# Student Version

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| **Section A – Program/Course details** | | | |
| **Qualification code:** | ICT30115 | **Qualification title:** | Certificate III in Information, Digital Media and Technology |
| **Unit code:** | ICTGAM301 ICTGAM302 ICTWEB201 ICTICT305 | **Unit title:** | Apply simple modelling techniques Design and apply simple textures to digital art Use social media tools for collaboration and engagement Identify and use current industry specific technologies |
| **Department name:** | BDIT, Computer and Information Technology | **CRN number:** | Enter CRN number |

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| **Section B – Assessment task details** | | | |
| **Assessment number:** | 2 of 2 | **Semester/Year:** | 2/2019 |
| **Due date:** | Session 8 | **Duration of assessment:** | 3 Weeks |
| **Assessment method** | Project/Report/Portfolio | **Assessment task results** | ☒Ungraded result |
| ☐Other: Click here to enter text. |

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| **Section C – Instructions to students** |
| **Task instructions:** |
| The following assessment task, Design and Texture a 3D Gaming Asset, is your second assessment task for 3D Texturing  Using Autodesk Maya, you are required to design and develop a simple 3d Asset for use in an Interactive Game Environment. This asset must fulfil the criteria of a gaming platform, i.e. Models should be within a reasonable vertex budget, Textures should be appropriate size etc.  It is important that you spend time developing the asset, i.e. collecting reference material, sketching etc. and experiment with texturing, rendering. With particular attention to texturing, think of your model as a blank canvas, it will only look as good as the final coat of paint. Sufficient evidence must be shown to your lecturer in order to be found competent.  You are also required to upload any 3d models developed for the game to Sketchfab an online social media platform to publish, share and discover, 3D content. Sketchfab provides a viewer based on the WebGL and WebVR technologies that allows users to display 3D models on the web. Once uploaded you will be required to post your work in the subject forum on Brightspace for presentation, critique and review for potential improvements.  This project has been divided into 4 parts. Each part must be completed as per the instructions. The 4 parts are as Follows.  Part 1 â€“ Planning and research â€“ Collecting reference material, developing an idea for a complex model Part 2 â€“ Modelling and Texturing â€“ Construct your model using Maya/3d Coat â€“ Texture your asset using the software of your choice Part 3 â€“ Complete feedback section, by seeking feedback and making changes as necessary  Part 4 â€“ Upload and publish your final asset to social media site Sketchfab and setup lighting and materials  Submission Package A zipped (.zip, .rar etc.) folder must be submitted to Brightspace containing:  1. Your Maya files (.mb), 3d Coat files (.3b) 2. Your textures used to colour the model (jpeg, png, tga etc.) 3. Your reference images  4. Feedback Section checked and completed before submission (IMPOR |

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| **Section D – Conditions for assessment** | |
| **Conditions:**  Student to complete and attach Assessment Submission Cover Sheet to the completed Assessment Task. | |
| • Assessment to be completed individually • The following technologies must be utilised: Maya, 3d Coat, Photoshop • Learners are expected to dedicate time to developing this assessment task both in and out of the classroom • Learners need to adhere to all relevant OHS requirements • Learners must submit: All required working files, Documentation & Any other assets that you feel may be required •This is an individual task; however, you are required to get information, feedback and ideas from your assessor, peers and industry to help complete the assessment  • You may resubmit this task if not successful within the enrolment period as per Holmesglen conducting assessment procedure. • You will have the opportunity to resubmit if any part of the assessment is deemed unsatisfactory (one resubmit allowed per task). • You can appeal an assessment decision according to the Holmesglen Assessment Complaints and Appeals Procedure. • If you feel you require special allowance or adjustment to this task, please decide with your assessor within one week of commencing this assessment, • Learners must submit: All required working files, Documentation & Any other assets that you feel may be required • This Assessment task must be uploaded and submitted to BrightSpace. All development files should be zipped (.zip) and name appropriately. E.g. “yourname\_Assessment2”. | |
| **Equipment/resources students must supply:** | **Equipment/resources to be provided by the RTO:** |
| N/A | Computer/Maya/3d Coat/Photoshop/Word |

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| **Section E – Marking Sheet - Student Answer Sheet** | | | |
| **Student ID:** |  | **Student name:** |  |
| **Unit code:** | ICTGAM301 ICTGAM302 ICTWEB201 ICTICT305 | **Unit title:** | Apply simple modelling techniques Design and apply simple textures to digital art Use social media tools for collaboration and engagement Identify and use current industry specific technologies |
| **Date:** |  | | |

**Project/Report/Portfolio task**

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| **Criteria for assessment** | | **Satisfactory** | | **Comment** |
| **Yes** | **No** |
| **The following has been submitted for assessment:** | | | | |
| Completed simple model | | ☐ | ☐ |  |
| Maya files (.mb), 3d Coat files (.3b) | | ☐ | ☐ |  |
| Textures used to colour the model (jpeg, png, tga etc.) | | ☐ | ☐ |  |
| Reference images | | ☐ | ☐ |  |
| Link to complex model uploaded to Sketchfab | | ☐ | ☐ |  |
| Feedback sought and feedback section complete | | ☐ | ☐ |  |
| Document with the relevant sections below filled out | | ☐ | ☐ |  |
| **Marking criteria for each product document/s supplied:** | | | | |
| 1 | Planning and Research |  |  |  |
|  | Interpret the brief to clarify design, texture generation, and the delivery requirements in consultation with the client | ☐ | ☐ |  |
|  | Identify the design and technical constraints | ☐ | ☐ |  |
|  | Develop a production workflow and schedule and perform according to work plan and organisational requirements and values review own production workflow | ☐ | ☐ |  |
|  | Research and analyse information and communicate effectively using a range of media and formats | ☐ | ☐ |  |
|  | Determine and confirm the requirements related to lighting and rendering | ☐ | ☐ |  |
| 2 | Modeling and Texturing |  |  |  |
|  | Create and apply 3d geometry | ☐ | ☐ |  |
|  | Use the appropriate methods and techniques to achieve the desired texturing and shading outcome | ☐ | ☐ |  |
|  | Assess the nature of the surface topology and apply UV mapping methods | ☐ | ☐ |  |
|  | Acquire new textures ensure that the resolution of the acquired texture meets resolution requirements | ☐ | ☐ |  |
|  | Layer and enhance the texture and apply the texture to the model | ☐ | ☐ |  |
| 3 | **Feedback** |  |  |  |
|  | Seek and respond positively to comments and feedback from peers and clients using evaluation techniques and make continuous improvements | ☐ | ☐ |  |
|  | Present test renders to the client for approval | ☐ | ☐ |  |
|  | Make technical or design adjustments consistent with the feedback and with budgetary constraints | ☐ | ☐ |  |
| 4 | **Final Asset and Sketchfab Render** |  |  |  |
|  | Upload to social media site Sketchfab and apply lighting to test the reaction of the textures, complete final renders. | ☐ | ☐ |  |
|  | Save and archive files in agreed formats and repository | ☐ | ☐ |  |
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| **Section F – Feedback to Student** | | | | | | |
| **Has the student successfully completed this assessment task?** | | | | | **Yes** | **No** |
| **☐** | **☐** |
| **Additional Assessor comments (as appropriate):** | | | | | | |
|  | | | | | | |
| **Resubmission allowed:** | **Yes ☐** | **No ☐** | **Resubmission due date:** |  | | |
| **Assessor name:** |  | | | | | |
| **Assessor signature:** |  | | | | | |
| **Student signature:** |  | | | | | |
| **Date:** |  | | | | | |

**Supporting document**

# Design and Develop Complex 3D Game Asset - Documentation

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| **Unit code**: | ICTGAM301 ICTGAM302 ICTWEB201 ICTICT305 | **Unit title:** | Apply simple modelling techniques Design and apply simple textures to digital art Use social media tools for collaboration and engagement Identify and use current industry specific technologies |
| **Student ID:** |  | **Student name:** |  |
| **Date of submission:** |  | **Student signature**: |  |

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| **Part 1 - Planning and research** | |
| **Clarify the design requirements** |  |
| 1.01 You are required to Interpret the brief to clarify design, texture generation, and the delivery requirements. | *i tried to make a sword* |
| 1.02 Identify the design and technical constraints of the assessment including examples such as filetypes. | *make a maya model then uv the model after that export it as an obj file then put it in a 3d coat* |
| **Software** |  |
| 1.03 List the software that best suits the production and delivery platform for which 3-D digital models are being designed and created describing the purpose of each. | *maya and 3d coat* |
| 1.04 Identify the properties of two (2) basic shaders in Maya | Lambert  Stingray |
|  |  |
| **Workflow** |  |
| 1.05 List the production schedule for your asset | *day one make the model, day tw* |
| 1.06 List the software you are planning on using to render your asset. | *maya, 3d coat* |
| 1.07 List three (3) UV mapping techniques. | *automatic,* ***Mip-mapping Bump mapping and Displacement mapping*** |
| 1.08 List two (2) methods of capturing digital images for use as textures | *Statistical and the other one i is a Structural methods* |
| 1.09 List appropriate resolutions for textures that will be used in games | *128 by 128 256 by 256 2048 by 2048* |
| 1.10 Explain in a sentence the relationship between topology and deformation | *the relationship is that you are changing the shape to make it like different* |
| 1.11 List a method of creating geometry and 3 methods of manipulating geometry. | *when you make it look like the real thing and it can move.*  *So select Mesh Tools > Create Polygon Tool.*  *Click to place the first vertex. Maya places vertices on the ground plane unless you snap them to existing geometry.*  *Click to place the next vertex. Maya creates an edge between the first point and the last point you placed.*  *Place another vertex. ...*  *Do any of the following.*  *changing the shape of the object, reduced faces of the object and smoothing or beveling the object* |
| 1.12 List 2 ways you can prevent injuries from occurring whilst using screens and keyboards for extended periods of time. | *make sure you stretch after setting for 1 hour always have a good chair* |
| 1.13 Outline intellectual property considerations when using images from external sources | *make sure you can use it and you don't get copyrighted* |
| 1.14 Describe in a sentence the method of rendering you plan to use to render your asset. | *make sure everything is fine and happy with you your choice before you can go on* |
| 1.15 List the responsibilities of a Level designer, 3D modeller and Texture artist as part of a game development project | Level designer    3D modeller  Texture artist |
| **Issues and Troubleshooting** |  |
| 1.16 Describe two (2) common issues and challenges that you could potentially face while designing and creating your 3-D digital model | it may not look like what you wanted to look like, it could get copyrighted if you copied other people work and made it like to similar |
| 1.17 List two (2) online resources for finding information on and troubleshooting software used during game development | Maya information https://help.autodesk.com/view/MAYAUL/2019/ENU/for troubleshooting <https://www.youtube.com/watch?v=gm78fkhz1-0>  Photoshop information  <https://helpx.adobe.com/au/support/photoshop.html>  troubleshooting  t<https://www.youtube.com/watch?v=M2OYanSS5RY>  3d coat information  <https://3dcoat.com/forum/index.php?/topic/21840-need-help-questions-tutorial-questions/>  troubleshooing <https://lesterbanks.com/2018/09/troubleshooting-3dcs-retopo-workspace/> |
| 1.18 List one issue you encountered whilst working on the asset, and how you solved the problem. | getting it into 3d coat, then i used the right file type |
| 1.19 List one environmental consideration caused by using game development software. | using to much power which could coat a lot of money |
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| **Research and Reference** | |
| 1.16 Research and collect a variety of 3D renders. These may be similar to your concept idea or they may simply use features or styles that you find appealing. | |
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| **Part 2 - Modelling and Texturing** |
| **Modelling** |
| Once you have interpreted the brief and developed an idea for a gaming asset, begin modelling your 3D Asset, using Autodesk Maya.  You are required to record work in progress screenshots of your modelling/texturing. |
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| **Texturing** |
| Colour and texture your simple asset appropriately according to your researched reference material. Record a still render of your textured model uploaded to Sketchfab in the cells below. |
| <Rendered 3D textured model/s> |

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| **Part 3 – Peer Feedback** | | | | | | | |
| Before moving forward learners will need to organize a meeting with their teacher to obtain approval and feedback before finalizing there Game Asset. THIS MUST BE COMPLETED AND CHECKED BY YOUR TEACHER BEFORE SUBMISSION. | | | | | | | |
| Once you complete modelling your asset upload it to Sketchfab and then post them on the development forum on Brightspace. Ask your peers for feedback on your project and potential areas for improvement. Ask your peers to consider information such as:   * Do you have any suggestion for improving my 3D models? * Can anyone suggest how I could go about improving the texture of my model? * Ask the group to play devil’s advocate to get a critical opinion of your model.   After reflecting on this information make any necessary changes to your project.  **Feedback** | | | | | | | |
| *Sword looks good, make less shiny.* | | | | | | | |
| **Checklist (To be completed by the learner’s facilitator)** | | | | | **Yes** | | **No** |
| 1. The learner has verbally demonstrated a clear understanding of the project requirements and resources that need to be developed, software that can be utilized and developed a work plan and schedule. | | | | | X | | ☐ |
| 2. Leaner has clarified the software and modelling techniques that best suits production requirements with teacher. | | | | | X | | ☐ |
| 3. The learner has a clear understanding of the target platform and technical requirements. | | | | | X | | ☐ |
| 4. The learner has uploaded completed models to Sketchfab and the development forum for feedback and reviewed there work plan to make sure key milestones are met. | | | | | X | | ☐ |
| 5. The learner has reflected on possible changes to improve the visual design of the environment and models | | | | | X | | ☐ |
| 6. Learner has confirmed with relevant personnel that models have not infringed copyright | | | | | X | | ☐ |
| 7. Learner has researched and analyzed information sources and data related to the digital media industry | | | | | X | | ☐ |
| 8. Leaner has used trouble shooting methods to clarify and solve any issues. | | | | | X | | ☐ |
| **Assessor Name** | Luke Pham | **Assessor Signature** | Luke Pham | **Date** | | *27/11/19* | |

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| **Part 4 – Final Asset and Sketchfab Render** |
| **Sketchfab** |
| Export your models, textures and upload to Sketchfab. Make sure to setup materials, textures and lighting. Once you are happy with your asset, publish it to Sketchfab. Class time will be allocated to do this during week 10.  *Finally, make backup copies of all your files and complete workplace documentation, submit a link to your final model uploaded to Sketchfab and then submit to Brightspace.* |
| **https://skfb.ly/6OVEM** |

# Assessment Submission Cover Sheet (VET)

Student to complete relevant sections and attach this cover sheet to each assessment task for submission.

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| **Student information** | | | *To be completed by Student* |
| **Student name:** |  | **Student ID:** |  |

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| **Program/Course details** | | | |
| **Qualification code:** | ICT30115 | **Qualification title:** | Certificate III in Information, Digital Media and Technology |
| **Unit code:** | ICTGAM301 ICTGAM302 ICTWEB201 ICTICT305 | **Unit title:** | Apply simple modelling techniques Design and apply simple textures to digital art Use social media tools for collaboration and engagement Identify and use current industry specific technologies |
| **Department name:** | BDIT, Computer and Information Technology | **CRN number:** | Enter CRN number |

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| **Assessment information** | | | *To be completed by Student* | | | | |
| **Teacher name:** |  | | | | | | |
| **Due date:** | Session 8 | **Date submitted:** | | |  | **Re-submission:** | ☐ |
|  | | | | | | | |
| **Student declaration** | | | |  | | | |
| By submitting this assessment task and signing the below, I acknowledge and agree that:   1. This completed assessment task is my own work. 2. I understand the serious nature of plagiarism and I am aware of the penalties that exist for breaching this. 3. I have kept a copy of this assessment task. 4. The assessor may provide a copy of this assessment task to another member of the Institute for validation and/or benchmarking purposes. | | | | | | | |

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| **Student signature**  For electronic submissions: By typing your name in the student signature field, you are accepting the above declaration. |  |

**Note:**

**Assessor to attach a photocopy of the completed Marking Guide (Section E) from the Student version of the Assessment Task.**

**Final result of the subject/unit will be entered on Banner by the teacher/assessor once all assessment tasks have been assessed.**