

SAS TECH REPORT

## Stack Overflow: A Great Place for Answers

by Adrian Dunston, internal blogger and Software Developer at SAS

If you're a software developer, I'll bet I can save you hours of lost productivity with two words. Seriously. That time you spend tracking down unexplainable error codes or banging your head against problems that fall just outside of your language manuals? I can get that time back for you. Maybe five or six hours a month saved. No strings.

The magic words? Stack Overflow.

In my opinion, Stack Overflow (<u>stackoverflow.com</u>) is the world's greatest question and answer Web site for software developers, hands down. If you post a programming question, you'll get an answer fast (under an hour). If you wait, you will get more answers. As the day goes on, you'll get better answers. You don't even need to create an account. Just go there and ask.

Stack Overflow was conceived and crafted to be better than other sites that serve the same purpose, and there are several reasons for its success. First and foremost, the site is about questions and answers. That's it. You post questions. Others post answers. Everyone votes, and the answers are ordered by votes. It's not a forum, so there's no discussion. If your question needs clarification, you post an edited question, and others edit their answers. There is a way to comment on answers, but it's used sparingly. It's all about getting great answers to hard questions fast in a searchable format.

The site was created by two popular and influential bloggers, Jeff Atwood of <u>Coding Horror</u> and Joel Spolsky of <u>Joel On Software</u>. Both bloggers brought their substantial readership of savvy programmers with them to help guarantee the site's successful launch. Another reason for Stack Overflow's success is the extended length of time that it remained in beta.

## Here's where things get really brilliant

If we were to stop here, if Stack Overflow were just a Q&A site with voting and a large initial user base, the site would be doing OK. But what comes next is a kind of secret sauce that really makes it collaborative genius. Stack Overflow is really an online game. Everything about how it works is out in the open, but it's only when you step back and look at it from a distance that you realize what its users are doing. They're playing a complex online social game.

Here's how the game works:

- When you register an account, you're given a reputation score: 1.
- When you ask a question, your reputation goes up a little.
- When you answer a question, it goes up a little more.
- When your questions and answers are voted up, your reputation goes up a LOT.

It's keeping score. Checking your place in the user list feels like putting your name in the high scores list in Pac-Man. With modern games, high score is no longer the motivator. When you perform well, modern games give you the tools to do even better, and Stack Overflow responds the same way. The more your reputation grows, the more access you have to the site. There's a low reputation threshold necessary to gain voting rights. A higher threshold gains access to post images, comment on answers and, eventually, edit other people's answers. At the highest scores, you have access to edit everything. Once you've built a high reputation, Stack Overflow allows you to edit it like a wiki.

Rewarding users with greater responsibility is the perfect way to entice and keep the kind of knowledgeable, helpful programmers who like answering other people's questions. It's like candy. Not only do you get a boost from strangers telling you you're brilliant, but you also get an opportunity to be more helpful. If that sort of thing appeals to you, beware. There are always more questions to answer, and it's hard to stop.

## There's more

A tagging system makes searching easy and highlights new questions that you may be wellsuited to answer. Stack Overflow uses OpenID, so you only have to create a user name and password if you want a separate one for this site. You can also mark questions as favorites. And in your account history you can view when you asked, when you answered and when you were voted up or down. There's even a system of "badges" that encourage you to explore different site features. It's got a clean look and great editing system. It's text-ad supported, but the ads are unobtrusive.

That's it: Stack Overflow. Questions answered. Time saved. Productivity gained. Of course, if you stop asking and start answering, all bets are off.