code_swarm

Michael Ogawa, UC Davis October 20, 2008

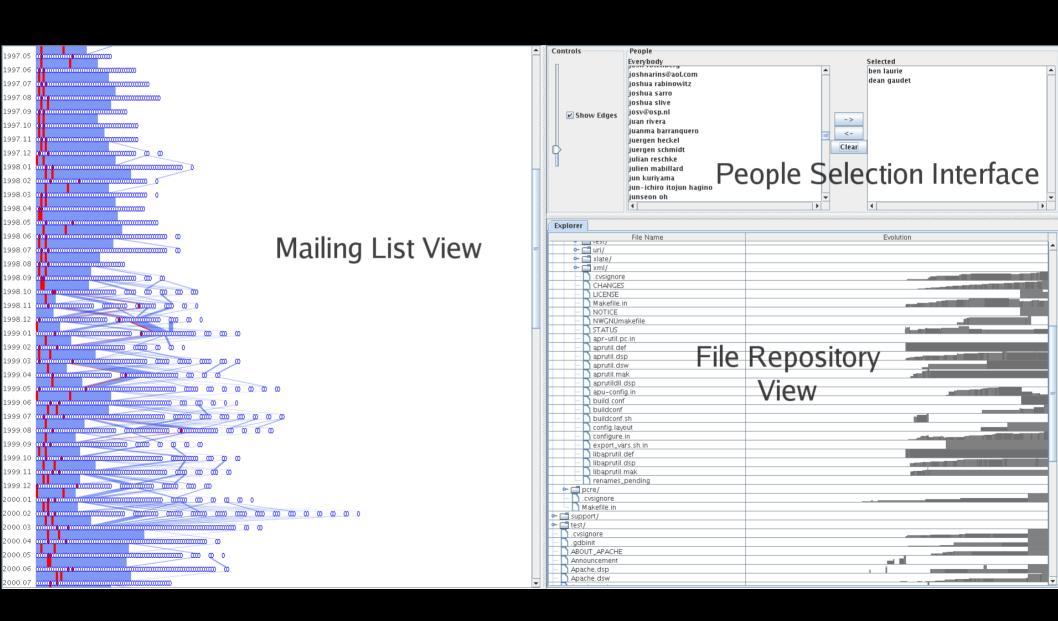
About Me

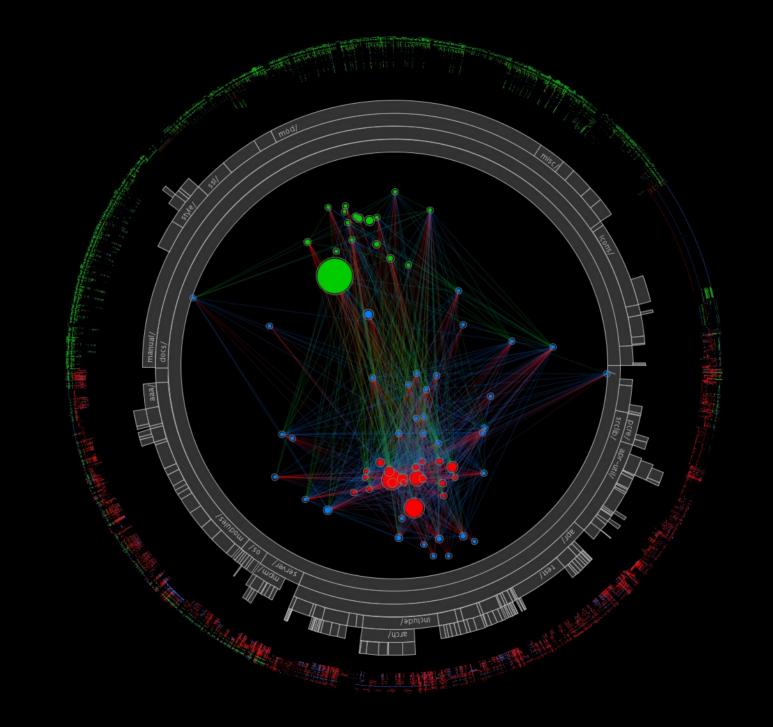
- Grad student at UC Davis.
- Former undergrad at Davis.
- Researching software visualization.
- Maverick.

An example of code_swarm (video)

Before code_swarm

Sankey Diagrams





Creating code_swarm

Philosophy of code_swarm

- Organic Infovis
 - Freeform: Not a one-to-one mapping
- Accessible to developers
- Understandable for everyone
- Aesthetic

Early Experiments (videos)

Technique: Motion

- Physics-based model with repulsive and attractive forces
- Developers attract files they work on
- Files repel other files
- Speed of each entity is capped

Seeing differences between projects

- Python
 - Guido's excellent adventure
- Eclipse
 - Lots of components, corporate sponsorship
- Apache
 - Planning and execution
- PostgreSQL
 - Small consistent group

Getting it on the internet

- Vimeo for streaming high quality video
- Single-page website with links to videos
 - vis.cs.ucdavis.edu/~ogawa/codeswarm
- Processing.org
- Infosthetics.com

Blogosphere Response

- A small number of blogger/developers
- Blog aggregators
- Bookmark services
 - Digg, del.icio.us, ycombinator, reddit
- Twitters
- Slashdot
- More blogs
 - O'Reilly, Wired

Compliments

- Looks good, wow factor
- Saw what they expected, like famous names
- Inspirational to see human endeavor, generosity, perseverance of developers
 - Guido in particular
- Experienced developers can see the release cycles

Criticisms

- Commits are not good indicators of project activity
 - Programmers may commit more often than necessary
 - A small group of maintainers may control patch commits from submitters
 - There are other ways of contributing to a project
- When there is a lot of activity, names are hard to read
 - OTOH, "...becoming something bigger than yourself" shaunxcode

What people wanted

- Closed vs. open source
- A failed project
- A resurrected project
- Big-name projects
 - Linux, GNU, gcc, Vista, IE
- Wikipedia, Slashdot forums
- "...when Stallman went off the deep end"
- MAKE IT OPEN SOURCE!!!

After Open Sourcing

Some Self-Promotion

- Code:
 - http://code.google.com/p/codeswarm
- Group:
 - http://groups.google.com/group/codeswarm

Very Helpful People

- Desmond Daignault (nawglan)
- Chris Galvan
 - Log conversion scripts
- Alex Gourley
- Sébastien Rombauts
- Arjen Wiersma (credmp)
- ...and others who submitted patches

Usable Data Sources

- svn
- CVS
- git
- Perforce
- Mercurial
- Wikiswarm (a MediaWiki extension)

Spinoffs

- Django
- Linux
- Plurk
- Vimeo
- Flickr
- SciPy
- LittleBigPlanet
- ~100 more on video sharing sites

Thanks!

Any Questions?