



An Introduction to Qt

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Qt Development Frameworks - Nokia

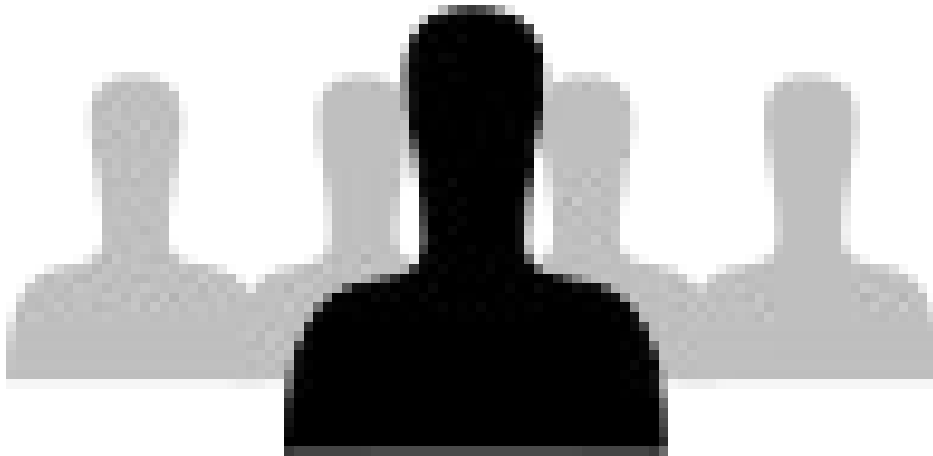


About me

Qt developer for < 1
year

Focus: Embedded Linux
development

An Oslo troll





What is Qt?

- History: Development started around 1993
- Used by KDE since inception
- Proven in industry



Qt in the field

- HP printers
- HGZ coffee machines
- Autodesk Maya 2011
- Roku Netflix player
- Videolan vlc
- Asus Skype phones



Platform support

- Linux
 - Display options: X11, Qt Windowing System (QWS)
 - CPU options: X86, x86_64, ARM, PPC, MIPS
- Mac OS X
 - Carbon and Cocoa
- Windows
 - Desktop: XP, Vista
 - Mobile: CE
- Symbian
 - Solaris, AIX, HPUX, vxWorks, ...



Licensing options

- GPL 3.0
- LGPL 2.1
- Commercial



Can we help you?

Support is available in several forms

- Commercial: available for all license models
- Large user community
- Qt training
 - And certification





What is Qt?

Technical level:

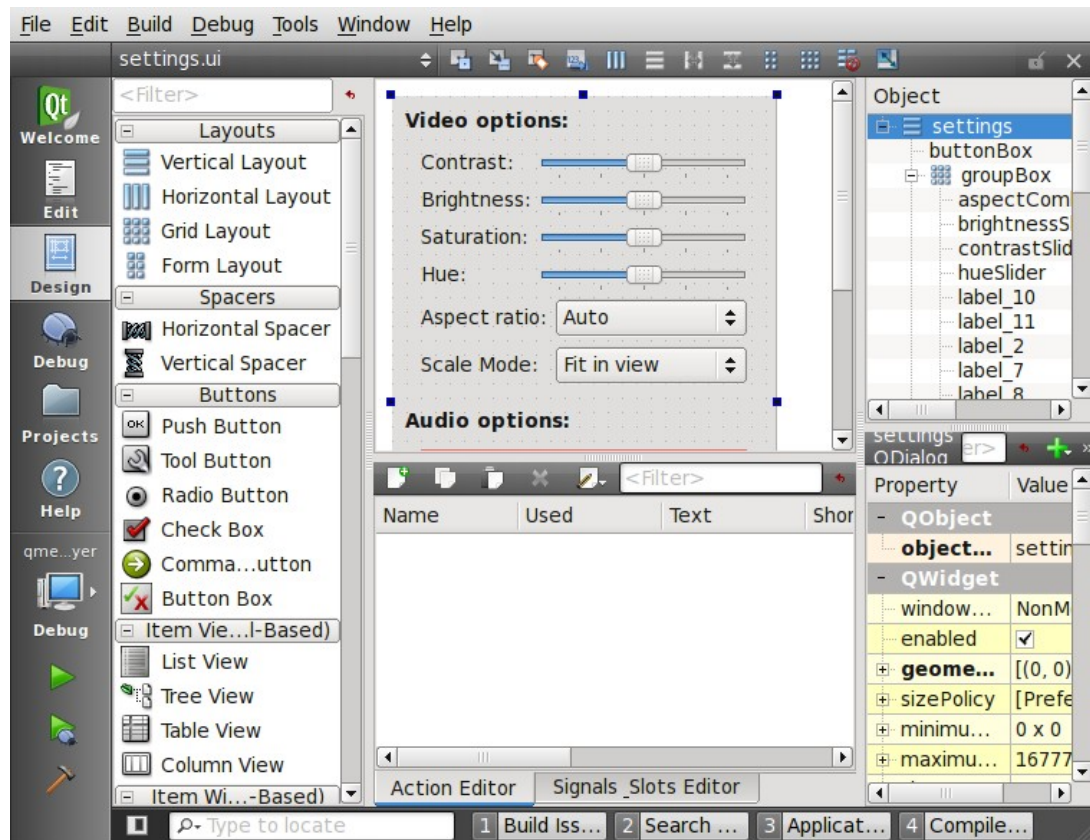
- An application framework
 - Written in C++
 - Other language bindings exist
- An IDE for all desktop platforms



Qt Creator

An IDE built on and for Qt

- UI Design
- Edit
- Compile
- Deploy & Debug
- API Help





What is Qt?

Technical level:

- An application framework
 - Written in C++
 - Other language bindings exist
- An IDE for supported desktop platforms
- Platform independent build tools



Open development model

- Git access
- Transparent Development Process
 - Development staff blogs
 - Developers regularly available on IRC



On to the good stuff

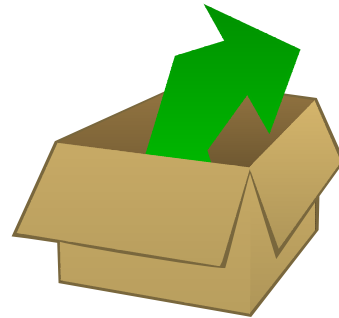


**Code less.
Create more.
Deploy everywhere.**



Ready to use

Embed a web browser in an application:





Ready to use

Embed a web browser in an application:

```
1 #include <QtGui/QApplication>
2 #include <QWebView>
3
4 int main(int argc, char *argv[])
5 {
6     QApplication a(argc, argv);
7     QWebView webView;
8     webView.show();
9     webView.load(QUrl("http://labs.trolltech.com"));
10    return a.exec();
11 }
```



Capture

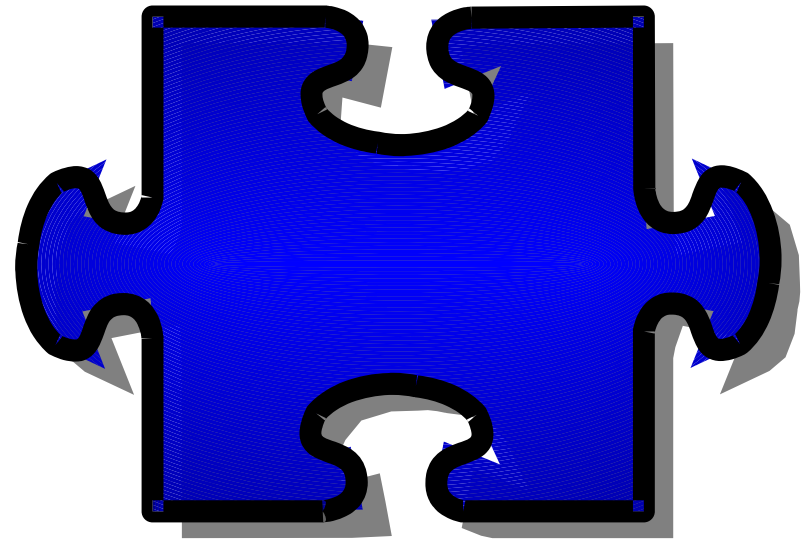
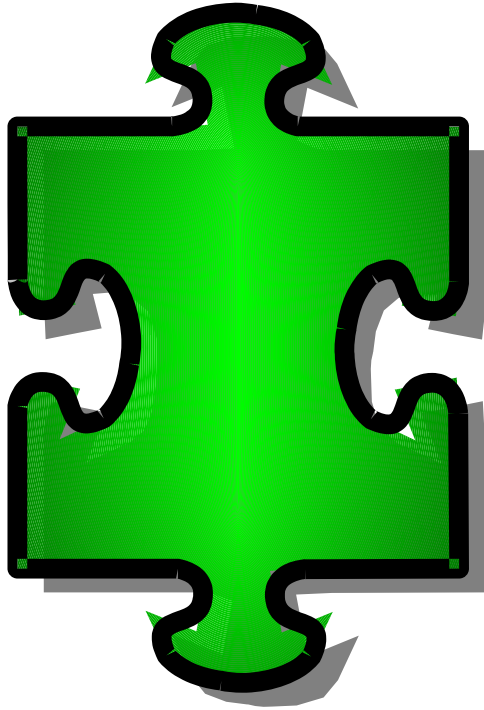
Capture that web page to SVG:

```
#include <QtSvg/QSvgGenerator>
#include <QtGui/QPainter>

...
QsvgGenerator generator;
generator.setFileName(...);
Qpainter painter(&generator);
webView.render(&painter);
```



The pieces you need



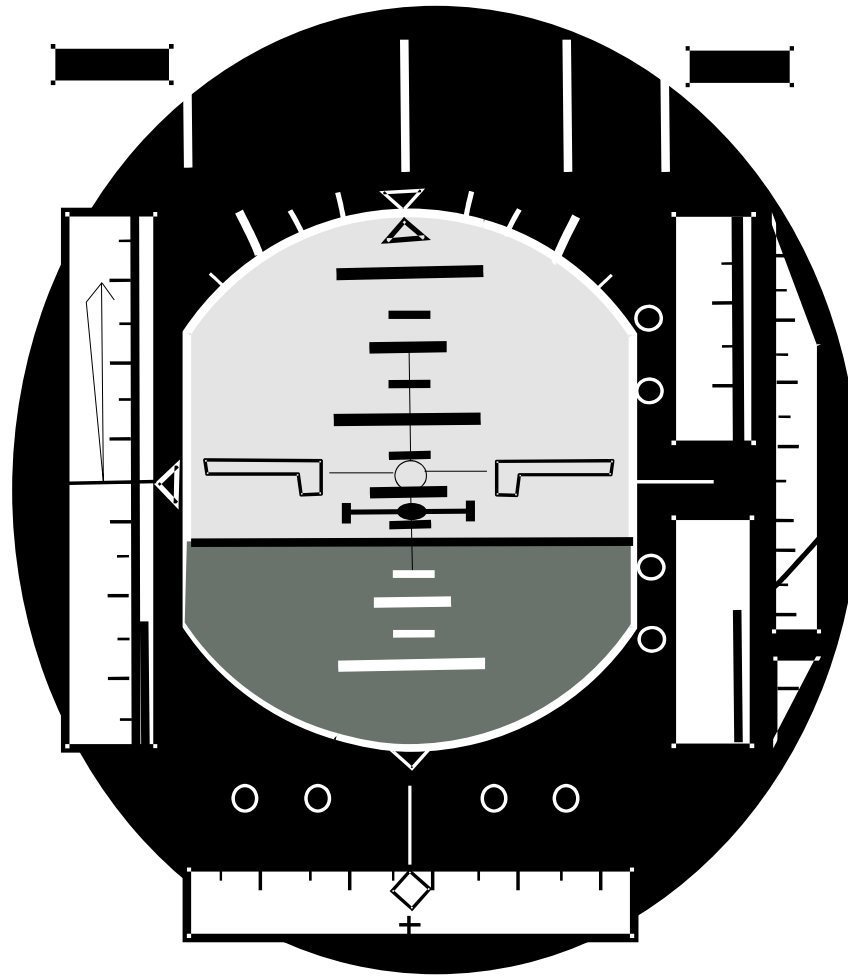


The pieces you need

- Core
- Gui
- Multimedia
- Networking
- OpenGL
- Scripting
- SQL
- Webkit
- XML
- SVG



UI Development options





UI Development options

Html
Javascript
QML



QML?

A declarative UI language
Javascript for logic
A Qt language binding



A Quick QML Demo

Demo source can be found under `demos/declarative/` in the Qt 4.7 technology preview.

<http://qt.nokia.com/developer/qt-qtcreator-prerelease>



More information

General Information: <http://qt.nokia.com>

Source Code: <http://qt.gitorious.org>



Questions?