BigCats app with multiple pages and audio in QML

This article describes a simple QML app which allows you to select from animal images, progress to a full screen view of that animal and play audio for it. The app is written as a learning exercise by a new QML programmer.

Introduction

I have chosen simple BigCats application for demonstrating how easy it is for creating Symbian application without a single line of code.

BigCats application displays custom grid view using four images inserted in rectangles. Here are the screen shots of the application.

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Steps to create simple QML application without writing a single line of code.

- Create new project using Qt Quick project -> Qt Quick application template and select Qt Quick component for Symbian as a application type.
- Select target as Symbian device or Qt Simulator
- Open main.qml file and add new tool button "info" as

```
        ToolButton {
            iconSource: "gfx/info.png"
        }
```

- Create application's about dialog

```
    QueryDialog {
        id: aboutDlg

        titleText: qsTr("BigCats 1.0")
        message: qsTr("<p>BigCats application displays Lion " +
                      "Tiger, Cheetah and Leopard on whole screen." +
                      "<p>It demonstrate the use of a switching between multiple views, playing sound and displaying images.</p>"
                      )
        acceptButtonText: qsTr("OK")
    }
```

- Link info tool button to display about dialog

```
        ToolButton {
            iconSource: "gfx/info.png"
            onClicked: aboutDlg.open();
        }
```

- Open MainPage.qml and add rectangles for thumbnail to the main page by

```
    Rectangle {
        id: rectangle1
        x: 6
        y: 6
        width: 170
        height: 250
        color: "#ffffff"
    }
```

- Add image to rectangle by

```
    Rectangle {
        id: rectangle1
        x: 6
        y: 6
        width: 170
        height: 250
        color: "#ffffff"

        Image {
            id: imagerec1
```


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```
        x: 0
        y: 0
        width: 170
        height: 250
        source: "gfx/Lion.jpg"
    }
}
```

- Now add mouse area for click

```
Rectangle {
    id: rectangle1
    x: 6
    y: 6
    width: 170
    height: 250
    color: "#ffffff"

    MouseArea {
        id: mouse_area1
        x: 0
        y: 0
        width: 170
        height: 250
    }

    Image {
        id: imagerec1
        x: 0
        y: 0
        width: 170
        height: 250
        source: "gfx/Lion.jpg"
    }
}
```

Follow above steps to create remaining rectangles and aligned to screen size.After above steps you will see similar to below screen

Creating multiple views / pages

- Create new page in MainPage.qml by adding

```
Page {
    id: page1
    x: 0
    y: 0
    width: 360
    height: 640
}
```

- Add rectangle to fit entire screen size by

```
    Rectangle {
        id: rectangle_page1
        x: 0
        y: 0
        width: 360
        height: 640
        color: "#ffffff"
```


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```
        }
```

- Add image to above rectangle by

```
            Image {
                id: imagepage1
                x: 0
                y: 0
                width: 360
                height: 640
                source: "gfx/Lion.jpg"
            }
```

- Add play icon image on top of above image by

```
            Image {
                id: image1
                x: 107
                y: 243
                width: 147
                height: 155
                opacity: 0.30
                z: 1
                source: "gfx/play.png"
            }
```

Note: set z: 1 to display image on top of other image.

- Add Audio playback and set file path by

```
        Audio {
                 id: playMusic
                 source: "Lion_Roaring.wav"
             }
```

Add **import QtMultimediaKit 1.1** to use Audio component

- Add mouse area for entire screen and action when clicked by

```
            MouseArea {
                id: mouse_area_page1
                x: 0
                y: 0
                width: 360
                height: 640

                onDoubleClicked: {
                   //Stop playback before changing view
                    if(playMusic.playing) {
                        playMusic.stop();
                    }
                    pageStack.pop();
                }
                onClicked: {
                    playMusic.play();
                }
```

- Add text on top of image by

```
        Text {
            id: text1
            x: 6
            y: 8
            z: 1
            text: qsTr("Double click to go back")
            font.bold: true
            color: "black"
        }
```

Similarly add remaining pages to the MainPage.qml file.

Adding link or action to main or initial page

- Add link to open new page(page 1) when its rectangle / thumbnail is clicked

```
    Rectangle {
        id: rectangle1
        x: 6
        y: 6
        width: 170
        height: 250
        color: "#ffffff"

        MouseArea {
            id: mouse_area1
            x: 0
            y: 0
            width: 170
            height: 250
           ''' onClicked: pageStack.push(page1);'''
        }

        Image {
            id: imagerec1
            x: 0
            y: 0
            width: 170
            height: 250
            source: "gfx/Lion.jpg"
        }
    }
```

Similarly add links to other pages to open.

Use pageStack.push(page1); to go to page1 and pageStack.pop(); to go back to previous page.

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Challenge

The biggest challenge I found is to sit and just have a brief look at features of QML quick components, as I was delaying this for a long time. This competition helped me to get introduced to very interesting and simple language of QML.

Summary

The above example is developed in few hours to just demonstrate simple application and there is room for improvements. This article will be updated once more features or improvements are added.

Note: This is an entry in the Symbian Qt Quick Components Competition 2012Q1

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