

# 1

## Web 2.0 and del.icio.us

There is renewed excitement in the web world these days, among web developers and the public in general. Many new ideas are taking hold, and a lot of old ideas are being reinvented. It appears that the web community is ready to move past the era of the dot-com bomb and continue to explore the possibilities of the web more eagerly and openly than ever before. del.icio.us undeniably factors into this excitement, along with many other websites, web applications, design ideas, development concepts, and programming languages, all of which the web community is beginning to lump under the umbrella term *Web 2.0*.

This book's purpose is not to explain all aspects of what a Web 2.0 website is or demonstrate why del.icio.us falls into that category. Sometimes trying to provide a clear definition of a technology can narrow your vision of its possibilities. By its nature, del.icio.us demonstrates an inherent desire *not* to be limited in functionality or purpose. Instead, del.icio.us allows itself to be accessed, manipulated, and mixed by outsiders using a hidden underlayer of tools and techniques. This hidden underlayer offers an array of new possibilities for using the website, and infinitely expands on the website's initial purpose. This book helps you explore and make the most of these possibilities by combining them with your own ideas about how things should work. This process is arguably the real purpose behind Web 2.0 as a whole.

First, you need to understand some del.icio.us fundamentals. If you're already familiar with del.icio.us and how it works, feel free to skip ahead.

### Enter del.icio.us

del.icio.us is a way to store and organize your web *bookmarks* (also commonly known as *favorites*), online. It seems like a simple concept, but there is a lot more involved in it than you might think. del.icio.us provides much more than just a way to reference a website you once visited and might like to return to later. When you save a bookmark to del.icio.us, it becomes a part of a *social network* of other del.icio.us users' bookmarks, that in turn leads to a great deal of information about what others find valuable and interesting on the web. You can use this data, as well as the unique way that del.icio.us categorizes and organizes bookmarks, to discover useful and trusted sources on the web to add to your own. You will probably find that this method of storing bookmarks is more interesting, useful, and fun than simply keeping them in your web browser.

# Part I: The Mashup-Friendly Web

When Joshua Schachter, the creator of del.icio.us, brought it live for the first time, perhaps his only intention was to provide a new bookmarking tool. It worked incredibly well and caught on like wildfire. Hundreds of thousands of del.icio.us users now use del.icio.us daily, just as Schachter intended, to store and organize their bookmarks. (If you make something good and useful, users will come.)

*You might be wondering what the deal is with the del.icio.us domain name, or web address. What kind of website uses an address like that? Well, del.icio.us' address is essentially just a fun little domain name trick. Working from right to left, del.icio.us resides on the .us top-level domain name (also known as a gTLD). Other examples of top-level domain names are .com, .net, .gov, and so on. The .us gTLD is meant to identify an American identity for a website. The actual domain name for del.icio.us, then, is icio.us. Instead of something like www on the front of domain, del.icio.us uses "del," thus spelling out the word "delicious" as del.icio.us using these domain name parts.*

## Organizing Your Bookmarks

You are probably accustomed to storing things like browser bookmarks and computer files in a hierarchical layout of containers, called folders or directories. Figure 1-1 shows an example of a computer application folder. As you can see, many top-level folders contain more levels of folders, files, and/or applications.

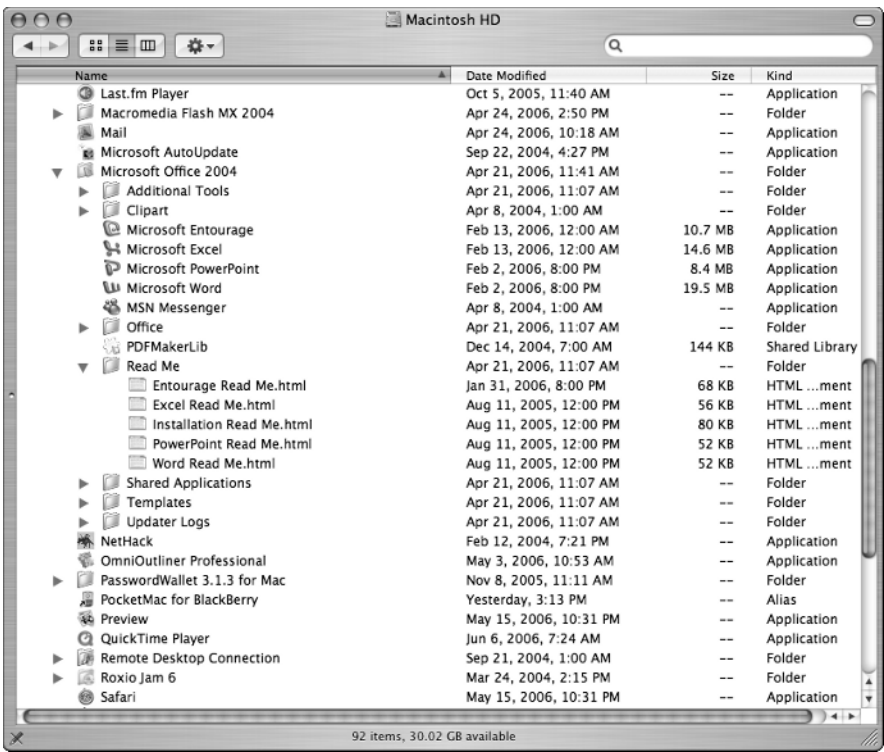


Figure 1-1

Anyone who spends a lot of time on a computer begins to realize that this isn't always the most effective way to find what you might be looking for, especially if you have a lot of files. Sometimes searching for the filename or its content, commonly called *metadata*, is much easier than remembering *where* you put it.

This technique is especially useful when applied to bookmarks. For example, say you found a great blog about web programming languages, with an excellent post about migrating to the PHP 5 scripting language. You want to bookmark it, and you do, but filing it in a folder or directory called PHP seems a little limiting. Not only do the authors of this blog write about PHP, but they also write a lot of valuable articles about the MySQL database system, HTML tricks and techniques, web server benchmarks and statistics, and more. If you go back to your bookmarks one day looking for PHP resources, you'll find the blog. But unless you add another bookmark to the same site in your MySQL folder, you won't find it when you're looking for MySQL help.

To solve this problem, del.icio.us uses something called *tags*. Tags are special keywords you can assign to each bookmark. It's kind of like choosing your own metadata to describe the bookmark file. You can assign as many tags as you want to each bookmark by entering them in the tags field in the posting interface — the web interface used to save bookmarks at del.icio.us. You enter the tags as a space-separated list. They can be anything you like — there are no restrictive guidelines for what a tag should be. Just use a tag that will help you easily find the bookmark again in the future.

*In most cases, you will want to use commonly recognized tags, such as php, music, or recipes that are easy to remember and easy for others to find. In specific instances, you may find that using tags meaningful only to you work best, such as vacation2007, musicwishlist, or toread.*

The del.icio.us posting interface automatically suggests the tags that other del.icio.us users have used to identify the bookmark (providing it has been posted to del.icio.us previously). It also lists existing tags that you have used in the past. Figure 1-2 shows tagging in action.

To access bookmarks filed under a tag, simply browse to the tag from your del.icio.us page or enter the tag's URL (*Uniform Resource Locator* — essentially, the address for a page on the web) in the address bar of your web browser. For example, you would enter the following tag URL for PHP:

```
http://del.icio.us/YOURNAME/php
```

You can combine or cluster tags to narrow your search by placing a plus mark (+) between the tags, like this:

```
http://del.icio.us/YOURNAME/php+software
```

This URL will show you all bookmarks that have both the php and software tags.

*Most del.icio.us URLs that involve your own bookmarks will contain your account name as a part of the URL. Replace YOURNAME in the examples throughout this book with your del.icio.us account name.*

You can also use the del.icio.us interface to browse and combine tags.

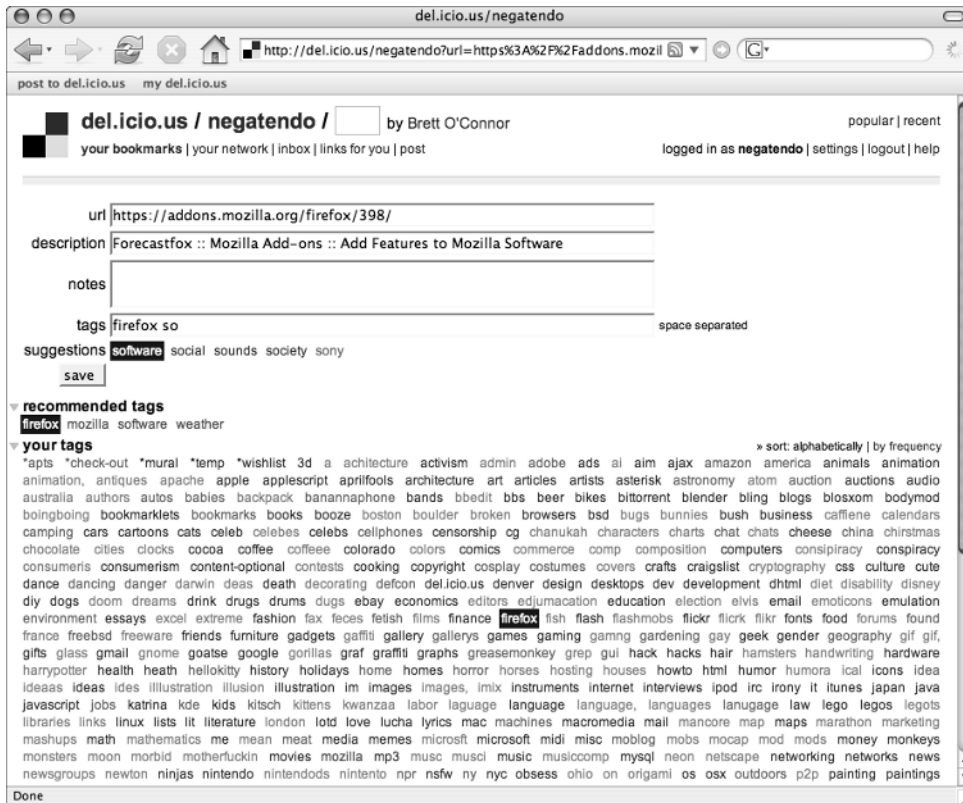


Figure 1-2

Tags are an extremely effective way to organize your bookmarks. They are key to learning how to make the best use of del.icio.us and creating del.icio.us mashups. Therefore, you'll be experimenting with them a lot throughout this book.

## Using Bookmarklets

There are several methods for getting your bookmarks into the del.icio.us posting interface. One method is to use the del.icio.us browser buttons, called *bookmarklets* (or *favelets*). A bookmarklet looks like a web browser bookmark or favorite and enables you to execute JavaScript commands in your browser.

To install a bookmarklet into your browser, just bookmark its contents or drag and drop it into your browser's *bookmarks toolbar*. The bookmarks toolbar is the part of your web browser that lets you view and interact with browser bookmarks like browser buttons, and is usually located just below your web browser's Back, Forward, Stop, and Reload buttons. To use an installed bookmarklet, you just click it.

As opposed to a standard bookmark, which just directs your browser to a new website, a bookmarklet is primarily a trigger that executes JavaScript code. A bookmarklet can do anything that JavaScript can do. If you want to see some examples, check out the [www.squarefree.com/bookmarklets/](http://www.squarefree.com/bookmarklets/) web page, which includes a wide variety of fun and useful bookmarklets.

The standard-issue del.icio.us posting bookmarklet takes whatever web page you are currently looking at and copies the title and URL of the page to the del.icio.us posting interface. This way, when you save or *post* the bookmark, a lot of information about the web page you are bookmarking has already been filled out for you. All you need to do is enter your tag names and click the Save button.

You need a del.icio.us account in order to use its bookmarklets. To sign up for del.icio.us, just fill out the form at the <http://del.icio.us> front page.

After you've created an account, you can install the del.icio.us bookmarklets in a few seconds by following the instructions at <http://del.icio.us/help/buttons>.

When you begin using the del.icio.us bookmarklets, they'll be the only traditional bookmarks your web browser will ever need.

## Socializing with Other del.icio.us Users

No man or woman is an island on del.icio.us. It is a social network. When you save a bookmark to del.icio.us, everyone sees it. (The concept of the *private bookmark* is planned but has not yet been fully implemented.) In addition, everyone can see and browse your tags, and watch you post new bookmarks via your del.icio.us page and *RSS feeds* (a file format that is used to deliver information over the web, as described in detail in the next chapter).

Because del.icio.us shows you how many people have bookmarked a link, it can serve as a popularity gauge for the link. When combined with the use of common tags, this creates an easy way to access and monitor the most popular web links about a particular topic. For example, you can see all links tagged with `php` at <http://del.icio.us/tag/php>.

This page changes pretty fast, because users are always adding new links tagged with `php`. Come back to this page in an hour or so and see for yourself.

del.icio.us also shows other tags related to PHP. It knows about these related tags because it knows what tags other users have used when saving a bookmark under the `php` tag. del.icio.us collects a lot of interesting data like this. To see the most popular PHP bookmarks, go to <http://del.icio.us/popular/php>.

Every bookmark posted to del.icio.us gets its own page, which shows everything del.icio.us knows about that bookmark. The simplest way to get to this page is by clicking the Saved By *N* Other People link below a posted bookmark (where *N* represents the number of users that have bookmarked the link).

## Part I: The Mashup-Friendly Web

After you start using del.icio.us frequently, you may find you are interested in what certain users post. You can identify specific users in your del.icio.us *network*, which is located at <http://del.icio.us/network/yourname>. Every time anyone in your network saves a new bookmark, it will show up here.

In addition, you can monitor specific tags, such as `php` or `recipes`, in your del.icio.us *inbox* at <http://del.icio.us/inbox/yourname>. You can even send bookmarks to other del.icio.us users with the special `for:` tag, followed by the del.icio.us username you want to send the bookmark to. For example, tagging a bookmark with `for:negatendo` will send the bookmark to me. You can see what bookmarks other del.icio.us users have sent you on your Links For You page, at <http://del.icio.us/for/yourname>.

If you keep your del.icio.us network and inbox well-populated, you may want to visit your web page every day to keep abreast of new bookmarks posted. Figure 1-3 shows an example of a well-populated network.

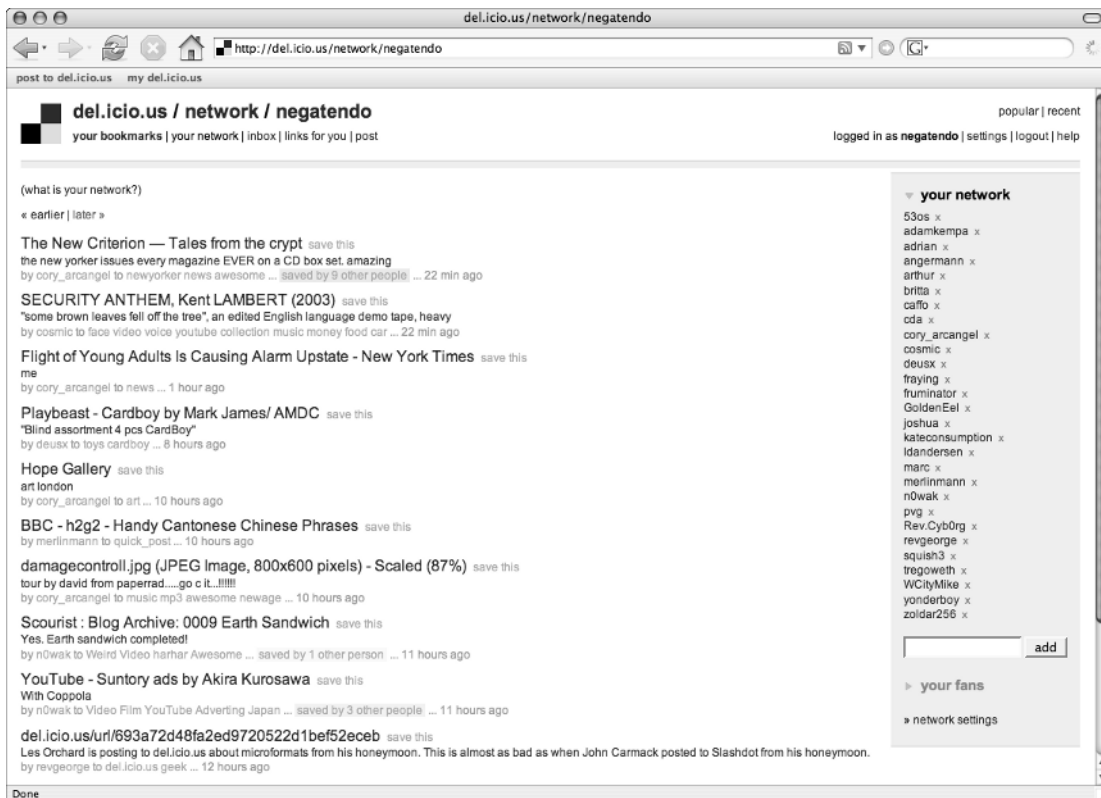


Figure 1-3

## Exploring the del.icio.us Community

Pages like the del.icio.us *hotlist* (found on the del.icio.us home page) and the del.icio.us *popular* page (found at <http://del.icio.us/popular>) aggregate what the entire del.icio.us community is reading and linking to, and you can explore it all. These pages, combined with del.icio.us tag pages, your network, and your inbox make del.icio.us a pretty fun place to hang out and discover all sorts of new and interesting websites.

The following Try It Out shows you how to post a bookmark to del.icio.us and then explore how it works itself into the entire del.icio.us network.

### Try It Out      Using Bookmarklets, Tags, and Your Network in del.icio.us

If you're already pretty familiar with how to use del.icio.us, feel free to skip this section.

1. Following the instructions earlier in this chapter, sign up for a del.icio.us account, install the bookmarklet, and browse to your favorite website. Click the bookmarklet to go to the del.icio.us posting interface.
2. Save the bookmark, tagging it with as many appropriate space-separated words as you can think of. Just use whatever comes to mind or tags that you believe others might use to describe this bookmark. If this link has been posted to del.icio.us in the past, del.icio.us may suggest some tags you can use.
3. Return to your del.icio.us page (<http://del.icio.us/yourname>) after posting the bookmark. If the bookmark has been posted by other del.icio.us users, del.icio.us will indicate this. Click the Saved By *N* Other People link to view the del.icio.us history for the bookmark, if it applies.
4. Go to the tag page for a tag you used with the saved bookmark to see if your bookmark appears there. You can manually enter the tag URL described earlier, or simply click the tag beneath your recently posted bookmark to see your bookmarks with that tag. For example, if you used the tag *search*, the tag page URL will be <http://del.icio.us/tag/search>.
5. Take some time to explore other bookmarks saved under that tag. If you see a bookmark you like, go to the user page for the last person who saved it by clicking their By username under the bookmark.
6. Add this user to your network by clicking the Add *Username* To Your Network link (where *Username* is the name of the del.icio.us user whose page you are viewing). Browse to your network at <http://del.icio.us/network/yourname> to see how their links will be collected on your network page.

### How It Works

1. The del.icio.us posting bookmarklet takes what it can from the web page you want to bookmark, including the page URL and title, and automatically transfers it over to the del.icio.us posting interface using some simple JavaScript code.
2. The bookmark you are trying to save may have been posted to del.icio.us by other users. If this is the case, del.icio.us takes tags commonly used by these other users and suggests them to you. In addition, del.icio.us uses your existing tags to auto-fill the tags field if you begin to type them.

3. When you save a bookmark, it becomes a part of the del.icio.us database. This page shows everything del.icio.us knows about the bookmark, including what you just told it.
4. By using this tag for your bookmark, it becomes a part of all bookmarks saved under that tag. Users monitoring this tag will see your bookmark, and all of the other tags you used are now potentially associated with this tag.
5. In this step, you used your saved bookmark tag to find another del.icio.us user with interests similar to yours.
6. By adding this user to your network, you can now keep track of other new and interesting links they post. You can add more than one person to your network, so keep exploring.

## Summary

In this chapter, you saw the way that del.icio.us collects, organizes, and shares your and other del.icio.us users' bookmarks, making it much more than just a simple way to save a web link. Arguably, del.icio.us has become the heartbeat of the web, and this chapter only touched the surface of what it can do.

## Exercises

Try out these simple exercises to get more comfortable with how del.icio.us works. See Appendix A for the answers.

1. Find the URL for all bookmarks tagged with `art` on del.icio.us.
2. List some tags you might use if you are collecting links to interesting apartment listings in your area.
3. Did you know there is an entire art scene devoted to videogame art? On *my* del.icio.us page, find the URL for all bookmarks I've tagged with both `art` and `gaming`. My del.icio.us username is `negatendo`.