# Skills assessment: Object-oriented programming tasks

## Criteria

### Unit code, name and release number

ICTPRG430 - Apply introductory object-oriented language skills (1)

ICTPRG413 - Use a library or pre-existing components (1)

### Qualification/Course code, name and release number

ICT40518 - Certificate IV in Programming (1)

## Student details

### Student number

881273817

### Student name

Tiana Zou

## Assessment Declaration

* This assessment is my original work and no part of it has been copied from any other source except where due acknowledgement is made.
* No part of this assessment has been written for me by any other person except where such collaboration has been authorised by the assessor concerned.
* I understand that plagiarism is the presentation of the work, idea or creation of another person as though it is your own. Plagiarism occurs when the origin of the material used is not appropriately cited. No part of this assessment is plagiarised.

### Student signature and Date

Tiana Zou 11/03/2024

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For queries, please contact:

Technology and Business Services SkillsPoint

Ultimo

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This assessment can be found in the: [Learning Bank](https://share.tafensw.edu.au/share/access/searching.do?doc=%3Cxml%2F%3E&in=P7ac4831b-430a-4b8d-8b56-f7b32ed5b9cf&q=&type=standard&sort=rank&dr=AFTER)

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## Assessment instructions

Table 1 Assessment instructions

| Assessment details | Instructions |
| --- | --- |
| **Assessment overview** | The objective of this assessment is to assess your skills required to complete object-oriented programming tasks. |
| **Assessment Event number** | 3 of 3 |
| **Instructions for this assessment** | This is a skill-based assessment and will be assessing you on your ability to demonstrate skills required in the unit.  This assessment is in one part:   1. Practical tasks.   The assessment also contains:   * Assessment Feedback. |
| **Submission instructions** | On completion of this assessment, you are required to submit it to your assessor for marking.  Ensure you have written your name at the bottom of each page of this assessment.  Submit the following documents for each part:   * Part 1: Practical tasks   + A zipped folder including:     - completed .csproj files for Tasks 1-5     - character-count.txt file for Task 4.   It is important that you keep a copy of all electronic and hardcopy assessments submitted to TAFE and complete the assessment declaration when submitting the assessment. |
| **What do I need to do to achieve a satisfactory result?** | To successfully complete this assessment the student will be available at the arranged time to complete all the assessment criteria as outlined in the assessment instructions.  All parts of the observable task must be performed to a satisfactory level.  All oral questions must be answered correctly to be deemed satisfactory in this assessment task: however, Assessors may ask questions to clarify understanding. |
| **Assessment conditions** | Assessment conditions will be safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the programming and software development field of work.  Assessment may be undertaken in normal classroom conditions, which is assumed to be noisy and similar to workplace conditions, or within the workplace. This may include phones ringing, people talking and other interruptions. |
| **What do I need to provide?** | * USB drive or other storage method with enough free space to save work to. |
| **What will the assessor provide?** | * An integrated development environment (IDE) * Applications for software development (Visual Studio suite) * Files provided in the resource folder |
| **Assessment location** | This assessment will be completed in the classroom.  The student may access their referenced text, learning notes and other resources. |
| **Supervision** | This is a supervised assessment. |
| **Reasonable adjustment** | If you have a permanent or temporary condition that may prevent you from successfully completing the assessment event(s) in the way described, you should talk to your assessor about ‘reasonable adjustment’. This is the adjustment of the way you are assessed to take into account your condition, which must be approved BEFORE you attempt the assessment. |
| **Assessment feedback, review or appeals** | In accordance with the TAFE NSW policy *Manage Assessment Appeals,* all students have the right to appeal an assessment decision in relation to how the assessment was conducted and the outcome of the assessment. Appeals must be lodged within **14 working days** of the formal notification of the result of the assessment.  If you would like to request a review of your results or if you have any concerns about your results, contact your Teacher or Head Teacher. If they are unavailable, contact the Student Administration Officer.  Contact your Head Teacher for the assessment appeals procedures at your college/campus. |

## Practical tasks

Create a C# console application for counting instances of alphabetic characters in a provided text file and writing the result of the count to another text file. All characters in the characters.txt file are uppercase so there is no need to consider casing.

* Read in the text from the provided *characters.txt* file.
* Iterate through each alphabetic character [A – Z].
* Count each instance of a specific character, for example, there are 40 instances of the character ‘P’ in the *characters.txt* file.
* Write the result to the *character-count.txt* text file.

|  |  |
| --- | --- |
| character and character-count text files have been added to Task 4  Figure 13 - Task 4, character and character-count text files | Results written to character-count.txt: A 35 B 39 C 41 D 43 E28 F 48 G 35 H 39 I 34 J 50 K 29 L 30 M 35 N 41 O 35 P 40 Q 32 R 39 S 42 T 33 U 47 V 45 W 45 X 32 Y 39 Z 44  Figure 14 - character-count.txt |