Animation in Qt Quick using a strip of frames in a single image

This article explains a method to make an animation in Qt Quick using a number of images in a single **.png**.

Tip: There are a lot of methods in Qt Quick for animating images. Other approaches include using an animated GIF and displaying individual frames, using property animations rather than a timer to move the visible area, or constructing the image out of a number of parts, which are animated together.

Introduction

This article explains one (of many) methods to animate an image in Qt Quick. In this approach the animation frames are drawn across the horizontal width of a png file. The QML code clips the view to show only one image at a time, and uses a timer to progress the frames into the visible area.

Implementation

To do this, first obtain a PNG file with horizontally aligned images (for this example we use the one below):

Create a new project in the Qt SDK. Add a QML file for cropping the image, and moving frames if needed. In this case we name it **Kameha.qml**:

```
import QtQuick 1.1
  Rectangle{
   id: animacion
   //We make the size of one frame, in this case is 180 x 110
   width: 180
   height: 110
   // this is trasparent color, very important if you want to put the animation if some scene
   color: "#00000000"
   // Add a property that make the count of the frames
   property int contador:0
   // clip true, if you put clip false, you see the image complete, not only the frame you want
   clip: true
   // Put the image you want to animate
   Image{
       id:animacion1
       x: 0
       y: 0
       source:"kameha.png"
       //If you want to scale the animation this is very important.
       smooth: true
   }
    //This function if called by the timer in the main page.
    function advance(){
       ++animacion.contador
       if(animacion.contador<=9){animacion1.x = animacion.contador*180*(-1)}
       else if (animacion.contador>9){animacion.contador=0}
    }
}
```

Now in your *main.qml*' put this code to load your file and advance the frame:

```
import QtQuick 1.1
Rectangle {
   width: 640
   height: 360
   color: "#335b80"
   //import our qml
   Kameha{
       id:kameha
       x: 212
       y: 134
   }
   //put a timer to make the animation
   Timer{
       id:timer
       // This interval will be ok, depends the quantity of frames you want
       interval:60
       repeat:true
       // You can put running false if you want to make actions and call the timer
       running:true
       onTriggered: kameha.advance()
   }
}
```

Now "Run" the app to see the image animate.

Summary

This article shows one approach for animating a graphic. Please add comments if you have any questions.

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