Battery Indicator Example using Qt

Overview

This code example shows how to create simple basic 'Battery Indicator' application using QSystemDeviceInfo.

Note: This example uses a QWidget based UI (deprecated) and should be updated to use a QML based UI.

Header (batteryindicator.h)

```
#ifndef BATTERYINDICATOR_H
#define BATTERYINDICATOR_H

#include <QDialog>
//Include the System Info header file
#include <QSystemInfo>

QTM_USE_NAMESPACE

namespace Ui {
    class BatteryIndicator;
}


class BatteryIndicator : public QDialog
{
    Q_OBJECT

public:
    explicit BatteryIndicator(QWidget *parent = 0);
    ~BatteryIndicator();

private:
    Ui::BatteryIndicator *ui;
    void setupGeneral();

    QSystemDeviceInfo *deviceInfo;
};

#endif // BATTERYINDICATOR_H
```

Source (batteryindicator.cpp)

```
#include "batteryindicator.h"
#include "ui_batteryindicator.h"

//set initial values
BatteryIndicator::BatteryIndicator(QWidget *parent) :
    QDialog(parent),
    ui(new Ui::BatteryIndicator),
    deviceInfo(NULL)
{
    ui->setupUi(this);
    setupGeneral();

}

BatteryIndicator::~BatteryIndicator()
{
    delete ui;
}
void BatteryIndicator::setupGeneral()
{
    //Create a QSystemDeviceInfo object and set its value
    deviceInfo = new QSystemDeviceInfo(this);

    ui->batteryLevelBar->setValue(deviceInfo->batteryLevel());

    //connect the signal to the setValue slot of the progress bar
    connect(deviceInfo, SIGNAL(batteryLevelChanged(int)),
            ui->batteryLevelBar, SLOT(setValue(int)));

}
```

UI File (BatteryIndicator.ui)

```
<?xml version="1.0" encoding="UTF-8"?>
<ui version="4.0">
 <class>BatteryIndicator</class>
 <widget class="QDialog" name="BatteryIndicator">
  <property name="geometry">
   <rect>
    <x>0</x>
    <y>0</y>
    <width>800</width>
    <height>480</height>
   </rect>
  </property>
  <property name="windowTitle">
```


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```
    <string>BatteryIndicator</string>
   </property>
   <widget class="QProgressBar" name="batteryLevelBar">
    <property name="geometry">
     <rect>
      <x>110</x>
      <y>110</y>
      <width>121</width>
      <height>291</height>
     </rect>
    </property>
    <property name="autoFillBackground">
     <bool>false</bool>
    </property>
    <property name="value">
     <number>24</number>
    </property>
    <property name="orientation">
     <enum>Qt::Vertical</enum>
    </property>
    <property name="textDirection">
     <enum>QProgressBar::TopToBottom</enum>
    </property>
   </widget>
   <widget class="QLabel" name="label">
    <property name="geometry">
     <rect>
      <x>120</x>
      <y>10</y>
      <width>161</width>
      <height>31</height>
     </rect>
    </property>
    <property name="autoFillBackground">
     <bool>false</bool>
    </property>
    <property name="lineWidth">
     <number>3</number>
    </property>
    <property name="midLineWidth">
     <number>3</number>
    </property>
    <property name="text">
     <string>Battery Indicator</string>
    </property>
    <property name="textFormat">
     <enum>Qt::RichText</enum>
    </property>
    <property name="wordWrap">
     <bool>true</bool>
    </property>
    <property name="textInteractionFlags">
     <set>Qt::LinksAccessibleByMouse</set>
    </property>
   </widget>
   <widget class="Line" name="line">
    <property name="geometry">
     <rect>
      <x>0</x>
      <y>40</y>
      <width>661</width>
      <height>16</height>
     </rect>
    </property>
    <property name="orientation">
     <enum>Qt::Horizontal</enum>
    </property>
   </widget>
  </widget>
  <layoutdefault spacing="6" margin="11"/>
  <resources/>
  <connections/>
 </ui>
```

Main File (main.cpp)

```
#include <QtGui/QApplication>
#include "batteryindicator.h"

int main(int argc, char *argv[])
{
    QApplication a(argc, argv);
    BatteryIndicator w;

    w.showFullScreen();

    return a.exec();
}
```

Project File (.pro File)

```
QT       += core gui

TARGET = BatteryIndicator
TEMPLATE = app


SOURCES += main.cpp\
        batteryindicator.cpp

HEADERS  += batteryindicator.h

FORMS    += batteryindicator.ui

#uses the System Info API
CONFIG += mobility
MOBILITY = systeminfo

symbian {
    TARGET.UID3 = 0xe1c86fe6
```


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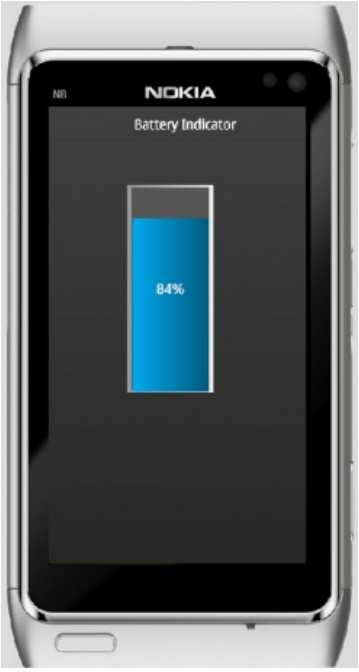
```
    # TARGET.CAPABILITY +=
    TARGET.EPOCSTACKSIZE = 0x14000
    TARGET.EPOCHEAPSIZE = 0x020000 0x800000
}
```

Postcondition

Here is one screenshot of the BatteryIndicator Apps.



Download Source Code

You can download source code from this link File:BatteryIndicator.zip.

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