sales amount and the average sales amount of the selected salesperson in the caption of Label lblMaxSales and lblAveSales respectively. The value of average sales amount of the selected salesperson equals to the respective total sales amount divided by the number of recorded sales. {Hint: you may make use of appropriate worksheet functions for this task.}
      2. Enable the CommandButton btnSaveReport on page “Report”.
   2. If the user has not selected any one of the names from the list of cbxSalesPerson, prompt a message “Select a salesperson” in a message box. Then terminate the running event.
3. When the CommandButton btnSaveReport is clicked, a standard Save As dialog box for the user to specify the location and the filename for a workbook to be saved will be displayed (relevant code has already been provided). Provide code for the following:
   1. If the user clicks the Save button in the dialog box:
      1. Save and close the workbook created in (1.a.iv.) according to the specified location and file name in the Save As dialog box without confirmation from the user.
      2. Terminate the application.
   2. If the user clicks the Cancel button or Close button in the dialog box, terminate the running event.
4. When the UserForm is initialized, provide code for the following:
   1. Display the page “Open Workbook” of pgeReport to the user.
   2. Hide the tabs of pgeReport.

-The End -