



How GitHub uses GitHub to build GitHub

Ted Behling
Systems Engineer
GitHub



Hello!

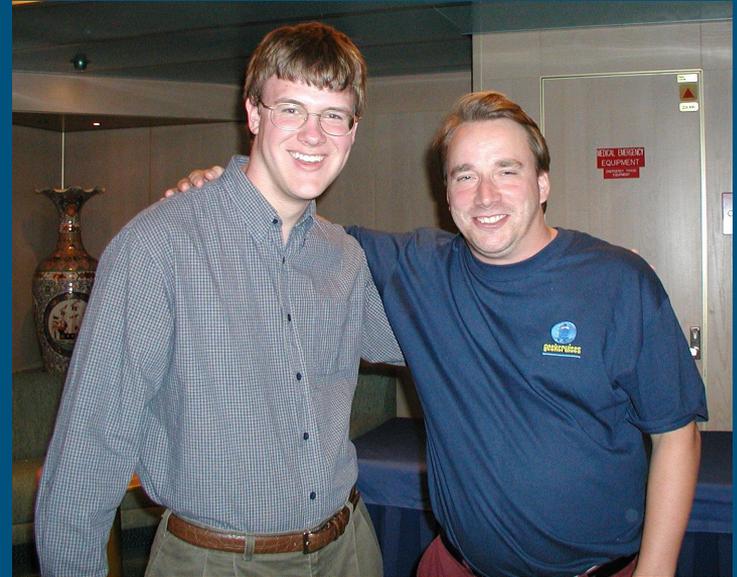


What's GitHub?

- Source code hosting
- Collaboration
- Software project management
- Tooling & APIs
- 76+ million projects hosted
- 27 million users (more than population of Texas)
- 749 employees worldwide
- Started in 2007

So, Git?

- Version control system
- Open source
- Decentralized or centralized
- Originally invented for Linux kernel



How Does GitHub **Communicate**?

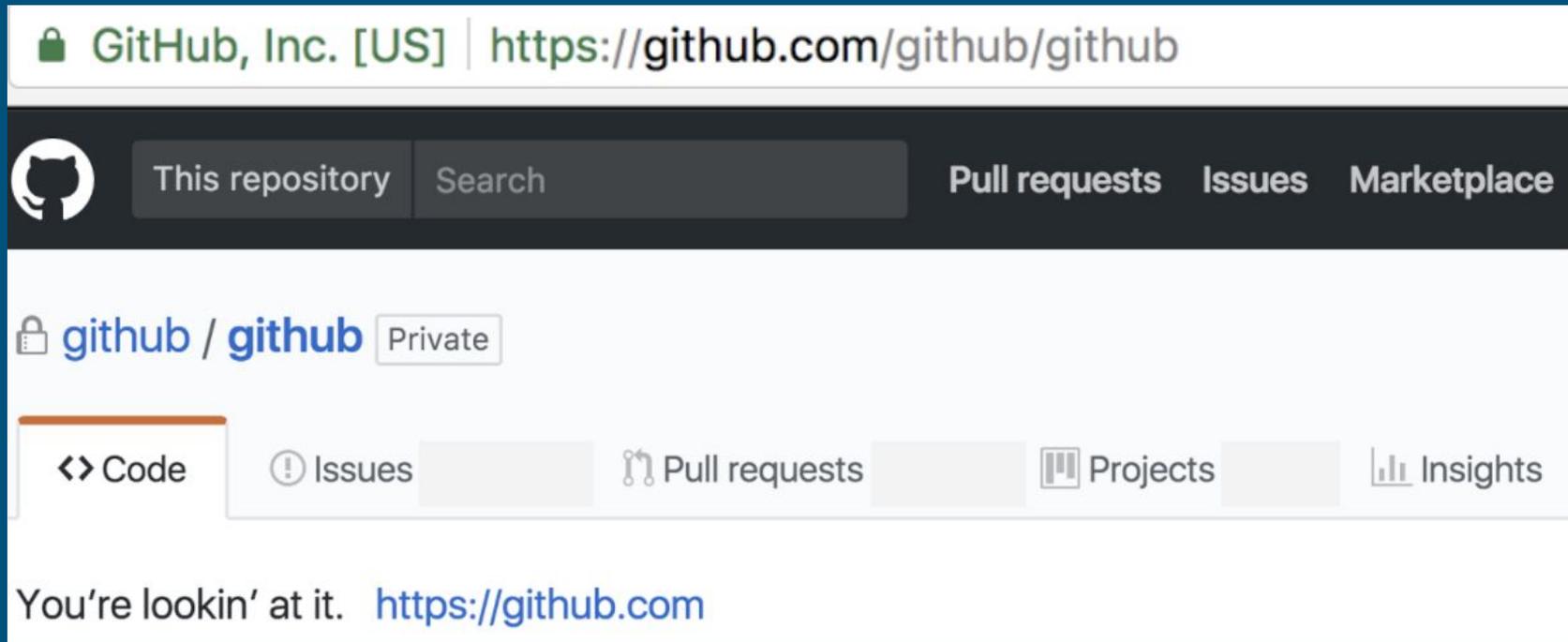
What's the Development **Process**?

How is the process **Automated**?

Communication



What's in a URL?



The image shows a screenshot of a web browser displaying the GitHub repository page for 'github/github'. The address bar at the top shows the URL 'https://github.com/github/github' with a lock icon on the left and the text 'GitHub, Inc. [US]'.

Below the address bar is a dark navigation bar containing the GitHub logo on the left, followed by a search bar, and then the links 'Pull requests', 'Issues', and 'Marketplace'.

The main content area shows the repository name 'github / github' with a lock icon and a 'Private' label. Below this is a horizontal menu with five items: 'Code' (highlighted with an orange underline), 'Issues' (with an exclamation mark icon), 'Pull requests' (with a fork icon), 'Projects' (with a grid icon), and 'Insights' (with a bar chart icon).

At the bottom of the page, it says 'You're lookin' at it. <https://github.com>'.

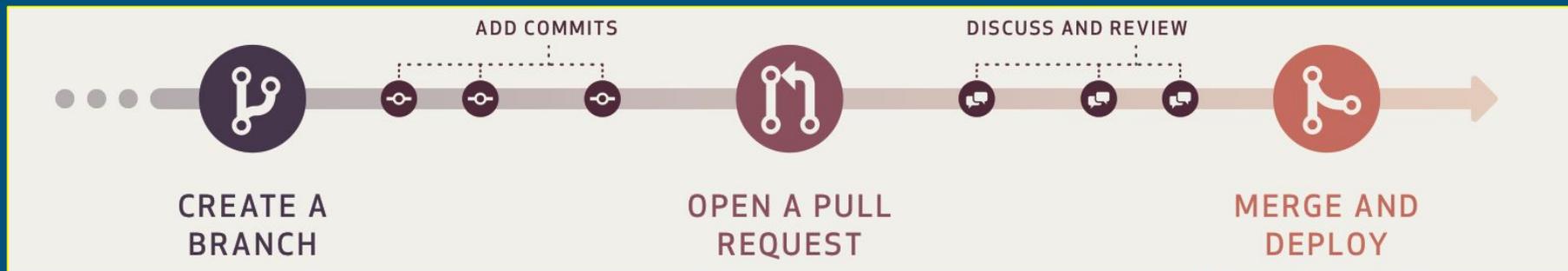
Our tools support our process

- Center of work: Pull Requests
 - Asynchronous messaging
 - Rich text (Markdown)
 - Tied to code
 - Docs are also in the repo
- A “Radar” issue opens weekly to capture comments on statuses/updates
- Chat rooms (group + 1:1)
 - Open to the whole company
- Video conferencing
 - 1:1s, pairing
 - Weekly team meeting -- NOT for status

Development process



GitHub Flow



<https://guides.github.com/introduction/flow/>

Process automation

ChatOps with Hubot

- Hubot runs in most chat rooms and responds to commands using scripts
- Replies are visible in the chat room to the whole team
- `.ci build github/tbehling/new-button`
- `.deploy github/tbehling/new-button to staging`
- `.sparkle rubiojr for being a solid manager`

Deploying with ChatOps



tbehling 7:12 AM

`.deploy enterprise2/tbehling/lets-encrypt-script to dev`



hubot APP 7:13 AM

`@tbehling` is `deploying` enterprise2/tbehling/lets-encrypt-script (c17f786...58bf55e) to dev



hubot APP 7:22 AM

Your instance enterprise2-deploy-tbehling-1510575273956444958 (i-0952b91562136e402) is ready at <http://3.14.15.92/>

`@tbehling`'s production `deployment` of enterprise2/tbehling/lets-encrypt-script (58bf55e) is done! (1 server)(540.38s)

Questions

Ted Behling
Systems Engineer, GitHub
ted@tedb.us
