IOS OPERATING SYSTEM

The Evolution of the iPhone.

Aissatou Barry

THE BEGINNING OF APPLE

❖Apple was founded April 1, 1976.

❖Was founded by Steve Jobs, Steve Wozniak and Ronald Wayne.

❖Apple started off by releasing its first computer.

❖Apple is formerly known as Apple computer Inc.

❖Apple is best known for their creation of the
iPhone, iPod and iPad.

WHAT IS IOS?

❖It is Apple's mobile operating system

❖Originally designed for the iPhone but now supports iPad, iPod touch and Apple TV

❖It was first introduced in 2007 with the first iPhone 2G

❖ It is programmed in C, C++ and objective-C
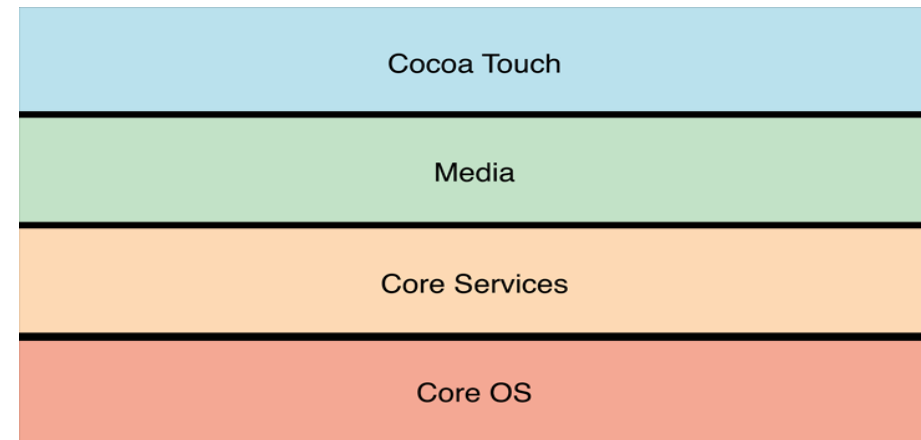
❖You can not install iOS on a non-apple hardware

IOS TOOLS & TECHNOLOGY LAYERS

❖**Xcode:** Provide multiple iOS app templates

❖**Interface** Builder: Provides drag and drop creation of user interfaces.

❖**iPhone Simulator**: Provides ability to test your software on iPhone and iPad

❖The four abstraction layers:

1. The Core O.S Layer

2. The Core Services Layer

3. The Media Layer
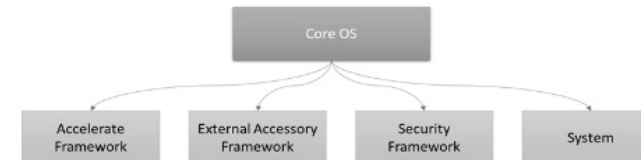
4. The Cocoa Touch Layer

CORE OS LAYER

❖Is the bottom layer of the iPhone OS stack

❖Provides services including:

1.   Low level networking

2.   Access to external accessories

3.   Usual fundamental operating system

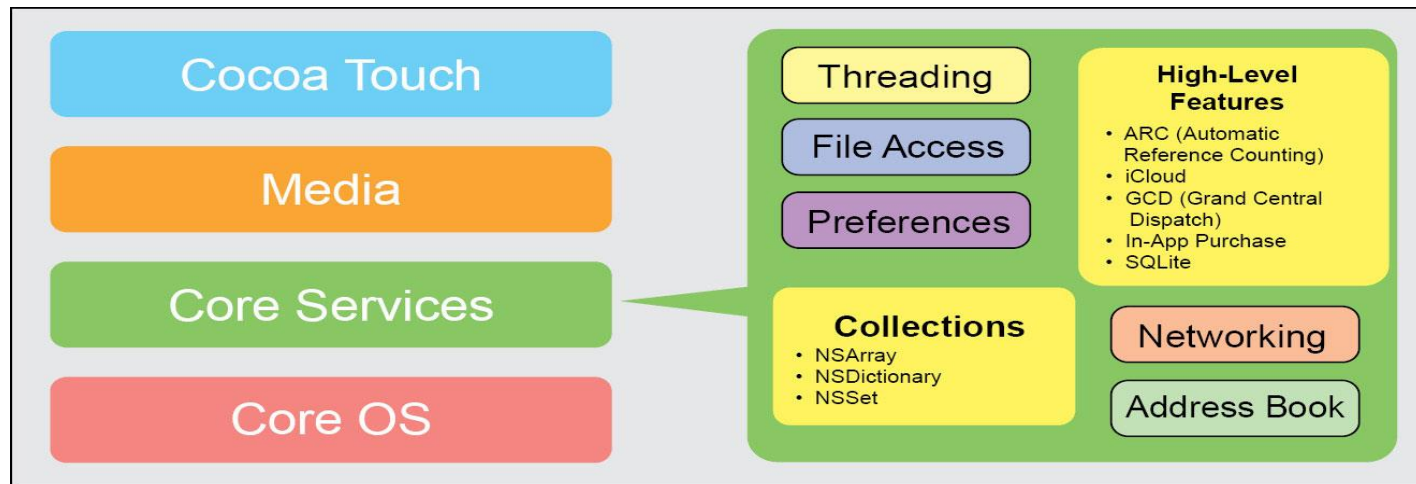such as memory management, file system handling

 and threads.

THE IOS ARCHITECTURE — CORE OS

The Core OS layer contains the low-level features that most other technologies are built upon.

CORE SERVICES LAYER

❖The Core Services layer contains fundamental system services for apps.

❖It also contains individual technologies to support features such as location, iCloud, social media and networking.

MEDIA LAYER

❖ Allow you to create the best multimedia experience available on the mobile device with frameworks

❖ Uses both C and objective – C

The technologies in this layer make it easy for you to build apps that look and sound great.

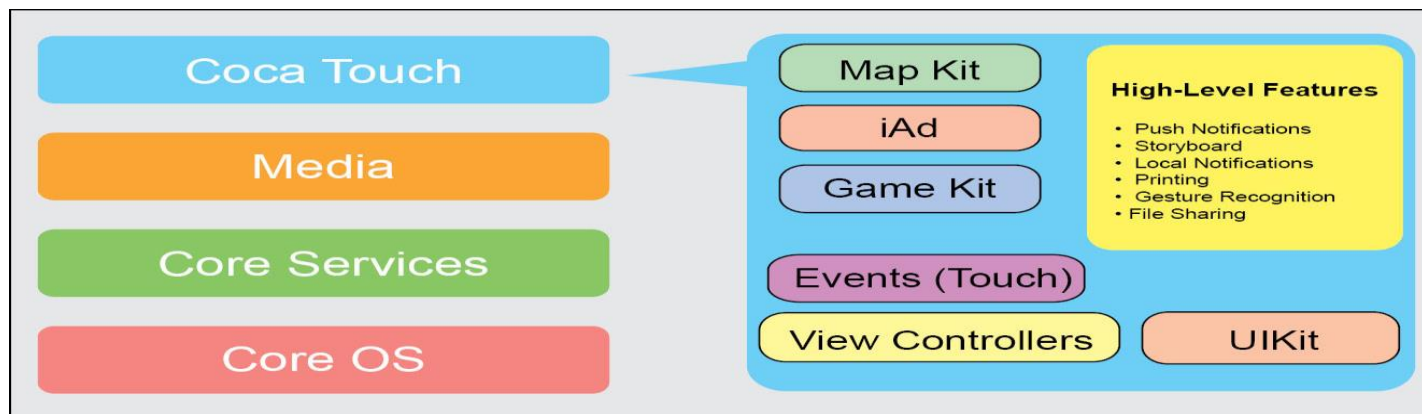**Media Layer**

- The Media layer contains the graphics, audio, and video technologies geared towards creating the best multimedia experience available on a mobile device.

Cocoa Touch		**Media**	
Media		Core Audio	JPG, PNG, TIFF
		OpenAL	PDF
Core Services		Audio Mixing	Quartz (2D)
		Audio Recording	Core Animation
Core OS		Video Playback	OpenGL ES

COCOA TOUCH LAYER

❖Provide the basic app infrastructure and support for key technologies such as multitasking, touch-based input, push notifications, and many high-level system services.

❖Contains key frameworks for building iOS apps. These frameworks define the appearance of your app.

APPLE SOFTWARE'S

❖**iLife suits**: used for organizing, editing, publishing photos, videos and music

❖**iWork**: used to create documents, spreadsheets and presentations

❖**iTunes**: Used to purchase and download music, music videos and etc.

❖**iClou.d**: used to store music and photos

PRIMARY & SECONDARY APPLICATIONS

Primary

1. Safari

2. Music

3. Mail

4. Phone

5. Face time video calling

Secondary

1. Camera

2. Photos

3. Calendar

4. Messaging

5. YouTube

6. Stocks

7. Map

8. etc

Evolution
OS to iOS 10 – Journey of iOS

iPhone OS 1
(1ˢᵗ Generation)

iPhone OS 2 (3G)

iPhone OS 3 (3GS)

iOS 4 (iPhone 4)

iOS 5 (iPhone 4S)

iOS 6 (iPhone 5)

iOS 7 (iPhone 5S)

iOS 8 (iPhone 6)

iOS 10 (iPhone 7)

iOS 9 (iPhone 6S)

Version	iPhone OS 2	iPhone OS 3	iOS 4	iOS 5	iOS 6
Codename	Big Bear	Kirkwood	Apex	Telluride	Sundance
New APIs	n/a	1000	1500	1500	n/a
New Features	n/a	100	100	200	200
Tentpoles	4	12	7	10	10
	Enterprise enhancements	In app purchase	Multitasking	Notification Center	Apple maps
	Microsoft Exchange	Peer-to-peer connectivity	Folders	Newsstand	Siri enhancements
	iPhone SDK	Accessories access	Mail enhancements	Reminders	Facebook integration
	App Store	Embedded Maps	iBooks for iPhone	Twitter integration	Shared Photo Streams
		Push notifications (redux)	Enterprise enhancements	Camera enhancements	Passbook
		Cut, copy, and paste	Game Center	Photo enhancements	FaceTime over cellular
		Landscape	iAd	Safari enhancements	Phone enhancements
		MMS		PC free	Mail enhancements
		Voice Memos		Game Center	Safari enhancements
		Calendar enhancements		iMessage	Accessibility enhancements
		Stocks enhancements		(iCloud)	(Chinese enhancements)
		Spotlight search			
Additional Features	Contact search	Voice Control	FaceTime	Siri	Panoramas
	Quick look enhancements	Video Recording	720p	1080p	
	Mail enhancements				
	Scientific calculator				
	Parental controls				
	Languages				
	MobileMe				
	3G + GPS				