

CONTRIBUTING TO MOZILLA WEBSITES



Mozcamp EU

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Web development can be confusing.

- But it's pretty easy to get started, that's one of the things that makes the Web great.
- I'm going to give you the tools to start working on our sites.

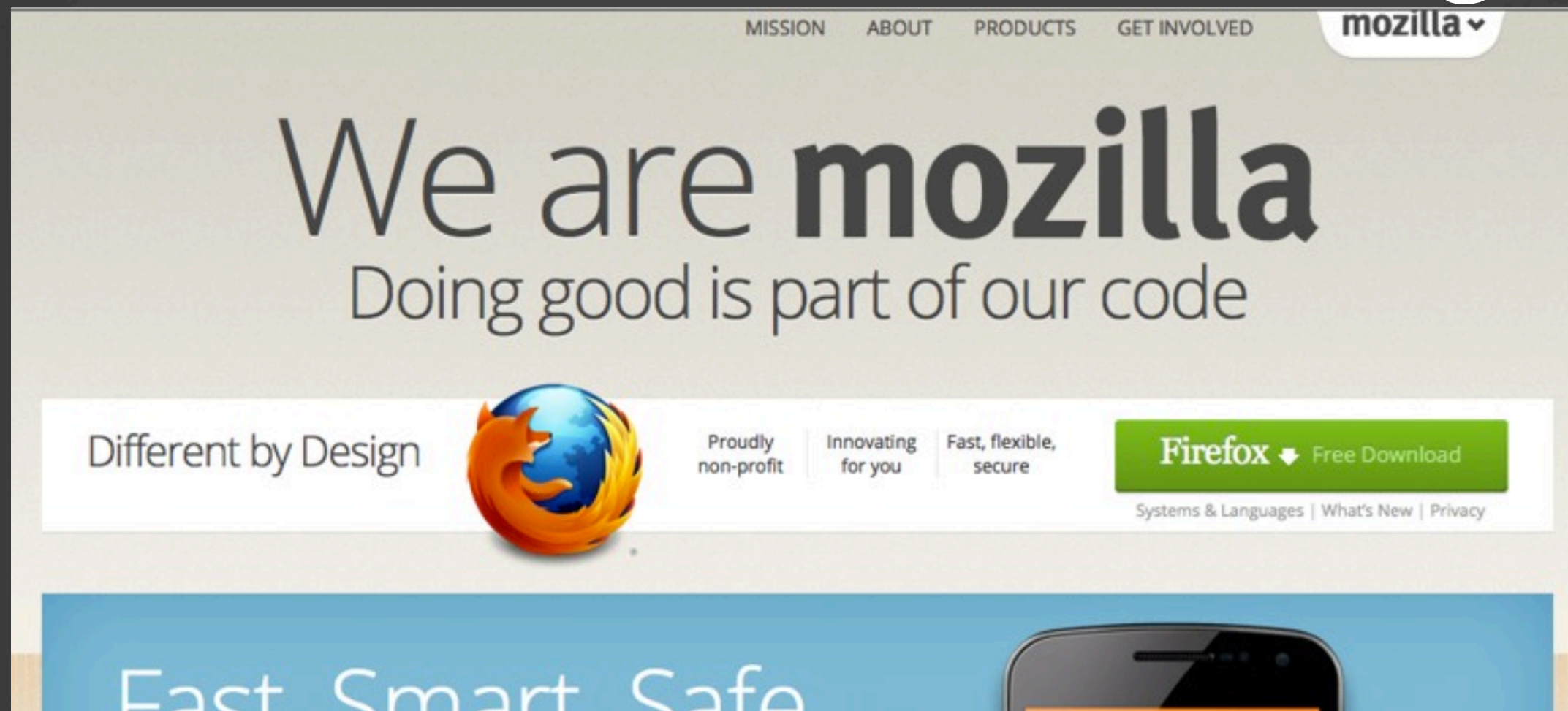


A QUICK TUTORIAL

- Editing CSS requires almost no setup.
- Lots of tutorials on the web.
- w3schools.com sucks.
- <http://reference.sitepoint.com/css> is pretty good.
- Use <http://developer.mozilla.org>
- <http://www.google.com/reviews/t>



Lets talk about Mozilla.org



- Mozilla.org has been around a long time.
- Historically, it's PHP.
- The current PHP site is a frankenstein monstrosity
- Mix of three original sites: mozilla.org, .com, and mozillamessaging.com



- Code is at <https://svn.mozilla.org/projects/mozilla.org/trunk>
- It's also at <https://svn.mozilla.org/projects/mozilla.com/trunk>
- You don't need to set up the whole thing, you can just set up the piece(mozilla.com, .org, or mozilla.org/thunderbird) that you want to work on.
- There's currently a rewrite of mozilla.org in Python happening called Bedrock.
- Trivia: The full checkout of both these sites is roughly 1.5GB. Mozilla.org & Thunderbird are nearly 1GB alone.



Lets Setup Mozilla.org!

- We're going to use Ubuntu.
- I've installed Ubuntu in a VM for demonstration purposes.
- If you're on Windows, VMWare Player is free and works well. Bit painful to install locally on Windows, but it's possible.
- If you're on OSX, you can install locally very similarly to the Ubuntu install, just use homebrew instead of apt to install packages.



Lets Setup Mozilla.org!

- <http://bedrock.readthedocs.org/en/latest/php.html>
- apt is the package manager on Ubuntu. Personally I'm used to CentOS, so you'll probably see me typo directories constantly on Ubuntu.
- You'll need to sudo apt-get install <package> the things below.
- apt: build-essentials, git, apt-file, subversion, apache2, python-pip, libxml2, libxml2-dev, libxslt, libxslt-dev, python-dev, npm
- openssh-server too if you want to connect to your VM via ssh.



Dealing with Errors

- Don't Panic! Most errors you'll encounter when setting up a php or python website mean "you forgot to install or enable something".
- copy paste and Google the error verbatim.
- apt-file can be used to search packages for a certain missing file, if the error reports it.

```
root@ubuntu: /home/sancus
libc6: /lib/i386-linux-gnu/libcrypt-2.15.so
libc6-amd64: /lib64/libcrypt-2.15.so
libc6-armel-cross: /usr/arm-linux-gnueabi/lib/libcrypt-2.15.so
libc6-armhf-cross: /usr/arm-linux-gnueabi/lib/libcrypt-2.15.so
libc6-dbg: /usr/lib/debug/lib/i386-linux-gnu/libcrypt-2.15.so
libc6-dbg: /usr/lib/debug/lib/i386-linux-gnu/tls/i686/noseg/libcrypt-2.15.so
libc6-dbg-armel-cross: /usr/arm-linux-gnueabi/lib/debug/lib/arm-linux-gnueabi/libcrypt-2.15.so
libc6-dbg-armhf-cross: /usr/arm-linux-gnueabi/lib/debug/lib/arm-linux-gnueabi/libcrypt-2.15.so
libc6-xen: /lib/i386-linux-gnu/tls/i686/noseg/libcrypt-2.15.so
root@ubuntu:/home/sancus# apt-file search libmysql.so
nuauth-log-mysql: /usr/lib/nuauth/modules/libmysql.so
root@ubuntu:/home/sancus#
```



Lets Setup Mozilla.org!

- We need to add some apache modules first.
- In -s /etc/apache2/mods-available/expires.load /etc/apache2/mods-enabled/
- We'll do this for expires.load, rewrite.load, include.load, actions.load, vhost_alias.load, headers.load
- Do apache configuration and add the VirtualHost etc.
- check out the code! `svn co https://svn.mozilla.org/projects/mozilla.com/trunk mozilla.com`
- edit your includes/config.inc.php after `cp config.inc.php-dist`



Understanding the site

- Now that you have the site setup, you can hack it!
- Mozilla.com/org are both a little weird.
- They run prefetch.php and then pull in scripts from the directory tree.
- Localization is performed by pulling in the right file from the various de, fr, pl, etc locale directories.
- After you're done making changes, you can make a patch via svn diff, attach it to a bug, and get review! Then you can commit it, if you have commit rights, or ask the reviewer to do it.



PHP is at End of Life

- Understanding the php site is useful, but we're moving off PHP, to...
- We need your help, because of that whole 1.5GB checkout thing.
- There are MANY old pages on mozilla.org.



BEDROCK!

- <http://bedrock.rtfld.org/>
- It's written in Python, on top of Django.
- Is currently live! At least partially.
- Need contributor help to modernize and move pages over from the old PHP site.
- Anthony Ricaud (aricaud@mozilla.com) Rik @ irc
- Craig Cook (ccook@mozilla.com) craigcook @ irc
- #www on irc.mozilla.org



Github

- Bedrock lives in Github
- You'll need to make a Github account so that you can fork it and hack on it.
- <https://github.com/signup/free>
- Once you've signed up, you can Fork the Bedrock repository.



Setup Git

- <https://help.github.com/articles/set-up-git#platform-linux>
- You set your name, email, and turn password caching on if you want to use https.
- You can also use SSH by uploading an SSH public key to Github
- Then: `git clone https://github.com/YourUserNameGoesHere/bedrock.git`



Setup Bedrock

- `pip install virtualenv`
- `virtualenv` is a sandbox for installing python libraries
- `pip install -r requirements/compiled.txt`
- This is where you find out if you installed all the correct packages earlier!
- `cp settings/local.py-dist settings/local.py`
- `./manage.py update_product_details`
- Install the LESS compiler - `$ npm -g install less`
- `set LESS_BIN`
- `./manage.py runserver 0:8000 !!!!` And you should have a running Bedrock server.



Adding a Page

- <http://jinja.pocoo.org/docs/> - Template syntax
- We're going to move the Book of Mozilla to Bedrock
- <http://www.mozilla.org/book/>
- This page is self-contained, and isn't localized.
- You'll need to add a template for it in `apps/mozorg/templates/mozorg/book.html` -- though it can be named whatever.
- Copy an existing template, and edit!
- The url needs to be added to `urls.py`
- Commit, push, and pull request!



Localization

- Two ways: .lang files and complete blocks
- <http://bedrock.readthedocs.org/en/latest/l10n.html>
- Syntax: {{ _("String to be Localized") }}
- ./manage.py l10n_extract
- ./manage.py l10n_merge
- Then you'll have a .lang file to translate in the appropriate spot
- apps/mozorg/templates/mozorg/something.html
- locale/pl/mozorg/something.lang



That's it!

