**IMAT3906 – Advanced Shader Programming Report**

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# Introduction (200 words)

* Explain the purpose of the project (ie. to look at advanced opengl techniques)
* Briefly talk about the specific techniques that will be demonstrated and what their purpose is.
* Briefly mention how advanced techniques are used in games

#### Specular and Diffuse Mapping

#### Normal Mapping

#### Parallax Mapping

#### Shadow Mapping

# Resources (200 words)

* Mention the main resource being Joey Devries on LearnOpenGL
* Cite some other online resources

# Process (300 words)

* Outline of the process of taking stuff from the CPU to the GPU and briefly how it is then used on the GPU via the shader. Including screenshots of where variables/vertices are coming from and going in respect to the shader-pipeline.

#### Specular and Diffuse Mapping

#### Normal Mapping

#### Parallax Mapping

#### Shadow Mapping

# Reflection (200 words)

* Briefly talk about how the project turned out.
* Talk about any points that were difficult and any issues with them.
* Talk about what I would do differently if I could start over.

# Appendix (100 words)

* Bibliography of the resources used
* Brief discussion around some games that implement the advanced techniques really well , maybe how games at the end of 2nd gen consoles life span still managed to push graphical fidelity with the help of these adanced techniques to gain more detailed models and scenes without rhe extra vertices