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:

```c++
#include <QtGui/QApplication>
#include <QWebView>

int main(int argc, char *argv[])
{
    QApplication a(argc, argv);
    QWebView webView;
    webView.show();
    webView.load(QUrl("http://labs.trolltech.com"));
    return a.exec();
}
```
Capture that web page to SVG:

```cpp
#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?