# Animation Previewer System Version 0.01
Pain, pain and memory leaking more pain

This will be small documentation exploring the current systems and features implemented and the general knowledge needed in operating them. This project was started as a way to explore new techniques and skills while trying to replicate an private editor tool used by Twirlbound's game 'pine' dubbed as the combat editor.

The animation previewer allows for easy editing of animations attached to an animator component while also bypassing the readonly restrictions. The access to a custom preview window and or control of the model in scene allows for users to determine whether variables such as animation events and animation curves suits their needs and can be edited in real time as the animation plays.

Animation Previewer
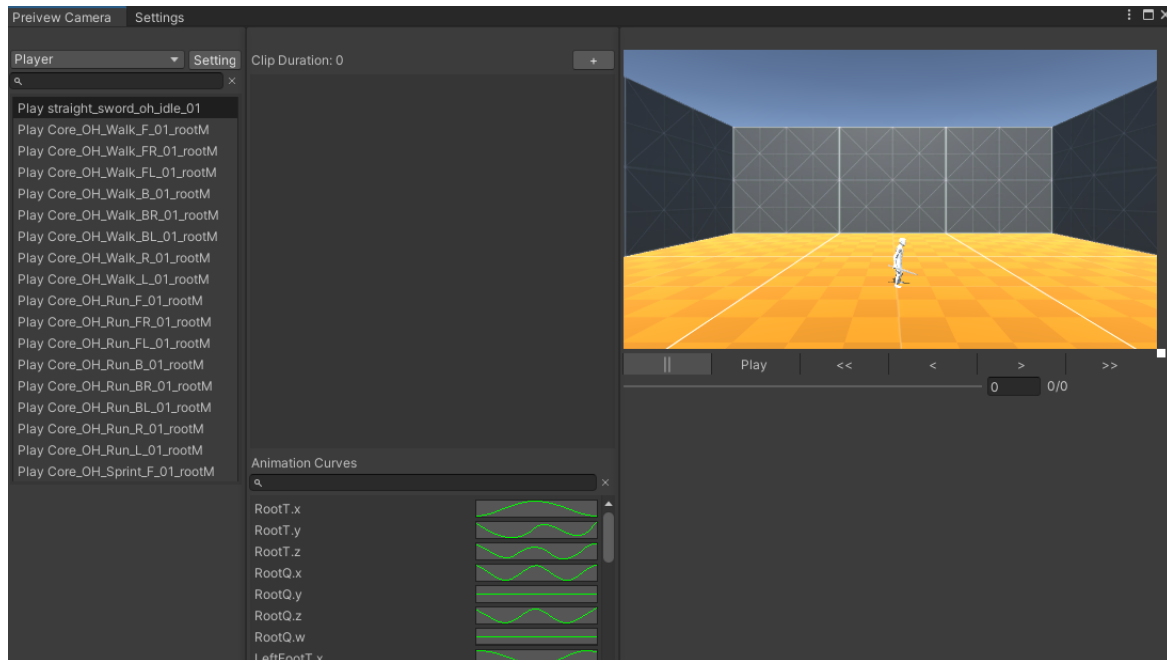
Prefab Selection

Any game object or prefab with the component Animator can be selected for the previewer to instaniate and control. Multiple selections can be chosen for an easier transition however, memory usage can vary it depends on the amount of animations found in the Animators and will preload all selection Animator animations regardless if Animators share the same animation clips.

Animation List

The animation list will display a list of animations found in the animator attached to the selected animation target where they can be selected to play and or edited.

For multi selection, the drop down will allow for different targets to be chosen with the animations changing to suit the animator attached.

In addition a simple search bar helps filter out animations by their name and a simple button to open up the settings menu.
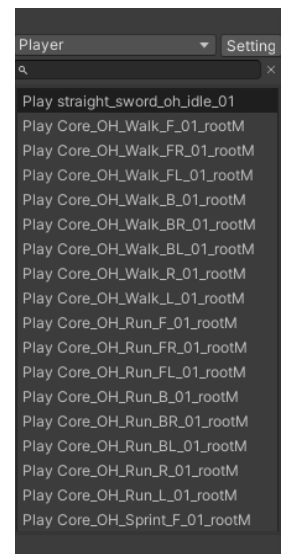
Event Editing

Adding animation events is as easy as clicking the + icon where a blank event is displayed.

From there, clicking the drop down box will display a list of functions found in scripts attached to the animator to be selected where the scripts are sorted via the namespace.

The - Icon is used to remove animation events seamlessly.

Changes will be automatically saved when editing.
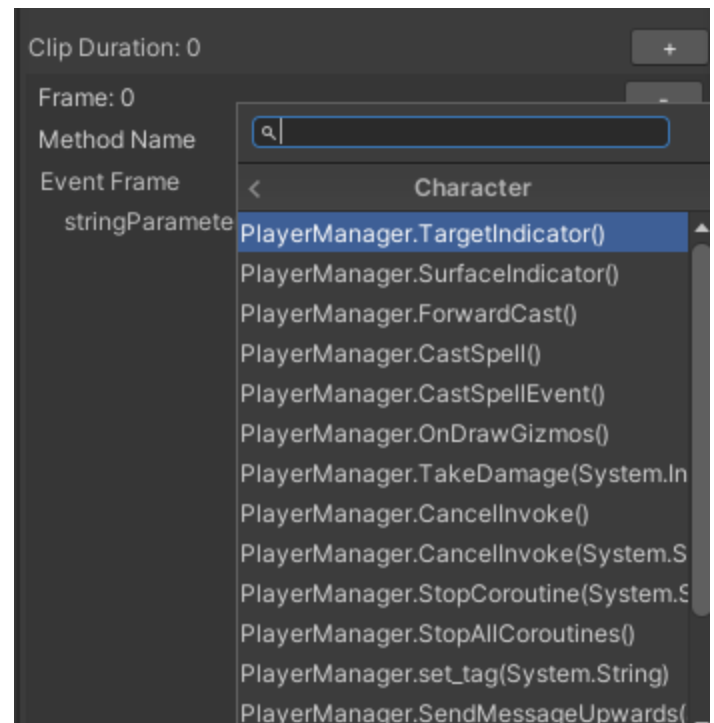
Preview Window

The preview window features a resizable image of the scene camera render where hovering over the small white box will allow for resizing. Below that, the animation controls allows for users to play, pause, play backwards and fast forwards while also having a slider to choose desired frame and allows for stronger controls.

The preview scene also allows users to move the camera via dragging, rotating and zooming in. The Settings window has information on the keybind inputs required.
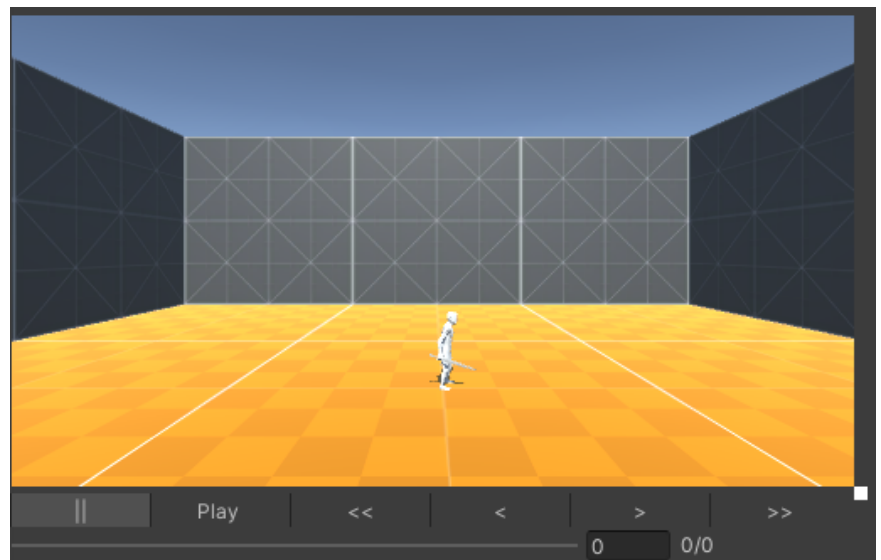
Animation Curves

This section allows for the animation curves found on the animation clip to be edited in real time while the animation plays.
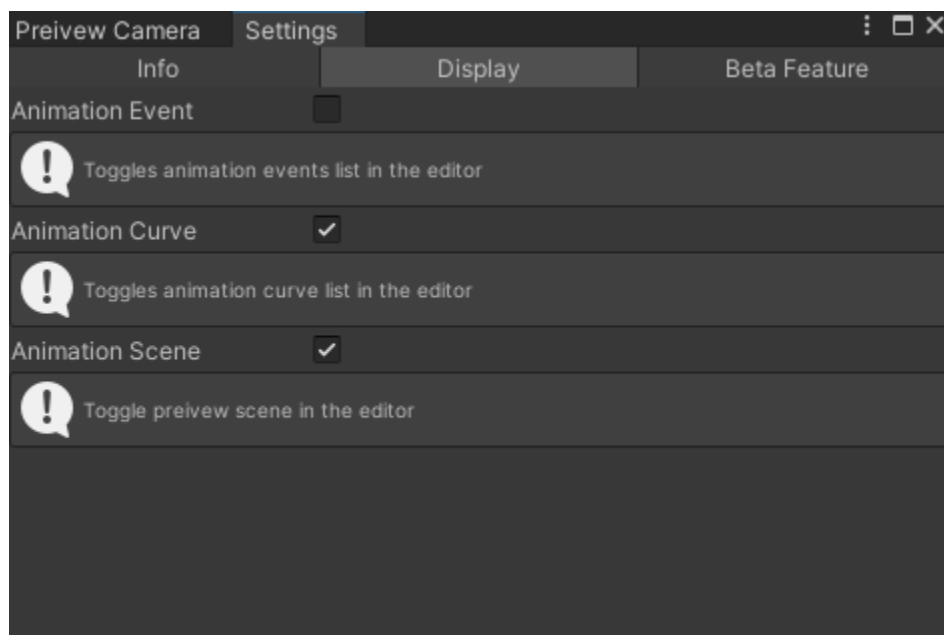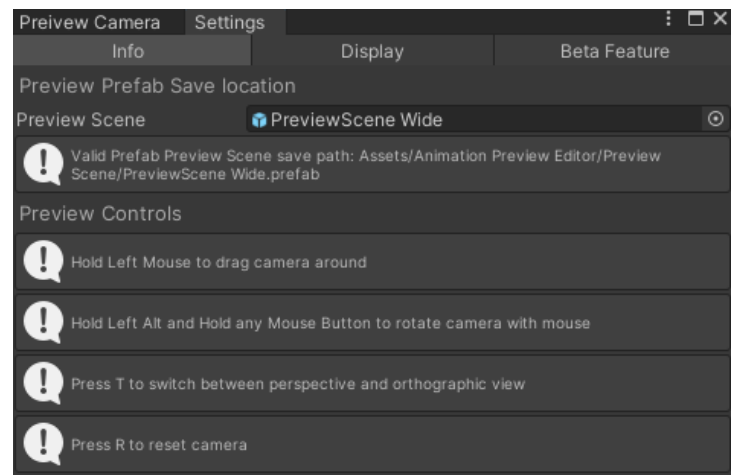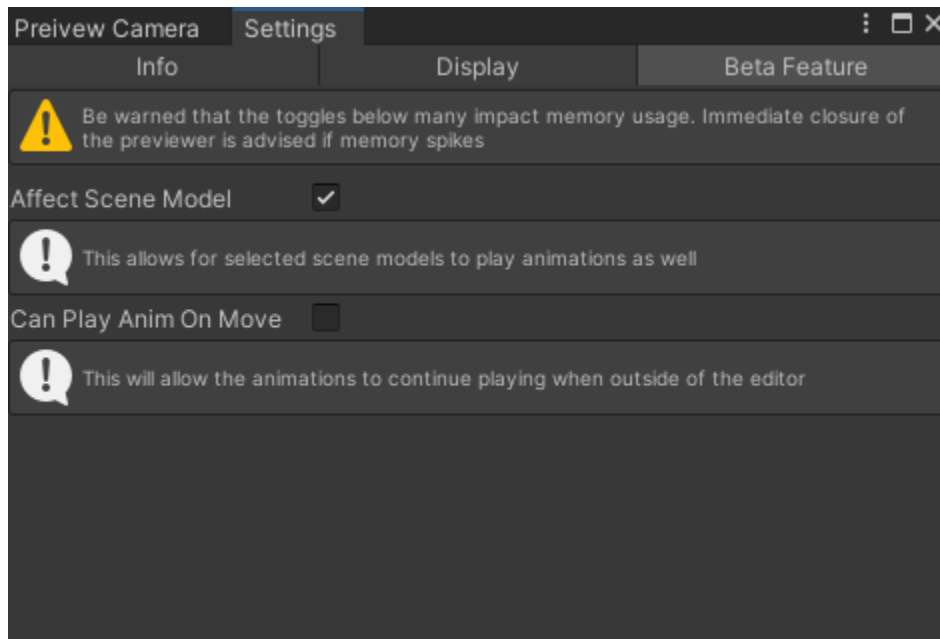
Settings

Info

Preview Prefab Save location allows for selected prefab locations to be saved in PlayerPrefs.

Preview controls shows how to control the camera in the preview scene (Need to be hovering over the preview scene.)

Display

Beta Feature

Preview Scene

Preview Scene prefabs used to create scene views for the Animation Previewer consists of 4 things. The scene, lighting, a camera and an empty game object for its transform.

With this example which will be included as an example as PreviewScene Wide has the lighting parented to the main camera. This is a personal choice to ensure direction of lighting is always consistent.

Creating a preview scene

As seen in the image above, all the components must be parented to a gameobject which will convert into a prefab for the previewer to use. A script called EditorSceneData must alos be placed on that prefab with the main camera and initalise transform (where the animated models will be instanisated).