

SCIT

School of Computing & Information Technology

CSCI236 – 3D Modelling and Animation SIM Session 4 2017

Assignment 3

Aim:

To investigate keyframe animation and parenting.

Procedure:

The ass3base.ma file has been included with this assignment. It consists of a single object (a tricycle).

This object needs to be separated into components for animation. This is your first task. You should give each of the new objects an appropriate name.

Next, you should adjust the pivot point for each component object so that each component rotates appropriately as part of the whole tricycle.

After that, you should set up an appropriate parenting chain for the components.

Finally, animate the tricycle so that it travels along a figure 8 (two touching circles) over 200 frames. Each circle should have a diameter of 10 units with their centres at (5, 0, 0) and (-5, 0, 0). The tricycle should start at the origin and move around the circle on the +X side before moving around the circle on the -X side. You may use any of the animation techniques you have seen in class – the aim is to get the path as close as possible to the two circles. All motion should be linear (no ease in or ease out) so that the animation cycles smoothly when played (You will need to use the Graph Editor for this. Wheels should rotate at a suitable speed and the pedals should remain level over the course of the animation. The steering should adjust to allow the front wheel to point in an appropriate direction.

You may use additional objects (locators) to simplify the animation process if you wish.

Save the file as **ass3.ma**.

Submit:

The file **ass3.ma** should be submitted in the usual manner.