

## Project Overview

The aim of this project is to have a 3D environment based on the edge of a town, where the character being controlled can walk along a path leading through a lightly forested area and onto a path that leads into the edge of town. There will be a number of other animated characters in the scene and the controlling character will have the option to cast spells over other characters to immobilize them and change their colour.

## Basic Features

All objects will be textured, and blinn-phong lighting will be used to manage the lighting from the sun, and the spotlighting from street lights. The project will load and manage multiple OBJ files and the aim is to animate the characters within the game so they move realistically. The camera itself will orbit around our main character from a third person perspective.

During parts of the scene, rain will be displayed in the scene at a random rate with a use of a particle system.

## Advanced Features

Gamma correction will be handled in the shaders to make the scene look more realistic.

Characters will can be manipulated and have set animations for given events.

## Stretch Goals

As our assignment already includes a decent amount of complexity and potential issues, these are topics we want to have but my not have time to do.

- Models that exhibit their own free will and move around the map (Some form of AI)
- Implement face culling to optimize our hardware usage and improve performance
- Deferred rendering

Student ID's

Andrew Graham: a1687414

Sean Marciniak: a1668979

Ben Weatherall: a1617712