

## Week 2 Tutorial Task - LERP

This task will be divided into two parts. Each part will be worth half of your grade for this tutorial. See next page for submission instructions.

### Part 1 - LERPing scale

Using what we did during the main tutorial session as a reference, make the duck's scale bounce back and forth between 0.0005 and 0.01 every 5 seconds.

### Part 2 - Small custom animation

Take an .obj file of your choosing (you may export one yourself from Blender, or download a free model from a site like OpenGameArt). Convert it to a glTF file using this converter:

<https://blackthread.io/gltf-converter/>

**Make sure to toggle the converter's first option so that it says "ASCII" instead of "Binary".**

Put the .glTF file into your project's "res" folder.

Import the model into your project. Create an entity and give it a mesh renderer, just as we did with the duck model during the tutorial.

Make sure that you can render your model on screen. If you can't see it, try adjusting its scale (try 0.01 or 100.0 for example) - sometimes models you find online (or even those you make yourself, if you forget to change your export settings) will be exported at a different scale. This is something you will likely run into with any 3D assets you grab for an assignment, etc.

Create a small "animation" with your model by creating timers and LERPing some of its attributes like we did with the duck. The attributes you change and the rate at which you change them are up to you. Change at least two attributes and interpolate the values smoothly back and forth. Be creative!

### What your project should look like

Manipulate the position of the duck and your own model so that both are visible in the window - you can make the window larger when you call `App::Init` if you wish or move the camera entity.

You can change the duck's position/remove the LERP on the duck's position attribute to make this easier, if you like.

## What to Submit

Submit the contents of your Week 2 Tutorial project folder as a ZIP archive. Do not include the Visual Studio project files - just ZIP the res and src folders.

**Name your file like this: Lastname\_Firstname\_StudentNumber.zip**

Example: Reeves\_Keanu\_100420690.zip

Here's what you should select to archive (shown with 7zip, a tool I recommend):

