An overview of data management best practice

Frustration by Peter Alfred Hess (CC BY 2.0)

Motivation

- Prevent data catastrophes!
  - Accidental overwriting
  - Hardware failure
  - Real-life catastrophes
- Track and control changes to your project files
  - Know your data's history
  - Revert files back to a previous state
  - Safely try out different ideas
- Simplify collaboration
  - Work concurrently without getting in each other's way

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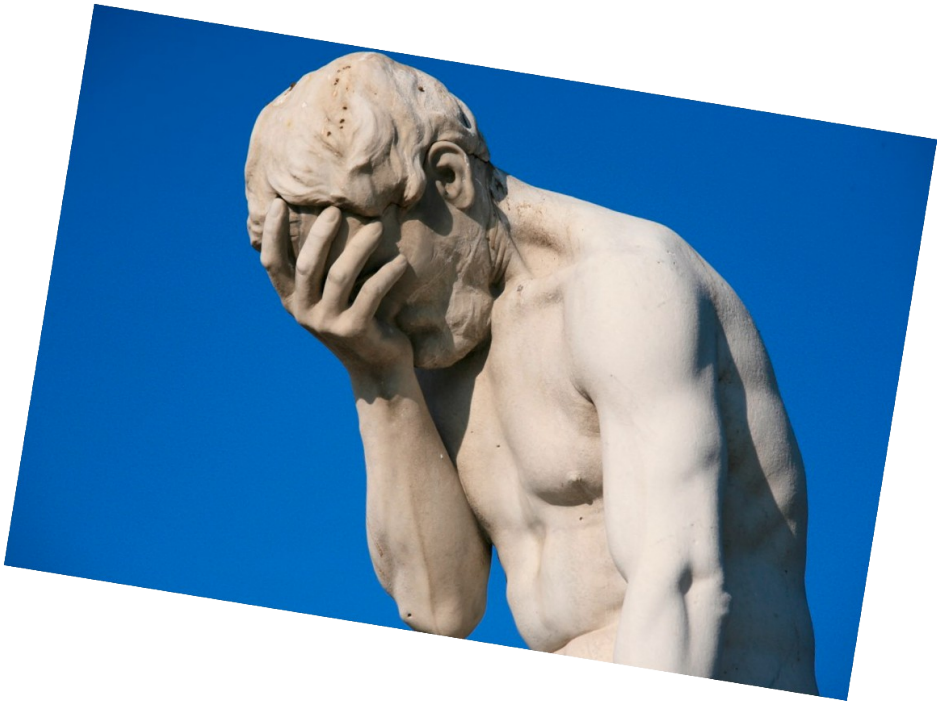

Head in Hands by Alex Proimos (CC BY-NC 2.0)

Motivation

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And you thought you had computer problems by Amanda Tetrault (CC BY-ND 2.0)

Motivation

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  - Hardware failure
  - Environmental catastrophes

DSC_7139 by Cameron Strandberg (CC BY 2.0)

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Nashville Flood by Eric Hamiter (CC BY-SA 2.0)

Motivation

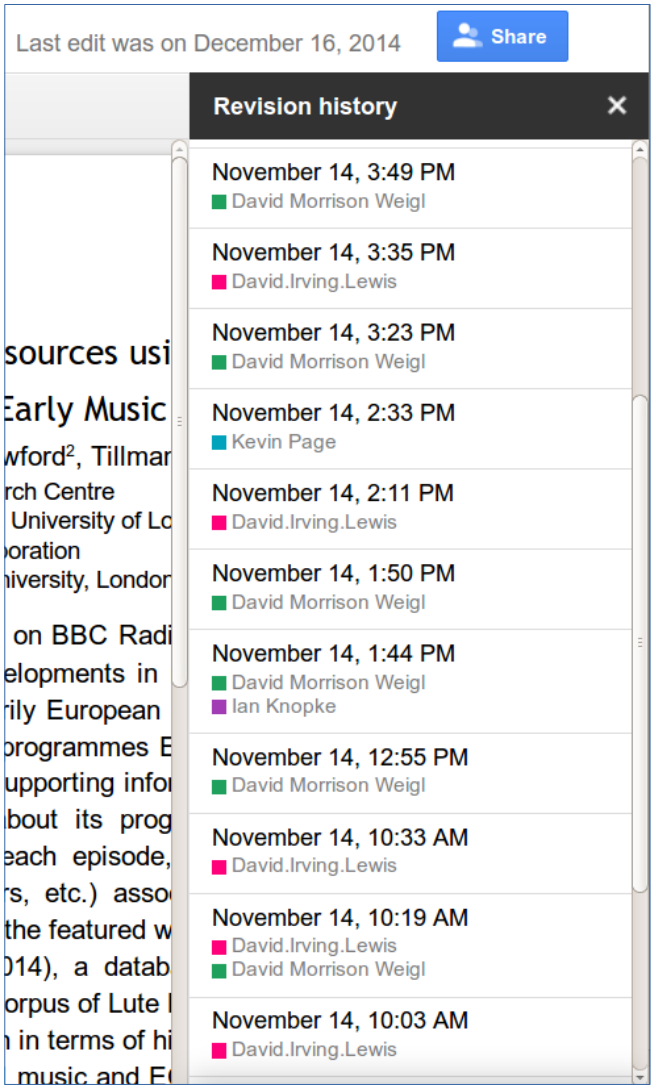
- Prevent data catastrophes!
  - Accidental overwriting
  - Hardware failure
  - Environmental catastrophes

Lion Roar 07_05 by PhotoBobil (CC BY 2.0)

```
davidw@davidw-XPS13-9333:~/DHOxSS2015/numbered$ ls -l
total 252
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_10-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_1-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_11-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_12-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_13-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_14-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_15-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_16-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_17-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_18-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_19-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_20-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_2-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_21-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_22-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_23-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_24-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_25-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_26-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_27-07-2015.txt
-rw-rw-r-- 1 davidw davidw  0 Jul 21 18:25 draft_28-07-2015.txt
```

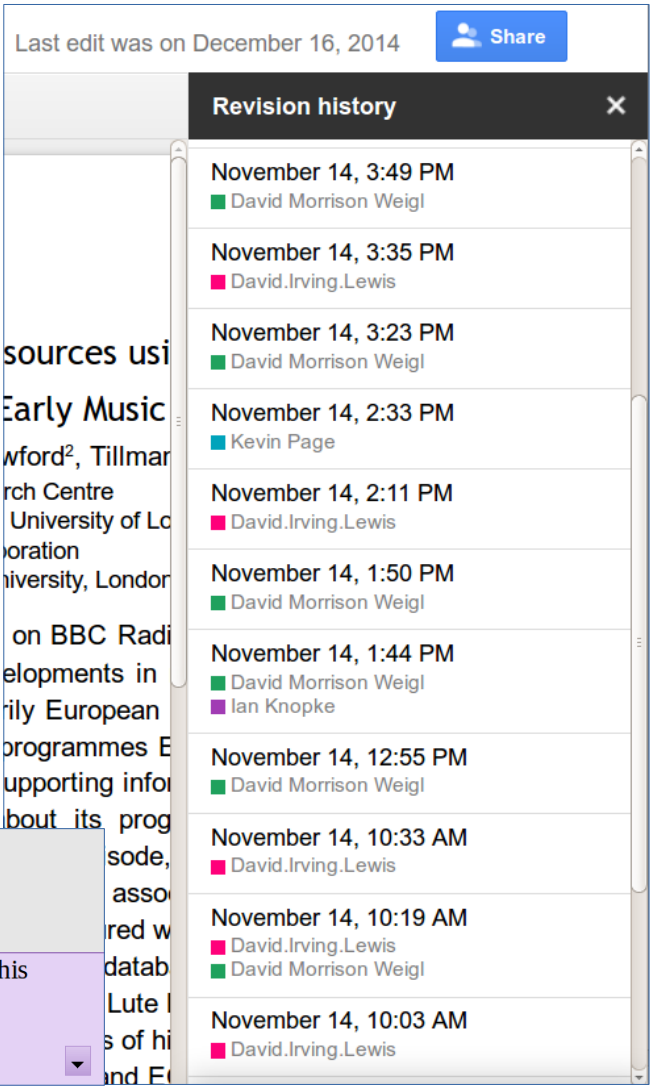
Track and control changes to your project files

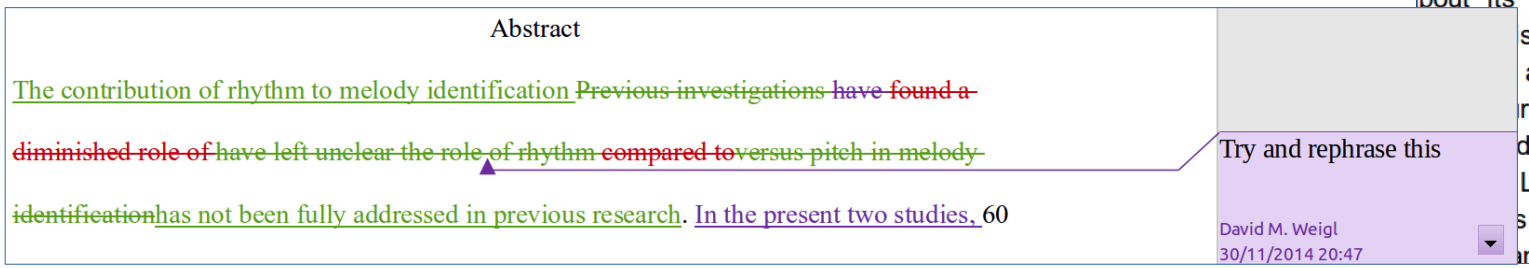
- Google Docs
  - Revision History



Track and control changes to your project files

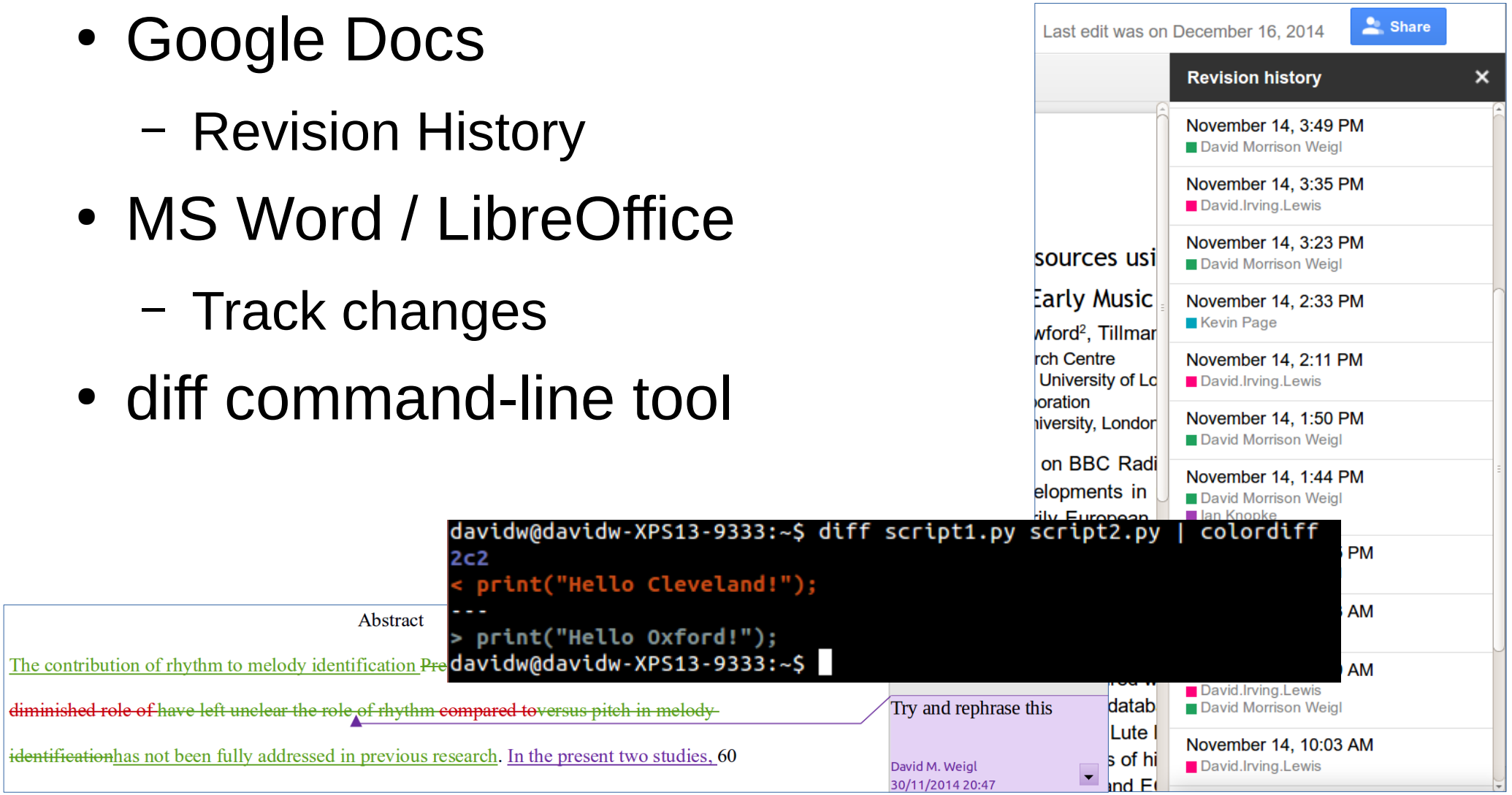
- Google Docs
  - Revision History
- MS Word / LibreOffice
  - Track changes





Track and control changes to your project files

- Google Docs
  - Revision History
- MS Word / LibreOffice
  - Track changes
- diff command-line tool



Josquin des Prez: Difference between revisions

From Wikipedia, the free encyclopedia

Revision as of 16:53, 31 March 2014 (edit)	Latest revision as of 03:42, 16 July 2015
205.121.158.110 (talk)	(edit) (undo)
(→Birth and early career)	Sigehelmus (talk | contribs)
← Previous edit	**m**

(39 intermediate revisions by 30 users not shown)

Line 2:	Line 2:
[[File:DESPREZ.jpg|thumb|right|1611 [[woodcut]] of Josquin des Prez, copied from a now-lost oil painting done during his lifetime<ref>Macey et al., §8.</ref>]]	[[File:DESPREZ.jpg|thumb|right|1611 [[woodcut]] of Josquin des Prez, copied from a now-lost oil painting done during his lifetime<ref>Macey et al., §8.</ref>]]
'''Josquin des Prez''' (**or '''Josquin Lebloitte dit Desprez''';** {{IPA-fr|ʒɔskɛ̃ depʁe|lang}}; c. 1450/1455 – 27 August 1521), often referred to simply as '''Josquin''', was a [[**Low Countries|Netherlandish**]] composer of the [[Renaissance music|Renaissance]]. **He** is **also known** as '''Josquin **Desprez**''' and **Latinized as** '''**Josquinus** Pratensis'''**, alternatively** '''**Jodocus Pratensis**'''. **He himself spelled his name "Josquin des Prez" in** an [[acrostic]] **in** his **motet "Illibata Dei virgo nutrix"**. <ref>[http://www1.cpdl.org/wiki/index.php /Illibata_Dei_Virgo_nutrix_(Josquin_des_Prez) ChoralWiki "Illibata Dei virgo nutrix" (Josquin des	'''Josquin des Prez''' ({{IPA-fr|ʒɔskɛ̃ depʁe|lang}}; **{{**c.**|**1450/1455**}} **– 27 August 1521), often referred to simply as '''Josquin''', was a [[**Franco-Flemish School|Franco-Flemish**]] **[[**composer**]]** of the [[Renaissance music|Renaissance]]. **His original name** is **sometimes given** as '''Josquin **Lebloitte**''' and **his later name is given under a wide variety of spellings in French, [[Italian language|Italian]], and [[Medieval Latin|Latin]], including {{nowrap|'''Iosquinus** Pratensis'''**}} and {{nowrap|'''Iodocus a Prato'''}}. His [[motet]] "Illibata Dei virgo nutrix" includes** an [[acrostic]] **of** his **name, where he spelled it "Josquin des Prez"**.

Revision control systems

Create a repository

Small Box, open by Meathead Movers (CC BY-SA 2.0)

Revision control systems

Add some files

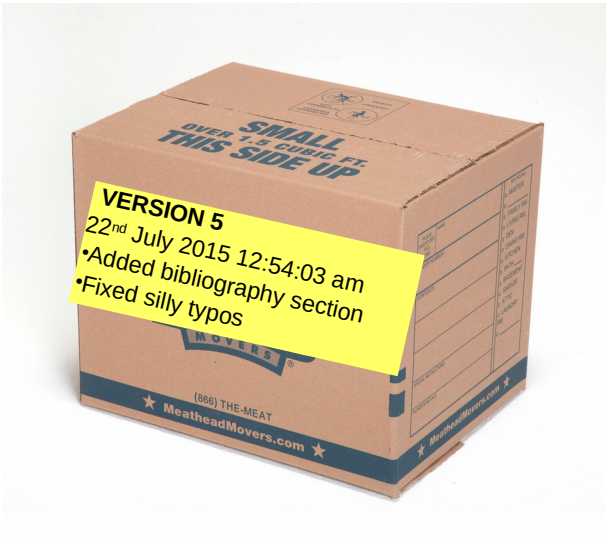
Small Box, open by Meathead Movers (CC BY-SA 2.0)

Revision control systems

Package it up

Small Box, closed by Meathead Movers (CC BY-SA 2.0)

Revision control systems



Add a label

Small Box, closed by Meathead Movers (CC BY-SA 2.0)

Revision control systems

Ship it out (e.g. to a remote server)

Revision control systems

Interrogate your repository archive

Revision control systems

Revert or retrieve changes

Revision control systems: git

git init / git clone

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git add file1 file2 file3

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git commit

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git init / git clone
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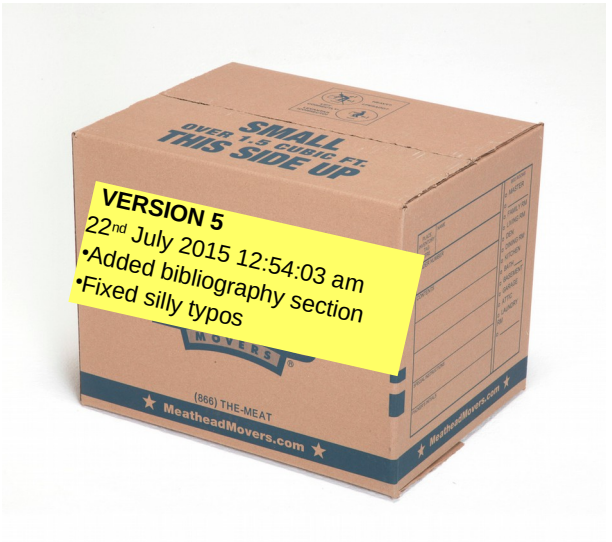
git commit -m “Added...”



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Revision control systems: git

git init / git clone
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git push

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Interrogate your repository archive

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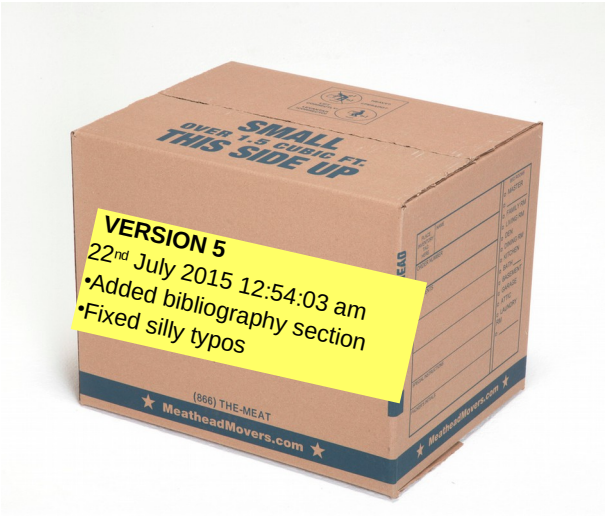
Revert or retrieve changes

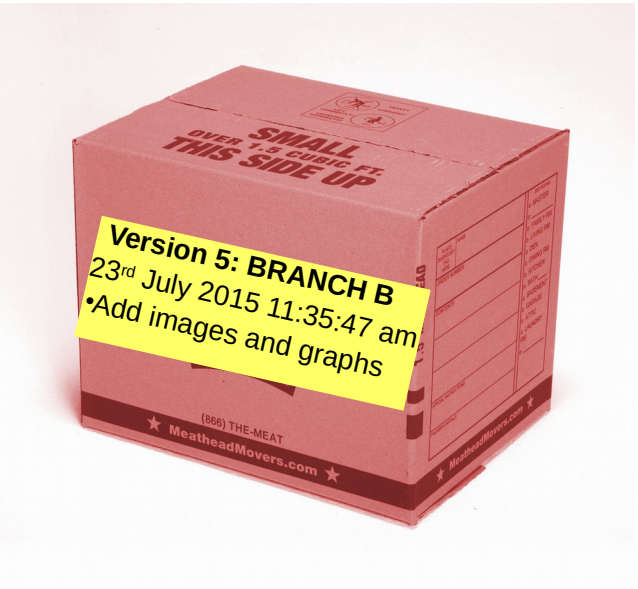
Team work: simplify collaboration



Team work: simplify collaboration

Jane works on describing the performance data capture

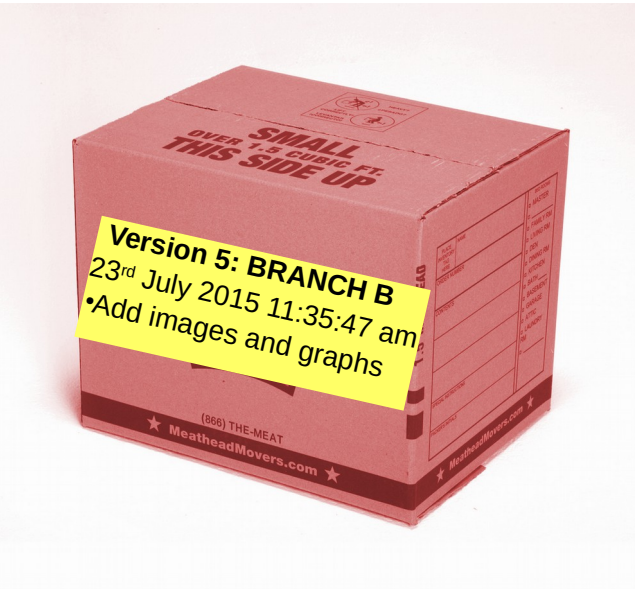
Bob adds in spiffy images and graphs



Team work: simplify collaboration

git branch

git branch



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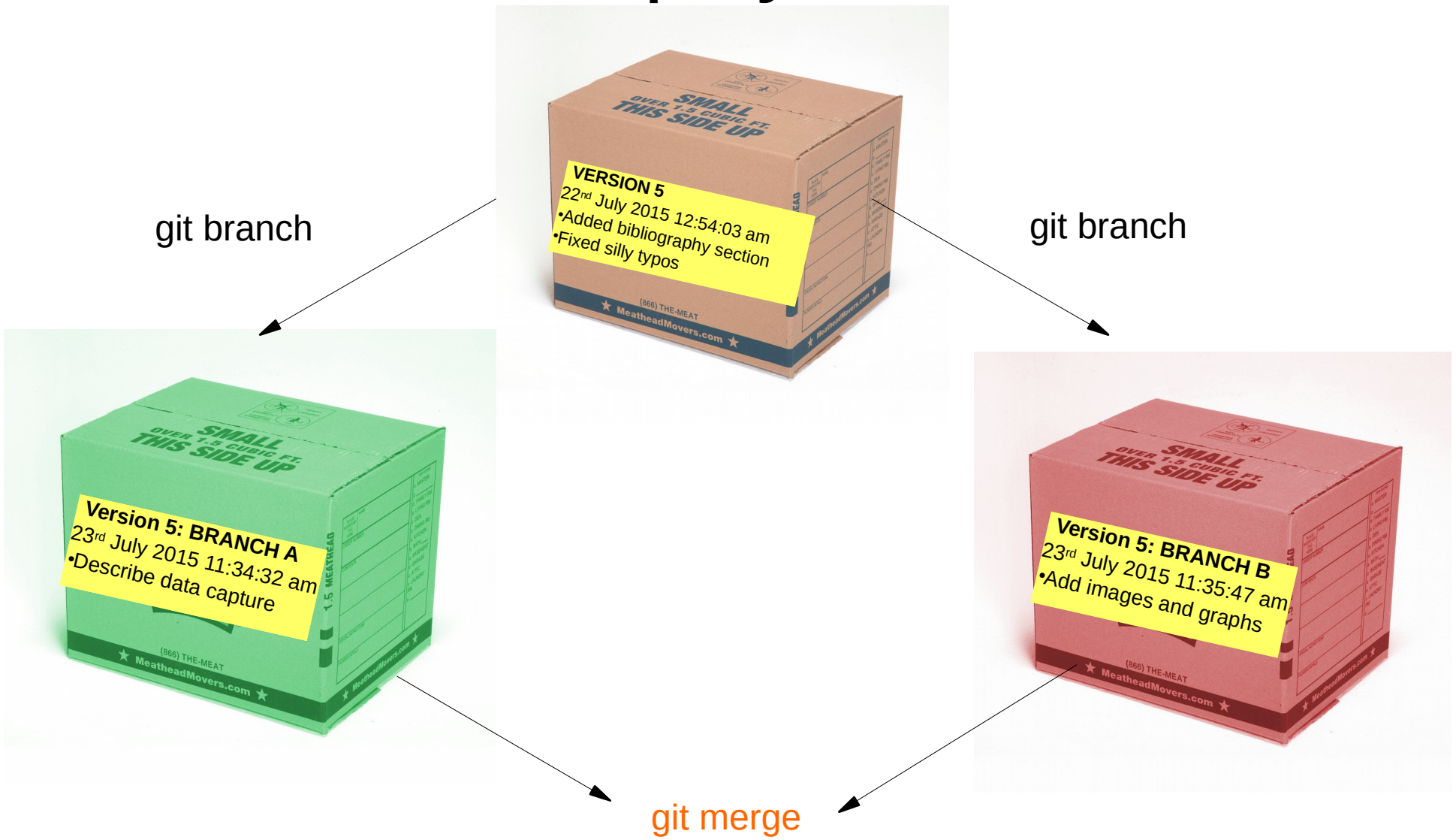

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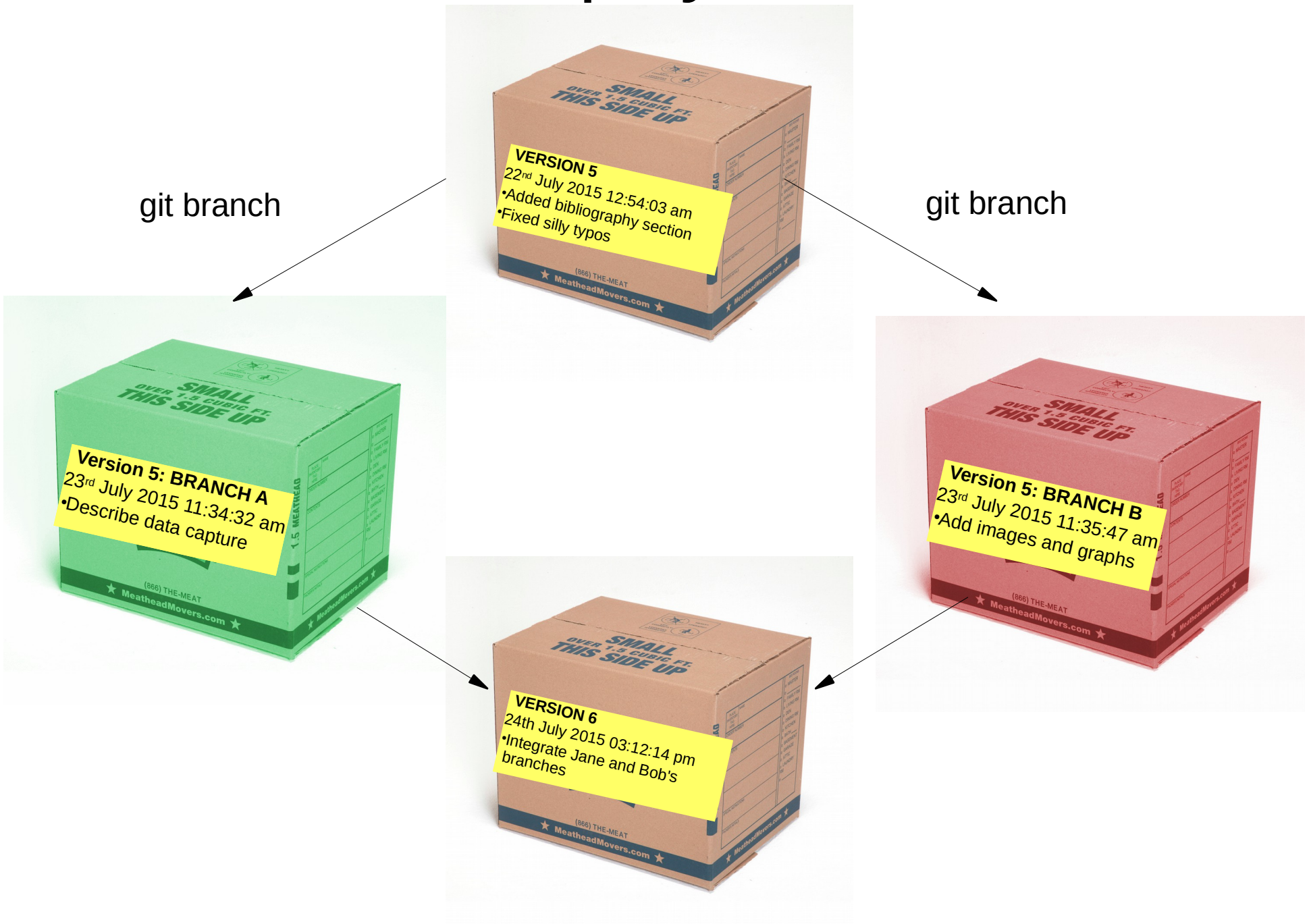
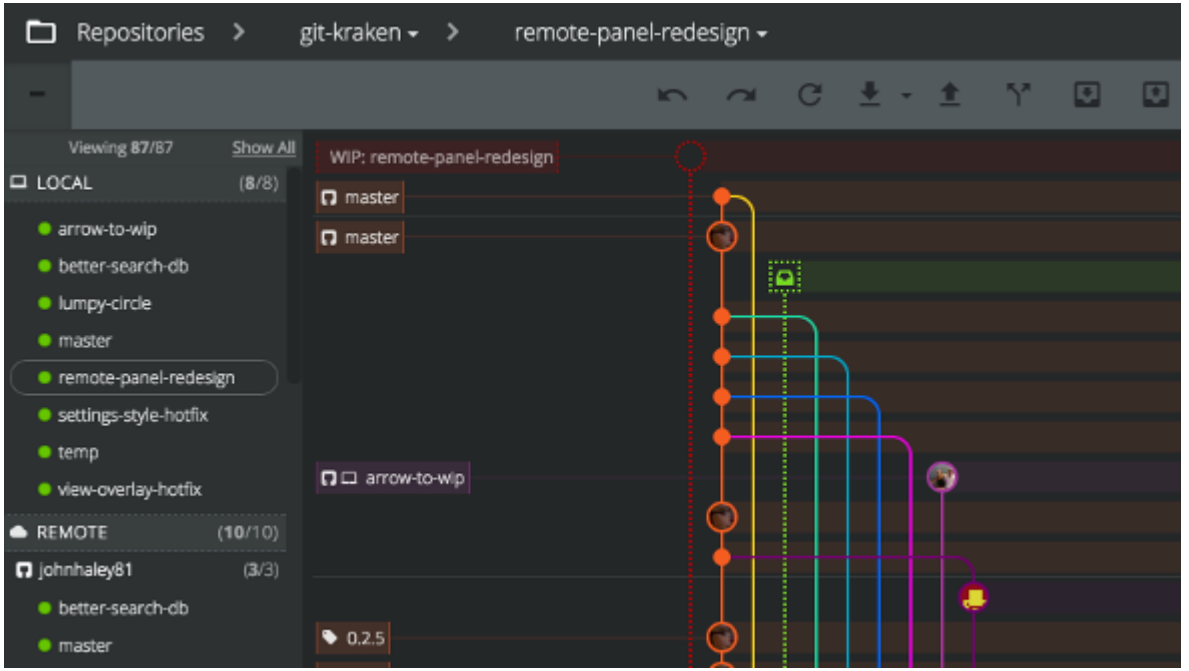
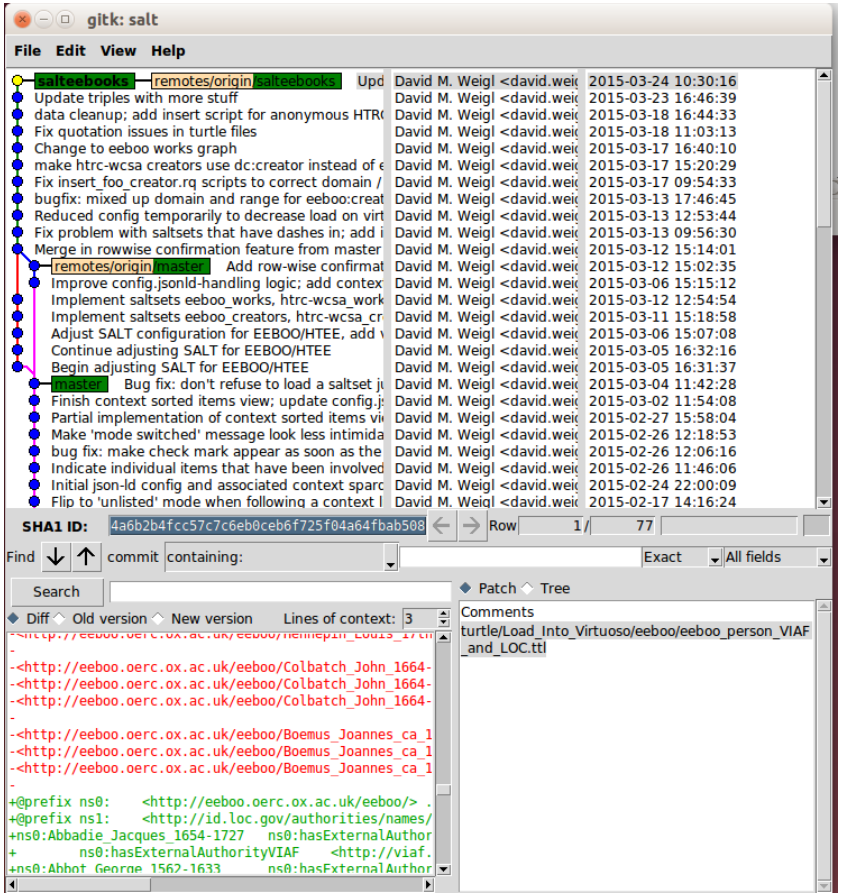
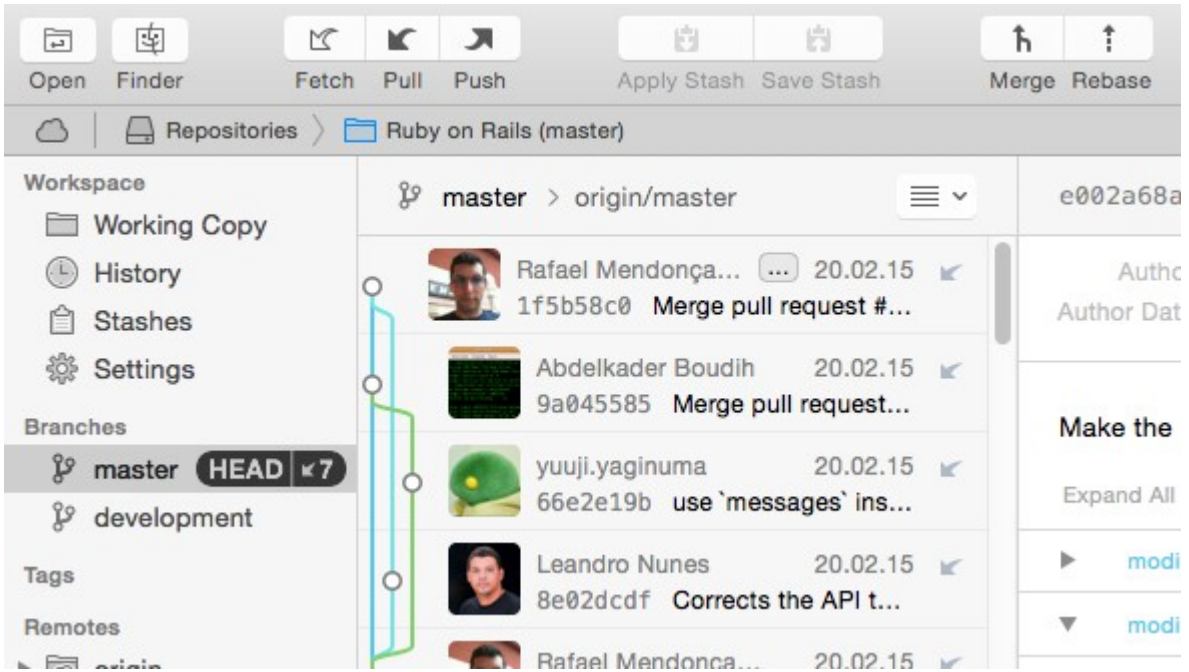
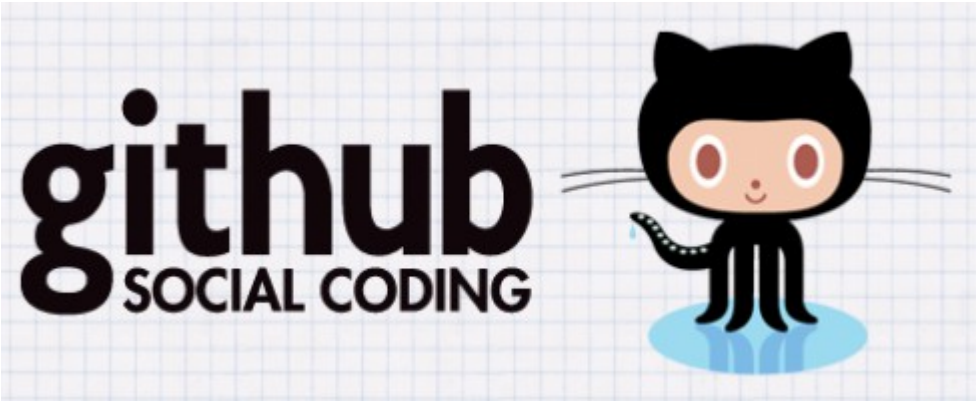








http://git-scm.com/downloads/guis


github
SOCIAL CODING

Summary

- Minimal (required!) data management:
  - Use sensible and consistent naming schemes
  - Version and back up your data
  - Consider cloud options such as Google Drive and Dropbox, for off-site back up & convenient basic versioning (revert etc) – but caveats about ownership!
- More elaborate data management:
  - Use a revision control system, e.g. Git
  - Nice 15 minute in-browser tutorial at

https://try.github.io