# Workshop 10 Lab 2

In this activity, we are going to import a 3D character into Unity3D and implement Gaze animation.

Note: The Unity Morph Character System male used in the video demo is no longer available. In this exercise we are using the Michelle character from mixamo.com.

1. New a 3D project and name it Gaze Animation
2. Create an Orc folder, Import Orc Idle.fbx
3. Click on Orc Idle, in the Inspector,

* Material, Extract Textures and Materials.
* Rigs, Animation Type, change to Humanoid.
* Click on Apply

1. In Rig, click on Configure, note the mapping of the Body, Head, Left Hand and Right Hand mapping to the model has been done in this character Avatar.

Graphical user interface, text

Description automatically generated

Click on Done to exit.

1. Create an Idle animation.

Click on Orc Idle->Animation

Add in an animation new clip and name it as Idle, check on Loop Time.

Graphical user interface, text, application, email

Description automatically generated

Scroll down and click on Apply to save.

1. Create an Animator Controller

New an Animator Controller, name it as Orc Animator Controller.

Link Idle animation to Entry.

Timeline

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On Layers, Base layer, Click on the gear icon, tick on IK Pass.

Graphical user interface, application

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Note: Need to enable this to allow Inverse Kinematic (i.e. IK) in the script later.

1. 3D character in the scene

Drag Orc Idle into the Scene.

Adjust the character in front of the camera.

Adjust the lighting to make it shine on the character.

Attached Orc Animator to the Controller of Orc Idle.

Graphical user interface, text, application, email

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Test the scene, make sure the character is moving in an idle manner.

1. Add in a Cube.

Adjust the Cube such that it is somewhere in front of the character.

A picture containing indoor

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1. Gaze animation

Attached the LookAt C# Script to the character. (See appendix)

Attached the Cube to Look At Target.

Attached the Neck to Eye

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Graphical user interface, text, application

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Note: We are transforming the Neck instead of the Eye in the Michelle character.

Test the scene. Note that the character will gaze at the cube in a random manner.

Adjust the position of the cube and the character will gaze at the cube in the new position.

1. Setting parameters for each animation

Currently the LookAtTime is set to 5 and LookAwayTime is set to 3.

We can set different parameters value for different animation.

In this exercise we are only setting one set of LookAtTime and LookAwayTime for the

Idle animation.

In the Assets folder, select Orc Idle.

Under Clips, select Idle

Go down to Curves and create two parameters: LookAtTime and LookAwayTime.

Graphical user interface

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Note: The values can be lerped overtime by adjusting the curve.

In Orc Animation Controller, create two floats Parameters: LookAtTime and LookAwayTime.

Graphical user interface, application

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Test the scene. Note that the value of LookAtTime and LookAwayTime will be set to the parameters value that we have defined earlier.

Appendix:

LookAt script for gazing behaviour.

From Coursera content

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Graphical user interface, text, application, email

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