FIT2096 - Games Programming 1

Lab Week01: C++ and Introduction to the Game Engine

At the end of this class you should be able to:

1. Create a new Unreal Engine 4 project (C++)
2. Use the mouse and keyboard to navigate around a game level

Part 1:

- What role do you want to be doing in the games industry?
    - Programmer (Engine, Gameplay, Tools?)
    - Designer
    - Artist
- Spend 10 minutes doing an internet search for Job Advertisements and Position Descriptions for the type of job you would like to do in the Games industry. Consider the following:
    - What skills are they looking for?
    - How much experience are they asking for?
    - What entry-level position would you need to start at to get to your preferred job?
    - Post your findings in the General Discussion forum, under the thread, 'Week 1: Jobs in the games industry'

Part 2:

Submission:

When you have finished this section:

- Add a comment to the projectile code with your name and take a screenshot of the Visual Studio editor window.
- Take another screenshot of the Unreal Engine editor with your project changes visible.
- If you complete the extended section, take a screenshot of your additional objects.
- Email all of these screenshots to your demonstrator by Tuesday of Week 2.

Task

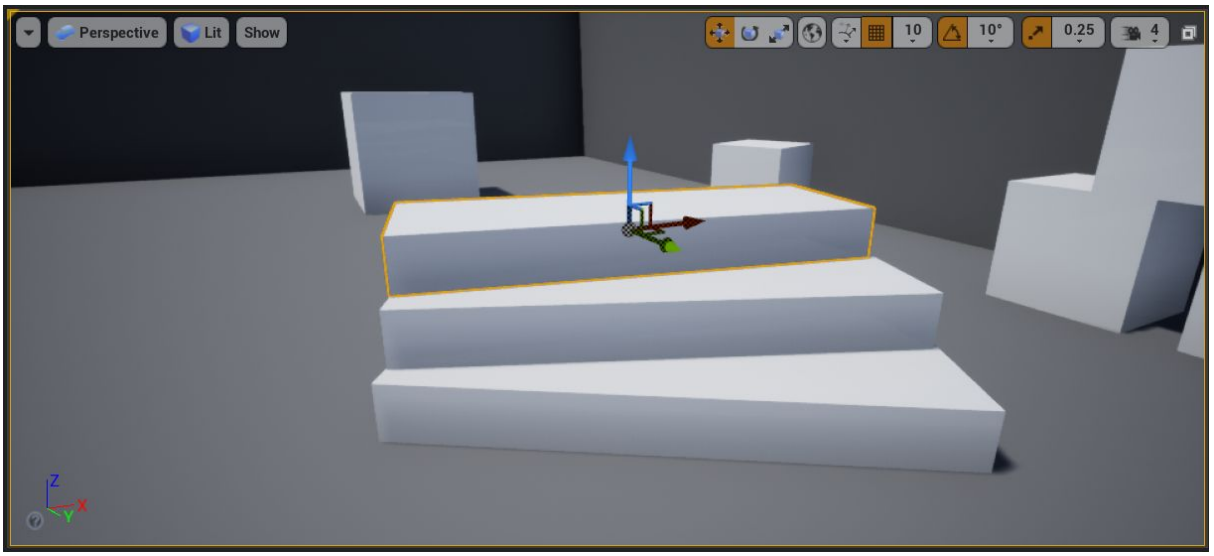
You will be expected to create Unreal Engine projects for all the labs. Watch the video 'Week 01 - Creating a UE4 project' on Moodle and then do the following tasks.

- Start the editor
    - Look through the standard project templates
- Create a First Person project with C++
- Play the project to look around the default level
- Go to Visual Studio, find the projectile class code, and change the initial and maximum projectile speed to 10000.0f
- Compile and Play the project again to see that your change has worked.

Extended (On your own)

Once you are sure you can build and run a project, try learning your way around the editor.

- Use the translate, rotate, and scale tools to turn one of the existing white physics blocks into a low, flat step. Find the keyboard shortcuts to speed this up.
- Hold down Alt while translating to create another step, and place it above the first.
- Use Right-click, Edit, Duplicate (Or Ctrl-W) to create another step, to start making a staircase.



If your staircase is like mine, it toppled over when you ran the game! How might you stop that? Could something on the Details tab on the right help?

Part 3:

As part of this unit there will be times that you will need to do your own research. Take a look at the following links and familiarise yourself with the type of material available via each.

- The **Unreal Engine YouTube Channel** has a lot of excellent video tutorials on various aspects of the engine. Take a look at what is available: https://www.youtube.com/channel/UCBobmJyzsJ6Ll7UbfhI4iwQ
- Epic also provides some great online documentation for all aspects of the Engine. Check it out at the following link: https://docs.unrealengine.com/latest/INT/

References:

- Introduction to the Editor | v4.7 | Unreal Engine: https://www.youtube.com/playlist?list=PLZlv_N0_O1gasd4IcOe9Cx9wHoBB7rxFl
- Introduction to Level Creation | v4.7 | Unreal Engine: https://www.youtube.com/playlist?list=PLZlv_N0_O1gak1_FoAJVrEGiLIploeF3F