# Knowledge assessment: Short answers

## Criteria

### Unit code, name and release number

ICTPRG301 - Apply introductory programming techniques (1)

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

901-00007V01- Statement of Attainment Build your digital literacy with coding

Version: 20191127

Date created: 15 October 2018

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For queries, please contact:

SkillsPoint Technology and business services

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 knowledge of the development of games using programming languages. |
| **Assessment Event number** | 2 of 2 |
| **Instructions for this assessment** | This is a written assessment and it will be assessing you on your knowledge of the unit.  This assessment is in one part:   1. Short answer questions   The assessment also contains:   * Assessment Feedback. |
| **Submission instructions** | When you have completed this assessment, submit it online for marking by your assessor.  Ensure you have added your name in the footer of each file.  Submit the following documents for each part:   * Part 1: Short answers   + This assessment document.   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 achieve a satisfactory result for this assessment all questions must be answered correctly. |
| **What do I need to provide?** | * Computer, word-processing software, internet and login details. * USB drive or other storage method with enough free space to save work to. |
| **What the assessor will provide?** | Access to this assessment and relevant online documents will be provided in the online learning platform. |
| **Due date/time allowed** | Indicative time to complete assessment:   * One hour. |
| **Assessment feedback, review or appeals** | Appeals are addressed in accordance with [Every Students Guide to Assessment](https://www.tafensw.edu.au/documents/60140/76288/every-students-guide-to-assessment-in-tafe-nsw.pdf). |

## Part 1: Short answers

1. A software development lifecycle is theprocess used to develop software. Briefly describe the phases (10- 20 words each phase) of a typical development cycle.

|  |  |
| --- | --- |
| Phase | Brief description |
| Analysis | Looking at the situation and defining the problem that the program will attempt to solve |
| Design | Outlining the solution to the problem and writing an algorithm for the solution |
| Implementation | Converting the algorithm into correct syntax and structure for the programming language that is being used (Python in this course) |
| Testing | Running the program through various tests to analyse whether it meets the specifications |
| Maintenance | Ongoing correction or updates to the program to improve the efficiency or operation of the code |

Identify the programming language used during your coursework and compare it with one other programming language used for game programming.

* + Write a short description of each and its command structure.
  + Describe two characteristics of its syntax.

|  |  |  |
| --- | --- | --- |
| Language | Description | Syntax characteristics |
| Python (used during coursework) | Can support many different programming processes (OOP, FP and PP), is high-level and so is relatively simple to code in and has both interpreted and compiled versions | 1. Uses colons (:) after commands (if, for, while) and indents (whitespace) on subsequent lines to indicate grouped statements 2. Uses hash (#) to indicate a commented single line |
| Java | Also a high-level language (simple) and supports OOP. Java is class and method based and is a compiled language so is slower than Python | 1. Uses curly braces ({}) to denote grouped statements 2. Semi-colons (;) define the end of a statement |

## Assessment feedback

### *NOTE: Your assessor will give you feedback via the online learning platform. For manual feedback, this section must have the assessor’s signature and the student’s signature*

### Assessment outcome

Satisfactory

Unsatisfactory

### Assessor feedback

Was the assessment event successfully completed?

If no, was the resubmission/re-assessment successfully completed?

Was reasonable adjustment in place for this assessment event?  
*If yes, ensure it is detailed on the assessment document.*

Comments:

### Assessor name, signature and date:

### Student acknowledgement of assessment outcome

Would you like to make any comments about this assessment?

### Student name, signature and date

***NOTE: Make sure you have written your name at the footer so it appears at the bottom of each page of your submission before attaching the cover sheet and submitting for marking.***