Display camera preview using Qt Mobility

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Platform	S60 5th Edition	**Tested on devices**	Nokia N97 Mini
Category	Qt	**Subcategory**	Qt Mobility API

Keywords (APIs, classes, methods, functions): QCamera, QVideoWidget

Warning: Camera API has been removed from Mobility. It was in the tech preview and maybe it will be added again later on.

Tip: Read this article before moving forward: Archived:Setting up environment for Qt Mobility API

Overview

Display Camera Preview on Widget using Qt Mobility APIs

Project configuration file (.Pro file)

- Add the Qt Mobility project configuration option in the .Pro file as shown below

```
CONFIG += mobility
MOBILITY += multimedia
symbian:TARGET.CAPABILITY = UserEnvironment
```

Header File

```
#include <qcamera.h>
#include <qvideowidget.h>
#include <qstackedwidget.h>

class CameraApp : public QWidget
{
    Q_OBJECT
public:
    CameraApp(QWidget* parent = 0);
    ~CameraApp();
public slots:
    void error(QCamera::Error);
private:
    void initCamera();

private:
    QStackedWidget* m_stackedWidget;
    QCamera* m_camera;
    QVideoWidget* m_videoWidget;
};
```

Source File

```
#include <qmessagebox.h>
#include <qgridlayout.h>

CameraApp::CameraApp(QWidget *parent) :
    QWidget(parent), m_camera(0)
{
    QGridLayout* layout = new QGridLayout;
    layout->setSpacing(0);
    layout->setMargin(0);

    m_videoWidget = new QVideoWidget();

    QPalette black(Qt::black);
    m_stackedWidget = new QStackedWidget();
    m_stackedWidget->setPalette(black);

    m_stackedWidget->addWidget(m_videoWidget);

    m_stackedWidget->setCurrentIndex(0);
    layout->addWidget(m_stackedWidget);

    setLayout(layout);

    InitCamera();
}
```

```
void CameraApp::initCamera() {
    QByteArray cameraDevice = QCamera::availableDevices()[0];
    m_camera = new QCamera(cameraDevice);

    connect(m_camera, SIGNAL(error(QCamera::Error)), this, SLOT(error(QCamera::Error)));

    m_camera->setFocusMode(QCamera::AutoFocus);
```


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```
    m_videoWidget->setMediaObject(m_camera);
    m_videoWidget->setAspectRatioMode(QVideoWidget::KeepAspectRatio);

    if (m_camera->state() == QCamera::ActiveState) {
        m_camera->stop();
        }
    m_camera->start();
    }
```

```
void CameraApp::error(QCamera::Error e) {
       switch (e) {
        case QCamera::CameraError: {
            QMessageBox::warning(this, "Camera error", "General camera error");
            break;
            }
        case QCamera::NotReadyToCaptureError: {
            QMessageBox::warning(this, "Camera error", "Camera not ready to capture image");
            break;
            }
        case QCamera::InvalidRequestError: {
            QMessageBox::warning(this, "Camera error", "Invalid request");
            break;
            }
        case QCamera::ServiceMissingError: {
            QMessageBox::warning(this, "Camera error", "Service missing");
            break;
            }
        case QCamera::NotSupportedFeatureError: {
            QMessageBox::warning(this, "Camera error", "Not supported feature");
            break;
            }
        default:
            break;
        };
    }
```

Classes

QCamera

QVideoWidget

Reference links

- Qt - cross-platform application and UI framework
- Qt Mobility API
- New Qt APIs Beta - Mobility Project

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