

Assessment Submission Coversheet: Computer Graphics

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

| Student Name: | Justin Green |
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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: | 31/03/2023 |
| Date of Submission: | Will be automatically recorded on Canvas |
| Assessment Work Location | Canvas |

For more information on these parts, please click on the <u>Subject and Assessment Guide</u> link in the course **Game Programming Year 2** under the subject **Computer Graphics** on 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: Justin Green Date: 02/04/23





Assessment Submission Coversheet: Computer Graphics

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:
 - Submitted a 3D real-time executable application implementing the OpenGL Library. The application presents just what OpenGL can offer in terms of 3D model rendering, texture mapping and 3D Lighting.
 - o SD Models Rendered With Custom GLSL Shader
 - Shaders include:
 - Simple
 - Coloured
 - Phong
 - Normal Lit
 - Textured
 - Post effects
 - particle
 - Texture Mapping:
 - The application loads in the 3D models using a mix of the AIE C++ bootstrap and GLSL fragment and vertex shaders, which maps any texture onto a obj that has an associated MTL file.
 - o X 3D Lighting:
 - The Application include directional lighting and point lights in 3d space which affect shaders in real time.
 - o Follow Good Coding Practices:
 - Ensured proper coding standards were met in regards to coding practices and documentation.

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Name: Justin Green Date: 02/04/23