# Installing Java 5.0 and Eclipse on Mac OS X

This page tells you how to download Java 5.0 and Eclipse for Mac OS X. If you need help, Blitz <u>cs5help@cs.dartmouth.edu</u>.

**You must be running Mac OS 10.4 or later (i.e., Tiger or Leopard).** To determine which version of the Mac OS you are running, click on the blue apple at the very upper left of your screen, and select "About This Mac". A window will pop up, and it will tell you which version of Mac OS you are running. If you are running 10.5, you may be able to skip the Java installation step.

Note: You'll see throughout the websites references to "Java 5.0", "Java 1.5", and "Java 1.5.0". However, all of them refer to the same version of Java. Blame Sun's marketing people. We consider them all the same, and we'll call them all "Java 5.0".

#### Downloading and installing Java 5.0

- If you are running Mac OS X version 10.5, go to <u>this link</u>. Where it says "File size: 136.4.7MB," click on the "136.4MB" to download the file.
- If you are running Mac OS X version 10.4, go to <u>this link</u>. Where it says "File size: 79.7MB," click on the "79.7MB" to download the file.
- After downloading, Apple will present you a dialog (i.e., a series of popup windows) that take you through the build process. You should be able to take the default choice ("Continue," "OK," "Agree," "Close," "Upgrade," etc.) for all options.

You may be asked to authenticate before continuing. This will depend on how your preferences are set. Type in your password as you would if you were logging in on your computer. Don't worry! This is just so that your computer knows you really have the authority to install something on it!

If you don't automatically get the dialog, then double-click on the "JavaForMacOSX10.4Release7.dmg" icon, and you should see a disk icon named "Java for Mac OS X 10.4, Release 7". Open that by double-clicking if it's not already open, and then double-click on "JavaForMacOSX10.4Release7.pkg". At that point, you'll get the dialog.

- When it says "Select a destination volume", choose your hard drive.
- There should now be two files on your desktop or download area starting with "J2SE". Feel free to delete these after finishing the installation. You can always download them again later if you need to.
- If at any point, you see a message such as "This volume contains a newer version of Java" you can just click on the Close button. It means that you already had the version of Java that you need!

### **Downloading and installing Eclipse**

- Click this link to download the file eclipse-SDK-3.4.1-macosx-carbon.tar.gz.
- After finishing the download, you may be prompted with a warning that the file may contain an application. Ignore this warning and continue by clicking "Download". The Mac will then decompress the downloaded file automatically. If it does not, then just double-click on the downloaded file (whose name ends with ".gz"). You should now have a folder named "eclipse" on your desktop.
- Now, you need to move the eclipse folder to your Applications directory. Double-click on your hard drive, and within that, double click on the "Applications" folder. Drag your eclipse folder from the Desktop into this folder.
- Inside your eclipse folder is an Eclipse application; its icon is a purple circle with three white stripes.

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Network	configuration		
Macintosh HD	eclipse		
THC	eclipse		
<u>©</u> CS ≜	eclipse.ini		
Desktop	epl-v10.html		
thc thc	features		
Applications	otice.html		
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	9 items, 51.21 GB ava	ilable	1

Click on this icon to run Eclipse.

(Optional, but highly recommended.) Drag the Eclipse icon to the Dock. Click on it there to run Eclipse. If you
don't drag your Eclipse icon to the Dock, then you'll have to double-click on it in your Applications folder each
time you want to run Eclipse. It's much easier from the Dock. You can always remove Eclipse from the Dock
later on (as in, after this course is over).

#### **Configuring Eclipse**

- Run Eclipse.
- It asks you to select a workspace. By default, this will be a folder named "workspace" in your home directory. For example, on my Mac the default is /Users/scot/workspace. I recommend that you put your workspace in your Documents folder. If your lick before "/workspace" and enter "/Documents". (So on my Mac it becomes "/Users/scot/Documents/workspace" If you don't want to see this message every time you start up Eclipse, before clicking "OK," check "Use this as the default and do not ask again."

00		Workspace Launch	er	
Select a wor	kspace			
Eclipse Platfo Choose a wo	rm stores your pr rkspace folder to i	ojects in a folder called a use for this session.	workspace.	
Workspace:	/Users/thc/Docu	ments/Jworkspace	•	Browse
🗹 Use this a	as the default and	do not ask again		
			Cancel	ОК

The first time you launch Eclipse, you'll probably see this startup window. Click on the arrow symbol toward the right:



Don't worry if you don't see this startup window. You shouldn't see it again after the first time.

• You'll see a window with various buttons and panes, but nothing of consequence in it:



Congratulations. You have installed Java 5.0 and Eclipse, and you have configured Eclipse!

## Configuring Eclipse to make it like mine

You may want to make your version of Eclipse look like mine, so that what you see in class is what appears on your screen. Do the following.

- In the Eclipse menu bar, click on Eclipse and then on Preferences... This will bring up a window with two panes. On the left is a list of things you can configure.
- Click on the triangle to the left of "General." Then click on the triangle to the left of "Appearance." Then click on "Colors and Fonts." You should see a window like this:

$\Theta \cap \Theta$	Preferences	
type filter text	Colors and Fonts	$( \diamond \cdot \diamond ) \cdot$
▼ General	Colors and Fonts (? = any character,	* = any string):
Appearance Colors and Fonts	type filter text	0
Label Decoration Compare/Patch Content Types	▶ Q Basic ▶ Q CVS ▶ Q Debug	1
▶ Editors	► Gig Java	U
<ul> <li>Network Connections</li> <li>Perspectives</li> <li>Search</li> </ul>	Ga Structured Text Editors     Ga Tasks     Ga Text Compare	U a i v
Startup and Shutdow Web Browser	Description:	
Welcome		
Workspace		
▶ Ant	Preview:	
► Help		
Install/Update		
▶ Java		
▶ Mylyn		
▶ Run/Debug		
▶ Team		
Validation		
Web and XML		
)++		Restore Defaults Apply
0		Cancel OK

• In the scrollable window in the middle, click on the triangle next to "Java." Then scroll down within that window and *double-click* on "Java Editor Text Font."

00	Preferences			
type filter text	Colors and Fonts			$( \Rightarrow \cdot \Rightarrow $
▼ General	Colors and Fonts (? = any character,	* = any string):		
Colors and Fonts	type filter text	0 (	Use System F	ont
Label Decoration Compare/Patch	Colored labels - qualifie	er informatic (	Change	$\supset$
Content Types	Inherited members		Reset	
Editors	Aa Javadoc display font (se	et to default		
Keys	Javadoc view backgrour	nd		
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Search		)4 +		
Startup and Shutdow	Description:			
Web Browser	The Java editor text font is used by	Java editors.		
Welcome				
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▶ Team 🔻		Restore	Defaults )	Apply
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As you can see, there's some text following "Java Editor Text Font." Don't worry about it.

• The following window will pop up:



On the right, where you can select the size, click "12". Then close this window by clicking on the window's close button.

• Close up the "General" preferences by clicking on the triangle to the left of "General." Click the triangle next to "Java" and then click the triangle next to "Code Style." Then click "Formatter." Here's what you should see:



• Click the button that says "New..." You'll see a window such as this one:

	New Profile
Profile name:	
1	
nitialize settings with the fo	ollowing profile:
Eclipse (built-in)	•
open the edit dialog nov	w

You can type in any profile name you like. I used "CS 5":

00	New Profile
Profile name:	
CS SI	
Initialize settings with th	e following profile:
Eclipse (built-in)	:
open the edit dialog	now
0	Cancel OK

Then click "OK."

• You should see a window that looks like this:

	Indentation Braces White Space Blank Lines M	lew Lines Control Statements Line Wrap	ping Comments
General settings		Preview:	Show invisible characte
Fab policy:         Use tabs only         ndentation size:         Fab size:         Alignment of field         Align fields in         indent         Declarations w         Declarations w         Declarations w         Declarations w         Declarations w         Statements wii         Statements wii         Statements wii         Statements wii         Statements wii         Statements wii         Statements wii	Tabs only	<pre>/**  * Indentation  */ class Example {     int[] myArray = { 1, 2, 3, 4     int theInt = 1;     String someString = "Hello"     double aDouble = 3.0;     void foo(int a, int b, int 4         switch (a) {             case 0:                Other.doFoo();                break;             default:               Other.doBaz();             }         }         void bar(List v) {             for (int i = 0; i &lt; 10;                v.add(new Integer(i)</pre>	4, 5, 6 }; ; c, int d, int e, int f) { ;++) {
'break' statem Empty lines	ents	void foo() { } }	

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Change	the	Tab	size	to	2:
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tie name: CS S			Export
Indentation Brac	es White Space Blank Lines	New Lines Control Statements	Line Wrapping Comments
General settings		Preview:	Show invisible characte
Tab policy:         Use tabs only for leading indentations         indentation size:         Tab size:         Alignment of fields in class declarations         Align fields in columns         indent         Declarations within class body         Declarations within enum declaration         Declarations within enum constants         Declarations within method/constructor         Statements within blocks         Statements within 'switch' body         Statements within 'case' body         'break' statements         Empty lines	tion body	<pre>     /**         Indentation         */         Class Example {             int[] myArray = { 1,             int the Int = 1;</pre>	<pre>. 2, 3, 4, 5, 6 }; "Hello"; b; b, int c, int d, int e, int f) { &lt; 10; i++) { er(i)); </pre>

Apply

Cancel

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You'll see that the Indentation size automatically changes as well.

• Click on "Blank Lines," (in the menu bar across the top of the page) and after "Between import groups" and "Before declarations of the same kind," change the values 1 to 0:

Installing Java 5.0 and Eclipse on Mac OS  $\rm X$ 

Indentation Braces White Space	Blank Lines Ne	tw Lines Control Statements Line Wrapping	Comments
Blank lines in compilation unit		Preview:	Show invisible characte
Before package declaration:	0	/** * 01	
After package declaration:	1	* Blank Lines */	
Before import declaration:	1	import into util List:	
	_	import java.util.Vector;	
Between import groups:	0	<pre>import java.net.Socket;</pre>	
After import declaration:	1	public class Another {	
Between class declarations:	1		
		public class Example {	
Blank lines within class declarations		public String first;	
		public String second;	
Before first declaration:	0	// Between here	
Before declarations of the same kind:	0	<pre>//and here are 10 blank lines }:</pre>	
Before member class declarations:	1	private LinkedList fList; public int counter:	
Before field declarations:	0	public Example(LinkedList list) {	
		fList = list;	
Before method declarations:	1	counter = 0;	
At beginning of method body:	0	<pre>public void push(Pair p) {</pre>	
Existing blank lines		<pre>fList.add(p); ++counter;</pre>	
Number of empty lines to preserve:	1	}	
and a supply make to prove the	]		

• Click on "Control Statements," and check the boxes as I've done here:

Indentation Braces White Space Blank Lines	New Lines Control Statements Line Wrapping Comments	
General	Preview: Show invisible ch	aracte
<ul> <li>Insert new line before 'else' in an 'if' statement</li> <li>Insert new line before 'catch' in a 'try' statement</li> <li>Insert new line before 'finally' in a 'try' statement</li> <li>Insert new line before 'while' in a 'do' statement</li> </ul>	<pre>/**  * Ifelse  */ class Example {  void bar() {   do {   }   } }</pre>	
'If else'  Keep 'then' statement on same line  Keep simple 'If' on one line  Keep 'else' statement on same line  Keep 'else if' on one line Keep 'return' or 'throw' clause on one line	<pre>while (true); try { } catch (Exception e) { } finally { } } void foo2() { if (true) { return; } else if (false) { return; } else if (false) { return; } } void foo(int state) { if (true)</pre>	

Click "OK."

• Now click on triangles to close up "Java." Click on the triangle next to "Run/Debug," and then click on "Console."

₿ 🖯 🖯	Preferences	
type filter text	Console	$(\phi \cdot \phi)$
▶ General	Debug Console Settings.	
▶ Ant	Fixed width console	
Cache	Maximum character width:	80
► Help Install/Undate	d	
Java	Limit console output	
▶ Mylyn	Console buffer size (characters):	80000
Run/Debug	Displayed tab width:	8
External Tools	Show when program writes to	standard out
Launching Perspectives	Show when program writes to	standard error
String Substitution	Standard Out text color:	
View Management Team	Standard Error text color:	
Validation Web and XML	Standard In text color:	
	Background color:	
		Restore Defaults Apply
0		Cancel OK

• Click on the green color sample next to "Standard In text color." You'll get a color picker:



• Slide the slider on the right down, so that you get a dark green. (You're at Dartmouth. What other color could you possibly want?)



Click "OK" to close the color picker window, and click "OK" again to close the Preferences window.

• Finally, I don't use the Task List and Outline panes, which are on the right-hand side of the window. Click on the "X" next to "Task List" and next to "Outline" in the tabs of these panes:



You'll get something like this:

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Now you've got your Eclipse set up the same as mine!

#### Scot Drysdale

Last modified: Mon Mar 24 2008