Qt and Tizen together can do more

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Why Qt and Tizen?

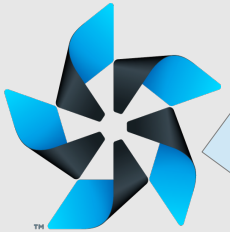
Why Tizen?

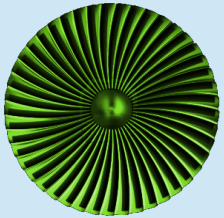
Web
Desktop
IVI
Security
Wearable
Open Source
Community
Store
Mobile
Tv

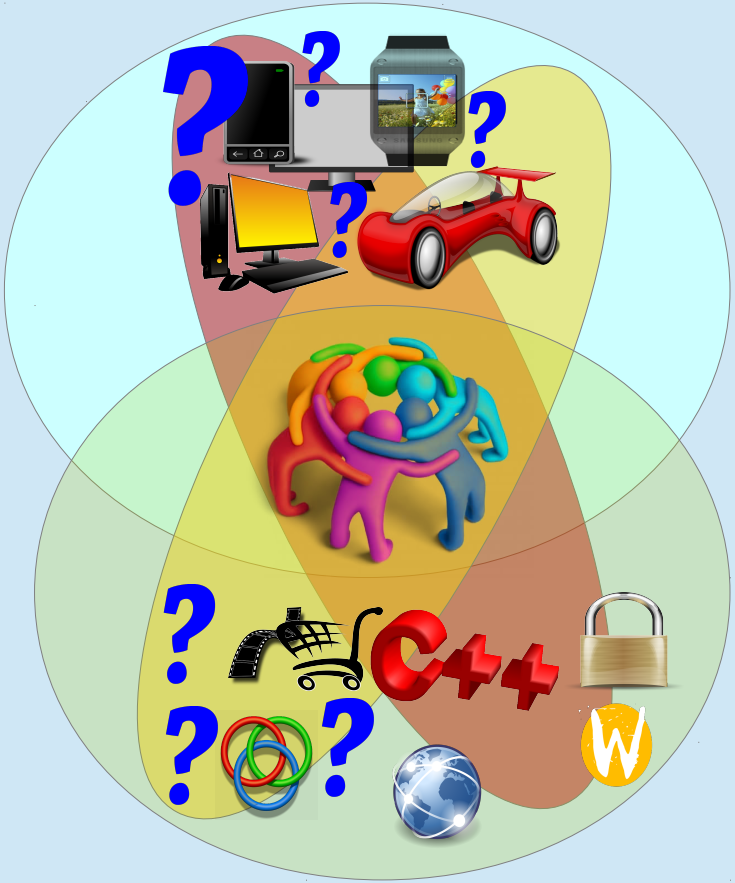
Why Qt?

Web
Performance
Gui
Components
Qt
Open Source
Community
Wayland
Flexibility
Multimedia
Qt Creator
IDE

Freedom of choice







Overview of Qt (FAQ)

Recent Qt history

Year	Description
2005	Qt 4.0 was released
2008	Nokia buys Qt
2009	Qt became free to use for open source and commercial projects (LGPL 2.0 license)
2011	Qt Project under open governance started
2012	Digia buys Qt trademark from Nokia
December 2012	Long awaited Qt 5.0 released
May 2014	Qt 5.3 released

Supported platforms

Community ports

TIZEN

webOS

OpenSolaris

Amazon Kindle DX

Haiku

Ubuntu

OS/2

Amiga OS

Licensing Model

- LGPL 2.1
- GPL 3.0

open source™

- Qt Enterprise
- Qt Mobile

Qt modules/technologies

- **QtCore -** Core non-graphical classes used by other modules.
- **QtTest** – Classes for unit testing Qt applications and libraries..
- **QtSql** - Classes for database integration using SQL.
- **QtQML** - The Qt QML module provides a framework for developing applications and libraries with the QML language.
- **QtWebkit/QtWebEngine** - Classes for a WebKit2/blink based implementation and a new QML API.
- **QtGui** – Base classes for graphical user interface (GUI) components. Includes OpenGL.
- **QtNetwork** - Classes to make network programming easier and more portable.
- **QtWidgets -** Classes to extend Qt GUI with C++ widgets.
- **QtQuick** – A declarative framework for building highly dynamic applications with custom user interfaces.
- **QtMultimedia** - Classes for audio, video, radio and camera functionality.

Qt Creator

Qt modules/technologies

Addons:

- **Qt D-Bus**
- **Qt Positioning –** maps and geolocation integration
- **Qt Sensors**
- **Qt OpenGL**
- **Qt Concurrent**
- **Qt Bluetooth**
- **Qt NFC**
- **Qt WebSockets**
- **Qt Graphical Effects** – OpenGL shader based components for use with Qt Quick
- **Qt Image Formats** - plugins for additional image formats: TIFF, MNG, TGA, WBMP.
- **Qt Print Support**
- **Qt SVG**
- **Qt Serial Port**
- **Qt Xml Patterns** - support for XPath, XQuery, XSLT.
- **Enginio** - a Backend-as-a-Service solution to ease the backend development for connected and data-driven applications.

Qt for Tizen

What is Qt for Tizen?

The Qt for Tizen project was founded in May 2013. Initiative is addressed to developers and by developers. It exists under Qt Project ubmrella.

The main goal is to enable Qt for 3rd parties, developers and project founders involved in Tizen by:

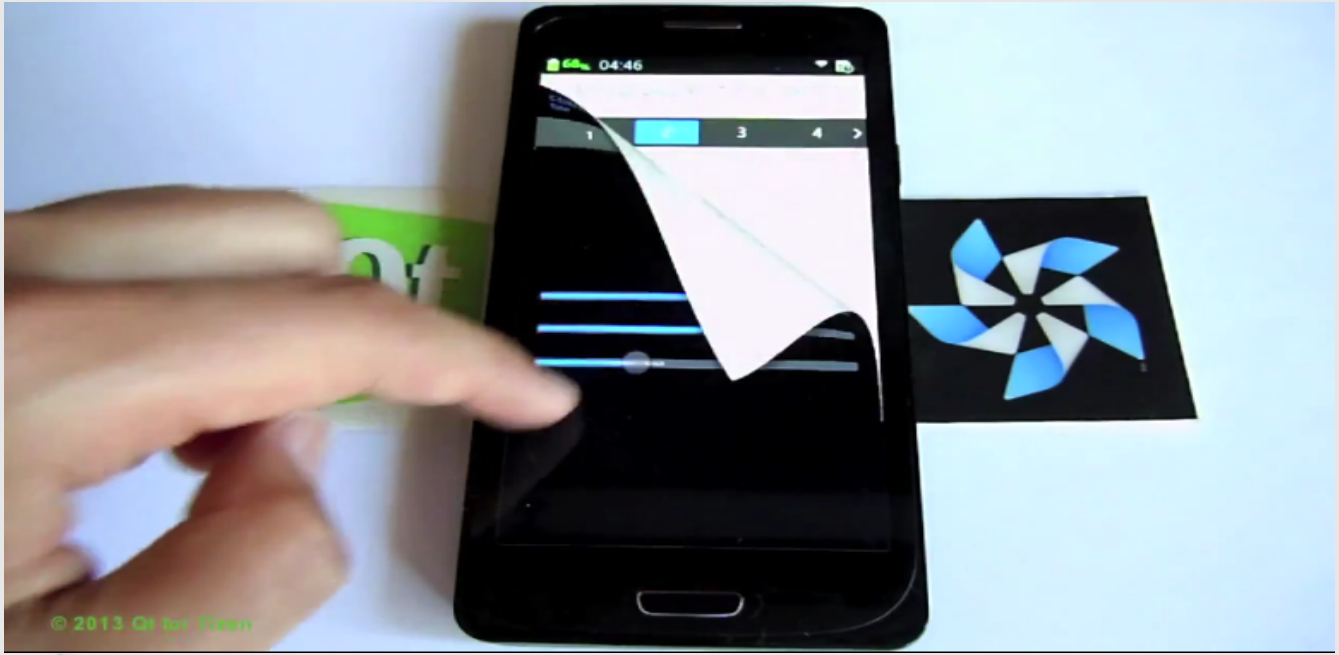
- Support Tizen Community (blog, G+, twitter, facebook, irc)
- Deliver Qt binaries
- Deliver Qt integration
- Deliver Qt Creator based SDK

Achievements

Qt ported to Tizen Mobile RD PQ device and Emulator

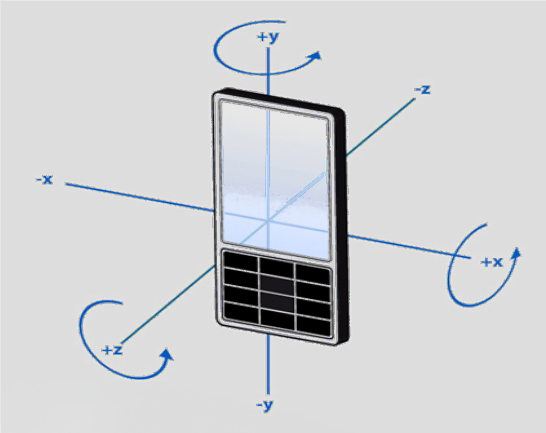
Achievements

Qt Quick Controls Tizen Mobile style



Achievements

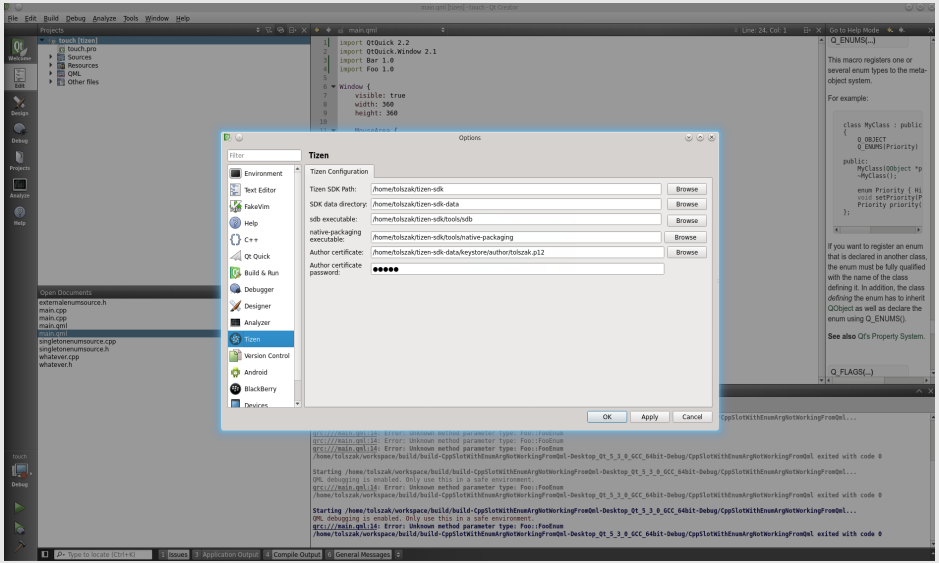
Qt for Tizen enabled submission of many applications to Tizen App Challenge



Integration with Tizen Mobile sensors

Achievements

Qt Creator integration with Tizen Mobile, IVI and Common



12 Qt packages available for all public Tizen 3.0 profiles

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Current state

Feature	State
Integration with Tizen 2.2.1	Alpha
Qt Quick Controls Tizen Style	Technology preview
Qt Creator Integration	Alpha
Qt Sensors integration with Tizen 2.2.1 mobile	Alpha
Qt Multimedia Integration	Technology preview
Packaging recipes	Done

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Future challenges

- Full Qt Creator integration including remote debugging
- Integration with future Tizen's security enhancements (cyanara)
- Compliance with Tizen Store policy
- Qt Quick Automotive Message Broker plugins
- Qt Web Engine
- Qt Wayland Compositor API
- Further integration: maps, nfc, bluetooth...

Q & A

Thank you

References

- http://en.wikipedia.org/wiki/Qt_(software)
- http://qt-project.org/doc/qt-5/index.html
- http://doc-snapshot.qt-project.org/qt5-stable/qtcore-index.html
- http://qt-project.org/wiki/Tizen
- http://fc06.deviantart.net/fs71/f/2012/283/3/a/desktop_computer_icon_by_ivprogrammer-d5hefue.png
- http://en.wikipedia.org/wiki/File:Arm_5250_full_1.jpg
- http://pixabay.com/en/smartphone-cell-phone-mobile-phone-154787/
- http://en.wikipedia.org/wiki/File:Intel_810_Chipset_Digon3.JPG
- https://www.flickr.com/photos/nooku/5221979616/in/photostream/
- https://www.tizen.org/about/tizen-brand-guidelines
- http://commons.wikimedia.org/wiki/File:Opensource.svg
- http://openclipart.org/detail/166905/help-desk-by-gsagri04
- http://pixabay.com/static/uploads/photo/2013/07/12/16/51/packages-151373_640.png
- http://openclipart.org/detail/35389/tango-applications-internet-by-warszawianka
- http://pixabay.com/en/old-black-video-icon-silhouette-34025/
- http://pixabay.com/en/padlock-security-lock-closed-24051/
- http://en.wikipedia.org/wiki/File:Wayland_Logo.svg
- http://pixabay.com/en/red-future-car-cartoon-cars-35263/
- http://skp.samsungcsportal.com/integrated/popup/HtgDetailGuide3.jsp?cdsite=my&seq=13685
- http://openclipart.org/detail/90709/tv-icon-by-jhnri4
- http://pixabay.com/en/flat-icon-food-car-cartoon-35594/
- http://pixabay.com/en/back-bend-bridge-exercise-female-18713/
- http://commons.wikimedia.org/wiki/File:Blue_question_mark_(italic).svg

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