Student name: Adam Hurst (s5226058)

Programme: BSc GSWE

Title: Development of Infinite Procedural Planet Generation with Game Object Persistence

Outline:

This project will design and implement a system to infinitely and procedurally create planets within a 3d environment. These planets and their environment will be persistent meaning player interaction within the simulation will remain forever, saved in some form of data structure. Initially, the focus of research will be on the creation andrandomisationof the procedural planets.Additionally**,** research will be done into methods to allow for persistence within the simulation, and how best to store this data.The final product will be a demo showcasing planet generation and persistency of player interaction, using a custom game engine designed during the Game Engine Programmingunit.

Potential primary supervisors: Karsten Pedersen / Leigh McLoughlin / Simant Prakoonwit / Andrew Watson