**Student Name: Weight: 20%**

**Student ID:** **Marks:** **/22**

# Assignment: Write Python Script in Windows

## Instructions

Read the scenario below and complete the questions that follow.

**Scenario**

You have been hired to write a Python script in a Windows environment. Your client wants you to utilize pywin32 and develop a system administrator script that will automate a task (or tasks). Your client has stated that it doesn’t matter which pywin32 modules you choose, as long as it’s useful for a system administrator.

Your project with involved the following tasks:

* Research Windows API
* Research pywin32
* Develop a script based on Windows API
* Create a justification document

The hiring company also wants to see the script in action, as it utilizes Windows API. Specifically, the client wants you to demonstrate 5 unique modules of the API.

The client has provided you with the following link containing different modules: [Python for Win32 Extensions Help](http://timgolden.me.uk/pywin32-docs/contents.html) (http://timgolden.me.uk/pywin32-docs/contents.html).

Finally, the client needs you to write a justification document that addresses the following questions:

* What is the purpose of the script? What business need is being met?
* Reasoning (justification) for why you chose each particular function and how it supports the goal/purpose of the project.

## Instructions

The following python aspects are required for this project:

* Pseudocode
* Submission of code in D2L. Pseudocode is in a block comment at the beginning of the code.

Complete the following steps:

1. Create a 10-minute video that shows you running your script in your environment. The video must contain the following:
   1. You must verbally describe your code and explain what is happening at execution.
   2. Show how your code uses the required python requirements: Windows API (5 unique pywin32 modules). Each module requires a detailed explanation.
2. Submit your code, video and justification document in D2L (as three separate files).

**Important Notes**

* When you submit your work, do not submit a link to YouTube or other public video sharing service. Your submission needs to be submitted through D2L only. Failure to do so will result in a 0% grade.
* Your work will be reviewed for similarities within and across cohorts.
* This is a formal document, so make sure the formatting and overall quality of work is professional (i.e., suitable for an important client). This will be a part of your final grade for this assignment.

**Tips for Success**

* Research common IT tasks and examine how those tasks can be automated with a script. One common example is creating similar settings on individual machines.

## Marking Criteria

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Categories** | **0** | **1** | **2** | **Score** |
| **Module 1 Code** | Not Functioning | Basic functionality implemented.  Code requires additional implementation in order to create functionality that is innovative and useful. | Useful functionality implemented (beyond just calling built-in functions) | **/2** |
| **Module 2 Code** | Not Functioning | Basic functionality implemented.  Code requires additional implementation in order to create functionality that is innovative and useful. | Useful functionality implemented (beyond just calling built-in functions) | **/2** |
| **Module 3 Code** | Not Functioning | Basic functionality implemented.  Code requires additional implementation in order to create functionality that is innovative and useful. | Useful functionality implemented (beyond just calling built-in functions) | **/2** |
| **Module 4 Code** | Not Functioning | Basic functionality implemented.  Code requires additional implementation in order to create functionality that is innovative and useful. | Useful functionality implemented (beyond just calling built-in functions) | **/2** |
| **Module 5 Code** | Not Functioning | Basic functionality implemented.  Code requires additional implementation in order to create functionality that is innovative and useful. | Useful functionality implemented (beyond just calling built-in functions) | **/2** |
| **Module 1 Justification**  **and Demo** | Insufficient | No justification or problems encountered during the demo without adequate resolution.  Does not prove that coding solution works, or is missing code explanation. | Justified and well demonstrated | **/2** |
| **Module 2 Justification**  **and Demo** | Insufficient or missing both evaluation components | No justification or problems encountered during the demo without adequate resolution.  Does not prove that coding solution works, or is missing code explanation. | Justified and well demonstrated | **/2** |
| **Module 3 Justification**  **and Demo** | Insufficient or missing both evaluation components | No justification or problems encountered during the demo without adequate resolution.  Does not prove that coding solution works, or is missing code explanation. | Justified and well demonstrated | **/2** |
| **Module 4 Justification**  **and Demo** | Insufficient or missing both evaluation components | No justification or problems encountered during the demo without adequate resolution.  Does not prove that coding solution works, or is missing code explanation. | Justified and well demonstrated | **/2** |
| **Module 5 Justification**  **and Demo** | Insufficient or missing both evaluation components | No justification or problems encountered during the demo without adequate resolution.  Does not prove that coding solution works, or is missing code explanation. | Justified and well demonstrated | **/2** |
| **Code Readability** | Insufficient (very difficult to follow the coding solution, lacks organization and logical structure) | Missing concise Pseudocode, missing sufficient code commenting, or missing proper code structure | Code is easy to understand with proper documentation. | **/2** |
| **Total** | | | | **/22** |