## No-Brainer

im cocks his head a bit as he says it to emphasize the point: "LibraryThing.com is social software."<sup>1</sup> However we categorize it, Tim's baby has become a darling to librarians, and as we sat chatting over lunch in spring 2006, the Web application that had begun life just ten months earlier was to catalog its three millionth book.

LibraryThing is no library—his critics are quick to remind him of that—but it does open some of the activities of librarianship, the cataloging and organization of books, to a world of bibliophiles eager to partake. Librarians and patrons alike cannot help but compare LibraryThing to their own catalogs and wonder how this free software built—well, crafted—in less than a year by a solo developer who didn't know he was building a Web 2.0 start-up, could deliver so many features that we've wanted in our "real" libraries.

Catalogs are, in libraries anyway, inventories. Their design and features often reflect the interests and needs of those in the library's back rooms rather than of the patrons entering and exiting through the front gates, but nobody told Tim that before he began, and the result reflects the things he wanted to do as a reader and consumer of books.

Much as the patron who exclaimed, with some exasperation, "I want all the books I'm interested in on one shelf," Tim wanted the library arranged to suit his needs.<sup>2</sup> So he set out to build software that allowed him and any other user the opportunity to organize the world of books to their liking.

But today he can't quite understand my question: "How did you choose to use PHP and MySQL?"

The answer, it seems, was obvious, a "no-brainer." He was confident and experienced with those technologies—a programming language and a database environment—and they were free.

Not just free as in "free beer," but also free as in "free speech."

Along with PHP and MySQL, Tim happily and unquestioningly hopped on board with Apache, an open-source Web server, and Linux, the open-source operating system on which everything runs. That combination, popular worldwide, is know as LAMP, for Linux, Apache, MySQL, PHP. Though it's difficult to gather statistics on the entire package, Netcraft reports that Apache is the dominant Web server, hosting over 60 percent of the world's Web sites.<sup>3</sup>

*LibraryThing* www.librarything.com

Together, this collection, this platform of free tools, has lowered the cost of development and reduced the risk of exploration. Zachary Tirrell and Matthew Batchelder, both of the technology consulting firm Taller Buildings, concur.<sup>4</sup> Speaking on the value of OSS (open-source software) to his work, Matthew explained:

It's easier to build and sustain a theme park when you don't have to build the transportation infrastructure that brings customers there. Think about it, would Disney's parks be as successful if they were developed before the interstate highway system and commercial airlines made it possible for people to quickly travel long distances for vacation?<sup>5</sup>

For a more concrete example, Zach and Matthew share the details of one of their current projects, a solu-

tion to alert individuals in cases of emergency. Looking at the dry erase board in Zach's office, the two of them walk me through the different components of the application. I admit my surprise at how such a seemingly simple task becomes complex when the particulars are revealed in the array of boxes and lines drawn before us. And at that, Zach draws another line, this one in red, separating a small section of the diagram from the rest.

"This is the working part of it," Zach says as he points to the newly highlighted section. "The rest, the other two-thirds, is just stuff we need to be able to do this core piece."<sup>6</sup>

The core of the project, of course, is an emergency alert system. But to issue an emergency alert, the software needs to know contact information for the people to alert, and that's where the complexity was hidden.

"If we can find an open-source component that does that, it could cut our development time in half or more," the two point out in near unison, as if to highlight the point that open source is an economic, not political decision.<sup>7</sup> They're quick to point out that they too depend on the open-source LAMP architecture for most of their work.

"LAMP isn't just good software, it's good business, and open source is too," Zach says. "I've seen too much time invested in proprietary technologies, then lost as the vendor switched strategy or, worse, re-sold work I'd done as a user to other customers."<sup>8</sup>

Of course, open-source software isn't just for developers. OSS is solving problems for libraries of all types and is helping to get work done for people of all technical abilities. And free OSS tools are now available in almost every application category, from browsing the Web to managing a Web site.

Over half a million Web sites run on WordPress, an open-source content management system that can be in-

stalled in five minutes.<sup>9</sup> On the other side of the Web, Firefox, the open-source Web browser, has been downloaded more than 300 million times.<sup>10</sup> These are just a couple of a number of feature-rich, free tools libraries are using now, and more are listed in the directories of desktop and server applications (chapters 10 and 11).

## Notes

- 1. Tim Spalding (founder, LibraryThing), composite of interviews by the author conducted via telephone and in person, May 8, June 2, and June 5, 2006.
- 2. Anonymous faculty member and library patron, Plymouth State University, June 22, 2005.
- "Netcraft Web Server Survey: By Server," July 2006, Netcraft Web site, http://survey.netcraft.com/Reports/0607/ byserver (accessed Mar. 19, 2007); ServerWatch, "January Netcraft Survey Shows Continued Growth," Jan. 10, 2007, ServerWatch Web site, www.serverwatch.com/stats/article .php/3636566 (accessed Mar. 19, 2007); ServerWatch, "September 2006 Security Space Survey Results," Oct. 11, 2006, ServerWatch Web site, www.serverwatch.com/stats/ article.php/3637346 (accessed Mar. 19, 2007).
- Disclaimer: I am a member of the firm, though not attached to the project being described.
- Matthew Batchelder and Zachary Tirrell, interview by the author, Jan. 11, 2007.
- 6. Ibid.
- 7. Ibid.
- 8. Ibid.
- Matt Mullenweg (WordPress developer), interview by the author, Aug. 6, 2006; "Installing WordPress," WordPress Web site, http://codex.wordpress.org/Installing\_WordPress (accessed Mar. 19, 2007).
- 10. Firefox download counter, Spread Firefox Web site, www .spreadfirefox.com (accessed Mar. 19, 2007).