

CMP73010

Managing Software Development

Assignment 2



CMP73010 - Managing Software Development School of Business and Tourism Session 2, 2019

Assignment 2

This assignment is due 11:00 pm on 23^{rd} September, 2019. The assignment a has component that is a C# source code but the majority is written responses. The responses and the C# code should be submitted through the link in your MySCU site.

Please do not leave the assignment to the last minute as you can start work on much of the assignment well before the due date. If you do require an extension for submission you must request this before the due date. Unless an extension is agreed, a late penalty will be applied. Each day late submission will apply a 5% penalty with a maximum of five days late. Submissions after four days will not be awarded any credit. Please note that a timestamp of 11:01 on the due date is considered one day late.

This assignment covers the *agile* development and *automatic document generation* topics in the unit.

Important: You must submit your own solution with **reasoning**, however, we are perfectly happy for you to chat and discuss with previous students of this unit and your current classmates. The last bit is particularly important. What we are looking for is the thought process behind your designs and solutions as well as the actual solutions. Reports which do not give satisfactory reasons for their designs and solutions will be **penalized**.

Part 1 – Agile processes (15 marks)

You are a software development consultant working for one of the *big four* consulting firms. You currently have two important clients that you are working with as part of your client portfolio. *Client* A is a small start-up with all staff based in the same city; specialising in e-commerce web and device applications. *Client* B is a large engineering-oriented company (e.g. Rio Tinto, BHP) with offices around the world. Both companies have development teams that primarily utilise C# as their programming language.

Your direct supervisor has asked for a briefing on what recommendations you are intending to make after conducting a series of meetings and audits with the clients. Your briefing to your supervisor should include:

- 1. An overview of Agile processes (2 marks).
- 2. An explanation of the possible Agile methodologies that could be used **for each client** (4 marks).
- 3. Arguments for and against the adoption of <u>one or more</u> Agile methodologies **for each client**. You will need to reference authoritative sources to convince your management. Note that you may decide that Agile is not *completely* appropriate for one or more of the clients. This is fine but you must support your decision with <u>reasoning and referenced research</u>. (5 marks).
- 4. Clearly identify what sorts of projects would benefit and what sorts of projects will not benefit from the Agile methods selected (4 marks). Note: This can be part of your point 3 arguments.

The briefing should be a **maximum** of 1500 words. This is a briefing to an employer. You will be penalised for going over the limit, as it may indicate your writing is not precise and you have not thought about your responses enough.

Part 2 – Automatic document generation (5 marks)

Your clients have requested a **demonstration on the value of automatic document generation** to be presented to their new junior programmers that have just begun working at the company. Attached is a C# program for a simple word game that you are <u>required</u> to use to demonstrate this. You must replace the

current inadequate comments with the C# XML comments. Your XML comments should contain examples of each of the following tags at the very least:

- <summary> and <remarks> (1.5 marks)
- <param> and <returns> (1.5 marks)
- <code> (1 mark)
- <see> (1 mark)

Note that your code does not have to compile but you could implement it in Visual Studio to iron out problems. Please note that you need to explain each of your C# XML comments. Comments without a good explanation will result in loss of marks and may not be marked entirely.

```
// perhaps include check if there is a string entered, eg. if(str.Length == 0),
// and in that case initialize wrd to 0
using System;
public class Exercise5
{
    public static void Main()
{
    string str;
    int i, wrd,1;
      Console.Write("\n\nCount the total number of words in a string:\n");
Console.Write("------\n");
Console.Write("Input the string: ");
      str = Console.ReadLine();
    1 = 0;
    wrd = 1;
    /* loop till end of string */
    while (1 <= str.Length - 1)
    {
         /* check whether the current character is white space or new line or tab character*/
         if(str[1]==' ' || str[1]=='\n' || str[1]=='\t')
         {
             wrd++;
         }
         1++;
    }
    Console.Write("Total number of words in the string is: {0}\n", wrd);
    }
}
```

Mark deductions (after):

Demerit areas	Marks
Not using the report template (CSC93001_Assignment_2_Report_Template.docx)	-3%
Not writing Report Title, Student name, Student Number, etc. at the first page	-1%
Not writing the Executive Summary	-1%
Not writing the Introduction and Conclusion sections	-1%
Exceeding the maximum word-limit	- 2%
Late submission penalty	5% per day

Notes:

- **Report Template:** Students must use the report template, available at the Assessment page, to submit this assignment. Information regarding mark distribution, word-limit, etc. in the template file is for the whole assignment.
- **Word-limit:** The maximum word-limit will be strictly applied. The marker can deduct marks for writing over this word-limit. So, make sure your report is completed within the given word-limit (1500 words). <u>There is no maximum word-limit applicable for Title</u>, <u>Executive Summary and appendices</u>.
- **Start early and submit on-time:** Avoid any pitfalls that may arise due to late start. Thus, start your assignment as soon as possible to submit on-time. For late submissions, the standard assessment submission policy will be applied (see the unit profile).
- **Appendix:** You may add appendices to document any additional material you wish to include such as tables, diagrams, figures, or other supplementary material. Appendices do not contribute to the word count of the document.
- **Reference:** You should add a reference section and include any references, including publications (literature, books, etc.), which you want to refer to support your report.
- Late Submission: This assignment will be due on Friday, 20st September, at 11:00 pm. A penalty of 5% of the available mark will be deducted from the actual mark for each day of late submission up to five days.
- **Consultation:** You will have the opportunity to show your assignment draft to your tutors/lecturer/unit assessor for feedback. Several assignment consultation slots will be organised; follow the announcements from the unit assessor.
- **Contact:** Please contact the tutor/lecturer/unit assessor if you have any issues or confusions.