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| **\**  **Qualification details** | | | |
| **Training Package Code and Title:** | **ICT - Information and Communications Technology (Release 8.0)** | | |
| **Qualification National Code and Title:** | **ICT40120 - Certificate IV in Information Technology (Gaming Development)** | **State code:** | BFF9 |

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| **Assessment Title** | **AT01 Action Game Characters** | | |
| **Unit National Code & Title** | ICTGAM428 Create 3-D characters for interactive games | | |
| ICTGAM431 Design and create 3-D digital models | | |
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| **Date Due** | ***27/03/2024*** | **Date Received** | ***14/02/2024*** |

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

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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 | *Project* |
| Duration of Assessment | *7 Class Sessions (Week 3 - 9)* |
| Location of Assessment | *Classroom, at home* |
| Conditions | *Assessor to ensure that the noise levels, natural interactions and time variances are maintained as it would in the be in the Cyber Security industry.*  *Learners are required to complete the required tasks in class and submit the required documentation electronically via Blackboard*  This includes access to:   * *required hardware and software.* * *required industry standard 3-D modelling software and features.* * *a range of industry standard delivery platforms* * *client specification documentation* * *reference materials applicable to design and visualisation of 3-D models* * *file storage* * *3-D product modelling software and delivery platforms.* * *games engine* * *character reference materials including models, illustrations, art and design books and character photographs.* * *a range of industry standard games, across all platforms and genres* * *a range of industry standard consoles and hand-held game devices.*   *Learners are required to complete the required tasks in class and submit the required documentation electronically via Blackboard.*  *The scenario for assessments is set within a simulated studio context (Immersive Studio’s) The* lecturer takes on the role of a studio head and the lecturer must have full access to the project management system Hack n Plan and all the students’ projects. |
| Elements and Criteria | As detailed in the assessment plan  You are required to make sure that all students meet the elements, performance criteria and oral communication items as outlined in the provided checklist. |

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| **TO THE STUDENT** | |
| Purpose of Assessment | You are required to show you can:  ICTGAM428:   * Identify and discuss character requirements and designs * Design characters   Develop character models  ICTGAM431   * Identify and clarify work requirements * Design 3-D digital models * Create 3-D digital models * Finalise 3-D digital models   You are required to meet the elements, performance criteria and oral communication items as outlined in the provided checklist. |
| Allowable Materials | Blackboard (Topic by topic) will include the following: Weekly Readings, Class notes, and Weekly Activities. |
| Required Resources | *Computer with:*   * *Internet Access* * *Word processing software* * *Access to Learning Management System (LMS)* * *Blender 4.0+* * *Hard drive* |
| 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 questions and activities must be attempted.*  *Use of research tools and peers in formulating answers are acceptable – but work submitted must be your own work.*  *Final project documentation is 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:   * *Select a Character Brief from LMS (Blackboard)* * *Identify two characters from the chosen brief to be designed and modelled for this assessment* * Perform research, planning, brainstorming and focus group feedback session to conceptualize design for the character * Perform initial first-pass or prototyping of model, textures, animations * Seek feedback on prototype of models * Use feedback to perform iterative improvements & produce a second-pass of 3D character models * Document each step of the design process & provide evidence of workflow in digital development software (Blender, Photoshop, etc, etc) |

# Project summary

Select two characters from one of the available Character Briefs documents for this assessment. Identify the purpose and requirements for these characters & discuss your findings in a short ‘pitch’ to the class and lecturer.

Once the client (lecturer) has provided any necessary clarification and given the green light begin work on designing the characters through concept art and the creation of schematics. Present your concept art to focus groups & note down the feedback. Plan out any changes / improvements based on the feedback then present findings to the client along with proposed steps for the production of the models.

Create a prototype of the models, textures and required animations, then present to client for feedback. Plan out changes and improvements then create second pass of the models.

Export and submit as a game-ready files as well as a rendered video of the model’s animations & working project files.

# Part 1

Task 1:   
Create a ‘pitch deck’ detailing the below:

* Select from the available ‘character brief’ documents for this assessment. Identify which of the briefs was chosen. Summarize the technical requirements/client requirements, the environment/theme of the game project, and the context of the two character’s role in this game.

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| See pitch deck presentation for answer. |

* Identify and discuss the style of the characters from the client brief and their purpose in the game narratively and mechanically.

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| See pitch deck presentation for answer. |

* In the presentation demonstrate the ‘type, role, name and profile’ of the two characters.

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| See pitch deck presentation for answer. |

* For each character, in the same presentation, discuss and determine the character animations that are required for the implementation into the game they're being designed for.

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| See pitch deck presentation for answer. |

* In the same meeting/presentation compare those animations with the criteria, game and client requirements.

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| See pitch deck presentation for answer. |

* Gather and analyse reference materials for the proposed character 3-D models (characters from other games, concept art/other sources, mood board)

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| See pitch deck presentation for answer. |

Task 2:

Within the same ‘pitch deck’ establish the following:

* Identify the organisation’s required guidelines, workflow sequences and industry standards applicable to this project.
  + What software/tools does the organisation require you to use for planning out and tracking the production?
  + What is the organisation’s ‘production cycle’/workflow sequence and how do you plan to align this project to that cycle? i.e, what tasks/steps will be completed within the stages of that cycle?
  + What industry standards are applicable to the project? EG, asset naming conventions, asset file types, storage and version control?

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| See pitch deck presentation for answer. |

* Outline the proposed timeline for production, keeping in mind the deadlines and other work needing to be completed. Confirm with the lecturer that the timelines proposed are reasonable and establish a plan to handle any potential delays to production.

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| See pitch deck presentation for answer. |

* Identify (two or three) 3-D development software which could be used for the completion of this project. Compare the two software packages and conclude which software package suits this project better.

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| See pitch deck presentation for answer. |

* Summarize and confirm the documentation which will need to be created and maintained throughout the remainder of the project. Confirm the project management technique which will be used throughout production to maintain the required timelines and deadlines.
  + *Production diary/work log*
  + *GANTT Chart*
  + *Kanban Board*

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| See pitch deck presentation for answer. |

# Part 2

## Task 1

* Begin designing and developing concept art for the two characters selected, making use of the reference materials and information gathered in Part 1.

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|  | A collage of images of a wolf in the woods  Description automatically generated |
| I generated concept art for both characters by using AI art generation.  I thene prresented this art to a focus testing group to get feedback on the concept art. | |

* Organize focus testing with at least 3 individuals – either classmates or other volunteers – to obtain feedback on the concept art. Provide the participants with questions intended to gauge both their overall impression of the character design from the concept art, as well as their impression of how closely the design meets the character brief.   
    
  (Participants will need to also be provided a summarized version of the character brief for comparison – essentially, explain to the participants what you were ‘aiming for’ and ask them how close they think the design matches the goal)  
    
  Record a summary of the feedback received from the focus tests and plan out any revisions.***(Note that in the next step you will meet with your lecturer to discuss the feedback and the changes you made – while it is possible that no changes or improvements resulted from the focus tested, be prepared to provide sufficient evidence and explanations as to why you think this is the case)***

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| *Provide your answer here…* |

* Based on the feedback received from the focus testing construct a *character turnaround and prop schematic* for each character to use as a reference in the modelling process.

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|  | A drawing of a fox  Description automatically generated |
| I downloaded character turnarounds as reference and added colour pallets and prop schematics. | |

* Arrange a meeting with the lecturer to discuss the results of the focus testing & changes. Present your two-character *turnaround and prop schematics* for final approval

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| *Provide your answer here…* |

## Task 2

* Begin work on the 3-D model prototype for your two characters.  
  Create the following:  
  - Prototype of character models in ‘A-Pose’ or ‘T-Pose’  
  - Prototype of accompanying prop/tool for the two characters  
  - Basic shading/textures on each of the above

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| *Provide your answer here…* |

* Prepare a *show and tell* presentation demonstrating progress made on the prototype and accompanying prop/tool.   
  Note down feedback from participants & the lecturer and plan out any required/suggested changes for the second pass of the model.

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| *Provide your answer here…* |

* Based on the feedback received from presenting the prototype begin work on the second pass of the character model.  
    
  Apply proper shading according to the technical requirements.  
  Apply an armature to the model  
  Ensure that the topology of the model (vertex count and no N-gons) meet the task requirements

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| *Provide your answer here…* |

* Develop the required animation cycles for the model in Blender.

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| *Provide your answer here…* |

* Perform an evaluation of the second pass models, textures, and animations to compare them to the original design brief and concept art.   
  Present the second pass of the model to the lecturer and obtain feedback and/or final approval for:  
  - character model topology  
  - prop/accessory topology  
  - texturing for both  
  - rigging/armature for both  
  - animations for both.

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| *Provide your answer here…* |

* If any feedback from the lecturer required changes, note down the feedback and implement the required changes.

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| *Provide your answer here…* |

* Render the required 'showreel' of the two characters performing their animations. Export each character as a game ready .fbx file with the texture and animations baked in. Confirm that the exported files can be brought into Unity3D and display correctly.  
    
  Prepare for submission by placing the following into a .zip folder:  
  - All project documentation (concept art, focus testing, presentations, etc, etc)  
  - .blender file for the original prototype version of both characters and their props  
  - .blender file for the second/final pass of both characters and their prop, including the final animation, textures and lighting  
  - rendered video files demonstrating the animations in a 'showreel'  
  - exported .fbx file with animations and textures baked in as a game ready file  
    
  Confirm with the lecturer that your submission file contains all required elements and obtain their final sign off before submitting to blackboard.