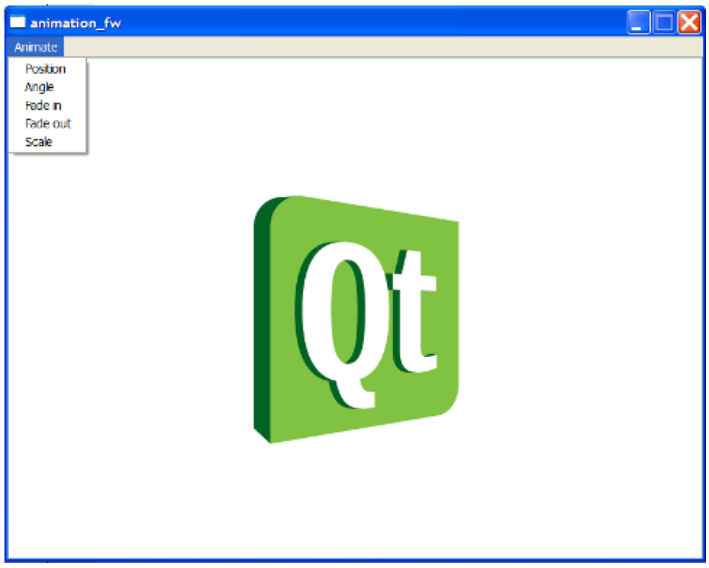
# Enabling Qt Animation Framework in an application

## 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)
    : 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");
```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```
    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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