Unit VIII Project

Option 2: Creating an Application Using Visual Basic

This project provides you with an opportunity to write an application (i.e., computer program) by using some of the concepts you learned in this course and then creating the application in Visual Basic.

1. Select ONE of the following tasks as the basis for completing this project:

    - changing a television channel by using a remote control,
    - using a sponge to wash a car,
    - walking up a set of stairs,
    - net income calculator,
    - measurement calculator,
    - discount calculator,
    - sales calculator,
    - labor calculator,
    - totals calculator,
    - membership calculator,
    - inventory calculator, or
    - a Web application.

2. Include a posttest loop using the 'Do…Loop' statement within your computer program.
3. Select at least FOUR of the concepts from Chapters 14-27, and apply these to your Windows application, which solves a problem. These are concepts you learned in this course and are listed below:

    - Create a counter-controlled pretest loop using the For…Next statement.
    - Play an audio file while an application is running.
    - Perform a calculation using the Financial.Pmt method.
    - Nest repetition structures.
    - Utilize a text box's Multiline, ReadOnly, and ScrollBars properties.
    - Create a sub procedure.
    - Code a control's TextChanged event procedure.
    - Code a control's CheckedChanged event procedure.
    - Create a Function procedure.
    - Code a forms Load event procedure.
    - Create a parallel one-dimensional array.
    - Create a two-dimensional array.
    - Calculate values in an array.
    - Create a structure.
    - Create an array of structure variables.
    - Write data to a sequential access file.
    - Calculate the number of characters in a string.
    - Bind table and field objects to controls.
    - Customize a DataGridView Control.
    - Query a dataset using LINQ.
    - Create a class.
    - Add property procedures in a class.
    - Create a default constructor.
    - Include methods other than a constructor in a class.

4. In a Microsoft Word document, explain the purpose of your Windows application by providing a brief description for the task being performed. Then, develop the algorithm using pseudocode (output,

input, and algorithm). You can write your algorithm and support it with the use of a flowchart. Upload the Word document to File Upload.

5. Develop the Windows application in Visual Basic by using at least four of the concepts you selected in #3. In addition to the four concepts you selected, the application should have an appropriate interface. Upload the finished application to File Upload.

For this project, you will be submitting one Microsoft Word document to address #4. Also, you will be submitting one Visual Basic file to address #1, #2, #3, and #5.