Department of Computing

Common First Year – Operating Systems

Assignment Dec 2021/Jan 2022

Assessment Brief

Module Title:	Operating Systems
Module Code:	ZSYS H1201
Lecturer:	Michael Gleeson
Stage:	Year 1
Assessment Title:	Windows Batch Script
Assessment Number:	3
Assessment Type:	Practical Assignment
Restrictions on Length:	Max 10 Min Demo
Individual/Group:	Groups of 2
Assessment Weighting:	10%
Issue Date:	Thurs 16th December 2021
Hand In Date:	Thurs 27th January 2022 @11am
Planned Feedback Date:	Submission plus 4 weeks
Mode of Submission:	Script via Blackboard, Demonstration

Assessment Details:

For this assessment you are required to:

- Write a Windows DOS batch file which satisfies the criteria listed on page 2.

- **You must work in groups of two and both members must be in the same CFY Group.**
    o You can form your own groups, you must both contribute to the task.
    o You are required to complete and sign an Individual Contribution Statement.
    o Submission will not be graded without this document.
    o If you cannot locate a suitable partner notify your Lab Tutor ASAP.

- Submit your **zipped** batch file online via Blackboard by the submission date.
    o Both team members must each individually, submit the same batch file, one group member submitting does not mean that both have submitted - late penalties will apply.

- You are required to **demonstrate and explain** your code, to your Lab Tutor.
    o Schedule TBC.

Assessment Tasks

Part A: Write a Windows DOS batch file which satisfies the following criteria:

   i.   Your script should have a menu system to allow the user to select any one of the listed tasks (an example image is provided on the following page).

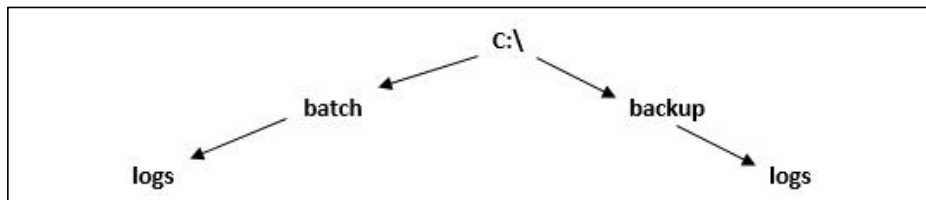   [5 Marks]

   ii.   An option to display User/PC information to the user, similar to the output below: [5 Marks]

```
Hello username, you are currently logged into
computername
It is CurrentTime. on CurrentDate
```

   iii.   An option that checks if the following directory structure exists and if it doesn't - it creates it.

                          [5 Marks]

   iv.   An option to redirect the output from (ii) to a file called logfile.txt located in c:\batch\logs directory when first run and append to this file when subsequently run.   [5 Marks]

   v.   An option to backup the contents of the c:\batch\logs folder to c:\backup\logs.   [5 Marks]

   vi.   An option to output the difference between these two files to screen.   [5 Marks]

   vii.   An option to view the attributes of c:\batch\logs\logfile.txt   [5 Marks]

   viii.   An option to view the permissions on the folder c:\backup.   [5 Marks]

   ix.   An option to list all running, non-system processes.   [5 Marks]

   x.   An option to exit the script - asking to confirm before exiting.   [5 Marks]

[Total for Part A: 50 Marks]

Part B: Demonstrate your batch file and explain its operation.

Marks breakdown for in lab demonstration:

Explain your code clearly	15 Marks
Answer questions with authority	10 Marks
Contribution and teamwork	15 Marks
Functionality, completeness and overall code quality	10 Marks

[Total for Part B: 50 Marks]

Some Advice/Tips/Pointers:

- You should comment your script file extensively.

- You should use environment variables and commands where appropriate.
  - For example, note where italics are used for *username* and *computername.*
  - The values of these should change depending on who is logged in and to what machine.

- You should include suitable spacing and formatting for your output
  - For example, use @echo off to keep your output 'clean'.

- It would be a good idea to test your script before submitting/demonstrating.

- Most content to complete this assignment is based on Windows Labs 11 and 12.
  - You may need to independently research further to answer certain parts.

- Your interface should be in a similar format to this image below.

- You must complete, sign and submit (at demonstration) an Individual Contribution Statement
  - Available on next page, print this out and complete **BEFORE** your demonstration.

CFY OS - Batch File - Individual Contribution Statement

Group Members:

1)	2)

Description of activities and contributions for Group Member 1: _____

Date	Detail

Overall, my involvement accounts for _____ % of overall project's work effort.

Description of activities and contributions for Group Member 2: _____

Date	Detail

Overall, my involvement accounts for _____ % of overall project's work effort.

Signatures:

Group Member 1: _____

Group Member 2: _____