

CSYE 7270

Building Virtual Environments

Assignment 3 – Shaders and Particle Effects

Professor: Nik Bear Brown

Due: July 9, 2020

TA: Rui Xia <xia.r@northeastern.edu>

Assignment 3 – Shaders and Particle Effects

Counts towards assignment score

Create two shaders and two particle effects for your game

One shader must have opacity, ambient, fresnel, specular effects and random effects.

One shader must have animation.

One particle effect must have a trailing smoke effect, the opacity and color of the smoke must be adjustable as an exposed parameter. See the following for inspiration All Patronuses - Harry Potter 1-8

<https://youtu.be/vwwiMCtviZM>

One particle effect must have some form of explosion.

Grading Rubric

Did I explain my code and design clearly? (20 Points)

How effective are you at explaining the code and assets you created for your game?

Your code review score will be scaled to a range of 0 to 5, then multiplied by 5 and be used for this score.

Did I meet every requirement? (20 Points)

Did you meet every requirement asked of you.

Did I explain my evaluation clearly? (10 Points)

Clearly explain the code and play-testing.

Is there play testing?

Playable (10 Points)

It MUST run.

What code is yours and what have you adapted? (10 Points)

You must explain what code you wrote and what you have done that is different. Failure to cite ANY code will result in a zero for this section.

Licensing (5 Points)

Did I explain my licensing clearly? Failure to cite a clear license will result in a zero for this section.

Gameplay Video (15 Points)

Create a gameplay video that explains how to play the game and how you created it.

For gameplay see Nik Bear Brown - Game Programming Classes student work

<https://www.youtube.com/playlist?list=PLIS8mRE04MvrZLvLvzZzDV8yqeBasdHfD>

Scope and overall quality (10 Points)

Is the scope enough for the assignment? The TA will rate it like one would rate a game on the Appstore.