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# Assessment Brief

# Assessment Details

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| Module Title: | **Principles Of Programming** |
| Module Code: | B8IT112 |
| Module Lecturers: | Claire Caulfield |
| Level: | 8 |
| Assessment Title: | Create console applications as solutions to the scenarios given |
| Assessment Number: | 1 |
| Assessment Type: | Individual Submission |
| Restrictions on Time/Length : | N/A |
| Individual/Group: | Individual |
| Assessment Weighting: | 50% |
| Issue Date: | 6th April 2021 |
| Hand In Date: | 4th June 2021 |
| Mode of Submission: | On-line **ONLY** |

# Assessment

The following is the assignment as set out for the module of Principles of Programming.

The assignment is an individual assignment with a 50% grade weighting.

**Requirements**

Create a solution to each of the scenarios set out below. The solutions should be written in C# console applications.

1. *Miles-per Gallon*

A car’s miles per gallon (MPG) can be calculated with the following formula.

MPG = Miles driven / Gallons of petrol used

Write a program that asks the user for the number of miles driven and the gallons of petrol used.

It should calculate the car’s miles per gallon and display the result on the screen.

1. *Guess the Number*

Create a C# console application which allows two players to play the game "Guess the number"

The program should ask the first player to enter a secret number. The secret number must be between 0-20. Once the player has entered the number the screen should be cleared of all text.

The program should then give the second player 3 attempts to guess player ones number. If the second player guesses the number correctly, a congratulatory message should be displayed on the screen.

If they guess too low, the message should read "Your guess is too low". If their guess is too high the message should read "Your guess is too high".

If the second player hasn't guessed the number after 3 attempts, you should display the message " Hard Luck, the number was x" (x being the secret number)

1. *Array and Method*

Write a console application that fulfils the following requirements.

* Create an array of grades. Enter the following values 34.7, 56.9, 75, 52, 92.2
* Print to the screen the size of the array.
* Print to the screen the value 56.9.
* Print every value in the array to the screen.
* Write 2 methods, one that returns a name and the other that returns the age of the user.
* Pass their age and name into a new method that calculates the year they were born. Print to the screen “X you were born in Y” X being their name and y being the year they were born.

## General Assessment Submission Requirements for Students:

1. Online assignments must be submitted no later than the stated deadline.
2. All relevant provisions of the Assessment Regulations must be complied with.

1. Extensions to assignment submission deadlines will be not be granted, other than in exceptional circumstances. To apply for an extension please go to <http://www.dbs-students.com/Registrar/> and download the Assignment Extension Request Form.

1. Students are required to retain a copy of each assignment submitted, and the submission receipt.
2. Assignments that exceed the word count will be penalised.
3. Students are required to refer to the assessment regulations in their Student Guides and on the Student Website.
4. Dublin Business School penalises students who engage in academic impropriety (i.e. plagiarism, collusion and/or copying). Please refer to the attached referencing guidelines for information on correct referencing.
5. Late submissions will be penalised 2 marks per day up to 14 days late. This is in accordance with the QAH of DBS.

## What is referencing and why is it necessary?

Please follow this link to the Harvard Style Referencing Guide - all referencing is required in this format.

<http://issuu.com/dbslibrary/docs/harvard-referencing-guide/1?mode=a_p>

The School of Arts generally use APA Referencing, information is available under DBS library guides on [www.library.dbs.ie](http://www.library.dbs.ie).