Archived:Handle change in screen orientation in Qt

Archived: This article is archived because it is not considered relevant for third-party developers creating commercial solutions today. If you think this article is still relevant, let us know by adding the template {{ReviewForRemovalFromArchive|user=~~~~|*write your reason here*}}.

Qt Quick should be used for all UI development on mobile devices. The approach described in this article (based on QWidget) is deprecated.

This code example shows how to get notification when the screen mode changes using QWidget::resizeEvent(). This method gets called when the screen mode changes, so you have to implement that virtual method in your class in order to handle orientation change events.

Warning: This article does not work properly in Qt 4.7 in Symbian. It can be rectified with the change described below.

The issue is in the example code's `ResizeEvent::GetScreenCoordinates()` method. The `GetScreenCoordinates` uses `QDesktopWidget::availableGeometry` and `QDesktopWidget::screenGeometry` methods. In all cases these methods do not reflect *current* screen geometry values during `QWidget::resizeEvent` call as the respective values are only changed *after* the resizeEvent has occured. This means that e.g. during the startup of the application these may return wrong values as the values are not yet set properly.

If the whole screen geometry information is needed from QDesktopWidget it's advised to connect to QApplication::desktop()'s workAreaResized(int) signal and call `QApplication::desktop()->availableGeometry()` in the connected slot function. This works in Qt 4.7.3 in Symbian but not (due to bug) in Qt 4.6.

See following bug report for more details. The QTBUG-14058's fix introduces documentation for QDesktopWidget on this issue.

In many cases application should however get simply the geometry of the main window using `QMainWindow::width()` and `::height()` methods during `QMainWindow`'s `resizeEvent`.

Source

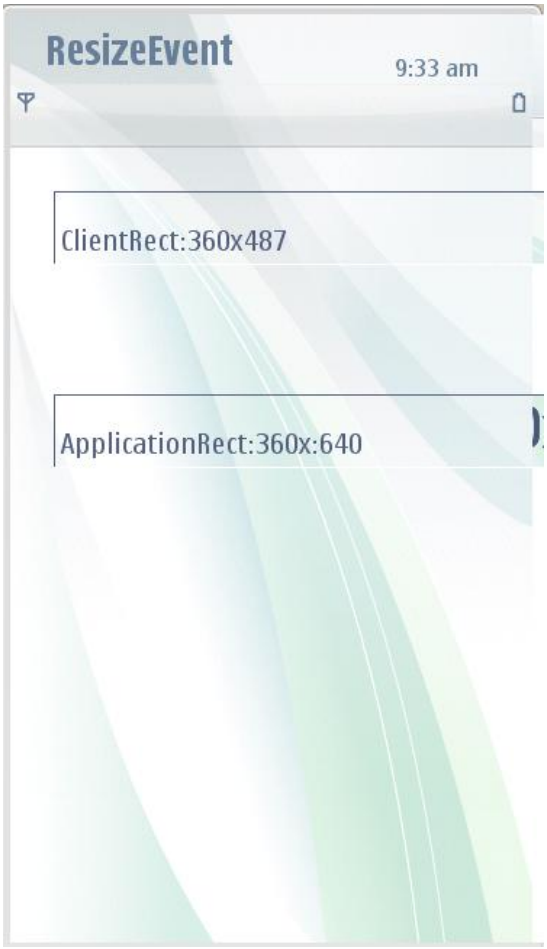
```
//resizeEvent() method get called when user change screen mode.
void ResizeEvent::resizeEvent (QResizeEvent* event)
{
    QSize widgetSize = event->size();
 //Resize your custom control according to new size.
    QMainWindow::resizeEvent(event);
}
```

Postconditions

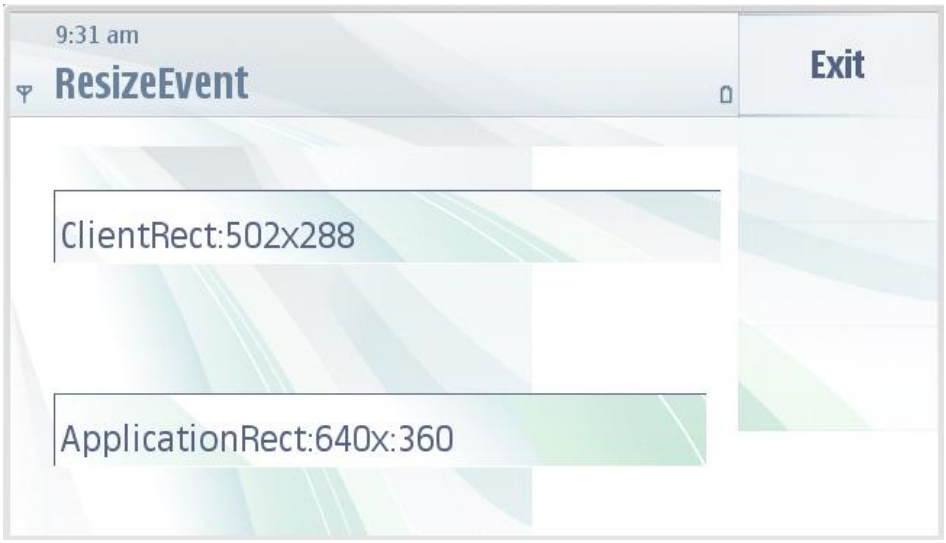
The code snippet is expected to notify change in screen mode.

Normal screen

(C) Copyright Nokia 2013. All rights reserved.



Screen after changing mode to portrait



Related link

- Archived:Listening for screen orientation changes in Qt

Download Code Example

- File:QtResizeEvent.zip shows new screen size when user change screen mode. This example is tested on Nokia 5800 XpressMusic.

(C) Copyright Nokia 2013. All rights reserved.

(C) Copyright Nokia 2013. All rights reserved.