

# CSYE 7270

## Building Virtual Environments

### Assignment 2 – Learning Unreal

Professor: Nik Bear Brown

Due: June 9, 2020

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

#### Assignment 2 – Learning Unreal

Counts towards assignment score

Implement a running game that replicates the “roll a ball” game the video Roll A Ball in Unreal Engine 4 Tutorial - Introduction and Demo (Part 1) <https://youtu.be/5rVJv3iNmzQ>

Propose five significant feature enhancements to the game for approval to the TA.  
These must be pre-approved.

Implement five significant feature enhancements to the game.

See <https://www.skonks.com/post/skunker-game-ai-learning-games>

Create a short video of you playing your game that shows its features.

For examples, see CSYE 7270 Assignment 1 (Game Programming) [https://youtu.be/6Db\\_1zyul5U](https://youtu.be/6Db_1zyul5U)

You can start with the Unreal built-in ball game template. See Unreal Engine 4 - Tutorials <https://www.youtube.com/playlist?list=PLxEqayGol3V1NgWAwde10DMhfGhbx5Ofp>

But the game must have pick-ups that disappear, move, and a score like the Unity and “roll-a-ball” versions.

#### Grading Rubric

*Did I explain my code and design clearly? (40 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 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.