

CS 360

Tools and Process

Communication

Development

Survey Results

Open Source: A Definition

- Free Redistribution
- Source Code (and build infrastructure)
- Allow Derived Works

*all come with some restrictions.

<http://opensource.org/osd-annotated>
Anybody can contribute to Open Source software!

What exactly does that mean?

How to Contribute

- Find an interesting project
 - GitHub / Sourceforge / What do you use?
- Can you build it?
- Study the project's development process/[learn the culture](#)
 - bug tracker / IRC / revision control / mailing list
- Read documentation
- Find a bug
 - does the project have mentored bugs?
 - good / easy first bugs?
- Produce / submit a patch

Tools - Communication

- IRC
- Mailing List
- Bug Tracker
- Wiki
- Commit messages
- Coding Standards? Conventions?

Mozilla

- IRC
 - <https://wiki.mozilla.org/IRC>
- Mailing List
 - <https://lists.mozilla.org/listinfo>
- Bug Tracker
 - <https://bugzilla.mozilla.org/>
- Wiki
 - https://wiki.mozilla.org/Main_Page
 - <https://developer.mozilla.org/en-US/>

Internet Relay Chat

- IRC
 - text based **group** chat
 - many clients available
- Start Firefox
 - <https://addons.mozilla.org/en-US/firefox/addon/chatzilla/>
 - install
 - Three Bars | Add ons | Chatzilla Preferences
 - set nickname
 - change or blank out description

Start Chatzilla



- Press cZ button in Firefox.

/server chat.freenode.net

join class chatroom

Hello CS360! I am *name*.

pick the person below you on the list at the left

/msg name hello

private message

name: hello

public message

Tabs light up for activity

Blue: enter/leave

Green: conversation

<http://www.wikihow.com/Register-a-User-Name-on-Freenode>

<http://www.ircbeginner.com/ircinfo/ircc-commands.html>

Join an existing channel

Remember, you are in public on these channels!



- Go back to the *client* tab

/server irc.mozilla.org OR click [moznet](#)

<https://wiki.mozilla.org/IRC>

- commonly used mozilla IRC channels
- in the moznet tab:
 - /join #f refox
- click one other channel that looks interesting.
- let chatzilla sit and gather some conversation
- we will return to this in the last 10 minutes of class

Resources

- Etiquette

- <http://geoffgreer.com/2012/05/19/programmer-irc-etiquette/>
- http://freenode.net/channel_guidelines.shtml

- Tutorials

- <http://www.irchelp.org/irchelp/irctutorial.html>
- <http://www.ircbeginner.com/ircinfo/ircc-commands.html>

<http://pastebin.com/TD7h283d>

Mailing List

- https://en.opensuse.org/openSUSE:Mailing_lists
- <http://lists.opensuse.org/opensuse-updates/2014-08/date.html>
- https://en.opensuse.org/openSUSE:Mailing_list_netiquette
- <https://lists.mozilla.org/listinfo>
- <https://lists.mozilla.org/listinfo/announce>
 - Use Google Groups for archives
 - Usenet?
- <https://groups.google.com/forum/#!forum/mozilla.dev.planning>

- **BEWARE! HERE BE SPAM!**

Bug Tracker

- Bugzilla
- <https://bugzilla.mozilla.org/>
- Let's look at bug id 628630 and 690625

Wiki

- https://developer.mozilla.org/en-US/docs/Mozilla/Developer_guide/Build_Instructions/Linux_Prerequisites

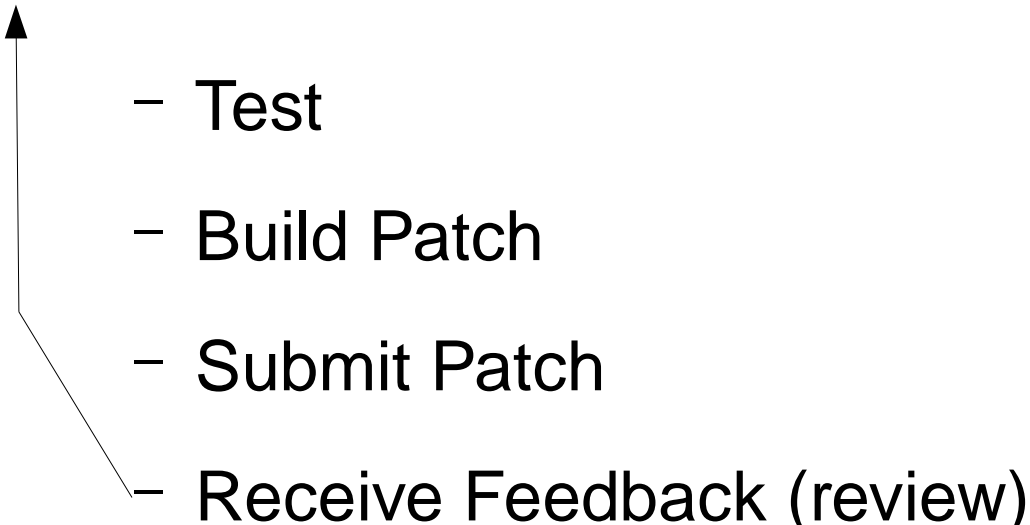
IRC Results

- #f refox

Tools - Development

- Revision Control
- Build System
- Test infrastructure
 - continuous integration
- Code Review infrastructure
- *Committer vs Contributor*

Developer Workflow

- Get Code
 - Build Code
 - Edit Code
 - Test
 - Build Patch
 - Submit Patch
 - Receive Feedback (review)
 - Commit!
- 

Example

- <https://github.com/chaddcw>
- <https://github.com/IQAndreas/github-issues-import>
- <https://github.com/IQAndreas/github-issues-import/pulls>
- closed
- <https://github.com/IQAndreas/github-issues-import/pull/29>

- The Command Line

`c:\>`

`zeus$`

- Development environment

- pick your own
- gcc vs Visual Studio (python, ruby, ...)
- any source code editor
- most projects don't build an Eclipse or Visual Studio *project*
- build via make, gmake, nmake, or custom build command

Release!

- Stable
- Nightly
- Unstable
- Release Candidate (RC)
- Alpha / Beta / Milestone

Fork!

- Linux Kernel → every distribution-customized Linux Kernel
- OpenOf tē → LibreOf tē
→ NeoOf tē
- Firefox → Pale Moon
- MySQL → MariaDB
- XFree86 → X.Org
- Android → Fire OS
→ Nokia X software platform