GitHub 101

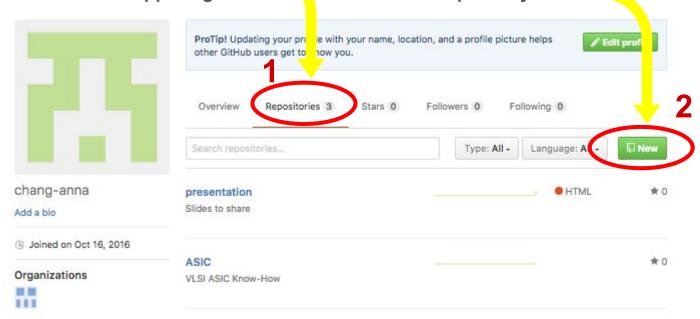
Tutorial to build your repository

Chingwen Chang / Oct. 16 2016

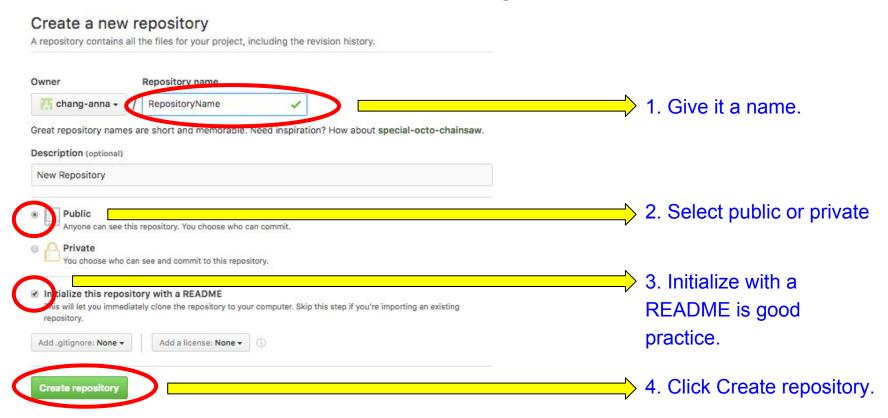
Step 1-a. Create a Repository

1. Go to your repository tab.

2. Click "New" on the upper right corner to create a new repository.



Step 1-b. Create a Repository With a Readme File



Step 1-c. What Just Happened



Click the file to start logging your updates.

Step 2-a. Create a Branch to Work on

- Why?
 - Because when you work as a team, you don't want your teammates to stall and wait while you make your changes.
- When the repository is created, there is only one "master branch".

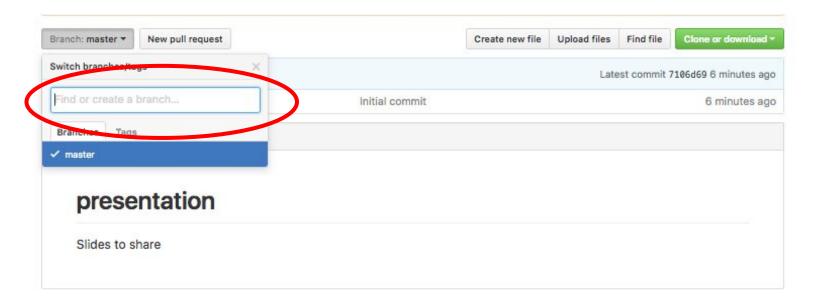


• The "master branch" is the primary set of working components for everyone to check out and work on their part(s) so one has to wait for any other ones.

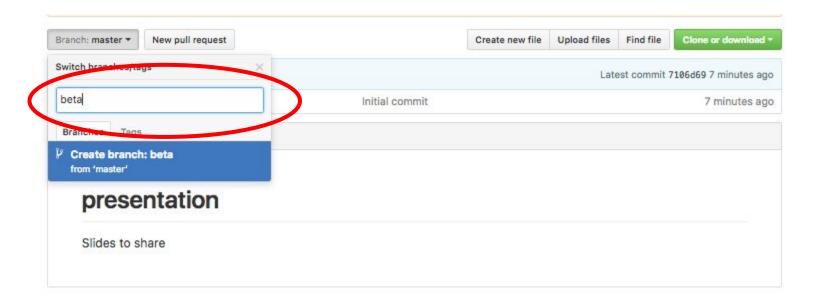
Step 2-b. Click to Create a Branch



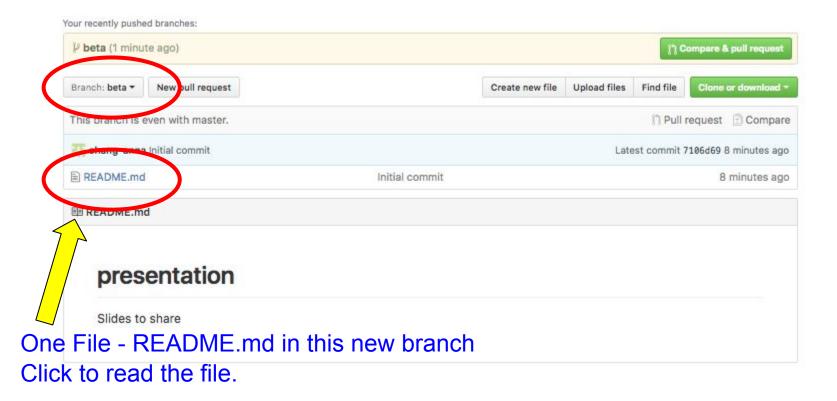
Step 2-c. Give the New Branch a Name



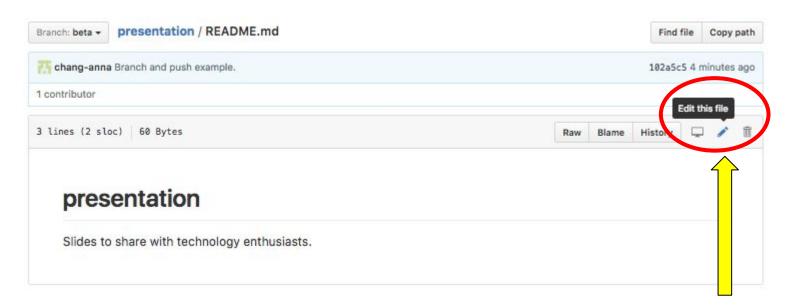
Step 2-d. New Branch is Named "Beta"



Step 2-e. You Are in Beta Branch Now

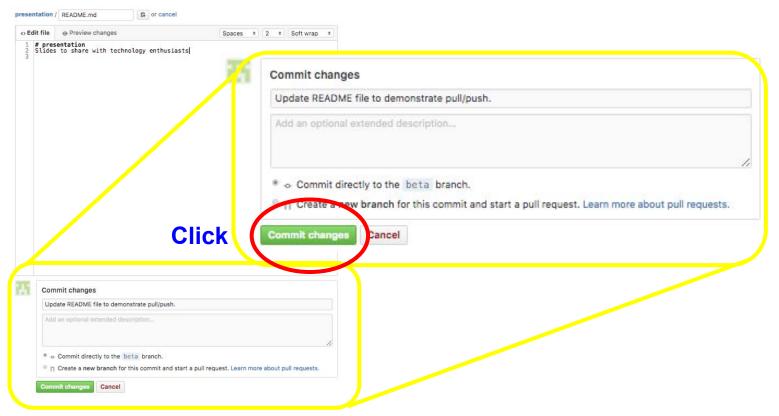


Step 2-f. Edit the File

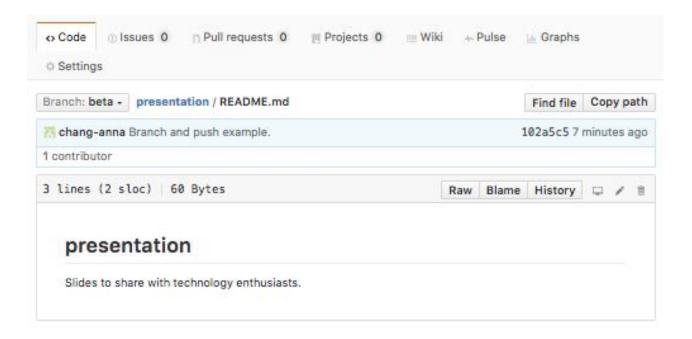


Hover over the pencil icon, click to edit the file.

Step 2-f. Confirm the Change When Done



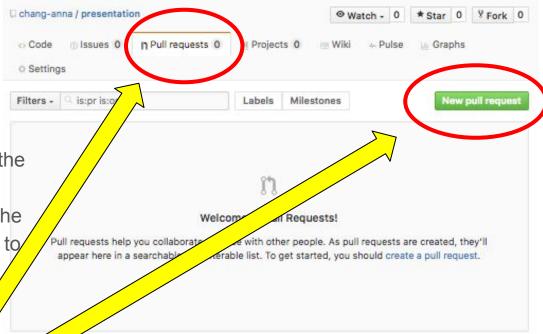
Step 2-g. What Just Happened



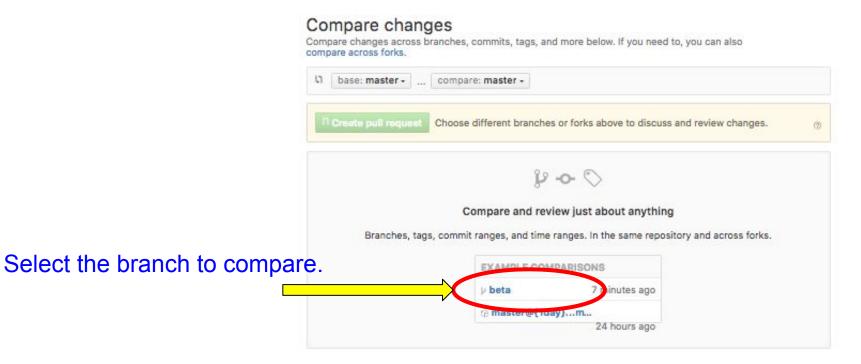
You will see your change is saved.

Step 3-a. Pull and Push

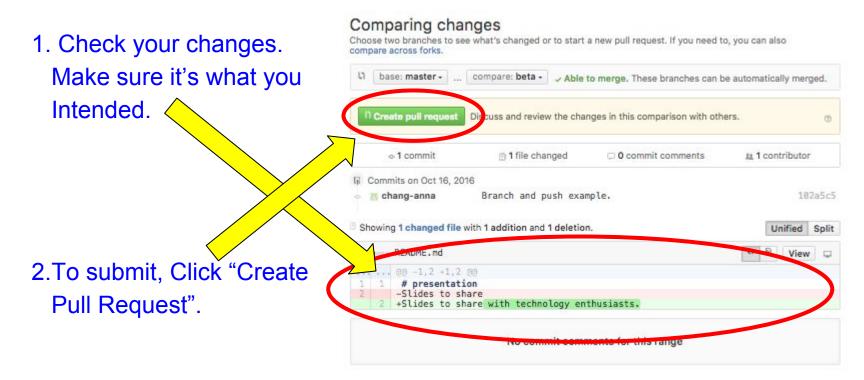
- Why?
 - Because it's time for your teammates to see your brilliant work.
- You have to "pull" the work from the master branch and "push" your change from the Beta branch to the primary master branch for others to "pull" and use.
- Go to the "Pull Requests" Tab.
- Click "New Pull Request" Button.



Step 3-b. New Pull Request to Compare



Step 3-c. Compare and Pull Others to Discuss



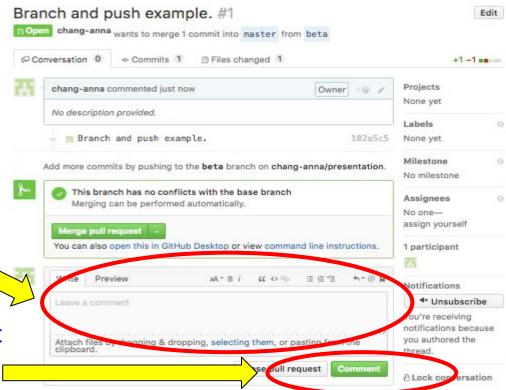
Step 3-d. Give Your Pull a Title

Open a pull request Create a new pull request by comparing changes across two branches, if you need to, you can also compare across forks. Give a Title to document base: master - ... compare: beta - Able to merge. These branches can be automatically merged. your changes. Labels Branch and push example. None vet Write Milestone No milestone Assignees No oneassign yourself Attach files by dragging & dropping, selecting them, or pasting from the clipboard. Create pull reques Es Styling with Markdown is supported n 1 file changed O commit comments - 1 commit as 1 contributor (a) Commits on Oct 16, 2016 102a5c5 m chang-anna Branch and push example. Showing 1 changed file with 1 addition and 1 deletion. Unified Split 2 README.md # presentation -Slides to share +Slides to share with technology enthusiasts. No commit comments for this range

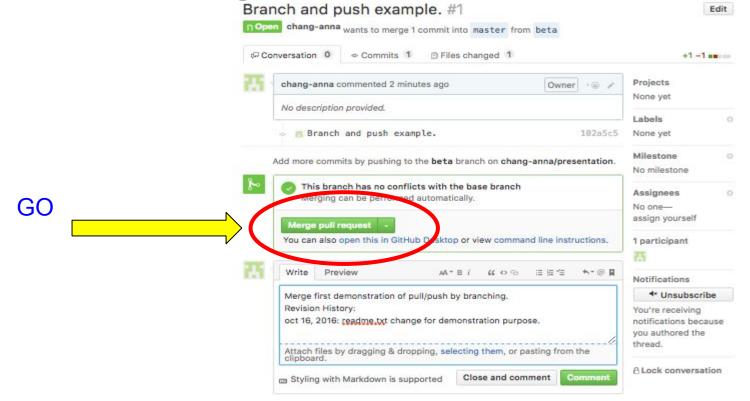
Step 3-e. Documentation is Important

Attach documents or further elaborate the reasons for this design change in order to keep records for future use.

Teammates can comment before pulling the trigger.

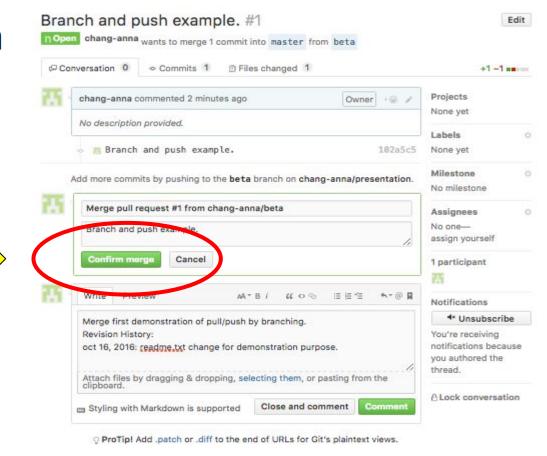


Step 3-f. All Set to Merge



O ProTip! Add .patch or .diff to the end of URLs for Git's plaintext views.

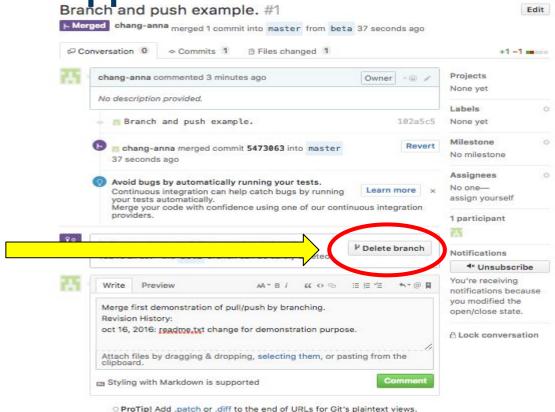
Step 3-g. Confirm



Step 3-g. What Just Happened

Now your teammates can enjoy your improvement or repair.

If you don't need the branch anymore, you can delete it.



Background - Anna Chang

Design and Verification:

- SystemVerilog / UVM / OVM / OOP : 7 years
 - Microprocessor (Sun, AMD), DFT (Apple, Nvidia, TSMC, AMD),
 - JTAG (Apple, Nvidia, TSMC, AMD), MBIST (TSMC, Nvidia, Apple, AMD),
 - PCI-express (Sun), mixed Signal Audio codec (Nuvoton),
 - I2C, SPI, Ethernet, I2S, PCI/PCI-e, SLIMbus, AMBA, AXI, AHB, P1500 (in different projects)
- Verilog / ASIC : 15 years
 - Microprocessor (Sun), and including UVM/OVM experience above.
 - Synthesis, timing analysis, micro-architecture (Sun, TSMC, Nuvoton)
 - FPGA Xilinx-Cortex M0 (Nuvoton and consulting projects, 18 months)
- Formal Verification (Apple, 2 years)
- o Tools: VCS, NCverilog, Modelsim, Jasper, Design/DFT-Compiler, TMAX, Perforce, SVN, Git, Eclipse
- DFT: 12 years in JTAG, P1500, Scan-chain, MBIST, ATPG
- **Design/Project Management :** TSMC 4 years.
- Programming Languages: Perl, Python, Make, Tcl/tk, Java, C/C++, J2EE(Spring, Hibernate, JDBC), HTML, CSS, JavaScript (Selenium, AJAX, JQuery, Node.js), XML/JSON, Linux/Unix (bash/csh/tcsh), Apache, SQL/MySQL, PHP
- https://github.com/chang-anna/presentation/tree/master/public

Thank you!