Forking the Academy: What Scholars Can Learn About Collaboration From the Open Source World

Konrad M. Lawson

konrad.lawson@eui.eu

http://muninn.net/

http://github.com/kmlawson/

@kmlawson

Collaboration among Scholars (Historians, for example)

Working Together in Teaching

Working Together in Teams

(With relatively well-defined divisions of labor)

Working Together Directly in Writing

Multi-Author Articles in Last 15 Years (1997-2012)

Three examples:

- American Historical Review: 13
- Past & Present: 21
- Journal of Asian Studies: 24

(less than 10% of articles in each case)

Collaboration without collaboration

Writing Together

Microsoft Word

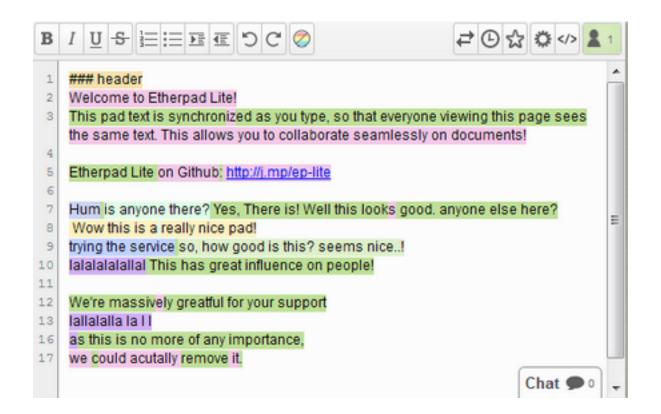


Track Changes

Google Docs

Wikis

Etherpad



Canonical text Centralized Hosted

Free and open-source software

Open Access vs Free & Open Source

Open Access

Green vs. Gold

Free Software: the users have the freedom to run, copy, distribute, study, change and improve the software

Gratis vs. Libre

The Spectre of Libre in the UK

Creative Commons Attribution License (CC-BY)

You are free:

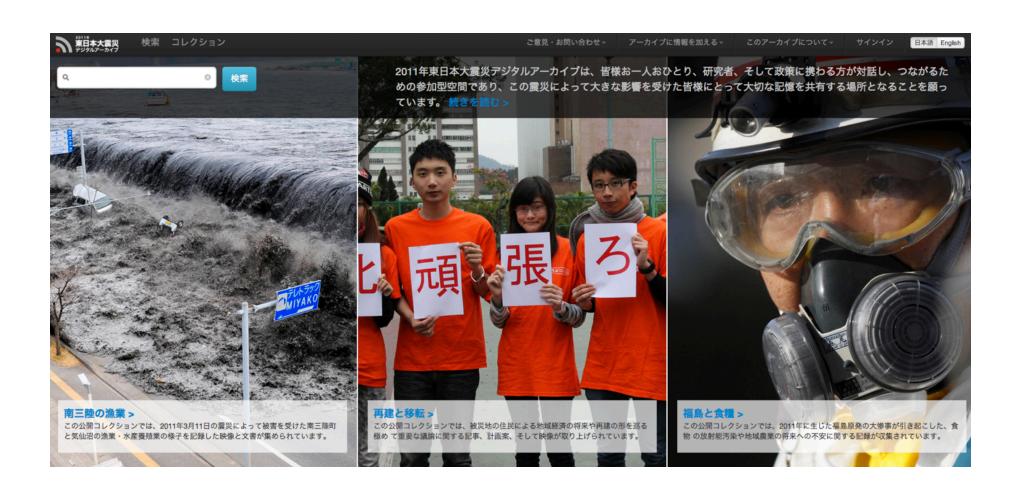
to **Share** — to copy, distribute and transmit the work to **Remix** — to adapt the work

to make commercial use of the work

On the condition:

You must attribute the work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work).

The Digital Archive of Japan's 2011 Disasters http://jdarchive.org/

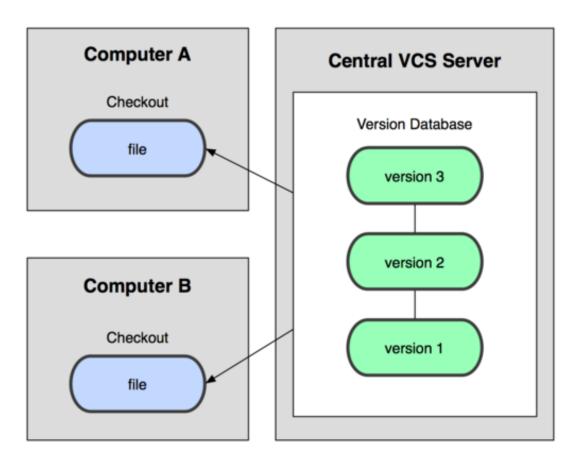


Coding Together

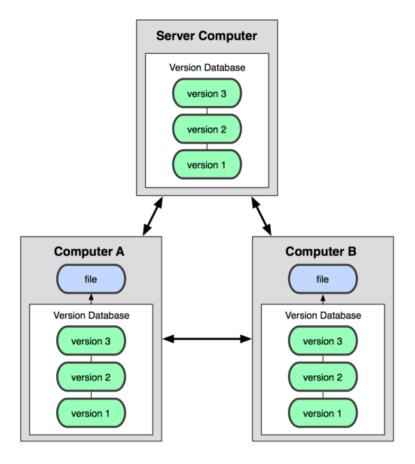
Small teams with shared access to a central repository of files

Version Control System

Centralized Version Control Systems



Distributed Version Control Systems



Other Collaborative Practices among Coders

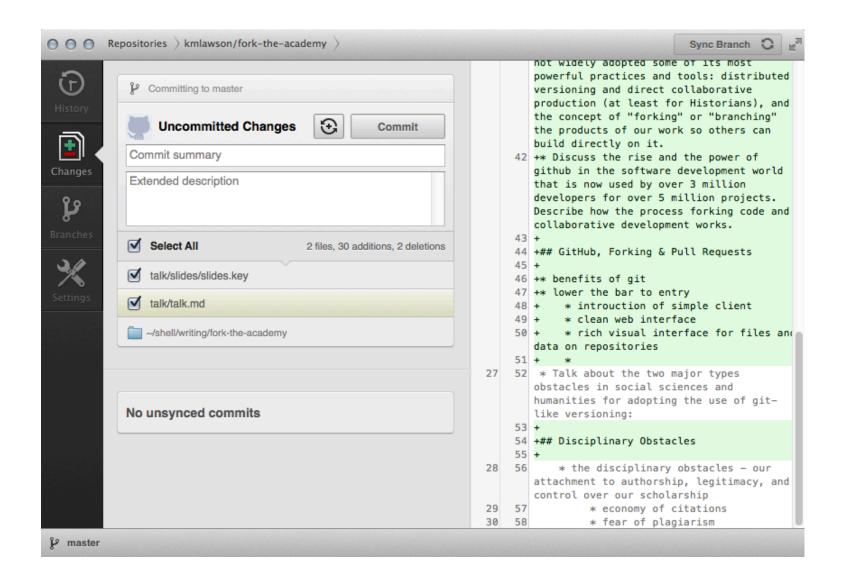
GitHub, Forking & Pull Requests

Rise of GitHub

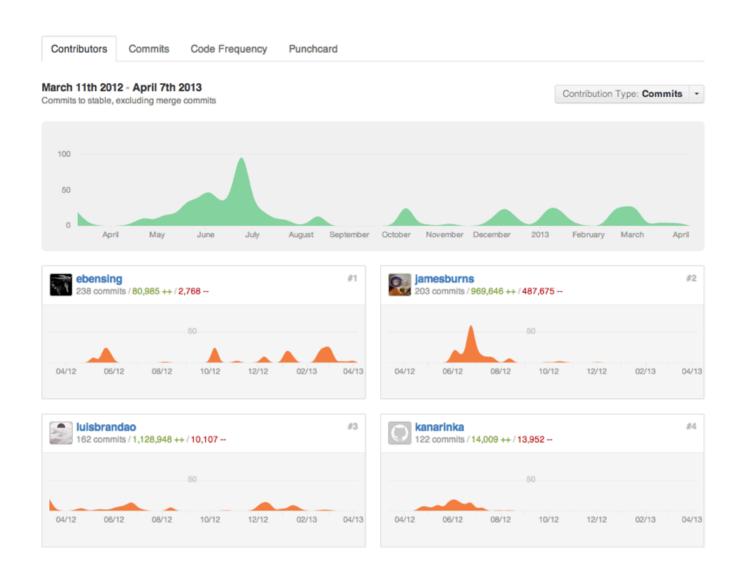
Lord of the Files: How GitHub Tamed Free Software (And More)

in Wired (Feb, 2012) http://www.wired.com/ wiredenterprise/2012/02/github/ GitHub (github.com) All the benefits of a distributed version control

Client Software



Rich visual interface for files and repository information



Rich visual interface for files and repository information

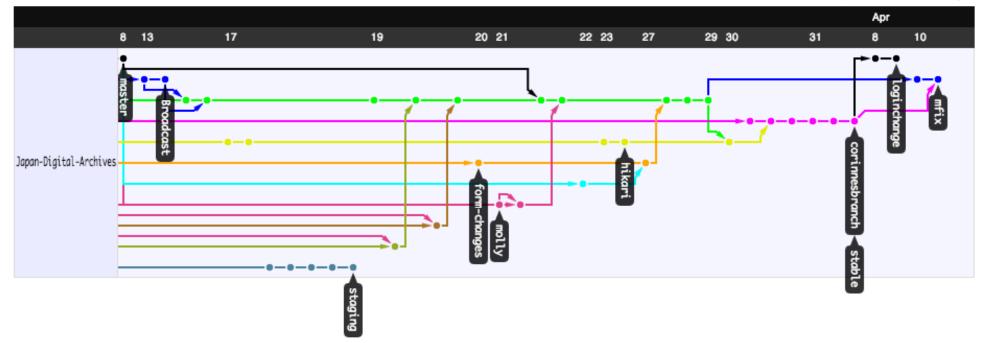
The Japan-Digital-Archive network graph

Keyboard shortcuts available

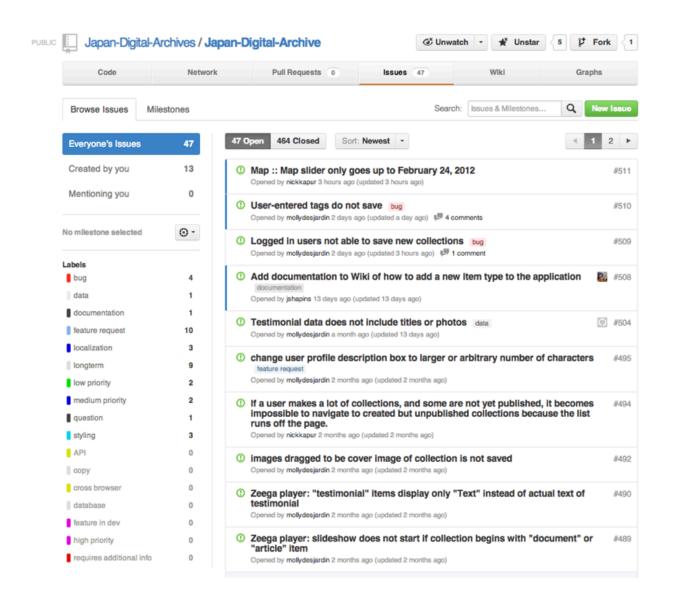
All branches in the network using Japan-Digital-Archives/Japan-Digital-Archive as the reference point. Read our blog post about how it works.

Show Help

Last updated: 2 minutes ago



Rich interface for handling of "issues" - bug reports, feature requests, edits



"Blame" - identifying authorship of any line of any file in the repository

	00	Zocero.debug(JID Tound I + JID);
1807aea4 » adam3smith 2013-04-08 update JSTOR	61	setupSets(allJids, host)
458f5edd » mcburton 2009-01-14 cleaning up whitespace	62	}
9ed42169 » ajlyon 2011-01-22 Trans: Fix for DOI as JID ha	63	// Sometimes JSTOR uses DOIs as JID; here we exclude "?" characters, sin
f5953d81 » ajlyon 2011-02-12 Trans: Committing changes to	64	// And exclude TOC for journal issues that have their own DOI
becdb63f » ajlyon 2011-09-22 Fix handling of DOIs as JIDs	65	else if (/(?:pss stable)\/(10\.\d+\/[^?]+)(?:\?.*)?/.test(url)
f5953d81 » ajlyon 2011-02-12 Trans: Committing changes to	66	&& !doc.evaluate('//form[@id="toc"]', doc, nsResolver,
	67	XPathResult.FIRST_ORDERED_NODE_TYPE, null).singleNodeVal
a5a15771 » simonster 2012-04-13 Fix saving some subset of it…	68	Zotero.debug("URL " + url);
	69	<pre>jid = RegExp.\$1;</pre>
	70	allJids.push(jid);
	71	<pre>Zotero.debug("JID found 2 " + jid);</pre>
1807aea4 » adam3smith 2013-04-08 update JSTOR	72	setupSets(allJids, host)
8da3aa88 » ajlyon 2011-01-13 Trans: Add support for DOIs …	73	}
f5953d81 » ajlyon 2011-02-12 Trans: Committing changes to	74	<pre>else if (/(?:pss stable)\/(\d+)/.test(url)</pre>
	75	<pre>&& !doc.evaluate('//form[@id="toc"]', doc, nsResolver,</pre>
	76	XPathResult.FIRST_ORDERED_NODE_TYPE, null).singleNodeVal
a5a15771 » simonster 2012-04-13 Fix saving some subset of it…	77	<pre>Zotero.debug("URL " + url);</pre>
	78	<pre>jid = RegExp.\$1;</pre>
	79	allJids.push(jid);
	80	<pre>Zotero.debug("JID found 3 " + jid);</pre>
1807aea4 » adam3smith 2013-04-08 update JSTOR	81	<pre>setupSets(allJids, host)</pre>

Forking





Pull Requests

Example: Syllabus for "Nineteenth-Century American Religion: A Digital History Seminar" https://github.com/lmullen/religion-19c-dh

Building

```
Week 4, class 7: Disestablishment
```

: reading: Thomas Jefferson, Virginia Statute for Religious Freedom; correspondence between Newport synagogue and George Washington; John Leland, The Rights of Conscience Inalienable

Week 4, class 8: The Second Great Awakening

: reading: Peter Cartwright, Autobiography

: due: revision of proposal/contract (if needed)

Week 5, class 9 : Catholic revivalism

: reading: Isaac T. Hecker, diary and letters; Elizabeth Ann Bayley Seton, letters

Week 5, class 10: Cherokees and Moravians

: reading: John Howard Payne and Daniel Butrick, Papers; Rowena McClinton, ed., Moravian Springplace Diary

Week 6, class 11: The Eliot School rebellion

: reading: The Bible and Our School System

Week 6, class 12: Unitarianism and Transcendentalism

: reading: William Ellery Channing, "Christianity a Rational Religion"; Ralph Waldo Emerson, "Divinity School Address"

Week 7, class 13: The moral establishment

: reading: People v. Ruggles; George Washington Bungay, Temperance Anecdotes

Week 7, class 14: Women's religion

: reading: Hannah Adams, Memoir, Rebecca Gratz, selected letters; Elizabeth Cady Stanton, The Woman's Bible

Imagining Scholarship with GitHub Approaches

Needs Libre Open Access

Opens up Past Scholarship to Reuse and Adaptation

Decentralize: Original Authors Retain their Copy

But any forks live independently No Canonical Text No Centralized Distribution Flexible "pull" or merging of differences

Attribution Embedded at Multiple Levels

Direct Reuse and Adaptation as Alternative to Quotation and Citations

Scholars (I'm looking at you historians) can Remain Lone wolves if they wish

The Disciplinary Obstacles

The Economy of Citations

The Taboo of Plagiarism

The Cult of Originality

Fear of Transparency

The Danger of Misuse

The Distaste for Incompleteness

The Technical Obstacles

Tools like git/GitHub work best with raw plain text (text markup like LaTeX and Markdown are fine)

Text is currently dominant even as scholarship is moving towards dynamic, multimedia and dynamic driven data

Lines and Files in version control systems designed for coders not academic writing

Need for more complex models of ancestry (not a single parent->fork relationship but multiple parents)

Forking the Academy: What Scholars Can Learn About Collaboration From the Open Source World

https://github.com/kmlawson/fork-the-academy

Konrad M. Lawson konrad.lawson@eui.eu http://muninn.net/ http://github.com/kmlawson/ @kmlawson