Working with QSystemInfo - System Information API - Part 1

ID		**Creation date**	8-March-2010
Platform	S60 3rd Edition, FP1, FP2 S60 5th Edition	**Tested on devices**	Nokia 5800 xPressMusic
Category	Qt	**Subcategory**	Qt Mobility API

Keywords (APIs, classes, methods, functions): QSystemInfo, QString, QStringList, QButton

Tip:
- Please read this article before moving forward: Archived:Setting up environment for Qt Mobility API
- Setup Carbide.c++ IDE as explained in this article: Working with Carbide.c++ IDE for Qt Mobility APIs

Overview

This is a part 1 of the ***QSystemInfo API*** which is a part of the ***System Information API*** from ***Qt Mobility project***.

What is covered in QSystemInfo API Part 1

- It is a part of the System Information API.
- This article covers information about
  - Available languages in the device
  - Current language of the device
  - Current country code of the device

Capabilities required

- None

UI design (.ui file)

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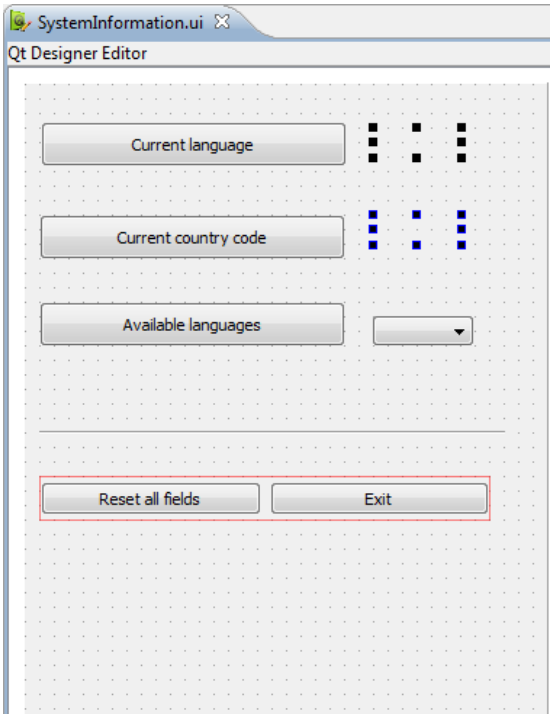

Project configuration file (.Pro file)

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

```
CONFIG += mobility
MOBILITY += systeminfo
```

- Add Qt-specific configuration options in .pro file as shown below

```
QT += network
```

Implementing QSystemInfo API

- QSystemInfo API is a part of the QtMobility namespace. So declare the QtMobility namespace as shown below:

```
using namespace QtMobility;
```

Header file

```
#ifndef SYSTEMINFORMATION_H
#define SYSTEMINFORMATION_H

#include <QtGui/QWidget>
#include "ui_SystemInformation.h"
#include <qsysteminfo.h>

using namespace QtMobility;

class SystemInformation : public QWidget
{
    Q_OBJECT

public:
 SystemInformation(QWidget *parent = 0);
    ~SystemInformation();

public slots:
 void displayCurrentCountryCode();
 void displayCurrentLanguage();
 void displayAvailableCountryCodes();
 void resetAllFields();

private:
    Ui::SystemInformation ui;
    QSystemInfo* sysInfo;
};

#endif // SYSTEMINFORMATION_H
```


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Source file

```
#include "SystemInformation.h"

SystemInformation::SystemInformation(QWidget *parent)
    : QWidget(parent), sysInfo(NULL)
{
 ui.setupUi(this);
 sysInfo = new QSystemInfo();

 QObject::connect(ui.curLanguageButton,
     SIGNAL(clicked()),
     this,
     SLOT(displayCurrentLanguage()));
 QObject::connect(ui.countryCodeButton,
     SIGNAL(clicked()),
     this,
     SLOT(displayCurrentCountryCode()));
 QObject::connect(ui.availableLanguagesButton,
     SIGNAL(clicked()),
     this,
     SLOT(displayAvailableCountryCodes()));
 QObject::connect(ui.resetButton,
     SIGNAL(clicked()),
     this,
     SLOT(resetAllFields()));
}

SystemInformation::~SystemInformation()
{
 delete sysInfo;
 sysInfo = NULL;
}

void SystemInformation::displayCurrentCountryCode()
{
 if(sysInfo)
 {
  QString str = sysInfo->currentCountryCode();
  ui.countryCodeLabel->setText(str);
 }
}

void SystemInformation::displayCurrentLanguage()
{
 if(sysInfo)
 {
  QString str = sysInfo->currentLanguage();
  ui.languageLabel->setText(str);
 }
}

void SystemInformation::displayAvailableCountryCodes()
{
 if(sysInfo)
 {
  QStringList list = sysInfo->availableLanguages();
  ui.languageComboBox->addItems(list);
 }
}

void SystemInformation::resetAllFields()
{
 if(sysInfo)
 {
  ui.languageLabel->clear();
  ui.countryCodeLabel->clear();
  ui.languageComboBox->clear();
 }
}
```

Output

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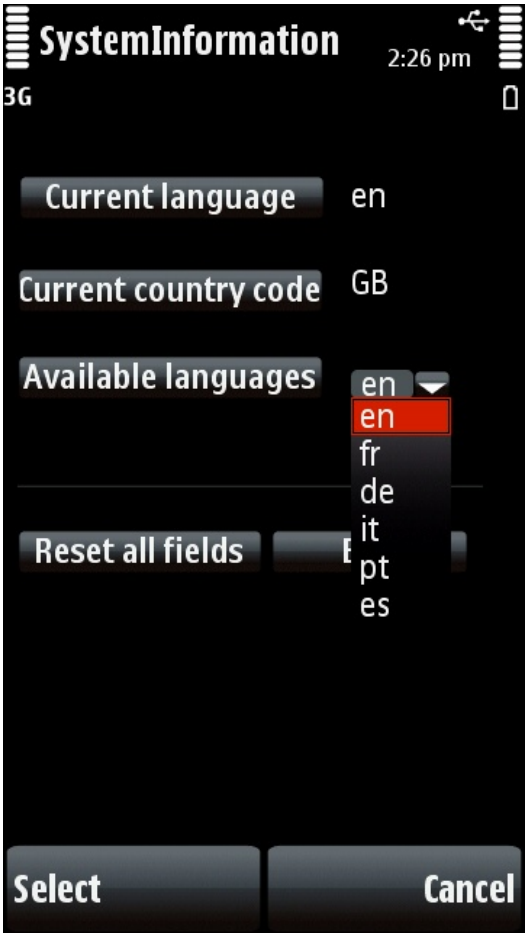

Useful functions

- QStringList availableLanguages();
- QString currentCountryCode();
- QString currentLanguage();

Keywords

Headers

- #include <qsysteminfo.h>

Classes

- QSystemInfo
- QString
- QStringList
- QButton

Example Application

- A working example application is available to download from here: QSystemInfo part1.zip

Related articles

- Getting started with Qt Mobility APIs
- Archived:Setting up environment for Qt Mobility API
- Working with Carbide.c++ IDE for Qt Mobility APIs
- Working with QSystemInfo - System Information API - Part 2

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- Working with QSystemDeviceInfo - System Information API - Part 1
- Working with QSystemStorageInfo - System Information API
- Working with QSystemDisplayInfo - System Information API
- Working with QSystemNetworkInfo - System Information API - Part 1
- Working with QSystemNetworkInfo - System Information API - Part 2

Reference links

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

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