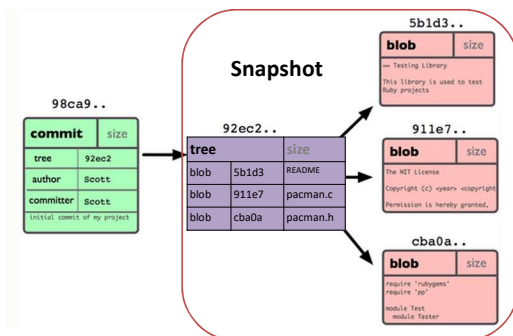


CS35L – 5 Week 9 Lec 2

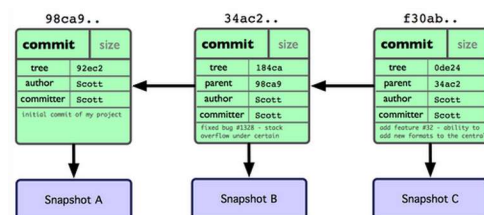
GIT Repository Objects

- Objects used by GIT to implement source control
 - **Blobs**
 - Sequence of bytes. Correspond more or less to inodes/ file contents
 - **Trees**
 - Groups blobs/trees together. Correspond to UNIX directories
 - **Commit**
 - Refers to a particular "git commit" Contains all information about the commit
 - **Tags**
 - Just a named commit object for convenience (example: versions of the software)
- Objects uniquely identified with **hashes**

Git Repo Structure



After 2 More Commits...

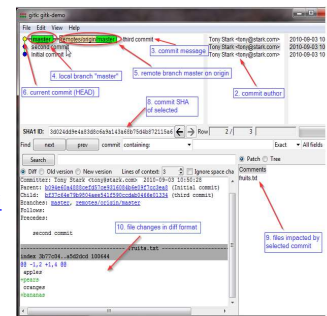


Homework 9

- Publish patch you made in lab 9
 - Create a new branch "quote" off of version 3.0
 - Branch command + checkout command (**git branch quote v3.0; git checkout quote**)
 - `$ git checkout v3.0 -b quote`
 - Use patch from lab 4 to modify this branch
 - Patch command
 - `$ patch -pnum < quote-3.0-patch.txt`
 - Modify ChangeLog file in diffutils directory
 - Add entry for your changes similar to entries in ChangeLog
 - Commit changes to the new branch
 - `$ git add .` `$ git commit -F <ChangeLog file>`
 - Generate a patch that other people can use to get your changes
 - `$ git format-patch -[num] --stdout > formatted-patch.txt`
 - Test your partner's patch
 - Check out version 3.0 into a tmp branch
 - Apply patch with git am command: `$ git am < formatted-patch.txt`
 - Build and test with `$ make check`
 - Make sure partner's name is in HW9.txt for #8

Gitk

- A repository browser
 - Visualizes commit graphs
 - Used to understand the structure of the repo
 - Tutorial: <http://lostechies.com/joshuaflanagan/2010/09/03/use-gitk-to-understand-git/>



Gitk

- SSH into the server with X11 enabled
 - `ssh -X` for OS with terminal (OS X, Linux)
 - Select "X11" option if using putty (Windows)
- Run gitk in the `~eggert/src/gnu/emacs` directory
 - Need to first update your PATH
 - `$ export PATH=/usr/local/cs/bin:$PATH`