**Assignment #1**Due before class Sept 27, 2012

You are given the task of designing a program that tells you which part of the day it is, given a user-entered time (hour & minute). Please use the 24h clock. Show the user two input boxes, one for the hour of day, the other for the minute. The user then clicks a “Convert” button, your program should display the corresponding time of day in the colour specified below. Use the following table:

|  |  |  |
| --- | --- | --- |
| **Hour** | **Time of Day** | **Colour** |
| 21:00-23:59  0:00-5:59 | Night | Black |
| 6:00-10:59 | Morning | Yellow |
| 11:00-13:59 | Lunch | Orange |
| 14:00-17:59 | Afternoon | Light Blue |
| 18:00-20:59 | Evening | Dark Blue |

Your program should clear the text-boxes as soon as the user clicks into it. The results should be given to the user in a label. You will also need to put a QUIT button onto the form.

You should use the features of Visual Basic that are covered in class. Please be aware that users can mistype the input data such as non-numeric characters or numbers beyond the range and your program should display appropriate messages accordingly.

Start off by creating a hierarchy chart, a flowchart and the corresponding pseudo-code.

Marking Criteria:

* 10marks - Hierarchy Chart
* 10marks - Flowchart
* 10marks - Pseudo-code for the program
* 10marks - Graphical User Input (GUI) Design
* 30marks - Correct Functionality
* 15marks - Error Checking
* 15marks - Documentation

**Hints**

1. Test your program thoroughly with test cases:

1. 4:45, 16:45, 20:00, 21:59
2. A, abc,!@#$%, [space], ...
3. [nothing]

2. Test whether the text-boxes are emptied when the user clicks into them.

3. Write necessary comments in your source code.

4. Prepare the documentation according to the guideline.