

# HTML5 Mobile Web Development

**Jake Carter**

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## About the instructor



**Jake Carter** is a web and software developer at RogueSheep, an award-winning Seattle-based company dedicated to creating top-tier applications that focus on design and usability. While he currently develops for Apple's iOS devices, Jake has a personal and professional enthusiasm for web standards. Staying on the cutting edge of technology is more than just a job for Jake—it's a passion.

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# Week 1 Tip Sheet

## Required Software

### Web Server With PHP 5.2 or Later

You will need a web server that will handle PHP file.

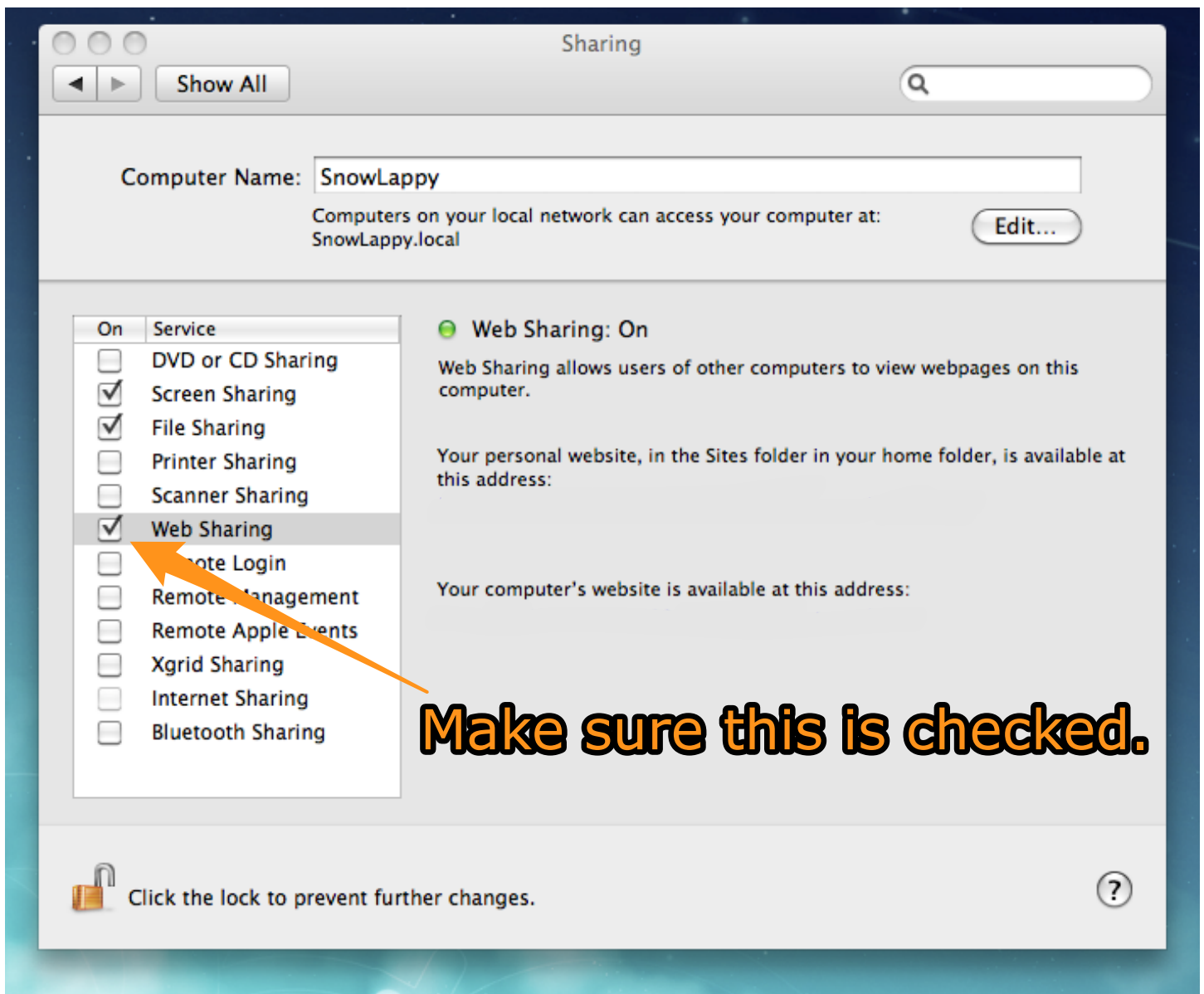
#### Mac

The Mac comes with PHP installed, but it is disabled by default. To turn it on you will need to edit the `/etc/apache2/httpd.conf` file. This file is protected, so you will need administrator privileges. I also suggest you use TextMate or some other text editor that knows how to handle files that require admin rights to edit.

1. Open the file `/etc/apache2/httpd.conf` in TextMate
2. Find the line that contains: `#LoadModule php5_module libexec/apache2/libphp5.so`
3. Remove the `#` from the line to uncomment it out.
4. Save the file.

When you try to save this file in TextMate, it will ask you for an administrator's username and password. Enter this in and you're done.

Once you have PHP enabled, you can turn your web server on by going to the 'Sharing' panel of the System Preferences application. Once there, click the check box next to 'Web Sharing'.



If this check box is already checked, you may need to uncheck and recheck it to make sure Apache is restarted.

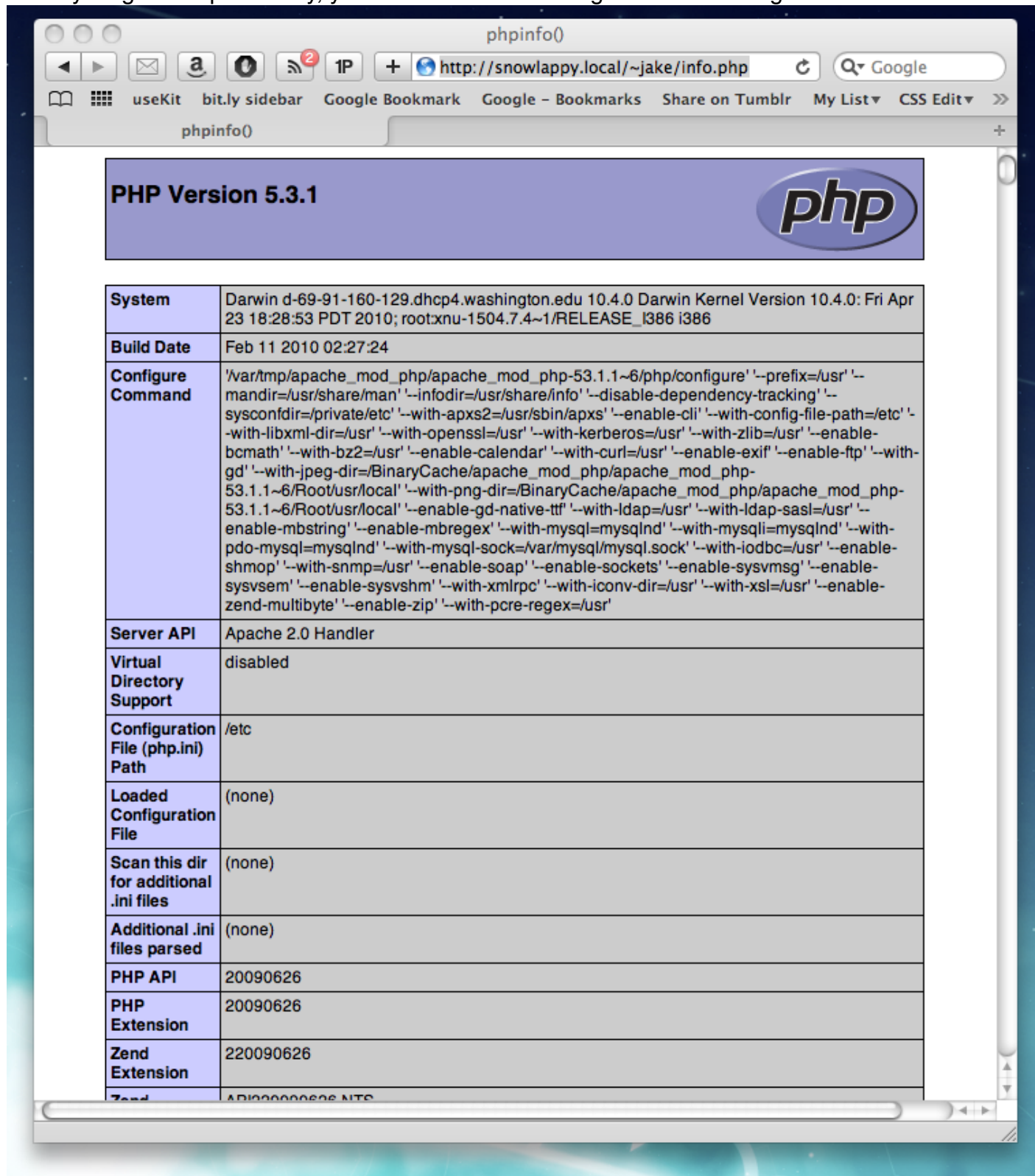
You should have a 'Sites' folder in your home folder. To make sure PHP is setup correctly, create a file in your 'Sites' folder called 'info.php' and copy the following code to it.

```
<?php
    phpinfo()
?>
```

Now open your browser and go to the following address (Make sure to replace *username* with your actual short user name):

<http://localhost/~username/info.php>

If everything is setup correctly, you should see something like the following:



The screenshot shows a web browser window titled 'phpinfo()' with the address bar displaying 'http://snowlappy.local/~jake/info.php'. The browser's toolbar includes various icons and a search bar with the text 'Google'. Below the toolbar, the page content is displayed on a light blue background. At the top, there is a header section with the text 'PHP Version 5.3.1' and the PHP logo. Below this, a table provides detailed information about the PHP installation. The table has two columns: the first column lists the category (e.g., System, Build Date, Configure Command), and the second column provides the corresponding value. The 'Configure Command' row is particularly long, listing numerous configuration options and their values. The table ends with rows for 'PHP API', 'PHP Extension', 'Zend Extension', and 'Zend'.

<b>System</b>	Darwin d-69-91-160-129.dhcp4.washington.edu 10.4.0 Darwin Kernel Version 10.4.0: Fri Apr 23 18:28:53 PDT 2010; root:xnu-1504.7.4~1/RELEASE_I386 i386
<b>Build Date</b>	Feb 11 2010 02:27:24
<b>Configure Command</b>	'/var/tmp/apache_mod_php/apache_mod_php-53.1.1~6/php/configure' '--prefix=/usr' '--mandir=/usr/share/man' '--infodir=/usr/share/info' '--disable-dependency-tracking' '--sysconfdir=/private/etc' '--with-apxs2=/usr/sbin/apxs' '--enable-cli' '--with-config-file-path=/etc' '--with-libxml-dir=/usr' '--with-openssl=/usr' '--with-kerberos=/usr' '--with-zlib=/usr' '--enable-bcmath' '--with-bz2=/usr' '--enable-calendar' '--with-curl=/usr' '--enable-exif' '--enable-ftp' '--with-gd' '--with-jpeg-dir=/BinaryCache/apache_mod_php/apache_mod_php-53.1.1~6/Root/usr/local' '--with-png-dir=/BinaryCache/apache_mod_php/apache_mod_php-53.1.1~6/Root/usr/local' '--enable-gd-native-ttf' '--with-ldap=/usr' '--with-ldap-sasl=/usr' '--enable-mbstring' '--enable-mbregex' '--with-mysql=mysqlnd' '--with-mysqli=mysqlnd' '--with-pdo-mysql=mysqlnd' '--with-mysql-sock=/var/mysql/mysql.sock' '--with-iodbc=/usr' '--enable-shmop' '--with-snmp=/usr' '--enable-soap' '--enable-sockets' '--enable-sysvmsg' '--enable-sysvsem' '--enable-sysvshm' '--with-xmldrpc' '--with-iconv-dir=/usr' '--with-xsl=/usr' '--enable-zend-multibyte' '--enable-zip' '--with-pcre-regex=/usr'
<b>Server API</b>	Apache 2.0 Handler
<b>Virtual Directory Support</b>	disabled
<b>Configuration File (php.ini) Path</b>	/etc
<b>Loaded Configuration File</b>	(none)
<b>Scan this dir for additional .ini files</b>	(none)
<b>Additional .ini files parsed</b>	(none)
<b>PHP API</b>	20090626
<b>PHP Extension</b>	20090626
<b>Zend Extension</b>	220090626
<b>Zend</b>	API20090626 NTS

## Windows

Windows comes with IIS (Internet Information Services) but is not installed by default. The instructions to install it change a little depending on what version of Windows you have, but here are the basic instructions:

1. Insert your Windows disc.
2. Open 'Add/Remove Programs' from the Control Panel.
3. Select 'Add/Remove Windows Components'
4. Choose 'Internet Information Services' from the list and continue with the install.

Once you have IIS you will need to install PHP.

<http://php.net/manual/en/install.windows.php>

## iOS SDK

The iOS SDK will only run on Mac OS X 10.5 or later. You will also need an Apple Developer Account which you can get for free.

<http://developer.apple.com/iphone/>

Once you have the iOS SDK installed, you can launch the iPhone Simulator from the following folder:

/Developer/Platforms/iPhoneSimulator.platform/Developer/Applications/iPhone Simulator.app

I would suggest dragging this to your dock for easy access during the class.

## Android SDK

You can download the Android SDK from:

<http://developer.android.com/sdk/index.html>

Once downloaded, unzip it to the location on your hard drive where you want to leave it, then follow the instructions for step 2 about adding the location to your PATH (It'll be one of the three bullet point at the bottom of step 2):

<http://developer.android.com/sdk/installing.html>

After that, you should be able to run the Android SDK Manager by typing *android* into a terminal.

```
Terminal — sh — 80x24
Last login: Thu Sep 30 09:25:25 on ttys000
jake@SnowLappy:~$ android
Starting Android SDK and AVD Manager
No command line parameters provided, launching UI.
See 'android --help' for operations from the command line.
█
```

Android SDK and AVD Manager

Virtual Devices

Installed Packages

Available Packages

Settings

About

List of existing Android Virtual Devices located at /Users/jake/.android/avd

AVD Name	Target Name	Platform	API Level
✓ Droid	Android 2.0	2.0	5
✓ N1_2.1	Android 2.1-update1	2.1-update	7
✓ N1_2.2	Android 2.2	2.2	8

✓ A valid Android Virtual Device.

🔧 A repairable Android Virtual Device.

✗ An Android Virtual Device that failed to load. Click 'Details' to see the error.

New...

Delete...

Repair...

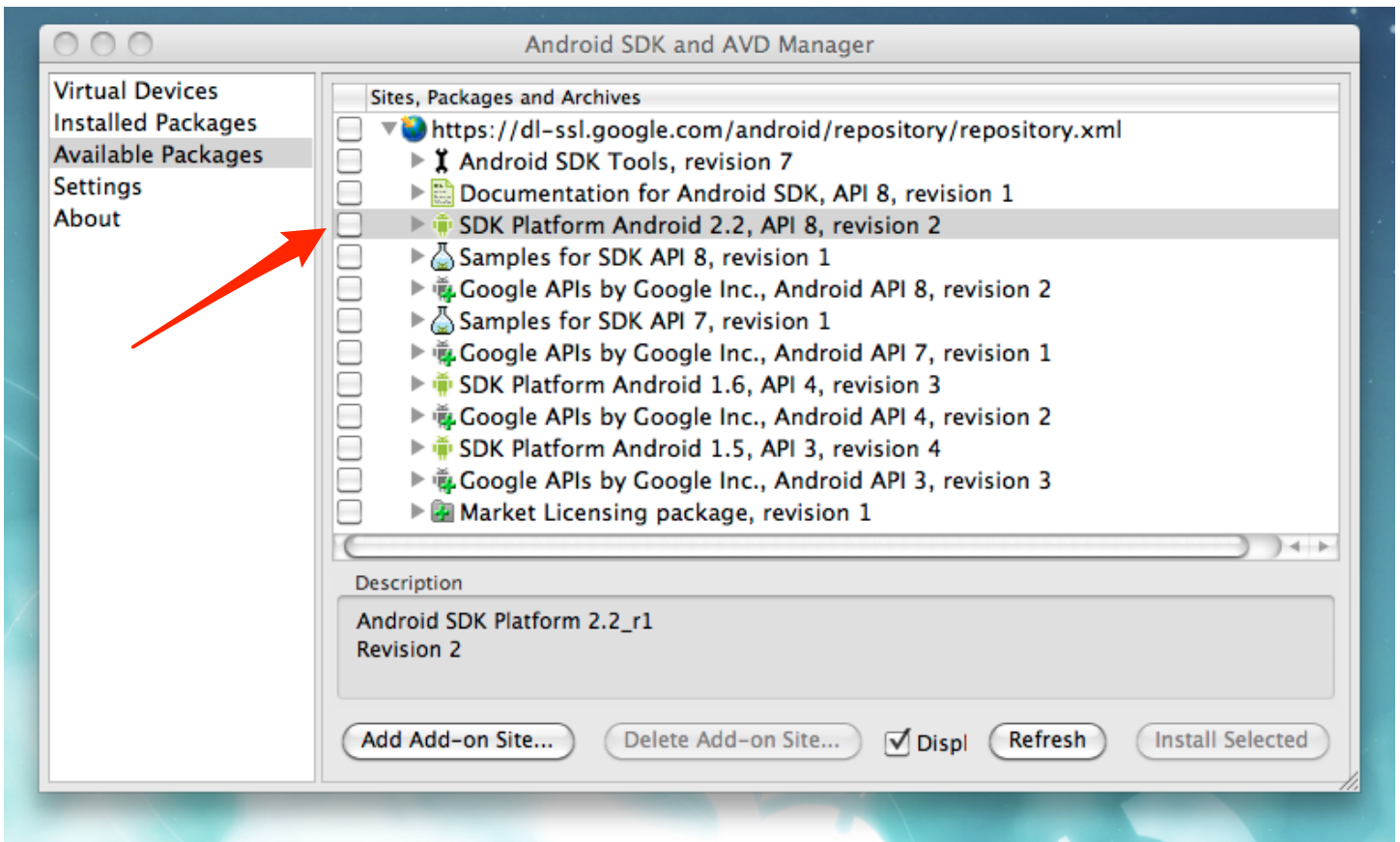
Details...

Start...

Refresh

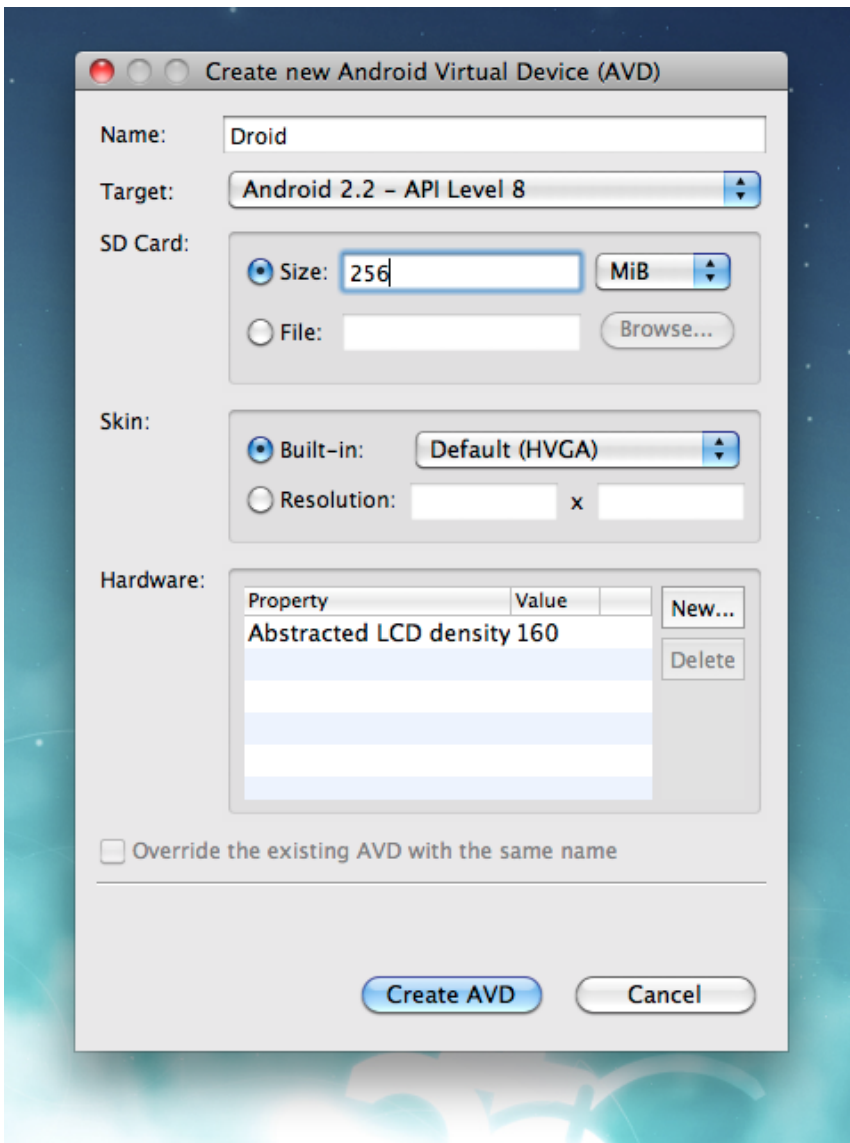
Once you're here, you will need to install the latest Android SDK Package by going to 'Available Packages' on the left and choose 'SDK Platform Android 2.2, API 8, revision 2' or which ever is the newest when you do this.





Once you've installed the package you will need to add an emulator. Go back to the 'Virtual Devices' option on the left and hit the 'New...' button. Fill it out like so:





Then click the 'Create AVD' button. Now you can select the device from the list and hit the 'Start...' button to start the emulator.