The Quartz Core Framework Offers Core Animations Interfaces with Advanced Compositing Technology

by JustinMcAllister

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iPhone belongs to an exceptional breed of devices which have there own special operating system. iPhone's operating system is named iOS. The os is split into four layers to make certain that iPhone apps developers can take maximum advantage of the device. The layers are: Cocoa Touch Layer (upper layer), Media Layer, Core Services Layer and Core OS Layer (deepest layer). It is necessary for iPhone application developers to have detailed understanding of all these layers. We are going to have a general look at first two layers.

The first layer - Cocoa Touch - is as well known as upper layer and is actually very important regarding iPhone. This specific layer provides essential frameworks that supply the infrastructure iPhone app developer is required to use on applications. In this specific layer, the developers largely use UIKit framework, Foundation Framework, Core Foundation Framework and so on. During iPhone application development, iPhone application developers work with UIKit to use graphical user interface. If there's a requirement to work with the Core Foundation Framework inside lower Core Services layer, the Foundation framework is required. All different development features are usually comprised in this framework.

In order to introduce multimedia services within the application, Media layer is needed. This specific layer offers all the graphics, audio as well as video technologies that guide iPhone apps developers build unique applications that are appealing and enjoyable. The Core Graphics framework comes with the interfaces for the Quartz 2D drawing API. Quartz is the same advanced, vector-based drawing engine which can be used in Mac OS X. It encourages path-based drawing, anti-aliased rendering, gradients, images, colors, coordinate-space transformations, as well as PDF document creation, display, and also parsing. Inspite of the fact that the API is actually C based, it applies object-based abstractions. It is used to stand for fundamental drawing objects, so that it is easier to save and reuse graphics content.

You will find Core Animation interfaces in the Quartz Core framework. Through this advanced animation and compositing technology, complicated animations and visual effects can be applied. This specific technology uses enhanced rendering path in order to implement these visual effects. With a goal regarding configuring animations and effects, it comprises a high-level Objective-C interface. Having configured these, they're then rendered in hardware for performance. There are several sections of iPhone OS, such as UIKit classes including UIView into which Core Animation is integrated. It gives animations for many standard system traits.

To make custom animations, the organizations providing iPhone apps development in India use an Objective-C interface within this framework. The audio technologies accessible in iPhone Operating system are constructed to assist iPhone application developer dish out brilliant audio experience to the users. Through these technologies, developers can make apps which can play back as well as record high-quality audio and also cause the vibration feature on units which enable those features. The audio formats which get backed up by the audio technologies in iPhone OS are AAC, Apple Lossless (ALAC), a-law, HE-ACC (MPEG-4 High Efficiency ACC), iLBC(Internet Low Bitrate Codec), MP3(MPEG-1 audio layer 3), IMA/ADPCM (IMA4), Linear PCM.

The operating system of iPhone facilitates full-screen video playback via Media Player framework. This framework can handle the playback of movie files with the .mov, .mp4, .m4v, and .3gp filename extensions. Following compression standards widely-used to enable playback of movie files:

- H.264 Baseline Profile Level 3.0 video, up to 640 x 480 at 30 fps. Remember that B frames are not backed inside the Baseline profile

- MPEG-4 Part 2 video (Simple Profile)

- AAC-LC audio, up to 48 kHz

- Lots of audio formats, including the ones mentioned in "Audio Technologies"

The developers who're well-versed working with these four layers, their importance in the entire development process, iPhone application development is a distinctive creative experience.

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JustinMcAllister - About Author:
Having worked within an a iPhone apps development company for longer than a decade, Justin McAllister contributes concerning iPhone apps development in mags.

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