

Creating Dynamic Web Pages

Gunther Birznieks

gunther@eXtropia.com

Overview

- Open Discussion
 - Feel Free to Ask Questions Anytime...
- Making a web site dynamic by adding applications
- Free sites (eXtropia, Matt Wright, CGI-Resources...)
- Security
- Technologies - Java, Perl, ASP, ColdFusion
- Emphasis – “*Open Source*” solutions. **This NOT a Vendor-specific Talk!**

Dynamic Web Sites

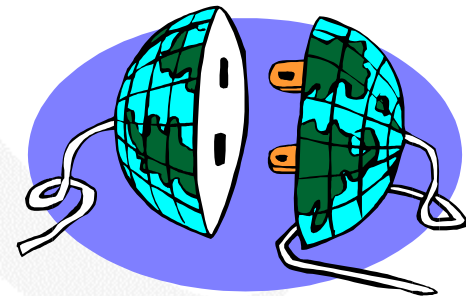
- Making a web site dynamic
- Note: This talk doesn't cover content.
- In other words, I will cover...
 - Applications
 - Specifically, “open source” or “free” solutions
 - Even for proprietary technologies



Applications Defined

- We don't mean desktop applications like Microsoft Word.
- Specifically...

Anything that performs a task that allows a user to interact with you or others through your website.



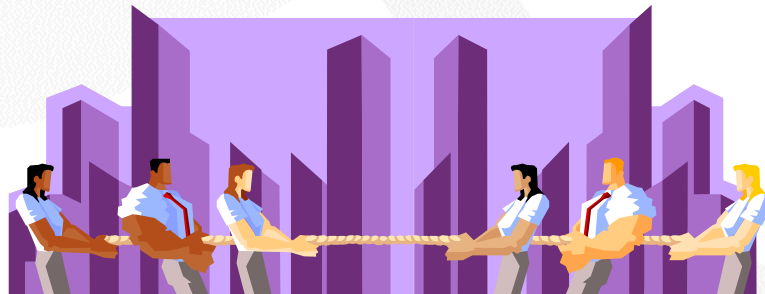
Simple Examples

- Simple = No Workflow
 - Single HTML Form/Request
- Guestbook
- Form Processor/WebResponder
 - Tell A Friend
 - Sign up for Monthly Newsletters
 - Provide Feedback
 - Simple Ordering



Complex Examples

- Complex = Heavier Workflow
- WebStore (on-line eCommerce)
- On-Line Discussions Forums
 - Ranging from straightforward forums to the complexities of managing entire communities
- Public Chat Engines



Getting the Apps

- Three choices
 - Hire someone
 - DIY (Do It Yourself)
 - Download for Free
- Or a combination of the above...



Apps For Free

- Fortunately, on the web plenty of people are willing to share their work.
 - We do it, and there are others as well
 - Major upside: fully functional apps for free
 - Also, many companies or people you will hire will try to write from scratch
 - But public stuff has been debugged by a wide audience (includes security debugging)



Apps For Free

- The downside to free apps...
 - Free stuff can appeal to a more techie audience
 - Look for a site that has good documentation
 - Free stuff can have varying quality
 - Linux and Apache are known examples of high quality free software that is less buggy than commercial counterparts.
 - But not all free software is great just like not all commercial software is great.
 - Look for a meta-site that rates the various free sites out there...

Free CGI Web Sites

- The originals (Mostly Perl based)
 - eXtropia (<http://www.extropia.com/>)
 - Originally known as Selena Sol's Scripts Archive
 - Founded as an offshoot from work done at the EFF
 - Electronic Frontier Foundation (<http://www.eff.org/>)
 - Currently in active development
 - Matt Wright's Scripts Archive
 - URL here
 - Older scripts, but very simple which can be excellent for beginners
 - Meta-Site Indexes for CGI
 - <http://www.cgi-resources.com/>

Free Java Web Sites

- The original
 - Gamelan (<http://www.gamelan.com/>)
 - Owned by EarthWeb, General Java Resource
- Internet.com's JavaBoutique (<http://www.javaboutique.com/>)
- eXtropia - WebDB @ <http://www.extropia.com/java/>
- CoolServlets (<http://www.coolservlets.com/>)
 - Forum, Mailing List
- JavaCorporate (<http://www.javacorporate.com/>)
 - Forum, Search engine (DB)
- Meta-Directories
 - <http://www.servletsource.com/software.jsp>

Free ASP Web Sites

- Meta-Directories
 - ASP Resource Index (<http://www.aspin.com/>)
 - ASPCode (<http://aspcode.com/>)
- Unlike Perl/Java, most free apps in ASP are sprinkled about
- There isn't really a single definitive resource



Hiring Someone...

- Could hire a company/freelance developer
 - The red light should go on if they propose developing something entirely from scratch
 - Unless your business is really different, there's no need.
 - Also, any software written from scratch should be considered below version 1. ***Even version 1 code has bugs.***
- Therefore, look for following criteria
 - Companies that use existing external resources
 - Or promote heavy reuse within their company if proprietary
 - Preferably go with a company that understands you business
 - They probably understand what types of bugs crop up with workflow specific to that line of work

Hiring Someone...

- People and companies who reuse code can be difficult to find.
- But they do exist.
 - Reusing code efficiently is not necessarily easy so the cost per hour for such a developer may be higher, but the total time will be lower. Hence, you will get faster time to market, lower overall project cost with application reuse.

What About Security

- We mentioned earlier that free/open source programs tend to have less bugs...
 - However, we follow that with a caveat
 - *Not all free programs are secure by virtue of the fact that the audience is large*
 - A given program may be so niche that it hasn't had a lot of use
 - A given program may have a lot of free competition so its audience may be limited.
 - Depends on the program you are looking for and the technology

Security Guidelines

- For Perl
 - Look for sites that enable Taint Mode by default
 - Puts Perl in a paranoid secure watchdog mode
- General Guidelines
 - Look for a *security section of the documentation* to make sure you are not setting your application up in an insecure way
 - Look for a *newsletter* you can sign up for which will *keep you notified if a security issue is found* in a script or application you are using
 - Note: Advantage on sticking to one or two site's software...less stuff to subscribe to

Technologies

- Technologies
- - Perl is ubiquitous -- any ISP will have it.
- - Java is great , but it's still not everywhere
 - you typically have to search harder to find an ISP to support it and then you will spend more money. Some free Java ISPs
 - <http://www.mycgiserver.com/> supports Java Servlets and JSPs
- <http://www.interactiveworkbench.com/>
 - office located in Singapore
- ASPs tend to be supported only on ISPs that support Windows NT

Open Discussion

QUESTIONS?

