Simple Splash Screen in QML

This article demonstrates one way to create a Qt Quick splash screen component with simple animations.

26 Feb 2012

Overview

A Splash Screen is a "view" that is displayed when your app is first started. Splash screens are used to provide app branding, including information like its developer and publisher. They are often also used to distract the user while long-running actions required to start the app are performed in the background. For example, an app might connect to the Internet and fetch information while the screen is displayed.

There are many ways to implement a Splash Screen in QML. In this code snippet we show one of the simplest - an image that is displayed for a number of seconds on app startup and then faded. The Splash Screen is declared as a re-usable component that is used within the app's main QML file.

More advanced splashscreens can also be developed using different QML elements.

SplashScreen Component

Our SplashScreen uses two important QML elements:

- Image - loads an image from our resources
- SequentialAnimation - does nothing for 4 seconds, then quickly fades the image.

The `Image` is used to load our image from the apps resources. It's value is a property in `SplashScreen` so we can change the image used when we use the component.

The `SequentialAnimation` contains a `PauseAnimation`, which does nothing for 4.2 seconds, followed by a `PropertyAnimation` which animates image's opacity property to zero over 0.7 seconds. When the animation completes the SplashScreen emits a signal - the app can use this to perform its next actions.

The code below is created in a file **SplashScreen.qml** in the main app directory:

```
import QtQuick 1.0

Item {
    id: splashScreenContainer

    // image source is kept as an property alias, so that it can be set from outside
    property alias imageSource: splashImage.source

    // signal emits when splashscreen animation completes
    signal splashScreenCompleted()
    Image {
        id: splashImage
        source: imageSource
        anchors.fill: splashScreenContainer // do specify the size and position
    }

    // simple QML animation to give a good user experience
    SequentialAnimation {
        id:splashanimation
        PauseAnimation { duration: 4200 }
        PropertyAnimation {
            target: splashImage
            duration: 700
            properties: "opacity"
            to:0
        }
        onCompleted: {
```


(C) Copyright Nokia 2014. All rights reserved.

```
            splashScreenContainer.splashScreenCompleted()
        }
    }
    //starts the splashScreen
    Component.onCompleted: splashanimation.start()
 }
```

Using the SplashScreen component

We use the SplashScreen component as shown in the following code snippet. The component's `onSplashScreenCompleted()` handler is used by the app to determine its next operation.

```
import QtQuick 1.0
Rectangle {
    width: 360; height: 640
    SplashScreen{
        id:splashScreen
        imageSource: "images/splashscreen.png"
        anchors.fill: parent
        onSplashScreenCompleted: {
            // do whatever you want splash screen loaded completely
            console.log("Splash Screen Loaded");
        }
    }
}
```

Screenshot

Here's the screenshot of the project on desktop, the splash screen disappear animation occurs as well.

Conclusion

This is one of the simplest approaches to making a SplashSreen QML Component. It can be extended to make some more animated splashscreen using other QML Elements.

(C) Copyright Nokia 2014. All rights reserved.

(C) Copyright Nokia 2014. All rights reserved.