# Dublin Business School

# Assessment Brief

# Assessment Details

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| --- | --- |
| Unit Title: | POP |
| Unit Code: | B8IT112 |
| Unit Lecturer: | Rory O’ Donnell |
| Level: | 8 |
| Assessment Title: | Programming Questions |
| Assessment Number: | 1 & 2 |
| Assessment Type: | Practical Questions |
| Restrictions on Time/Length: | NONE |
| Individual/Group: | Individual |
| Assessment Weighting: | 50% |
| Issue Date: | March 2024 |
| Hand In Date: | **June 2024 Moodle** |
| Planned Feedback Date: | Hand in date . Presentation of Work on last class |
| Mode of Submission: | Moodle |

**DUBLIN BUSINESS SCHOOL**

**ASSESSMENT 50%**

**Question 1.**

Workshop Selector

The following table shows a training company's workshops, the number of days of each, and their registration fees.

Workshop Number of Days Registration Fee

Handling Stress 3 €1,000

Time Management 3 €500

Supervision Skills 3 €1,500

Negotiation Skills 5 €1,300

How to Interview 1 €500

The training company conducts its workshop in the six locations shown in the following table. The table also shows the lodging fees per day at each location.

Location Lodging Fees per Day

Dublin €300

Limerick €200

Cork €300

Kerry €200

Belfast €400

Sligo €150

When a customer registers for a workshop , he/she must pay the registration fee plus the lodging fees for the selected location.

Example

Here are the charges for attending the Handling Stress workshop in Dublin

Registration: €1,000

Lodging: €300 \* 3days = €900

Total: €1,300

Create an Application that lets the user select a workshop from one ListBox and a Location from another ListBox. When the user clicks a button, the application should calculate and display the registration cost, the lodging cost and the Total cost.

Create a flowchart of your solution

**Question 2.**

Population

Create an Application that predicts the approximate size of a population of organisms.

The application should use textboxes to allow the user to enter the starting number of organisms , the average daily population increase (as a percentage), and the number of days the organism will be left to multiply.

Example:

Starting number of organisms : 2

Average daily increase : 30%

Number of days to multiply : 10

The program should display the following table of data in a ListBox control:

Day Approximate Population

1 2

2 2.6

3 3.38

4 4.394

5 5.7122

6 7.42586

7 9.653619

8 12.5497

9 16.31462

10 21.209

Create a flowchart of your solution

**Question 3.**

Automobile

DBS's Automotive performs the following routine maintenance services:

Oil changes €50

Lube Job €20

Radiator flush €60

Transmission flush €100

Inspection €10

Muffler replacement €200

Tire Rotation €30

DBS also performs other nonroutine services and charges for parts and labour (€30 per hour). Create an Application that displays the total for a customer's visit to DBS.

The application should have the following value-returning methods

oilLubeCharges - returns the total charge for an oil change and / or a lube job, if any.

flushCharges - returns the total charges for a radiator flush and/ or a transmission flush, if any

miscCharges - returns the total charges for an inspection, muffler replacement, and / or tire rotation it any.

otherCharges - returns the total charges for other services(parts and labour), if any.

taxCharges - returns the amount of sales tax if any. Sales tax is 10% and is charged only on parts. if the customer purchases services only, no sales tax is charged.

totalCharges - returns the total charges.

The application should have the following void methods, called when the user clicks the clear button.

clearOilLube- Clears the check boxes for the oil change and lube change

clearFlushes - Clears the check boxes for radiator flush and transmission flush.

clearMisc - Clears the check boxes for instection, muffler replacement and tire rotation

clearOther - Clears the text boxes for parts and labour

clearFees - Clears the labels that display the labels in the section marked summary

Create a flowchart of your solution

**Question 4.**

Charge Account Validation.

Using the file chargeAccount.txt in moodle attempt the following question. The file contains a list of a company's valid charge account numbers. There are a total of 18 charge account numbers in the file, and each one is a 7 digit number such as 5658845.

Create an application that reads the contents of the file into an array or a list. The application should then let the user enter a charge account number. The program

should determine whether the number is valid by searching for it in the array or List that contains the valid charge account number. If the number is in the array or list, the program should display a message indicating the number is valid. If the number is not in the array or List, the program should display a message indicating the number is invalid.

Create a flowchart of your solution

# What is referencing and why is it necessary?

Referencing is a **standard** method of **acknowledging** the **sources of information** you have consulted. Anything – words, figures, graphs, theories, ideas, facts – originating from another source and used in your assignment must be referenced (i.e. acknowledged)

* To avoid plagiarism
* So that the reader can verify quotations

**Assignment example:**

You are writing an assignment about **“Communications in Organisations”** and you have consulted a book by Henry McClave, called *“Communications for Business”.* In this book you have found a quotation that you want to include in your assignment. You do that as follows:

“The ability to communicate effectively is often cited as the key characteristic of the successful manager or administrator” (McClave, 1997: 1)

The following is an example of the bibliographic entry when using the Harvard Business Style:

*Year of publication*  *Edition of publication Publishers*

# Bibliography

McClave, Henry. 1997. *Communication for business.* 2nd ed. Dublin. Gill and Macmillan.

## Author Title of publication Place of publication

**What information do I need for proper referencing?**

* An acknowledgement within the body of your essay should include the **name of the author,** the **date of publication** and the **page numbers,** e.g. (Forde, 2001: 73-74)
* At this point – known as “in-text referencing” you are only giving the reader the author, date of publication and page reference of the source. The full details should be included in the bibliography.

# Paraphrasing and quoting – what’s the difference?

Paraphrasing involves writing someone’s ideas in your own words – not verbatim e.g.

* Anderson (1987: 73-74) advances three arguments against the death penalty. He contends that the death penalty is inhuman and no society that purports to be civilised can condone it. It has never been proved that the death penalty acts as a deterrent, and, furthermore, many innocent people have died in vain for crimes committed by others.

Quoting involves writing the exact words of the author directly from the book or journal e.g.

* “My arguments against the death penalty are three-fold. To do away with any human being is uncivilised and inhuman. There is no proof that the death penalty acts as a deterrent to heinous criminal acts, and it is a documented fact that many innocent men and women have been wrongly sentenced for the crimes of others” (Anderson, 1987: 73-74)

# Writing a bibliography

A bibliography is a list of books, journal articles, newspaper articles or any other printed or electronic resource referred to by an author. It normally requires the following information, all of which can be found inside the book or on the library OPAC:

* Name of the author
* Date of the publication or resource
* Title of the publication or resource
* Edition of the publication or resource
* Place of publication or resource
* Publisher

**The following provides examples on how material should be entered in a bibliography:**

### Journal article

In this example the volume of the journal (=14), issue number (=2), page numbers (=131-143) and date (=June 2003)

* Caldwell, Raymond. 2003. Models of agency change: a fourfold classification.  *British Journal of Management, 14.* (2): 131-143, June 2003

Note that the *title of the journal* is italicised and not the title of the article.

# Internet

The important point to remember in this bibliographic note is to enter the date the website was accessed e.g. 4 September 1996

* McKiernan, G. 1996. *Project Aristotle(sm): automated categorisation of Web resources*. [Online]. Available: http://www.public.iastate.edu/~CYBERSTACKS/Aristotle.htm [4 September 1996]

# Electronic Database

In this example the title of the journal in which the article has been published (*Journal of Management Studies)* is in italics. The name of the database and the article reference number (if any) should be given in square brackets.

* Roche, William K. 1999. In search of commitment-oriented human resource management practices and the conditions that sustain them. *Journal of management studies,* 36 (5) 653 [Abstract in the InfoTrac database]

FACULTY OF COMPUTING

GRADING CRITERIA FOR UNDERGRADUATE MODULES

|  |  |  |
| --- | --- | --- |
|  | **% Required** | **Criteria** |
| **1st Class Honours** | 70 or more | Shows insight and imagination in synthesising project. Can creatively and convincingly apply theory and/or practice to contexts. Shows originality and strong evidence of a critical faculty. |
| **Upper 2nd Class Honours** | 60-69 | Clearly understands ideas and concepts in relevant literature and is able to successfully apply them. Able to present arguments and conclusions in a clear and persuasive fashion. |
| **Lower 2nd Class Honours** | 50-59 | Demonstrates concise and logical presentation of facts and arguments. Shows understanding and coherence. |
| **3rd Class Honours** | 40-49 | Able to simply recite material correctly and to relate ideas to problems in a basic fashion. Shows some difficulties in understanding, interpretation and application |
| **Pass** | 35-39 | Shows some difficulties in understanding, interpretation and application. Borderline. |
| **Fail** | Below 35% | Does not understand primary ideas and concepts, or their relevance to contexts. Shows confusion and poor presentation of fundamental ideas. |