Cranberry

File format for animations

Version 1.0 on July 8, 2017

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TODO.

File format specification

Header

Version attribute

The required version attribute specifies the version of the file format. Cranberry is backwards-compatible, that means that old versions are not simply obsolete but can still be used as you desire. It can be any integer number.

Spritesheets attribute

The spritesheets attribute is completely optional. But if you need to load many animations and objects at once, this is recommended. It has a much greater performance, because the standalone method requires the images to be packed into a big texture and that algorithm needs its time.

Index attribute

The required index attribute specifies the index of the spritesheet. It can now be referenced by frames.

Sheet attribute

The required sheet attribute specifies the path to the actual image. While this should be a *Qt resource path* (starting with ":/"), cranberry also supports relative paths to the executable (e.g. "/assets/sheets/foo.png").

Frames attribute

Image attribute

The image attribute specifies the path to the standalone image. It is required in case no spritesheets have been specified in the head JSON object.

Sheetindex attribute

The sheetindex attribute specifies the index of the spritesheet to use. It is required in case one or more spritesheets have been specified in the head JSON object.

Rect attribute

The rect attribute specifies the source rectangle within the spritesheet for this frame. It is required in case one or more spritesheets have been specified in the head JSON object. This JSON object contains 4 members, *x*, *y*, *w* and *h* representing x coordinate, y coordinate, width and height respectively.

Duration attribute

The required duration attribute specifies the amount of milliseconds the frame should be shown on the surface. Note that you should not use values too little (at constant 60 frames per second, one frame lasts 16,6 milliseconds). It can be an integer number or a floating-point number.

Examples

This example shows an animation based on standalone images.

```
{
  "version" : 1,
  "frames" : [
    {
      "image" : ":/anim1/frames/0.png",
      "duration" : 60
    }
    {
      "image" : ":/anim1/frames/1.png",
      "duration" : 60
    }
  ]
}
```

This example shows an animation based on spritesheets.

```
{
  "version" : 1,
  "spritesheets" : [
    {
      "index" : 0,
      "sheet" : ":/anim1/sheet1.png"
    }
  ],
  "frames" : [
    {
        "sheetindex" : 0,
        "duration" : 60,
        "rect" : {
          "x" : 0,
          "y" : 0,
          "w" : 32,
          "h" : 32
        }
    }
  ]
}
```