Assessment Submission Coversheet:  
Computer Graphics

Task 1 – Create a Real-Time 3D OpenGL Application

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| **Course Stream:** | 10702NAT – Advanced Diploma of Professional Game Development |
| **Assessment Name:** | Computer Graphics |
| **Units Covered:** | ICTICT427 – Identify, evaluate and apply current industry-specific technologies to meet organisational needs |
| **Teacher/s:** | Jesse James Donlevy |
| **Due Date:** | 02/04/2023 |
| **Date of Submission:** | *Will be automatically recorded on Canvas* |
| **Assessment Work Location** | Canvas |

*For more information on these parts, please click on the* [***Subject and Assessment Guide***](https://aie.instructure.com/courses/1027/files/723185?wrap=1) *link in the course* ***Game Programming Year 2*** *under the subject* ***Computer Graphics*** *on* [*https://aie.instructure.com*](https://aie.instructure.com) *and read the* ***2023 Subject & Assessment Guide – Computer Graphics***

**Naming Convention**

* Yourname\_CG\_CPP\_SourceFiles.zip
* Yourname\_CG\_CPP\_ReleaseBuild.zip

**Declaration**

By submitting this work under my name, I declare that my submission is my own work with respect to plagiarism and does not violate any copyright laws. I have retained a copy of this assessment material that I can produce if requested.

Tick to acknowledge you have read and agree with this declaration.

Name: Please enter you name. Date: Please enter the date

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Task 1 – Create a Real-Time 3D OpenGL Application

**Work Submitted:***Tick to acknowledge you have submitted this part of the assessment.*

1. Completed Real-Time 3D OpenGL Application:   
   Using the Bootstrap Library I was able to create a real-time 3D graphics engine. The engine utilised multiple shaders to create different lighting effects and post-processing effects.
   * 3D Models Rendered With Custom GLSL Shader: I was able to load in multiple different 3D models using my engine. I was also able to load in a high resolution 3d model of a robot into my engine.
   * Texture Mapping: I was able to map textures to planes and complex triangle meshes. These textures influenced the colour of the object as well as the interaction of the lighting with the object.
   * 3D Lighting: I was able to implement a couple of instances of 3D lighting into my scene
   * Follow Good Coding Practices: In a few short sentences or dot points, please enumerate and describe what you submitted for this part of the assessment.

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Name: Please enter you name. Date: Please enter the date