**ICS 4U - Final Project**

**Applying Project Management and Software Development Skills**

For your final project, you will be developing a software application that performs a specific task. The software application must include a number of concepts that were covered during the course, must be extremely user friendly, and must be completely bug and error free. You have your own choice of a computer programming environment.

The concepts that must be implemented in your project, in order to obtain maximum marks, are:

***Looping Decision Making User-Defined Functions Strings***

***Lists (1-D and 2-D) Text Files Graphics***

**Defining the Problem - Due: Wednesday, January 9, 2013 - Communication - 15**

Submit to me a description of your final project. Include the purpose of the project, who would use it, and why you have decided to develop this particular software application for your final project. Provide enough detail about the purpose of the project so that any person reading it would have no doubt as to what the project will achieve.

**Analysing the Problem - Due: Wednesday, January 16, 2013 - Communication - 25**

Provide pseudo code and/or flowcharts and detailed descriptions for the main body of your program and for each of the user-defined functions that your program will use.

Provide the details for the text file(s). Include information about the information stored in the text file(s). Provide an example of the text file(s).

Any screen shots that help explain the program would be very beneficial.

This document should contain a title page, table of contents and a section for the main body, each procedure, each function and each text file.

**Creating and Testing the Solution - Due: Thursday, January 24, 2013 - Application – 85 -Thinking/Inquiry - 85**

Complete your project and submit it to me.

**Documenting the Solution - Due: Thursday, January 24, 2013 - Communication - 10**

Make certain that your program is properly documented.

**MARKING RUBRIC**

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| --- | --- | --- | --- | --- | --- |
|  | **0** | **1** | **2** | **3** | **4** |
| **Defining the Problem** | **Information Provided** | | | | |
| **Purpose of Program** | **None** | **Little** | **Some** | **Most** | **All** |
| **Description of Users** | **None** | **Little** | **Some** | **Most** | **All** |
| **Reason For Choosing this Project** | **None** | **Little** | **Some** | **Most** | **All** |
| **Analysing the Problem** | **Detail Provided** | | | | |
| **Title Page / Table of Contents** | **None** | **Little** | **Some** | **Most** | **All** |
| **Pseudo code / Flowcharts - Main Body** | **None** | **Little** | **Some** | **Most** | **All** |
| **Pseudo code / Flowcharts – User-Defined Functions** | **None** | **Little** | **Some** | **Most** | **All** |
| **Text File Information** | **None** | **Little** | **Some** | **Most** | **All** |
| **Creating and Testing the Solution** | **Detail Provided** | | | | |
| **Level of Completeness** | **None** | **Little** | **Some** | **Most** | **All** |
| **User Friendly (Easy to Read Information and Follow Instructions)** | **None** | **Little** | **Some** | **Most** | **All** |
| **All Input Verified With Appropriate Messages If Necessary** | **None** | **Little** | **Some** | **Most** | **All** |
| **Program Runs Without Crashing** | **None** | **Little** | **Some** | **Most** | **All** |
| **Efficient Coding** | **None** | **Little** | **Some** | **Most** | **All** |
| **Accurate Output** | **None** | **Little** | **Some** | **Most** | **All** |
| **Looping** | **None** | **Little** | **Some** | **Most** | **All** |
| **Decision Making** | **None** | **Little** | **Some** | **Most** | **All** |
| **User – Defined Functions** | **None** | **Little** | **Some** | **Most** | **All** |
| **Strings** | **None** | **Little** | **Some** | **Most** | **All** |
| **Arrays (1-D)** | **None** | **Little** | **Some** | **Most** | **All** |
| **Arrays (2-D)** | **None** | **Little** | **Some** | **Most** | **All** |
| **Text Files** | **None** | **Little** | **Some** | **Most** | **All** |
| **Graphics** | **None** | **Little** | **Some** | **Most** | **All** |
| **Documenting the Solution** | **Detail Provided** | | | | |
| **Commenting** | **None** | **Little** | **Some** | **Most** | **All** |