


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

<b>Assessment Title</b>	<b>AT02 Blender Animation</b>		
<b>Unit National Code &amp; Title</b>	ICTGAM427 Use 3-D software interface and toolsets (Release 1)		
<b>Date Due</b>	<b>Session 10</b>	<b>Date Received</b>	03-05-2022

<b>Student Name</b>	<b>Xihao Chen</b>	<b>Student ID</b>	30053752
<b>Student Declaration</b>	I declare that the evidence submitted is my own work:  .....		

<b>Assessor Name</b>			
<b>Assessment Decision</b>	<input type="checkbox"/> Satisfactory	<input type="checkbox"/> Not Yet Satisfactory	
<b>Assessor Signature</b>		<b>Date</b>	
<b>Is student eligible for reassessment (Re-sit)?</b>	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<b>Reassessment Date:</b>

### Feedback to student

Via Blackboard (LMS) – Please check [Grade] section.

### Feedback from student

Via Blackboard (LMS) – Please use [Comment] section during submission.

<b>Student signature</b>		<b>Date</b>	
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### Assessment Instructions

#### TO THE ASSESSOR

Type of Assessment	Project
Duration of Assessment	5 sessions (session 4 – session 9)
Location of Assessment	Classroom (computer lab), at home
Conditions	<p>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.</p> <p>This includes access to:</p> <ul style="list-style-type: none"><li>• reference materials applicable to creating 3-D animation and digital effects</li><li>• required hardware and software and peripheral devices</li><li>• games engine</li><li>• file storage</li><li>• required 3-D modelling and animation software</li></ul> <p>Learners are required to complete the required tasks and submit the required evidence electronically via Blackboard.</p>
Elements and Criteria	<p>As detailed in the assessment plan.</p> <p>You are required to make sure that all students meet the elements, performance criteria and foundation skill items as outlined in the provided checklist.</p>

#### TO THE STUDENT

Purpose of Assessment	<p>You are required to show you can:</p> <p>ICTGAM427 - Use 3-D software interface and toolsets</p> <ul style="list-style-type: none"><li>• Locate and identify 3-D software navigation controls</li><li>• Locate and identify 3-D animation toolsets and select required menu categories</li><li>• Initiate and use software-support materials and customise application interface</li><li>• Identify and plan 3-D application import and export procedures and use application feedback</li></ul> <p>You are required to meet the elements, performance criteria and foundation skill items as outlined.</p>
Allowable Materials	<p>Blackboard (Topic by topic) will include the following: Weekly Readings, Class notes, and Weekly Activities.</p> <p>Internet resources must be recorded as references for the assessment.</p>

### 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:

- Research and identify 3-D modelling and animation software
  - Navigate a 3-D software environment
  - Prepare for 3-D production
  - Produce an animated 3-D model

## Production Diary Documentation Guidance\Requirements:

Throughout the assessment task you are required to research, gather ideas and inspiration, document examples, evaluate software, up-skill, and undertake professional conversations.

Production documentation should include (but is not limited to) a production document. Your production documentation should feature research findings, design and development notes, textual explanations and reviews, written records of conversations, production tasks and timelines, visual references (such as images and videos), links, and other types of media.

There is an expectation that all visual content is supplemented by supporting written documentation to provide a clear overview of intent.

Your final production documentation must clearly show that you have evidence to support the outlined requirements for each part included in this assessment. All production documentation needs to contain evidence for all assessment requirements to be considered complete.

## Scenario

You have just started working as an entry-level game designer for 'Immersive Studios'. The studio manager wants to assess your ability to efficiently navigate and use 3-D software, so they have asked you to create a simple animation for a 3-D model that will be suitable for implementation in a video game. Throughout the production process you will need to consult

with the studio manager so they may observe your performance at each different stage of production. You will also need to keep a short production diary in order to document the processes you adopt.

### Criteria

In order to create the required animation you will need to source a 3-D model to animate. The 3-D model that you use for the assessment should be rigged, but not animated in any way. You may use a suitably rigged 3-D model that you have personally created, or you may generate a rigged 3-D character model using Adobe Mixamo.

Note that Mixamo is only to be used for sourcing a suitable 3-D model for use in the production, no Mixamo animations are to be included.

At the steps that require you to verbally consult and gain feedback, your lecturer will play the role of the **studio manager** who is supervising your work for Immersive Studios.

### Part 1 – Research and identify 3-D software

1. The first step in planning production is to identify the task requirements and research the software you may potentially use to produce the animated 3-D model. In your production diary, detail the animation you are going to create and the 3-D model that you will use to implement it. Then you will need to conduct research relating to Blender as well as at least one (1) other 3-D modelling and animation capable software that is an industry-standard within the game development industry. Document and evaluate your research in your production diary, identifying the capabilities, toolsets, and features of the software that are relevant to the assessment task.
2. As a part of your conducted research you should explore the primary processes for different types of navigation within the 3-D environment. In your production diary, briefly describe the processes for panning, zooming, and rotating the viewport in Blender.
3. It is important that you understand how to improve your own workflow when using Blender. In your production diary you need to identify and briefly describe at least three (3) hotkeys, two (2) alternative navigation procedures, and two (2) input procedures that will help to improve your performance when using Blender.

### Part 2 – Navigate the 3-D software environment

1. Once you have researched how to effectively use Blender, you will need to demonstrate your ability to navigate its 3-D environment efficiently to the studio manager. In consultation with the studio manager, demonstrate your ability to efficiently navigate a 3-D environment by performing the following series of steps.
  - a. Identify how to access the following general toolsets in Blender – **'3-D Modelling', 'Animation', 'UV editing', 'Texture Painting', and 'Shading'**.
  - b. Identify, analyse, and associate the following menus and menu categories within Blender, as according to the task requirements – **primary menu bar** (File, Edit, Help), **object interaction menu** (object-mode, edit-mode), **object interaction sub-menu** (Select, Add, Vertex, Edge, Face), and the **editor type menu**.
  - c. Demonstrate how to use the following transformation types with 3-D geometry – **translation, rotation, scaling, and extrusion**.

- d. Demonstrate how to use at least three (3) different application hotkeys in Blender.
  - e. Demonstrate how to customise the user-interface according to the task requirements and the procedural needs of toolsets by creating and saving a custom workspace in Blender. Your custom workspace needs to include your own configurations of user panels and windows.
2. It is also important that you understand appropriate actions to take when issues are encountered while using Blender. In consultation with the studio manager, demonstrate your ability to utilise the following support procedures, documentation, and help files native to Blender.
  - a. Identify and access the Manual from within Blender.
  - b. Identify and access the Tutorials page from within Blender.
  - c. Identify and access the Support page from within Blender.
  - d. Identify and access the User Communities page from within Blender.

### Part 3 – Prepare for production

1. After successfully demonstrating your ability to effectively navigate and use Blender, you are ready to begin looking for a range of reference materials to use in producing the required animation. In your production diary document at least three (3) different reference materials that are relevant to the animation you will be producing.
2. Once you have identified a range of relevant reference materials you will need to present them to the studio manager for approval. In consultation with the studio manager, present the reference materials you have identified and confirm that they are relevant and suitable to production.
3. Before you begin production of the animation it is important that you confirm the relevant file-management and project configuration procedures to follow. In consultation with the studio manager, discuss the relevant configuration properties for the project file as well as the procedures for opening, importing, saving, and exporting files from within Blender. You should also discuss relevant sources for finding user feedback for Blender so that you can use them in production as necessary.

### Part 4 – Produce animated 3-D model

1. At this stage you should be ready to begin producing the required animation. Prepare and create the required project file(s) as according to your discussions with the studio manager. Navigate and interact with Blender's interface and toolsets in order to generate the required animation for your selected 3-D model. Manage your files as according to the file-management procedures discussed with the studio manager, including using appropriate naming conventions and exporting the final file for the animated 3-D model as an FBX with appropriate specifications.
2. Lastly it is important that you demonstrate how to troubleshoot errors and other problem scenarios that you may encounter when using Blender. Describe at least one (1) example of an error scenario that you have encountered while using Blender in your production diary. You also need to include at least one (1) screenshot of some user feedback and one (1) screenshot of a page from the native support documentation for Blender that both relate to the example error scenario.