

DLS - Sprite To Animation User Guide

Overview

The Sprite To Animation r is a Unity editor extension that allows you to create animations from a sprite sheet. It adds a new window to the Unity editor, where you can set a sprite texture, select an animation template, name a prefab, and specify an output path. You can also generate the animations and prefab by pressing a button.

Usage

1. **Open the Sprite Animation Creator Window:** Go to `Window > DLS > Sprite Animation Creator` in the Unity Editor menu. This will open the Sprite Animation Creator window.
2. **Set the Sprite Texture:** In the Sprite Animation Creator window, click on the field labeled 'Sprite Texture'. This will allow you to select a sprite sheet from your project's assets.
3. **Set the Animation Template:** Click on the field labeled 'Animation Template'. This will allow you to select an animation template. An animation template is a ScriptableObject that contains details about how the sprites on the sprite sheet should be animated.
4. **Set the Prefab Name:** Enter a name for the prefab that will be created.
5. **Set the Output Path:** Enter the path where the generated assets should be saved. You can also click the 'Browse' button to choose the output path using a directory navigation window.
6. **Generate the Animations and Prefab:** Click the 'Generate' button to create the animations and prefab.

Animation Templates

An Animation Template is a ScriptableObject that contains the information needed to create animations from a sprite sheet. This includes the size of the grid to slice the sprite sheet, and a list of AnimationDetail objects that define each animation.

An AnimationDetail object contains the following properties:

- `animationName`: The name of the animation.
- `row`: The row index for the animation on the sprite sheet.
- `startColumn`: The starting column index for the animation on the sprite sheet.
- `endColumn`: The ending column index for the animation on the sprite sheet.
- `frameRate`: The frame rate for the animation.
- `animationType`: The type of the animation (e.g., Idle, Movement).
- `direction`: The direction for the animation.
- `loop`: Whether the animation should loop.

Extension Code Overview

The Sprite Animation Creator extension is composed of several classes:

- `SpriteAnimationCreator`: The main class for the extension. It is responsible for the GUI of the custom window and for generating the animations and prefab.

- `SpriteAnimationTemplate`: A ScriptableObject that represents an animation template.
- `AnimationDetail`: A serializable class that represents the details of an animation.
- `AnimationType`: An enum that represents the type of an animation.

The extension also contains several helper methods to perform tasks like slicing the sprite sheet, generating the animations and animator controller, creating the prefab, and generating animation clips.