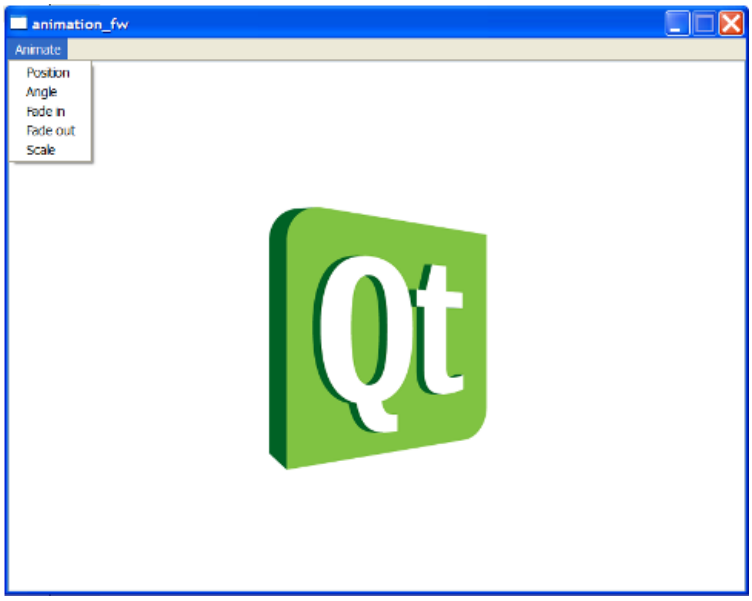
Enabling Qt Animation Framework in an application

Overview

This series of snippets demonstrates how to implement nice animation effects into your Qt UI application. Qt 4.6 has Qt Animation Framework as a built-in feature. Documentation can be found here: [1]

This snippet is an example of an application that can show animation effects. Animations can be executed in the Qt Graphics View Framework: [2]

Full example code can be found here: File:Animation fw.zip



Preconditions

Qt 4.6 has been installed.

Header file

The Qt Animation Framework supports the animation of graphics items derived from `QObject` and `QGraphicsItem` or from `QGraphicsObject`. Graphics items can be placed into `QGraphicsScene`, so first we create it as the `QMainWindow` central widget.

```
class MainWindow : public QMainWindow
{
    Q_OBJECT

public:
    MainWindow(QWidget *parent = 0);
    ~MainWindow();
};
```

Source file

```
MainWindow::MainWindow(QWidget *parent)
```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```
    : QMainWindow(parent)
{
    // Create QGraphicsScene and QGraphicsView
    m_scene = new QGraphicsScene(this);
    m_view = new QGraphicsView(m_scene,this);
    m_view->setCacheMode(QGraphicsView::CacheBackground);
    m_view->setViewportUpdateMode(QGraphicsView::BoundingRectViewportUpdate);
    m_view->setHorizontalScrollBarPolicy(Qt::ScrollBarAlwaysOff);
    m_view->setVerticalScrollBarPolicy(Qt::ScrollBarAlwaysOff);

    // Create PictureItem for the animation
    QPixmap pixmap(":/qt1.png");
    m_item = new PictureItem(pixmap.size(),pixmap,this);

    // Add PictureItem to center of the scene
    m_scene->addItem(m_item);

    createMenu();

    // Set QGraphicsView as central widget
    this->setCentralWidget(m_view);
}
```

Postconditions

The application has `QGraphicsScene` and `QGraphicsView` ready to show some animations.

Animation Framework snippet series

Full example code package

- **Enabling Qt Animation Framework in an application**
- Archived:Animating graphics item position in Qt
- Archived:Animating graphics item rotation
- Archived:Animating graphics item fading
- Archived:Animating graphics item scaling
- Archived:Animating graphics item position and rotation simultaneously

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