

Overview

The AnimatedBackground system animates and composites different items in a loop. For example, one item could be a sprite that fades in and out while moving. Each background is specified in a JSON file in "Graphics\AnimatedBackgrounds". The length of the overall animation loop for a background is given in milliseconds with the "Duration" key. All the sprite animations for a given background should be in a single sprite resource file which is specified with the "SpriteResourceFile" key. The items that make up the background are listed in a JSON array specified with the "Items" key. The items will be drawn in order based on their position in the array, so earlier ones appear below older ones. Each item is specified as a JSON object.

Background Items

There are different types of items that can be placed in the background, and each has its own set of properties.

- **Type** : Which type of background item this JSON object represents. This can be "Sprite" or "SpriteAnimationSeries".

Sprite

A "Sprite" displays a single sprite animation from the sprite resource file. It can fade in, stay opaque for a while, and fade out. You can give it a starting position and velocity. It's also possible to have Sprites that are fully opaque the entire time.

- **FadeDuration** : Length of the fade-in and fade-out in milliseconds. If StartTime is -1, this is not needed.
- **OpaqueDuration** : Length of time after the end of the fade-in, but before the beginning of the fade-out in milliseconds. If StartTime is -1, this is not needed.
- **Position** : If StartTime is -1, the sprite will appear here at the beginning of the background animation loop. Otherwise, it will appear at this position at the beginning of its fade-in. This should be given as a string in the format: "x|y". (Default "0|0")
- **Animation** : Name of the sprite animation from the sprite resource file that will be drawn for this background item.
- **Scale** : Scale at which the sprite should be drawn. This should be given as a string in the format: "x|y". (Default: "1|1")
- **StartTime** : If this is -1, the sprite will be fully opaque for the entire background animation. Otherwise, this gives the number of milliseconds after the beginning of the animation loop at which this sprite's fade-in begins. (Default: -1)
- **Velocity** : Vector for the velocity at which the sprite moves in pixels per second. This should be given as a string in the format: "x|y". (Default: "0|0")

SpriteAnimationSeries

A SpriteAnimationSeries displays a series of sprite animations in-order and fades each into the next. For now, only single-frame animations are supported.

- **FadeDuration** : Length of a transition from one sprite animation to the next in milliseconds

- OpaqueDuration : Length of time a given sprite animation is fully opaque (between fades) in milliseconds
- Position : Position at which to draw the item. This should be given as a string in the format: "x|y". (Default: "0|0")
- Scale : Scale at which the sprite animations should be drawn. This should be given as a string in the format: "x|y". (Default: "1|1")
- Series : A JSON array containing a list of sprite animation names from the sprite resource file. They will be displayed in the same order as they're listed.

Example

FileSystems\PC\Graphics\AnimatedBackgrounds\Example.json

```
{
  // Duration of the loop in milliseconds
  "Duration": 20000,
  // The sprite resource file containing the sprites for this background
  "SpriteResourceFile" : "AnimatedBackgrounds/ExampleBackgroundSprites",
  "Items": [
    {
      "Type": "SpriteAnimationSeries",
      "FadeDuration": 2000,
      "OpaqueDuration": 8000,
      "Position": "0|0",
      "Series": [
        "Background1",
        "Background2"
      ]
    },
    {
      "Type": "Sprite",
      "Animation": "Leaf",
      "Position": "1053|321",
      "Velocity": "-100|0"
    }
  ]
}
```

/share/Web/wiki/dokuwiki/data/pages/frog_animated_background_system.txt · Last modified:
2013/02/07 04:13 by mpellegrini