Assignment 5

Due: Saturday December 03, 2022, at 11:59 pm

Objectives

- Create and develop a complete application using Excel 2016/Excel 2019 that reads information from a database, produces a chart using Excel, and creates a report in Word.
- Write an application overview and documentation in a separate Word document.
- Develop your application using modular programming, error handling and the effective programming techniques discussed throughout the course.
- Create ~~custom ribbon and~~ develop Userforms.

Submission:

Your completed assignment will be submitted as a single zip file. Name this file with your network login followed by _a05.zip. For example, if your network login was barn4520, then your assignment file should be named barn4520_a05.zip. This zip file will consist of:

1- A **word** document containing application overview and documentation. You can explain how to use the application and the purpose from it. Include some screenshot for clarification.
2- A second **Word** document containing the results of your application in the form of report. It includes chart and some text explaining the results.
3- An **Excel** file called username_a5.xlsm containing the project code. Name this file with your network login followed by _a05.xlsm.
4- An **Access** file which contains the data that your application uses.

The Word Report:

- A typical report in Word should display the results of your application in someway.
- It should be Automatically generated from your project in excel.
- All reports must contain some text explaining what your application did or the results, as well as a chart from Excel.
- Typical examples should include:
  - a histogram/chart of student final grades, as well as grade statistics such as min, max, average, mode, median, and std. dev.
  - results of multiple runs of a simulator.

  Essentially, the report is the output of your application, regardless of the type of application.

Description:

There is a great deal of flexibility in this assignment. Listed below are several options for you to choose from. Choose one of the following:

1. Student Marking Application

An application for storing student grades. See the Student Grading Application document overview.

2. Other Ideas:

Must be able to use Word, Access and Excel. Other types of applications similar to the above application could include an invoice system, or something used by Human Resources or a volunteer/asset tracking system for a non-profit organization, a stock price simulator/analyzer, statistical data analysis application.

3. More VBA project ideas are available here:

- Fantasy Baseball Simulator - Brandon Soderquist
- Nutritious Meal Planner - Dain Berrett
- Equity Stock Ticker: Scraping The Web
- Events Report Automation - Cory Paxton
- Jinsook Lee - Personal Books Organizer: SMART LIBRARY
- Medicare Average Claims Report

Your application will do all the following:

1. read information from an Access database(*.mdb) or (*.accdb)
2. ~~create custom ribbon and~~ develop Userforms.
3. generate a report in Word
4. create a chart in Excel using data taken from the Access database, and include the chart in the Word report

Rubric

- Instructions to the user in the application: [10]
- A word document which explains what your application does (includes at least 2 screenshots and 2 paragraphs) [10]
- Word Report document (Generated from Excel) [10]
- User Interface [10]
- Connection to Word [10]
- Connection to DB [5]
- Reading correctly from Database [10]
- ~~Ribbon customization [10]~~
- Generating charts and stats [10]
- Modular programming [10]
- Error handling [10]
- Proper commenting [5]