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| **Qualification details** | | | |
| **Training Package Code and Title:** | **ICT - Information and Communications Technology (Release 7.0)** | | |
| **Qualification National Code and Title:** | ICT40120 Certificate IV in Information Technology (Gaming Development) | **State code:** | BFF9 |

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| **Assessment Title** | **AT04 Knowledge Questions (Part 2)** | | |
| **Unit National Code & Title** | ICTGAM423 Apply artificial intelligence in game development (Release 1) | | |
| ICTGAM427 Use 3-D software interface and toolsets (Release 1) | | |
| ICTGAM430 Design interactive media (Release 1) | | |
| **Date Due** | **Session 17** | **Date Received** |  |

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| **Student Name** | Richard Pountney | **Student ID** | 30007736 |
| **Student Declaration** | I declare that the evidence submitted is my own work:  RBP  ………………………………………….. | | |

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| **Assessor Name** |  | | | |
| **Assessment Decision** | Satisfactory | | Not Yet Satisfactory | |
| **Assessor Signature** |  | | **Date** |  |
| **Is student eligible for reassessment (Re-sit)?** | No | Yes | **Reassessment Date:** |  |

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| **Feedback to student** | | | |
| *Via Blackboard (LMS) – Please check [Grade] section.* | | | |
| **Feedback from student** | | | |
| *Via Blackboard (LMS) – Please use [Comment] section during submission.* | | | |
| **Student signature** |  | **Date** |  |

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| **Assessment Instructions** |

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| **TO THE ASSESSOR** | |
| Type of Assessment | *Written Questions* |
| Duration of Assessment | *5 sessions (session 13 – session 17)* |
| Location of Assessment | *Classroom (computer lab), at home* |
| Conditions | *Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry.*  *This includes access to:*   * *reference materials applicable to creating 3-D animation and digital effects* * *required hardware and software and peripheral devices* * *games engine* * *file storage* * *required 3-D modelling and animation software*   *Learners are required to complete the required tasks and submit the required evidence electronically via Blackboard.* |
| Elements and Criteria | As detailed in the assessment plan.  You are required to make sure that all students meet the elements, performance criteria and foundation skill items as outlined in the provided checklist. |

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| **TO THE STUDENT** | |
| Purpose of Assessment | You are required to show your understanding of:  *ICTGAM427 - Use 3-D software interface and toolsets*   * 3-D animation production protocols * industry standard 3-D modelling and animation software * contents and application of production brief * development process that may be used in 3-D software interface and toolsets * protocols in filing media assets * file management procedures and project configuration procedures that may be used in 3-D software interface and toolsets * fundamental research principles procedures that may be used in 3-D software interface and toolsets * principles of design and colour used in 3-D animation and digital effects environments * procedures for producing a storyboard and script * technical constraints that hardware and software impose on graphics requirements and creative visual design   You are required to meet the elements, performance criteria and foundation skill items as outlined. |
| Allowable Materials | Blackboard (Topic by topic) will include the following: Weekly Readings, Class notes, and Weekly Activities.  Internet resources must be recorded as references for the assessment. |
| Required Resources | *Computer with:*   * *Internet Access* * *Word processing software* * *Access to Learning Management System (LMS)* |
| Reasonable Adjustment | In some circumstances, adjustments to assessments may be made for you. If you require support for literacy and numeracy issues; support for hearing, sight or mobility issues; change to assessment times/venues; use of special or adaptive technology; considerations relating to age, gender and cultural beliefs; format of assessment materials; or presence of a scribe you need to inform your lecturer. |
| Assessment Submission | *All activities must be attempted.*  *Use of research tools and peers in formulating answers are acceptable – but work submitted must be your own work and must not be plagiarised.*  *Final files and documentation are to be uploaded to the appropriate area in the Blackboard course created for this unit.*  *If you are marked as NYS (Not Yet Satisfactory) on your first attempt, you will be provided with another opportunity to re-attempt the assessment.* |
| Project contents | This project consists of the following tasks:   * Answer all of the questions for each section |

**Instructions**

To the best of your ability, answer each of the following questions in full. Ensure that you have attempted to answer all questions before submitting.

**Part 2 – ICTGAM427**

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| **Question 1 – Describe the protocols involved in the procedure of producing a 3-D animation.** | | | |
| Concepts & Storyboards  <https://www.proglobalbusinesssolutions.com/3d-animation-production-process/> | | | |
| **Question 2 – Identify at least three (3) game development industry-standard 3-D modelling and animation programs.** | | | |
| ***1*** | Blender | | |
| ***2*** | Autodesk Maya | | |
| ***3*** | 3ds Max | | |
| **Question 3 – Explain the details typically contained within a production brief, and how that information is applied in production.** | | | |
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| **Question 4 – Describe one method for enhancing your workflow processes for working with Blender and its toolsets toward game development.** | | | |
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| **Question 5 – Explain how to export a 3-D model from Blender as an FBX and so that it’s materials and textures are embedded within the file.** | | | |
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| **Question 6.a – Explain how to use the following file management procedures in Blender.** | | | |
| ***Open*** | |  | |
| ***Import*** | |  | |
| ***Save*** | |  | |
| ***Export*** | |  | |
| **Question 6.b – Explain how to configure the unit measurement for a Blender project.** | | | |
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| **Question 7 – Explain the procedures for accessing support files and support communities within Blender.** | | | |
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| **Question 8.a – Briefly describe how the following principles of motion design may apply to 3-D animation and digital effects in video games.** | | | |
| ***Timing, spacing, and rhythm*** | | |  |
| ***Eases*** | | |  |
| ***Mass and weight*** | | |  |
| ***Anticipation*** | | |  |
| ***Arcs*** | | |  |
| ***Squash and stretch*** | | |  |
| ***Follow through and secondary action*** | | |  |
| ***Exaggeration*** | | |  |
| ***Secondary and layered animation*** | | |  |
| ***Appeal*** | | |  |
| **Question 8.b – Describe how colour theory is used in relation to the following elements of video game design.** | | | |
| ***Mechanics*** | | |  |
| ***Progression*** | | |  |
| ***Visual hierarchy*** | | |  |
| **Question 9 – Explain the procedure for creating a storyboard and script for a 3-D animation.** | | | |
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| **Question 10 – Explain how the 3-D software and the hardware being used in production can constrain the graphical specifications and the creative visual design of a 3-D animation.** | | | |
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