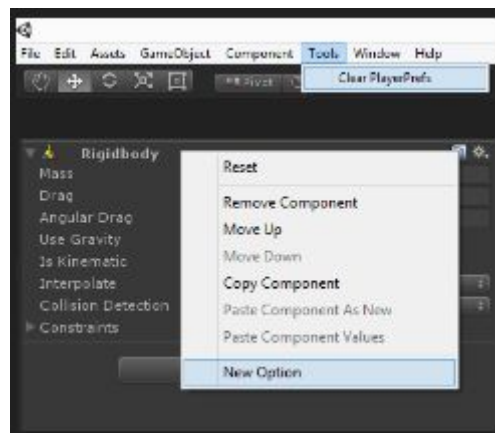**Tools Scripting 2 - 2020**

Final Work
**Content: Unity, Maxscript & C++ Tools**

Tasks:

1. Create a menuItem shortcut (2.5 points)

Create a new MenuItem shortcut in Unity and explain its functionality and why it can be a helpful tool for your development needs. (as seen in lesson 2)

2. Finish MVD Tool window. (2.5 points)

Using the code provided at lesson 3, finish the placement tools. Add a menu to apply transform settings (translation, rotation, scale) to the objects that are being placed and also misc settings such as layer filter dropdownlist and attach to parent. Files that must be modified are MVDTools.cs and ClickSpawn.cs.
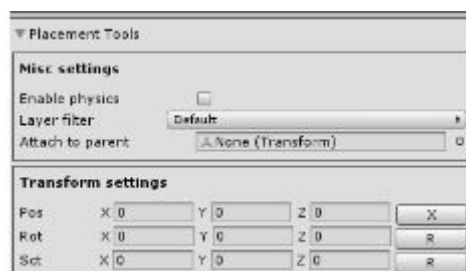
Note: Deliver of tasks 1 and 2 must be done within a Unity 2019.3 .package file containing the tool code (code provided at class) with the new implementation code.

3. Build a cinematic,Track Camera (2.5 points)

Build a camera track using a spline/line in 3DSMax maxscript and export the given knots into a .json file. The camera must have a target (entity) and its view must be locked targeting that entity. Create a new component to do so.

The cinematic must be build in the engine using two splines previously exported from max and there must be a transition between both tracks. Implement your code at UpdateTest method in CameraSystem.cpp to obtain the desired results.

Bonus: Modify the spline renderer to render smooth splines instead of straight polylines.

4. Rigid animation for more than object per frame (2.5 points)

Export more than one animated object in max into a single animation file (e.g elevator door) and parse the results. You will need to modify the given maxscript exporter provided at lesson 5 and change the basic animation parser code at the engine if needed.

5. Bonus: Build a whitebox level with pro builder (2.5 points)

Following the guide points given at lesson 1 about level design and level building, draw the mockup off a very basic level and create a the level in Unity using pro builder tools.

Submission:

- The student must provide a .zip file or a repository link containing three folders with the given names:
    - Unity: folder containing the unity package with tasks 1, 2 and 5.
    - Cinematics: folder containing the engine with task 3.
    - Animations: folder containing the engine with task 4.
- Provide a brief description of the work done (readme.txt)
- Unity and engine code must execute without errors
- Content must be sent to alberto.s@salle.url.edu
- Mail header must be [MVDTools2-MyFullName]
- Deadline [09/06/2020 - 23:59:59]