

# /reviews

» If programs were ... superheroes

- ★★★★★ Superman
- ★★★★★ Spider-Man
- ★★★★ Iron Man
- ★★ Iceman
- ★ Bananaman

Our pick of the best net-related software out now

## Mobile platform

# iPhone SDK for Developers

Apple's streamlined development environment for the mobile web

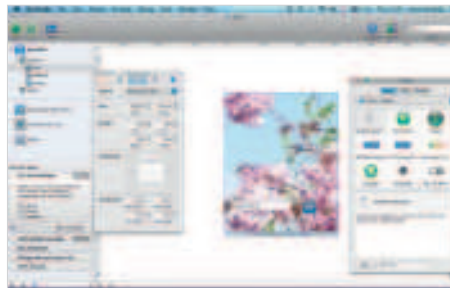
Web	<a href="http://developer.apple.com/iphone">developer.apple.com/iphone</a>
Price	Free
System	Mac OS X v10.5.3 or later and iTunes 7.7

For marketing people, anybody wandering around with an iPhone in their pocket is like a bluefin tuna to a Japanese fisherman. These folk have money to spend and a clearly expressed love of shiny things. It's not a huge leap from there to the idea that something of a gold rush is going on for mobile web developers at the moment.

So, what are your options for developing specifically for the iPhone? You could just carry on as you've been doing and let the device cope with your output, same as anybody else. The other option is to build a custom page or application, and to do that you'll need the iPhone SDK.

### Initial trepidation

As you'd expect from Apple, there are a few hoops to jump through before you can really get started. First, you'll need an Intel-based Mac running OS X v10.5.3 and up. Not entirely unreasonable considering the technical ins and outs, but not a



**Dashcode** The interface provides a smooth design and coding experience with the benefit of a built-in workflow

universal qualification. Assuming you clear hurdle one okay, you then need to sign up for an Apple developer account. It's free but you'll need one to download the SDK and access the extra materials.

Then there's the download itself, which comes as one bundle that's effectively Apple's XCode plus a few bonus features. This tops 1.25Gb and requires more space to install.

XCode looks a bit scary if you're not familiar with it but, unless you're already writing C, Java or Cocoa code, that's the way it's going to stay. For web developers, there's only really one area of interest

and that's Dashcode, the IDE Apple developers have been using for some time to produce their Dashboard widgets.

### A leg up

As development environments go, Dashcode is a pretty friendly, pared-down affair. The opening dialog screen gives you a list of pre-set patterns to choose from. These include Custom, Browser and Utility applications, all neatly packaged to give you a leg up on the development process.

Once you've decided what your application is going to be, the building process can begin. Apple has made this fairly simple with the Inspector and Library panels.

In simple terms, the library holds an array of objects used to create interfaces, such as text areas, buttons and other gadgets. You drag these onto your design plane and edit them directly. There are two more tabs: Code and Photos. These give you access to a set of common coding tasks, written in JavaScript, which you can easily plug into your chosen visual components. Photos are easily accessible via iPhoto.

The inspector is where you refine layout and other visual properties, such as type styles, and plug

## \* Alternatives

### Android

Web	<a href="http://code.google.com/android">code.google.com/android</a>
Price	Free

Android also works with WebKit, employing its own set of customised JavaScript handlers and methods in much the same fashion as the iPhone. However, native apps are written in Java for a virtual machine running on a Linux kernel, making it a more accessible platform than Apple's choice.

★★★★★

### Windows Mobile

Web	<a href="http://www.asp.net/downloads/essential">www.asp.net/downloads/essential</a>
Price	Free

Microsoft isn't afraid to muddy the waters, that much is certain. Generally, native development is in C++ with web apps being driven towards ASP and the mobile .NET framework. Your best bet is to familiarise yourself with Visual Studio and take it from there.

★★★★★

### Flash Lite

Web	<a href="http://www.adobe.com/products/flashlite">www.adobe.com/products/flashlite</a>
Price	Free

Adobe's mobile Flash platform hasn't had quite the explosive effect that could have been hoped for, particularly since it's not on the iPhone at all. However, that omission will doubtless be rectified eventually, and in the meantime Flash Lite has a good level of penetration.

★★★★★

# \*HTML 5

## Apple brings you the future of markup, today!

Apple has been pretty astute with web technology on the iPhone. The DOM-focused JavaScript approach of iPhone Safari is a good guess at the direction of future browsers and the adoption of HTML 5 is also interesting.

The new standards, HTML and XHTML 5, are still being put together but there are some important details to note. Firstly, the introduction of new capabilities to HTML, including the ability to create and manage a persistent data store. Apple has suggested its implementation as a standard.

The advantages here will be more than obvious to anyone with a web app requiring the storage of each user's state, preferences and so on. It also

means a certain degree of offline continuity for web apps – an important hurdle for anything focused on mobile platforms.

The shift to a DOM model for HTML 5 mirrors the iPhone approach too, and encourages developers to think in that direction if they aren't already. All this leads to several element-related developments. The principal change is a more XML-like syntax. There will be less need to use specially sub-classed <div> elements as more content/task-specific identifiers become available.

Though the actual release of HTML 5 is some years away, experimenting with its possibilities is worthwhile for Apple and future web technologists.

together your components, events and handler routines. It effectively combines basic CSS with event management.

### Augmented code

If at any point you become confused, fear not. Apple has kindly endowed Dashcode with a scheme to keep you on the path of proper development. To the left of the development window you'll find a collapsible menu of tasks which, once completed, you're urged to denote as such before proceeding to the next phase.

Starting with Layout Interface, the workflow moves on to Add Handlers and Code, which separates the men from the boys. The code of choice is JavaScript, but there have been a few additions to the usual set of possibilities, including a suite of CSS animation calls and client-side databases.

Transform, transition and animation – these are the commands you'll be using to give your application those trademark smooth effects. Transitions are smoothly calculated animations of CSS-style values, such as opacity. These save a lot of calculation on your part and, everything being

hardware accelerated, are slick in the extreme. The same is true of CSS animations, which offer you a greater degree of control over keyframe values.

Added to this we have a few additional native JavaScript calls, such as getElementByClassName and the big bonus: offline data support. That means a persistent database on the iPhone itself. This really is cool because not only can your application work more effectively when offline but the database itself is just one call to create and uses standard SQL syntax. Security comes from the prohibition on cross-domain access.

### Special gestures

It's the gestural interface that people always show off when demonstrating their new iPhone and you'll want to make the most of it. Fortunately, this is as easy as adding the relevant event handler to the affected object and examining the custom events that return to see how many fingers have been used and what type of gesture has been attempted.

Now you've got your application handling those gestural controls, you'll want to see exactly how things are going to play out once users get hold

This is an exciting platform to develop for and the tools are surprisingly easy to use

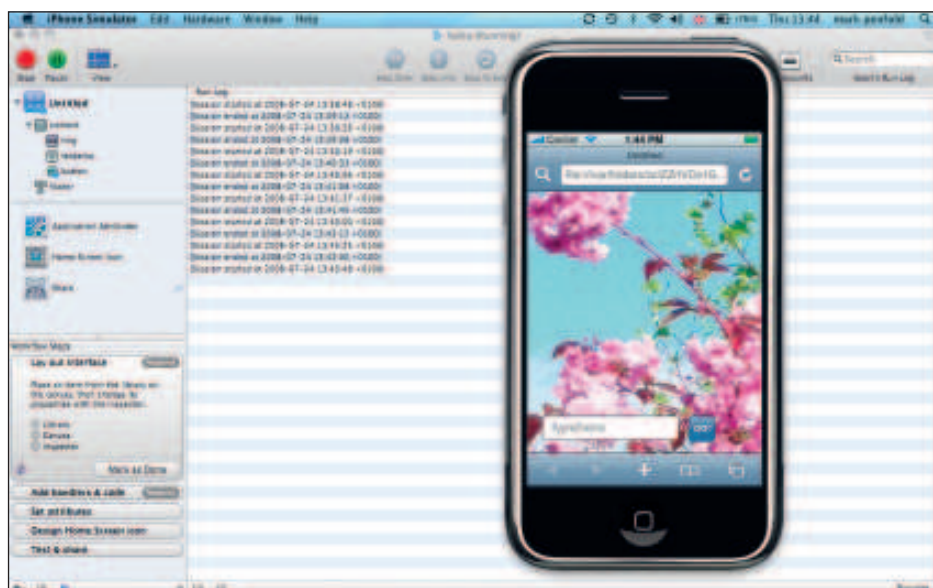
of your app. Just hit the big green play button and Dashcode launches the iPhone Emulator. The emulator itself is pretty much what you'd expect, but just seeing those half-baked 'hello world' efforts on Apple's smart-looking hardware is amusing.

### Thanks for sharing

The final stage is distribution. This is slightly less onerous for web developers, who don't need to pay to appear in the regular Apple App Store. Web applications are listed in large numbers but what you should really do (for once) is read through the terms and conditions before listing your app.

The iPhone has kicked the mobile phone business into a higher gear just when it looked like it was flagging, but it's important not to get carried away. The iPhone implementation of Safari has a list of limitations as long as its strengths. A candidate for top of that list is the omission of Flash, but others are sure to emerge.

This is an exciting platform to develop for and the tools to do so are surprisingly pleasant to use, but it'll be some time before all the kinks are ironed out. Fortunately, developers for the mobile web are used to difficult conditions. ●



**iPhone Emulator** As every developmental step is taken, it makes sense to verify your work with the iPhone emulator. Just hit the green button to test your code and see how it will look when users get their hands on it

### .net rating

For

- ⊕ Good, clean interface
- ⊕ Strong set of templates
- ⊕ iPhone emulation

Against

- ⊖ Feels somewhat restrictive thanks to structured approach
- ⊖ Special submission required to appear in App Store

**The SDK gives mobile web developers their most clearly defined and capable target to date.**

★★★★★

Turn over for more reviews >>

Open source

Let's switch to ...  
Ogg

**What is it?**  
An open source multimedia framework

**Where?**  
[www.xiph.org/ogg](http://www.xiph.org/ogg)

**Who's it for?**  
Anyone interested in keeping proprietary control separate from their multimedia

**How much is it?**  
It's free

**Like other container elements such as QuickTime, the Ogg multimedia framework provides a happy, patent-free environment in which audio, video and other media can be encoded.**

In fact, Ogg was at one time slated to be the recommended format for audio and video within the new HTML 5 specification. This, however, did not go down too well with major commercial players in the same field and has been dropped.

The codecs themselves are about as patent-free as anything in this field can be, particularly in the case of Vorbis, the Xiph foundation's video codec. On top of that they offer quality of a comparable level to that from commercial sources, up to and including HD video.

Probably the only thing in the way of this standard is its level of uptake. If enough users back it, the future of media distributed via the web could be free of partisan interference. Mozilla, Wikimedia and many others are already on board.

Full-screen web browser

# Plainview 1.0

Giving websites the cinematic, full-screen treatment

**Web** [www.barbariangroup.com/software/plainview\\_app\\_1\\_0](http://www.barbariangroup.com/software/plainview_app_1_0)

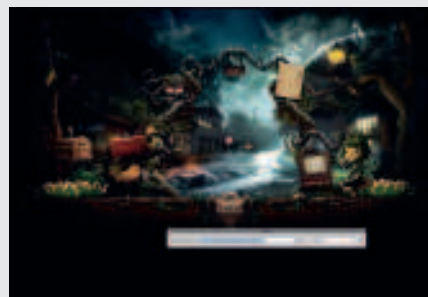
**Price** Free

**System** Mac OS X 10.4 or later

**Plainview is a full-screen web browser. What use is that? Well, if your work happens to be a series of websites, it's extremely handy when presenting the fruits of your labours to clients.**

Barbarian Group, developers of the software, are web developers themselves. They're also Apple geeks, so this is a full-on Cocoa-coded solution that maintains web browsing interactivity while also providing your audience with a view of your work in the purest, most lucid form possible.

The process is pretty simple – you just build a list of URLs, determine their order, then skip through them. You can obviously include lecture notes, and if you so desire, point at them with a cane. The combined effect is bound to win favour with clients, who are often keen for a bit of theatre in presentations. ●



**Big screen** It's surprising what a difference a full-screen browser can make to your presentations

.net rating

- |   |   |
|---|---|
| <b>For</b>                              | <b>Against</b>                            |
| ⊕ Native application                    | ⊖ Remembering yet more keyboard shortcuts |
| ⊕ Fully functional from pop-up overlays |   |
| ⊕ Keyboard shortcuts                    |   |

**Plainview enables you to make the most of your work in a presentation situation without suffering any loss of functionality.**

★★★★★

Also available

**Firefox 3**  
[www.mozilla.com](http://www.mozilla.com)  
Along with its many other excellent qualities, Firefox 3 has a full-screen mode that involves auto-hiding its address bar. The logical advantage here is that you have a cross-platform solution with a wider install base.

PDF software

# Adobe Acrobat 9 Pro

Coming to a PDF near you soon: Flash Interactivity!

**Web** [www.adobe.com/products/acrobatpro](http://www.adobe.com/products/acrobatpro)

**Price** £499.38

**System** Windows or Mac OS

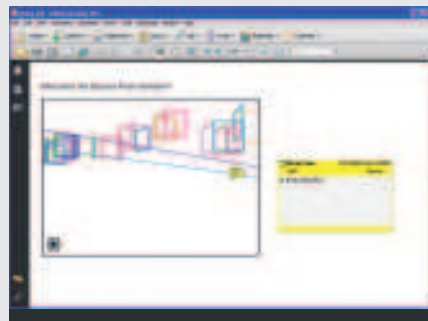
**This is a big upgrade for Acrobat. Improved collaboration, new tools and of course, Flash. Surprisingly there's also a significant speed bump.**

The big news for web professionals is the ability to include Flash functionality in exported PDFs. This facility maintains the site's full interactivity without the need to go online.

Collaboration is also big in 9 Pro. Acrobat will sync updates created between a distributed network, enabling comments and modifications as if everyone was sat around one machine.

Acrobat has suffered with bloat for a while, leading to some crazy latency. The addition of CAD data and Flash video could be a mixed blessing if the headlined 200-400 per cent speed improvements aren't uniform in application.

On the whole, PDF has become a potentially valuable offline tool for web designers. The option of producing interactive documents could easily be turned to commercial advantage. ●



**Special effects** Flash animation and video can be added to PDF documents at time of creation

.net rating

- |                        |                      |
|------------------------|----------------------|
| <b>For</b>             | <b>Against</b>       |
| ⊕ Flash                | ⊖ Not a cheap option |
| ⊕ Synced collaboration | ⊖ Remains bloated    |
| ⊕ Improved speed       |                      |

**Flash support and improved web page capture are interesting news for web professionals with complex presentational work in mind.**

★★★★★

Also available

**PDF Creator**  
[sourceforge.net/projects/pdfcreator](http://sourceforge.net/projects/pdfcreator)  
It might not have the bells and whistles of Adobe's application and it only works on Windows machines, but PDF creator has the powerful advantage of being free. It works through other applications to give you an extra Print option.