

Developing iPhone apps with the Flash Platform

Paul Robertson – Adobe Systems, Inc.



Who is this guy, anyway?

Who is this guy, anyway?

<http://probertson.com/>
paul@probertson.com
[@probertson](#)

Disclaimer

Acknowledgements

Acknowledgements

Tom Krcha
Renaun Erickson
Ted Patrick
Jeff Swartz
Mike Chambers
Lee Brimelow
Chiedo Acholonu
Greg Burch

What are we talking about here?

What are we talking about here?

“Publisher for iPhone”

What are we talking about here?

“Publisher for iPhone” (and iPod Touch and iPad)

Why should I care?

Why should I care?

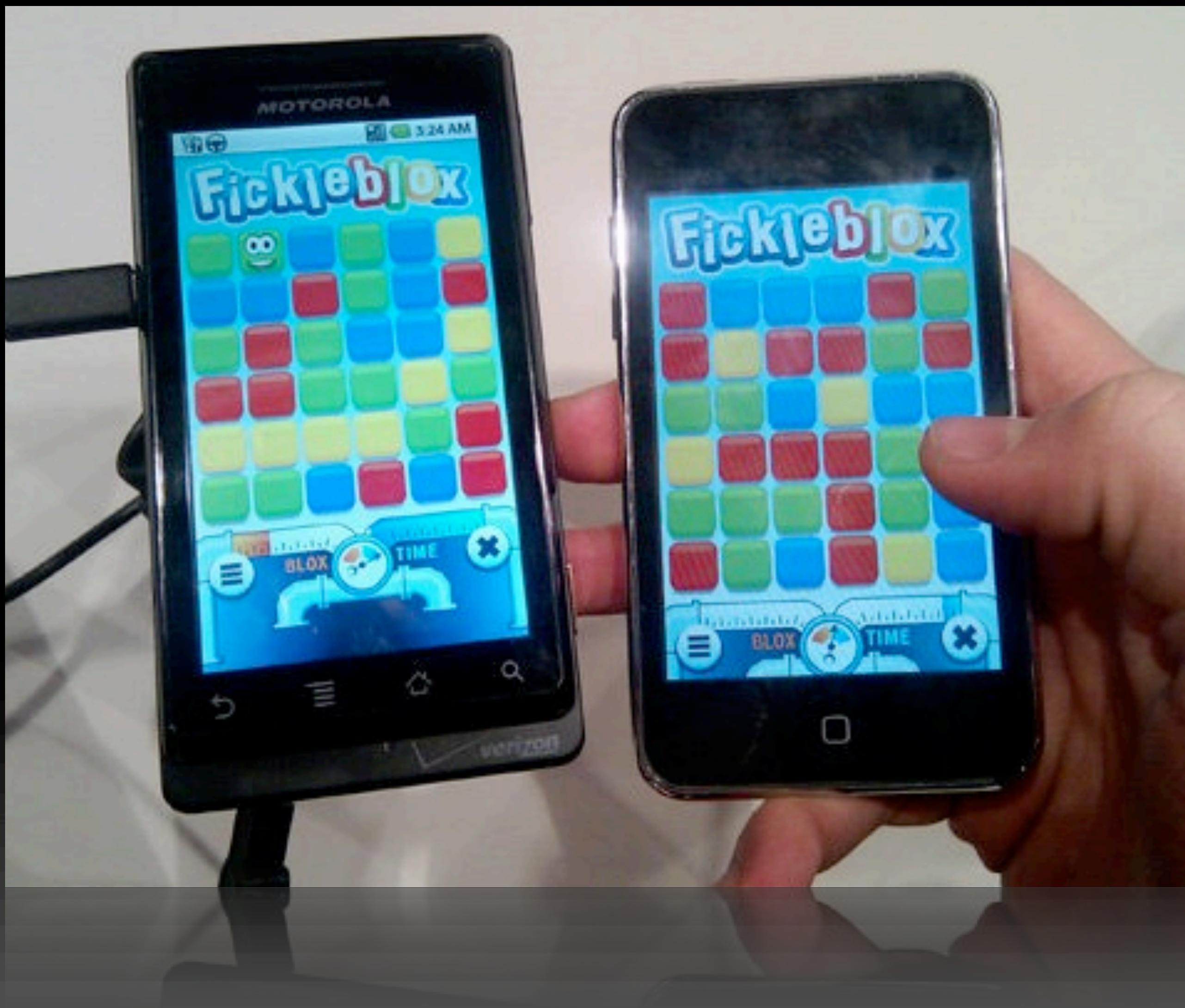
Hint: it's not about Apple

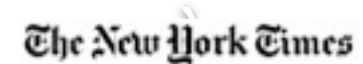
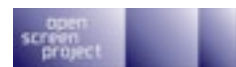
Why should I care?

Hint: it's not about Apple

Why should I care?

Hint: it's not *just* about Apple



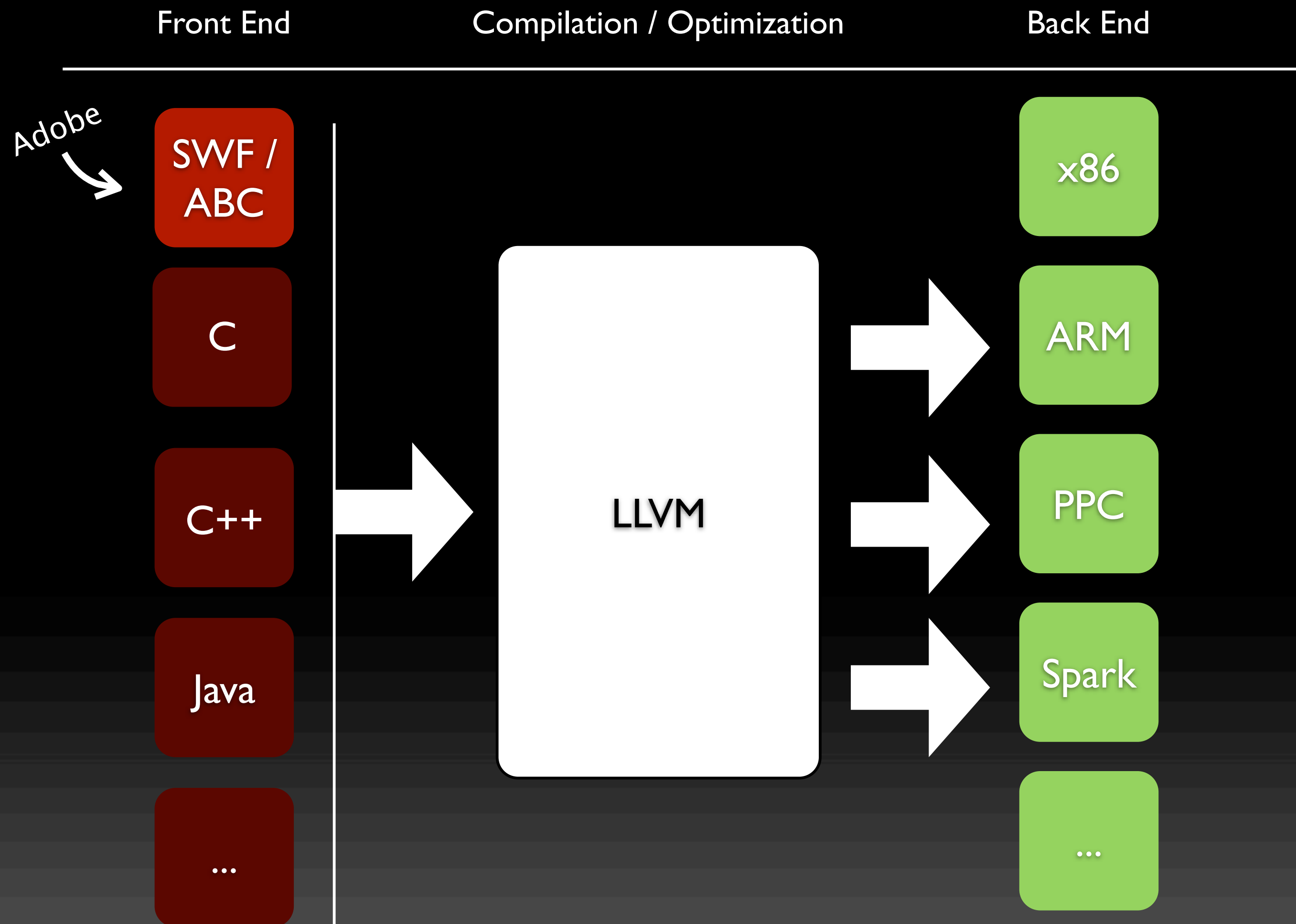


How does it work?



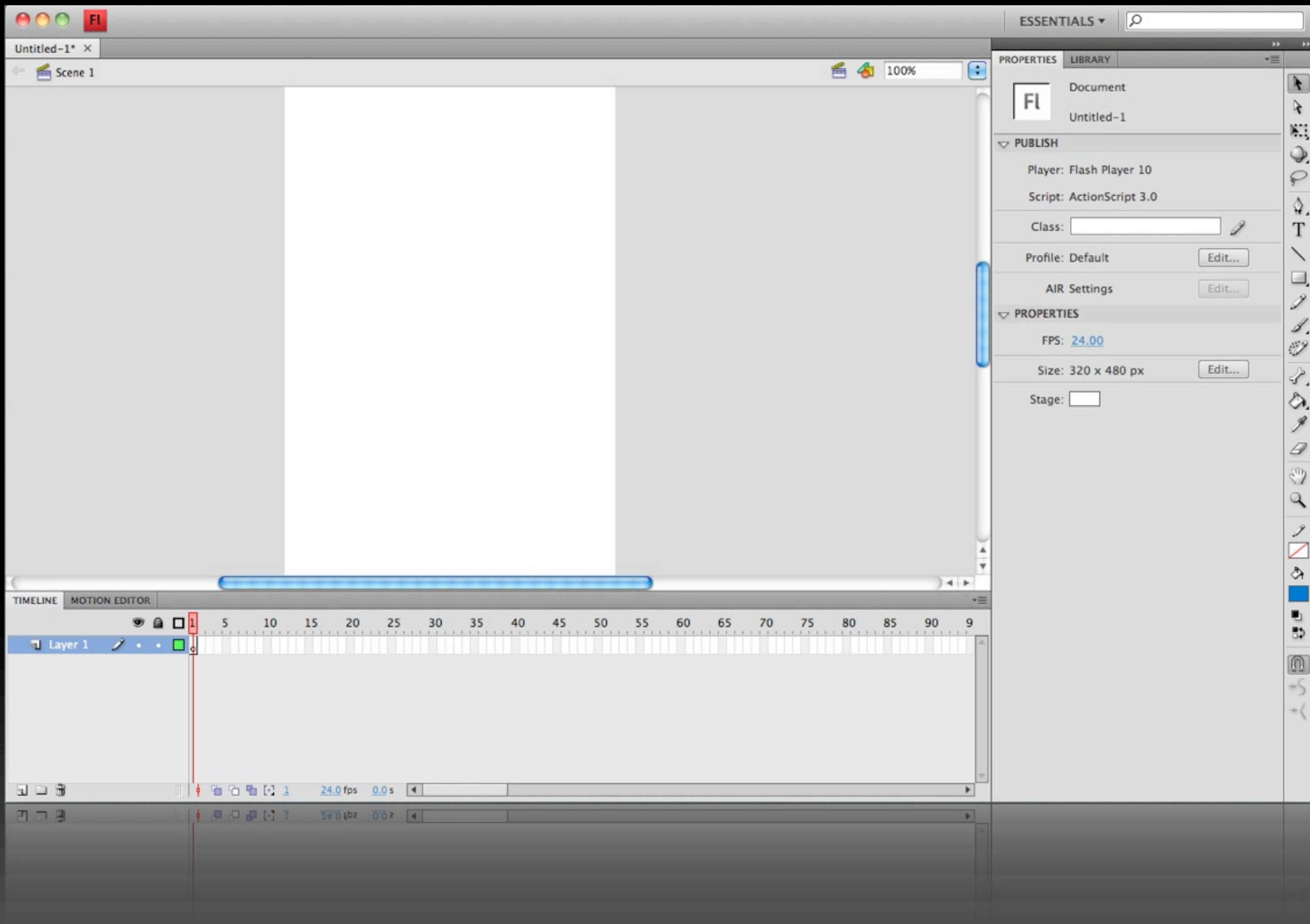
LLVM

Compiler Infrastructure



How do you build an app?





Flash - robotlegs-examples-AddressBook/src/org/robotlegs/examples/addressbook/service/CreateDatabaseService.as - Flash Builder - /Users/paul/Documents/Adobe Flash Builder...

Package Explorer

- AddressBook-Robotlegs
 - air-sqlite
 - robotlegs-examples-AddressBook
 - src
 - (default package)
 - assets
 - data
 - org.robotlegs.examples.addressbook
 - controller
 - events
 - model
 - service
 - events
 - helpers
 - CreateDatabaseService.as
 - IContactService.as
 - IDatabaseService.as
 - SQLContactService.as
 - XMLContactService.as
 - view
 - AddressBookContext.as
 - sql
 - RobotlegsAddressBook-app.xml
 - Flex 4.0
 - Referenced Libraries
 - bin-debug
 - html-template
 - libs
 - readme.md

Start Page CreateDatabaseService.as

```

1 package org.robotlegs.examples.addressbook.service
2 {
3     import com.probertson.data.QueuedStatement;
4     import com.probertson.data.SQLRunner;
5
6     import flash.errors.SQLError;
7     import flash.events.SQLErrorEvent;
8
9     import org.robotlegs.examples.addressbook.events.ApplicationConfigurationEvent;
10    import org.robotlegs.mvcs.Actor;
11
12    public class CreateDatabaseService extends Actor implements IDatabaseService
13    {
14        [Inject]
15        public var sqlRunner:SQLRunner;
16
17
18        public function createDatabaseStructure():void
19        {
20            var stmts:Vector.<QueuedStatement> = new Vector.<QueuedStatement>();
21            stmts[stmts.length] = new QueuedStatement(CREATE_CONTACTS_SQL);
22            stmts[stmts.length] = new QueuedStatement(POPULATE_CONTACTS_SQL);
23
24            sqlRunner.executeModify(stmts, executeBatch_complete, executeBatch_error, null);
25        }
26
27        private function executeBatch_complete():void
28        {
29            dispatch(new ApplicationConfigurationEvent(ApplicationConfigurationEvent.DATABASE_READY));
30        }
31
32    }

```

Problems Data/Services Network Monitor Console Search ASDoc

No consoles to display at this time.

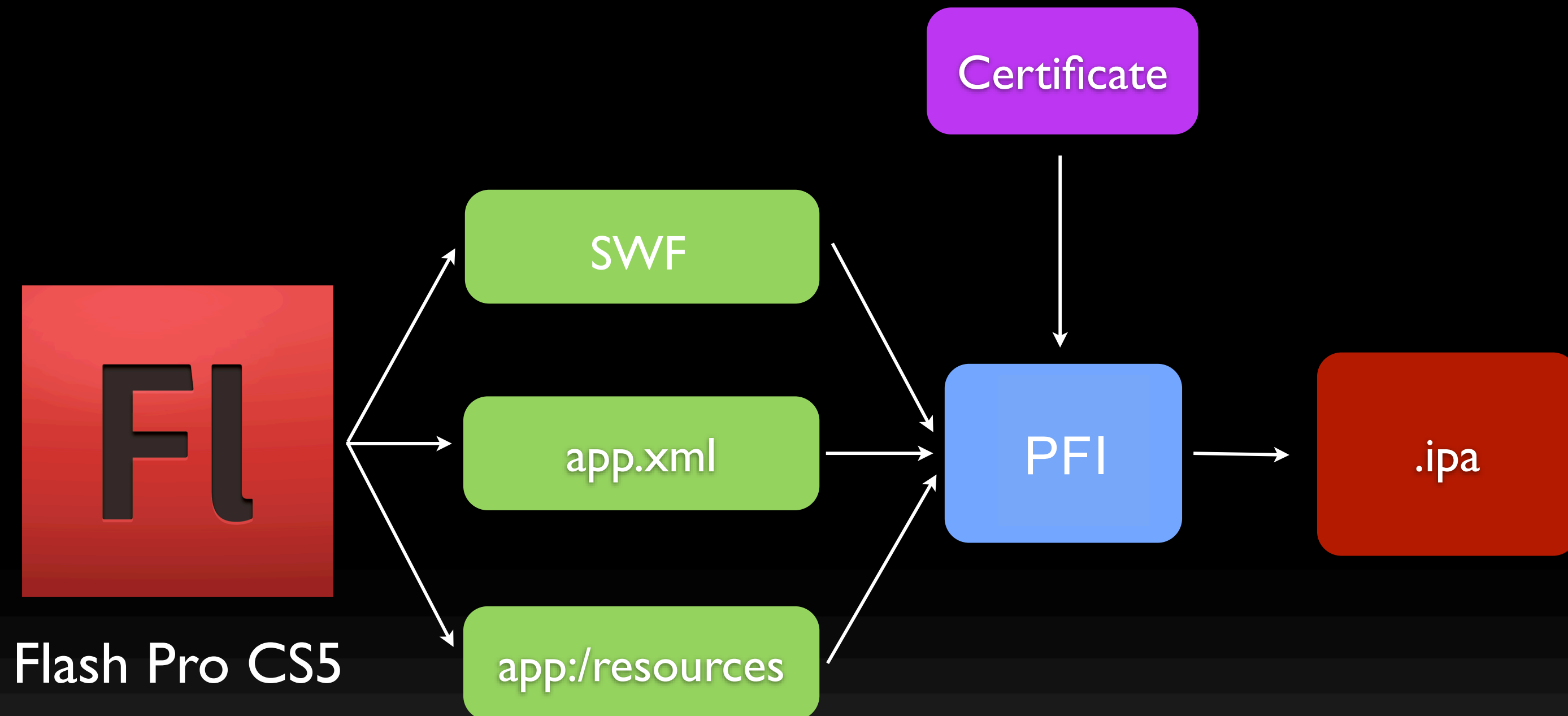
Writable	Insert	1:1
Writable	Insert	1:1

Develop

Publish

Package

Deploy





iPhone Dev Center

Hi, Guest

[Register](#)

[Log In](#)

Log in to get the most out of the iPhone Dev Center.

[Log in](#)

The iPhone Dev Center provides access to technical resources and information to assist you in developing with the latest technologies in iPhone OS. Log in with your Registered iPhone Developer Apple ID and password, or sign-up as a free Registered iPhone Developer today.

Developing for iPhone OS 3.1

Search iPhone Reference Library

Technical Documentation



Getting Started Documents

Developers new to iPhone OS can read about the tools, frameworks, development best-practices, and design methods for creating innovative world-class iPhone applications.



iPhone Reference Library

Explore a collection of in-depth technical documentation, sample code, guides, and articles for iPhone development categorized by topic and frameworks.

Featured Content

[iPhone Application Programming Guide](#)

[iPhone Development Guide](#)

[iPhone Human Interface Guidelines](#)

[Your First iPhone Application](#)

[Learning Objective-C: A Primer](#)

To access iPhone SDK 3.1.2 and additional technical resources and information, [log in](#) with your Registered iPhone Developer Apple ID and password, or [sign up](#) as a free Registered iPhone Developer today.

Download iPhone SDK 3.1.2

Registered iPhone Developers can download iPhone SDK 3.1.2, which includes the Xcode IDE, iPhone SDK 3.1.2, which includes the Xcode IDE, iPhone Registered iPhone Developers can download [Download iPhone SDK 3.1.2](#)



Getting Started Videos

Watch Apple experts discuss everything from getting started with iPhone SDK, to the tools and getting started with iPhone SDK, to the tools and Watch Apple experts discuss everything from [Getting Started Videos](#)

Developer Apple ID and password, or [sign up](#) as a free Registered iPhone Developer today.

To access iPhone SDK 3.1.2 and additional technical resources and information, [log in](#) with your Registered iPhone

iPhone Developer Program

App Store Resource Center

Find details on everything from how to prepare for submitting an app to managing an app once it's been posted. [Log in](#)



News and Announcements

Check out this regularly updated section for a range of information including tips on submitting apps, turnaround time for app review, and more. [Log in](#)



Join the iPhone Developer Program

The iPhone Developer Program offers a complete process for developing and distributing iPhone or iPod touch applications. [Learn More](#)

applications. [Learn More](#)
distributing iPhone or iPod touch
complete process for developing and
The iPhone Developer Program offers a
Join the iPhone Developer Program

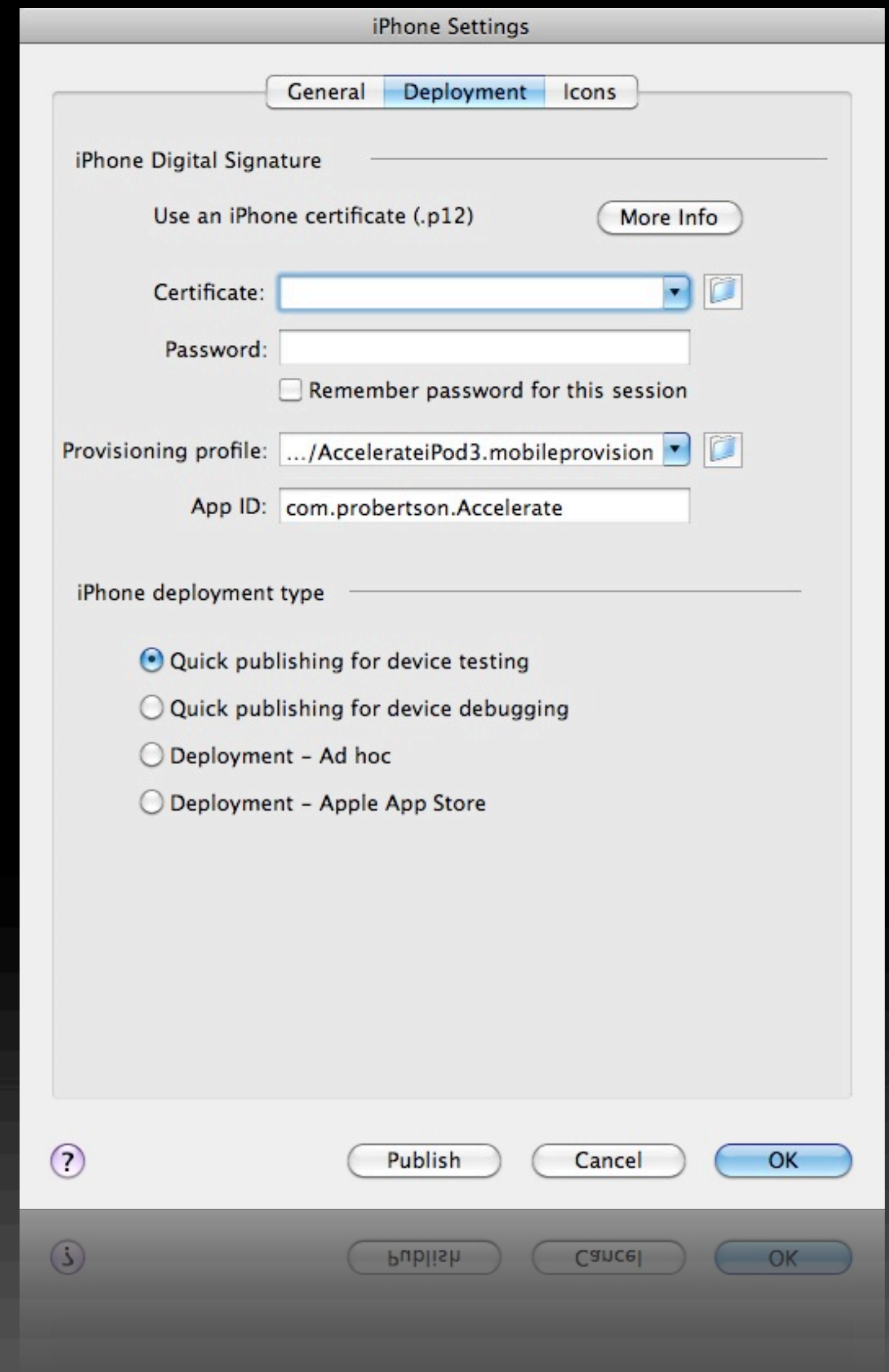
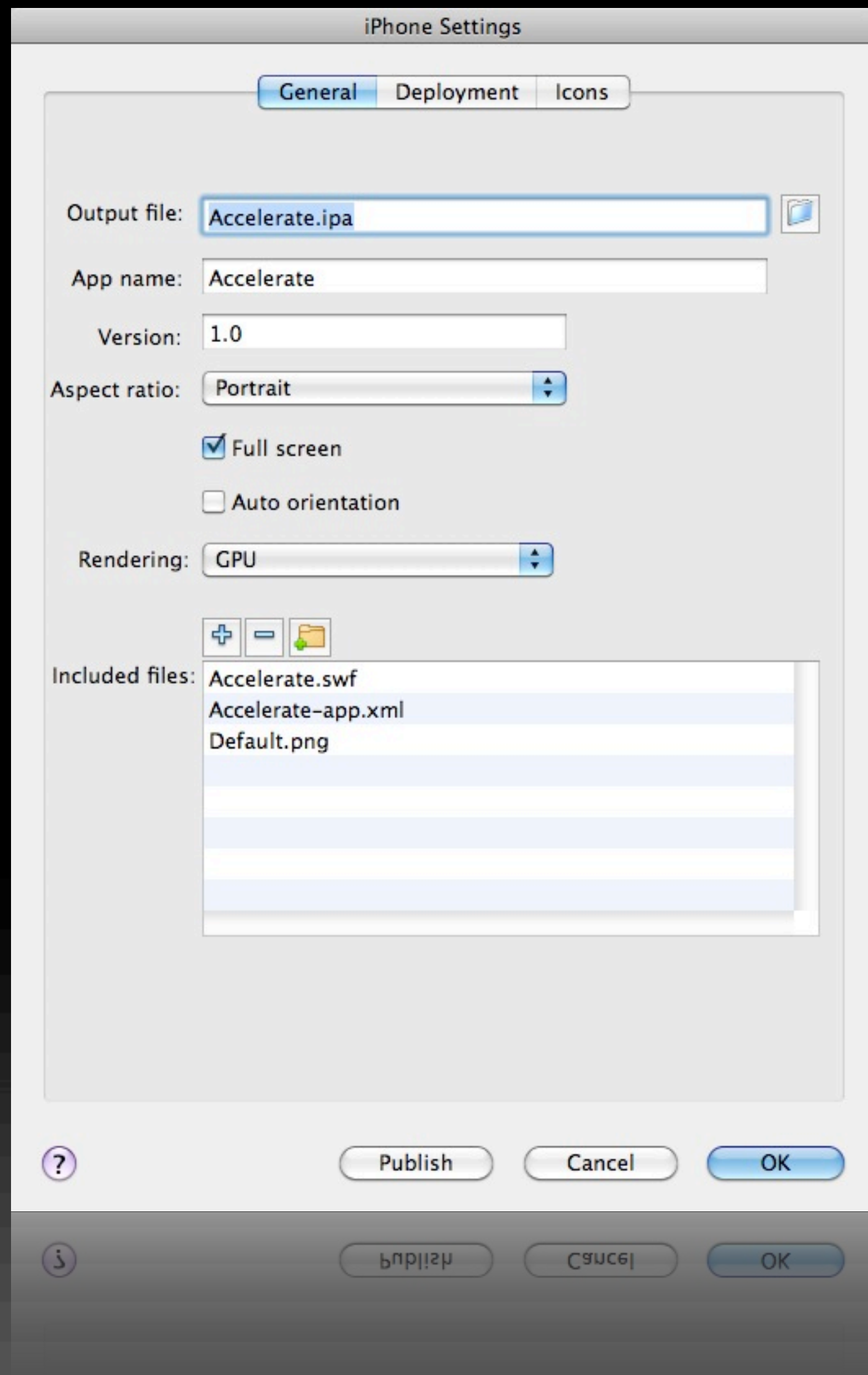
Do I have to develop on a Mac?

Do I have to develop on a Mac?

Short answer: No

Do I have to develop on a Mac?

Short answer: No
Long answer: No





How do you test your app?

How do you test your app?

Desktop first

How do you test your app?

Desktop first
Device Central and Emulators

How do you test your app?

Desktop first
Device Central and Emulators
On device

How do you debug your app?

How do you debug your app?

Flash Pro debugger (desktop testing)

How do you debug your app?

Flash Pro debugger (desktop testing)
Full remote debugging

How do you profile your app?

How do you profile your app?

Flash Builder profiler

How do you profile your app?

Flash Builder profiler
Shark, Instruments

What APIs can I use?

What APIs can I use?

Nearly all AIR 2 and Flash Player 10.1 APIs
Files, Networking, Shared Objects, SQLite, Keyboard

What APIs can I use?

Nearly all AIR 2 and Flash Player 10.1 APIs
Files, Networking, Shared Objects, SQLite, Keyboard

Notable exceptions

Pixel Bender

HTMLLoader (<mx:HTML>)

APIs that don't make sense on mobile

What *other* APIs can I use?

What *other* APIs can I use?

Multitouch*

Gestures*

Accelerometer*

Geolocation*

Save to camera roll

Screen orientation

Detect idle mode (override idle)

Hardware acceleration (caching surfaces)

Special urls: tel, sms, mailto, maps, video

Open app from Safari*

*Also in Flash Player 10.1 (mobile/desktop) and/or AIR 2 (desktop)

Demo

What about components?

What about components?

SourceForge project: Slider, Toggle, List...
<https://sourceforge.net/projects/flashiphonecomp/>

How hard is this really?

How hard is this really?

Most time-consuming: Design and asset creation

How hard is this really?

Most time-consuming: Design and asset creation
No. 2: performance tuning

How hard is this really?

Most time-consuming: Design and asset creation
No. 2: performance tuning

Port existing Flash Lite (ActionScript 2.0) apps in 2-3 days

How hard is this really?

Most time-consuming: Design and asset creation
No. 2: performance tuning

Port existing Flash Lite (ActionScript 2.0) apps in 2-3 days
Store apps built in 1 day to several weeks

How do I get started (preferably today)?

How do I get started (preferably today)?

Build an AIR app

How do I get started (preferably today)?

Build an AIR app
320 x 480

How do I get started (preferably today)?

Build an AIR app

320 x 480

Read the documentation

How do I get started (preferably today)?

Build an AIR app

320 x 480

Read the documentation

Blog posts, video tutorials, Developer Center, ...

How do I get started (preferably today)?

Build an AIR app

320 x 480

Read the documentation

Blog posts, video tutorials, Developer Center, ...

email: iphone-prerelease@adobe.com

Where do I go from here?

Where do I go from here?

Wednesday 10 am:

Renaun Erickson: “Optimize it! ActionScript Tips for iPhone Games”

Today, 2:30 pm:

Oz Michaeli: “Flash to iPhone: Use what you already know about Flash to make Objective-C & OpenGL apps”

What does the future hold?



Flash Builder publishing

Not in 4.0

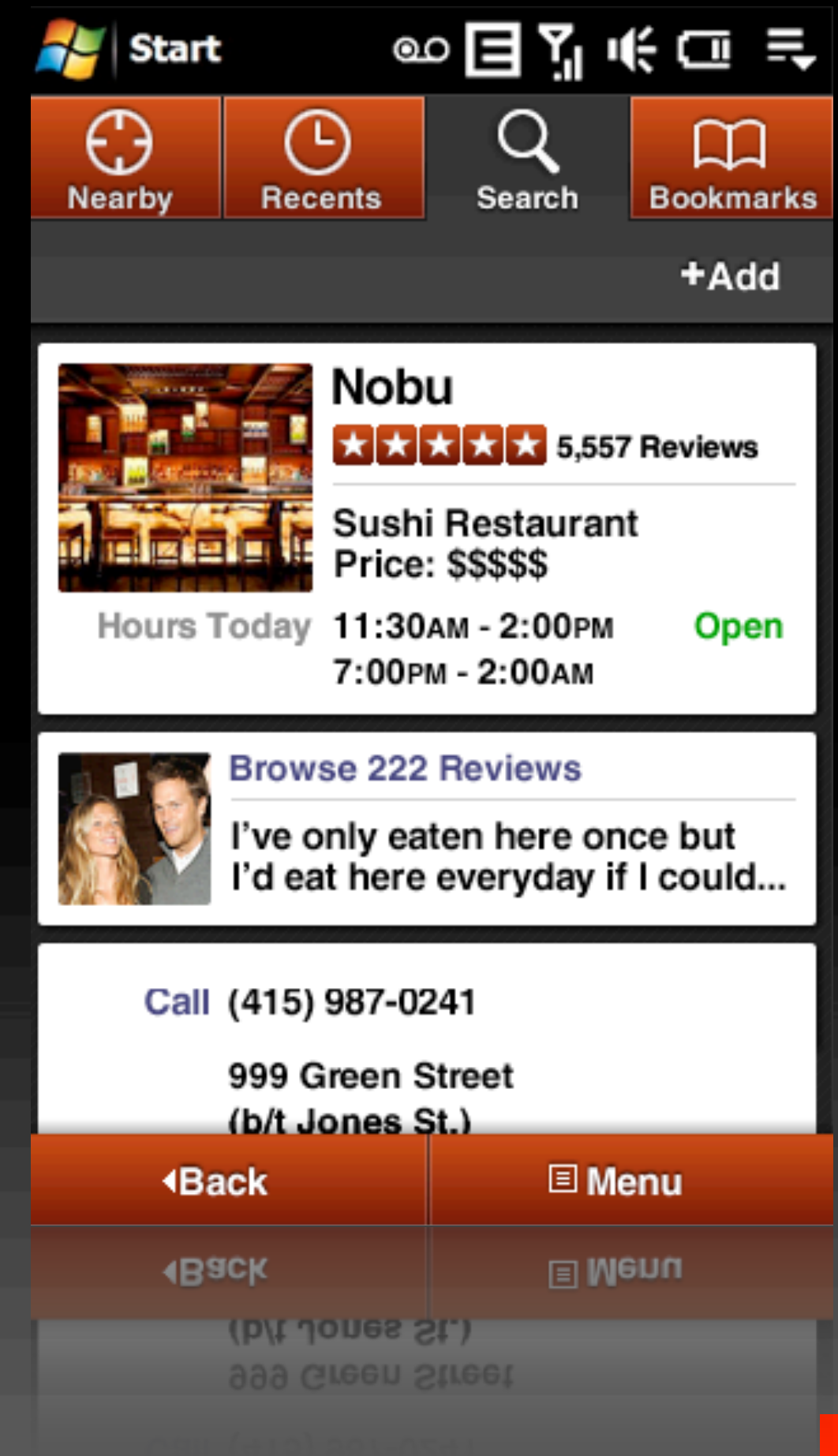
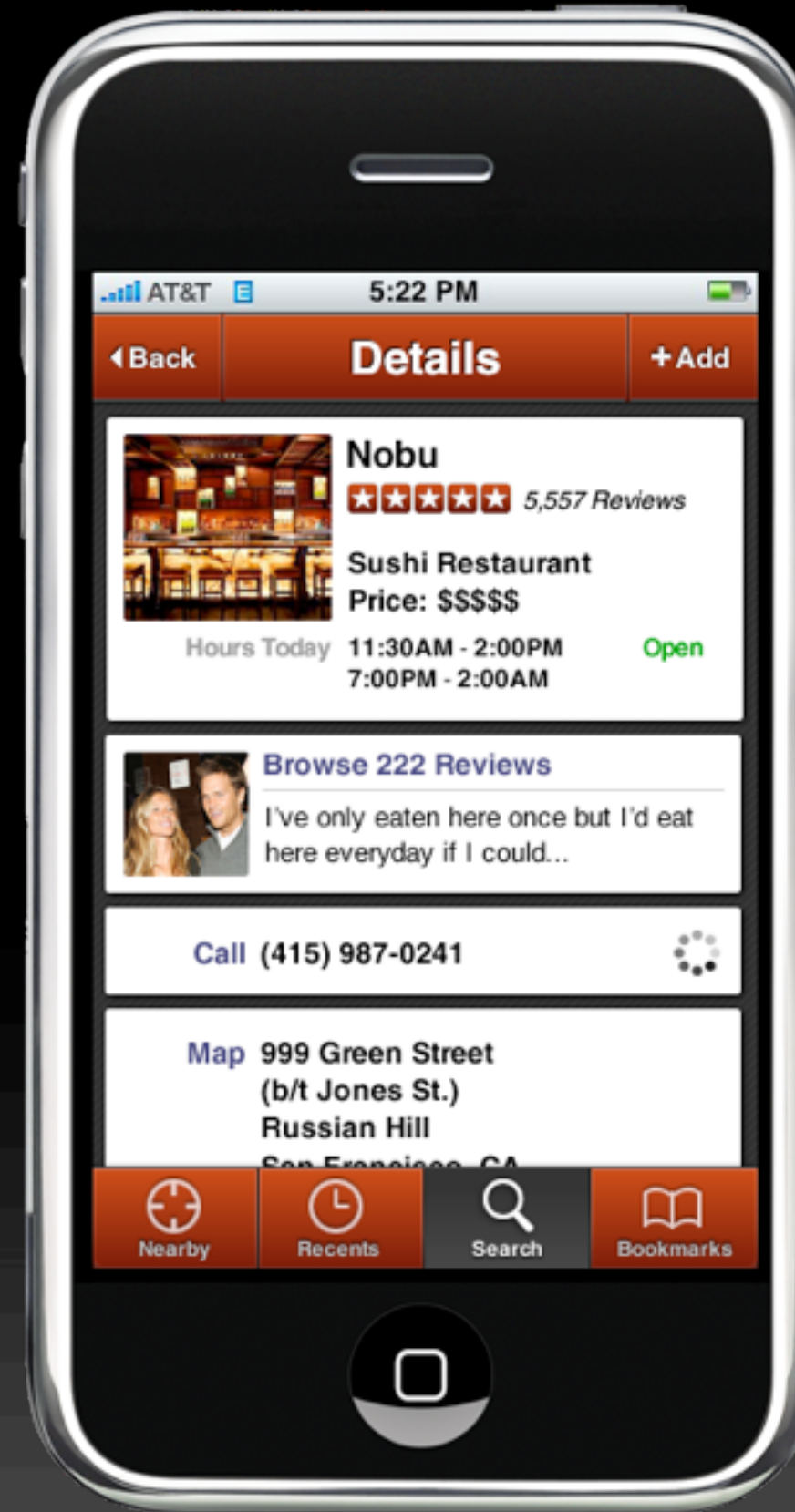
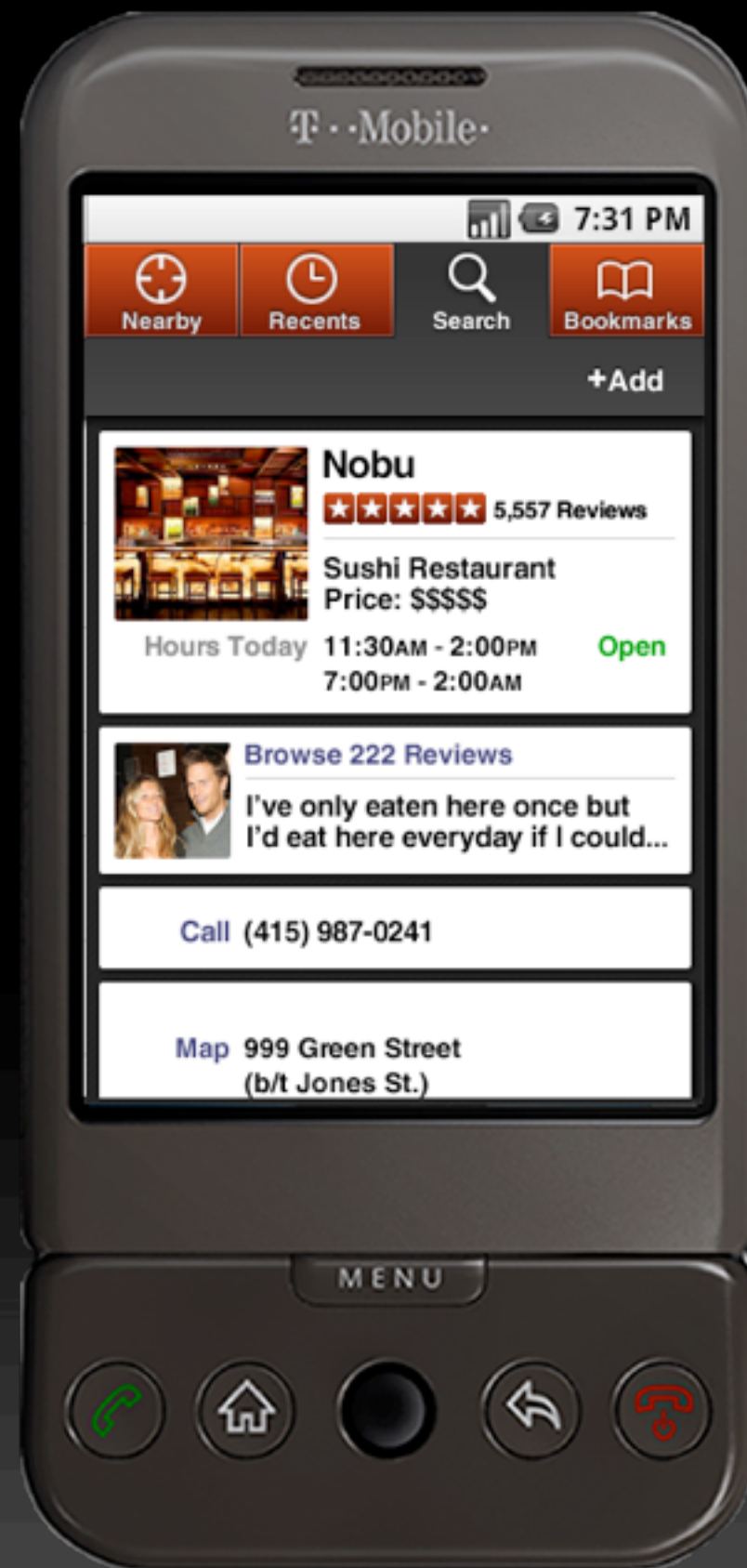
But before 5.0



Flex Mobile Framework

codename "Slider"

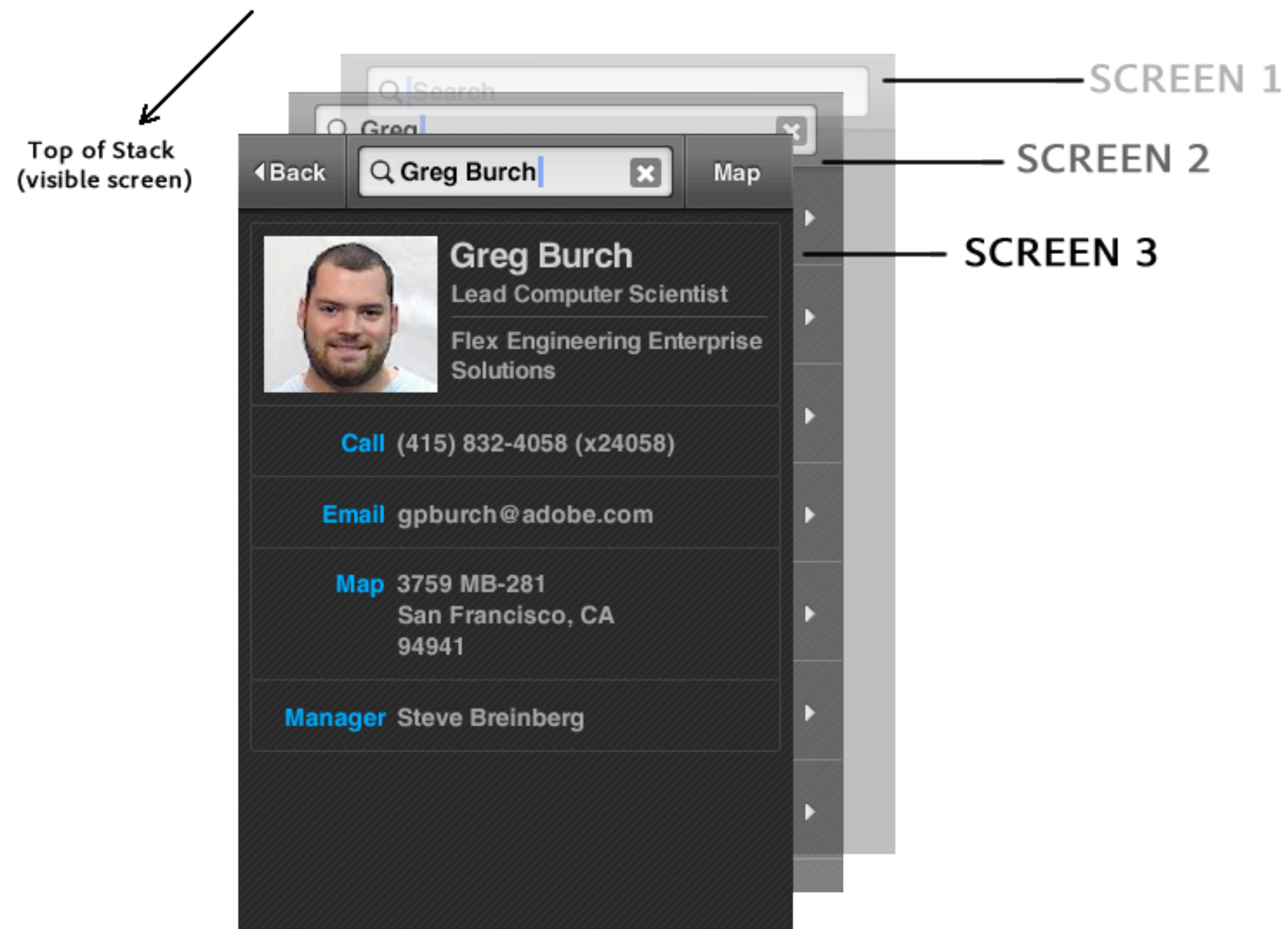
Adaptable UI



Adaptable UI



Screens



Device-independent units

Device-independent units

HTC Magic	320x480	180ppi
Motorola Droid	480x854	240ppi
iPhone	320x480	160ppi
Google Nexus One	480x800	250ppi

Device-independent units

HTC Magic	320x480	180ppi
Motorola Droid	480x854	240ppi
iPhone	320x480	160ppi
Google Nexus One	480x800	250ppi

```
<s:Button width=".5in" height=".5in"/>
```

<http://probertson.com/>
paul@probertson.com
[@probertson](#)



Adobe