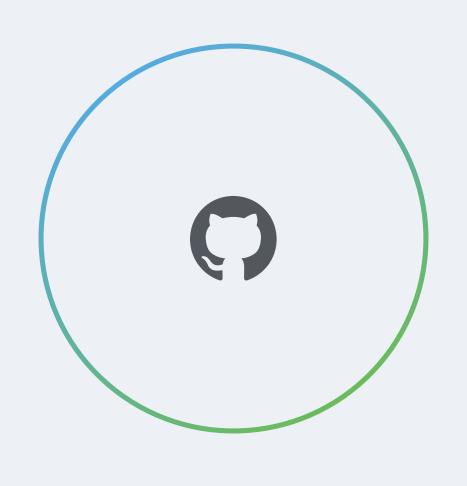# GitHub

Government Proficiency without the computer science degree

Jamie Jones

- Federal Solutions & Implementation Specialist
- Version Control Enthusiast
- Recovering Government meeting attendee

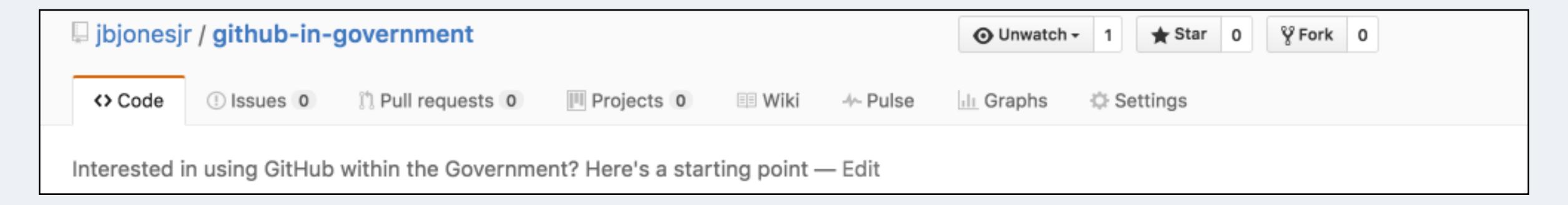 jbjonesjr

 jbjonesjr

Agenda

- What is it
- How do you use it
- Best Practices
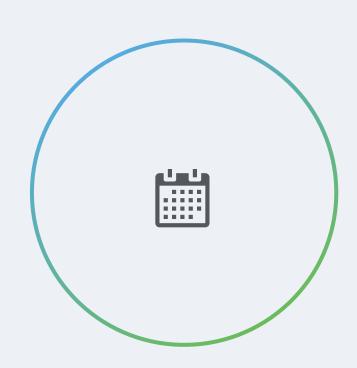- How to manage a community

GitHub: What is it

GitHub

- Version Control, Web based editing and file/document rendering
- Issue & Feature Tracking with milestone and project planning
- Wikis and project documentation
- Rich Text formatting throughout
- Collaboration between users and teams
- Static website hosting and publishing via GitHub Pages
- Discovery and exposure via social conventions

jbjonesjr / **github-in-government**   Unwatch ▾ | 1   ★ Star | 0   Fork | 0

<> Code   ⓘ Issues 0   Pull requests 0   Projects 0   Wiki   Pulse   Graphs   Settings

Interested in using GitHub within the Government? Here's a starting point — Edit
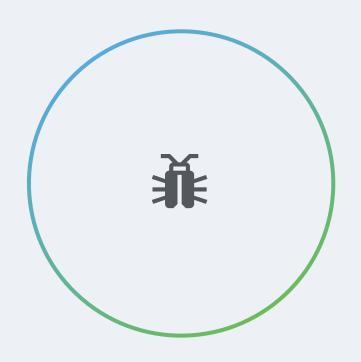
Delivery that works for you

GITHUB.COM

- **Online version control and collaboration platform. Like Microsoft Word track changes, but for everything.**
  - 16 million users, ~50th most trafficked website in the world
  - 38 million projects hosted, the home of Open Source software
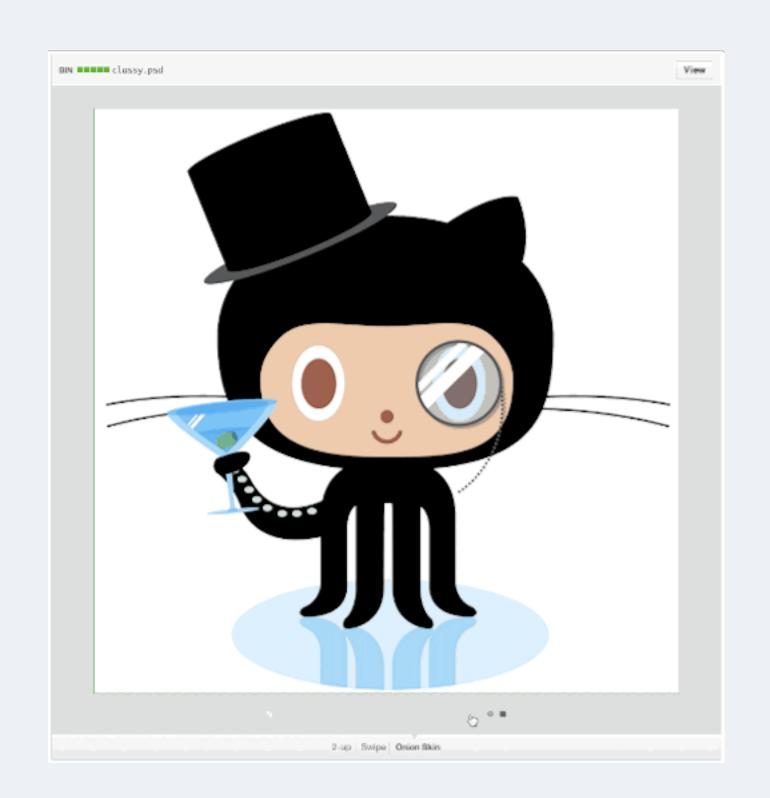 - Public Repositories are free, private repositories cost $9/user/month

GITHUB ENTERPRISE

- **Like GitHub.com, but running on your network (or cloud), using your Enterprise tools**
  - On-premises Virtualization (VMWare, Hyper-V, etc) or AWS/Azure
  - Over 100 Federal instances today
  - Supports Single-Sign on, Auditing, Other Security Requirements
  - Checks all those Government checkboxes

Image Rendering

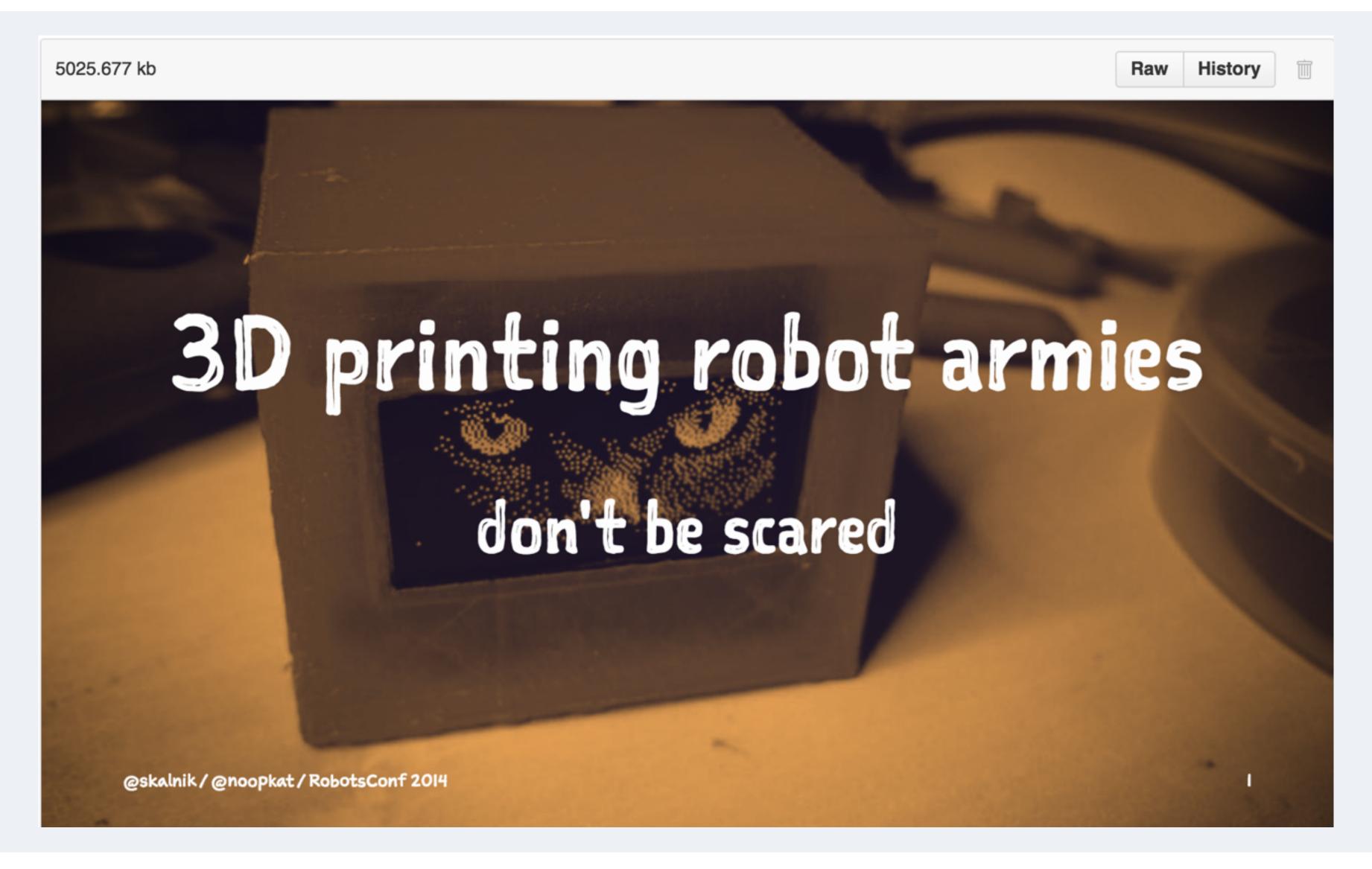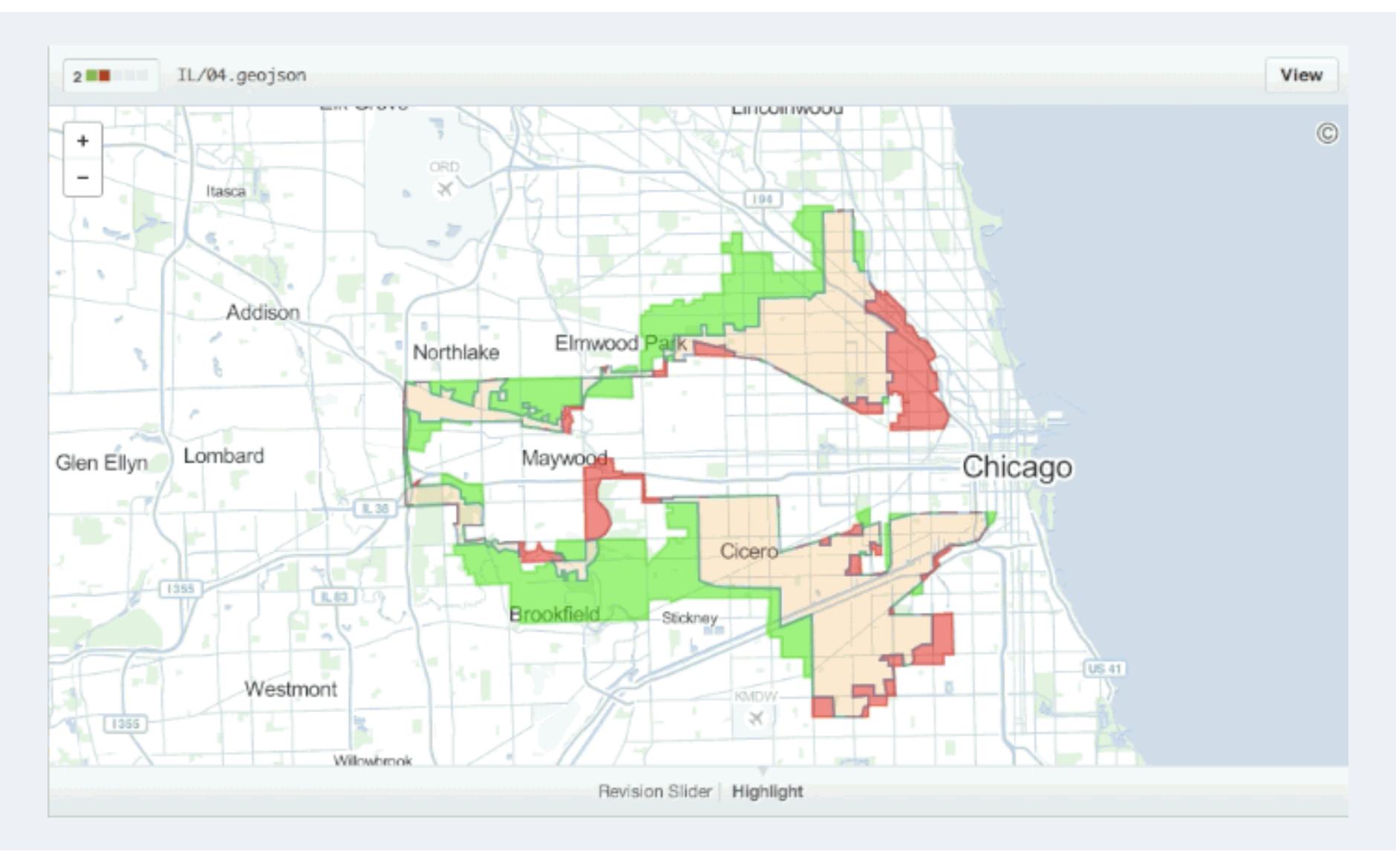**PNG, JPEG, SVG, Photoshop supported**

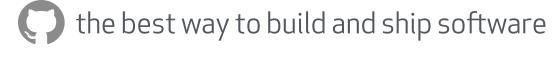**examples**

PDF Rendering

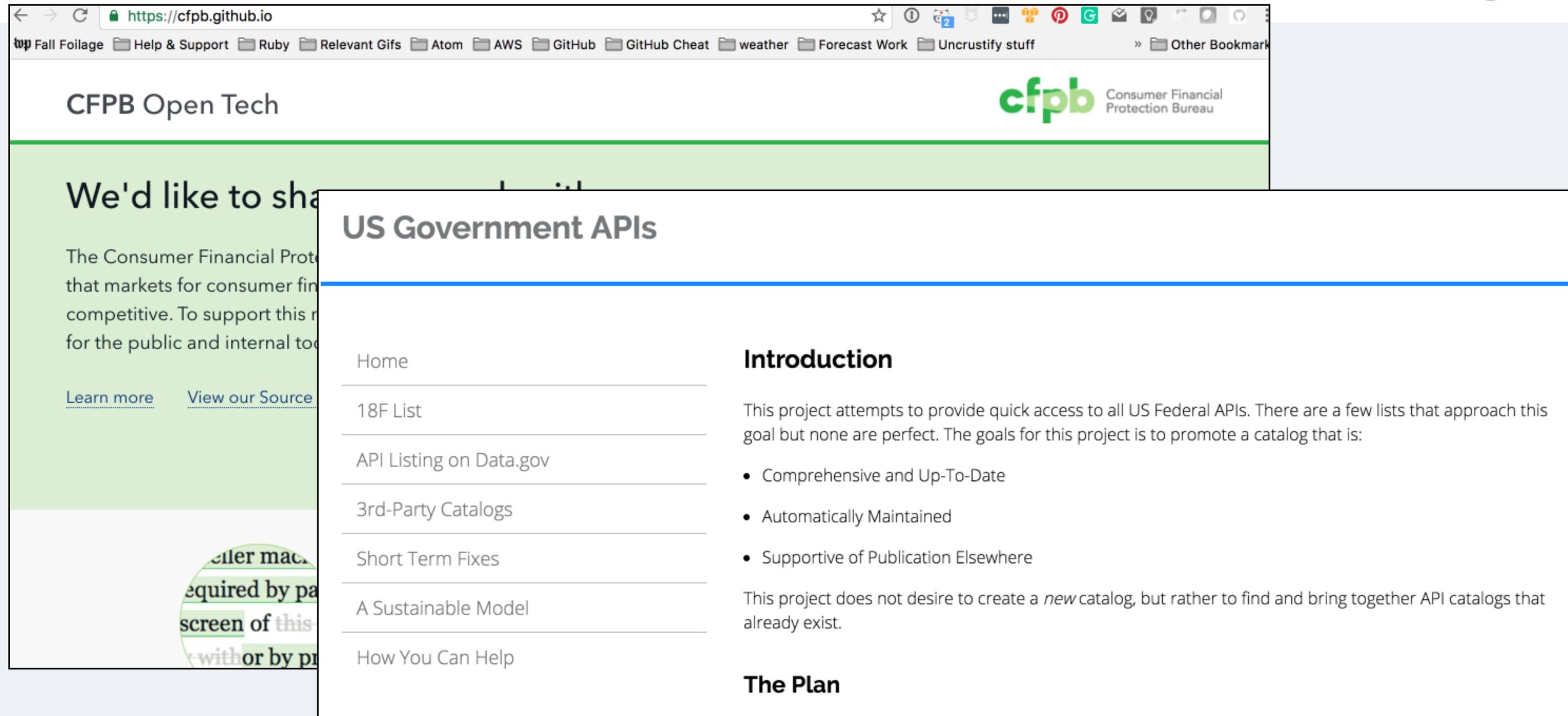# Map Rendering & Differences
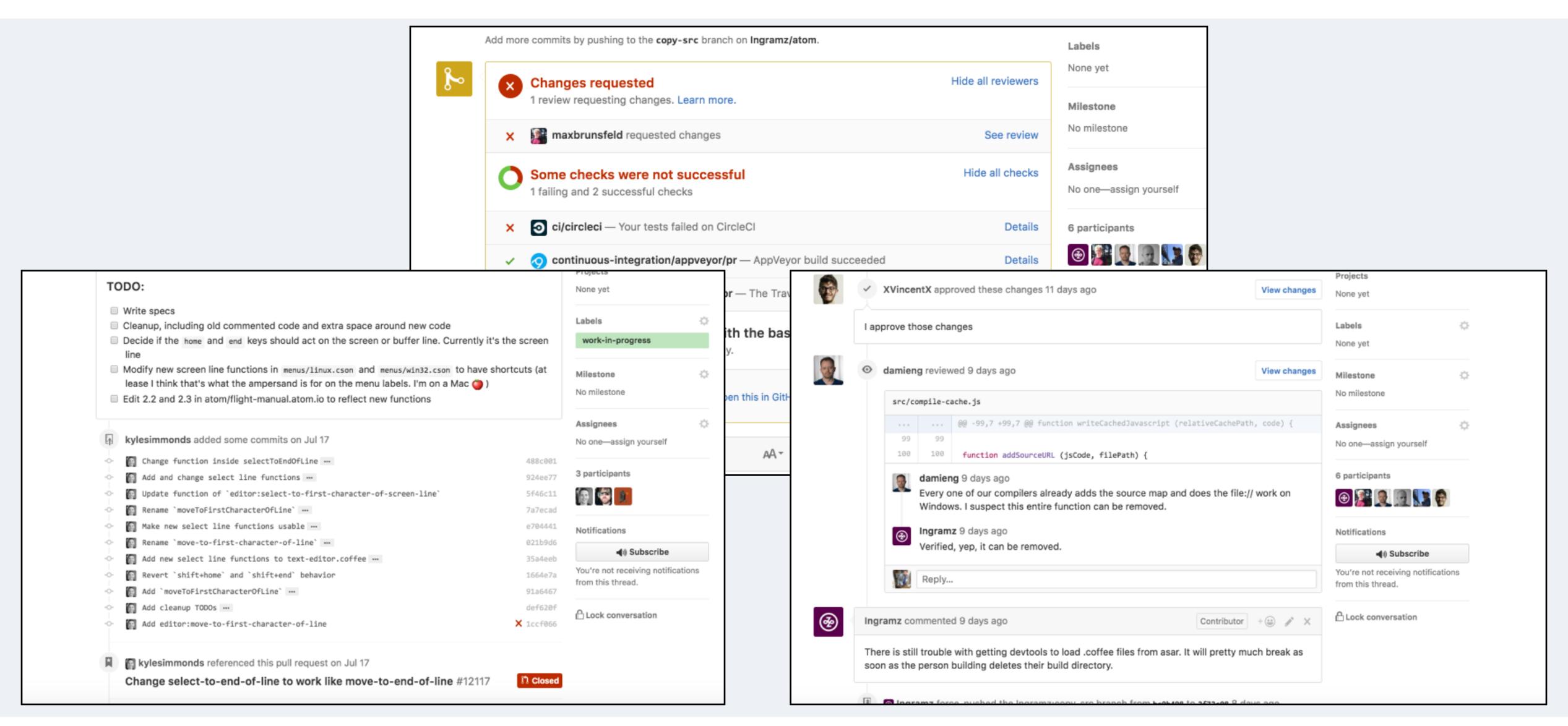
GitHub Pages

Pull Requests
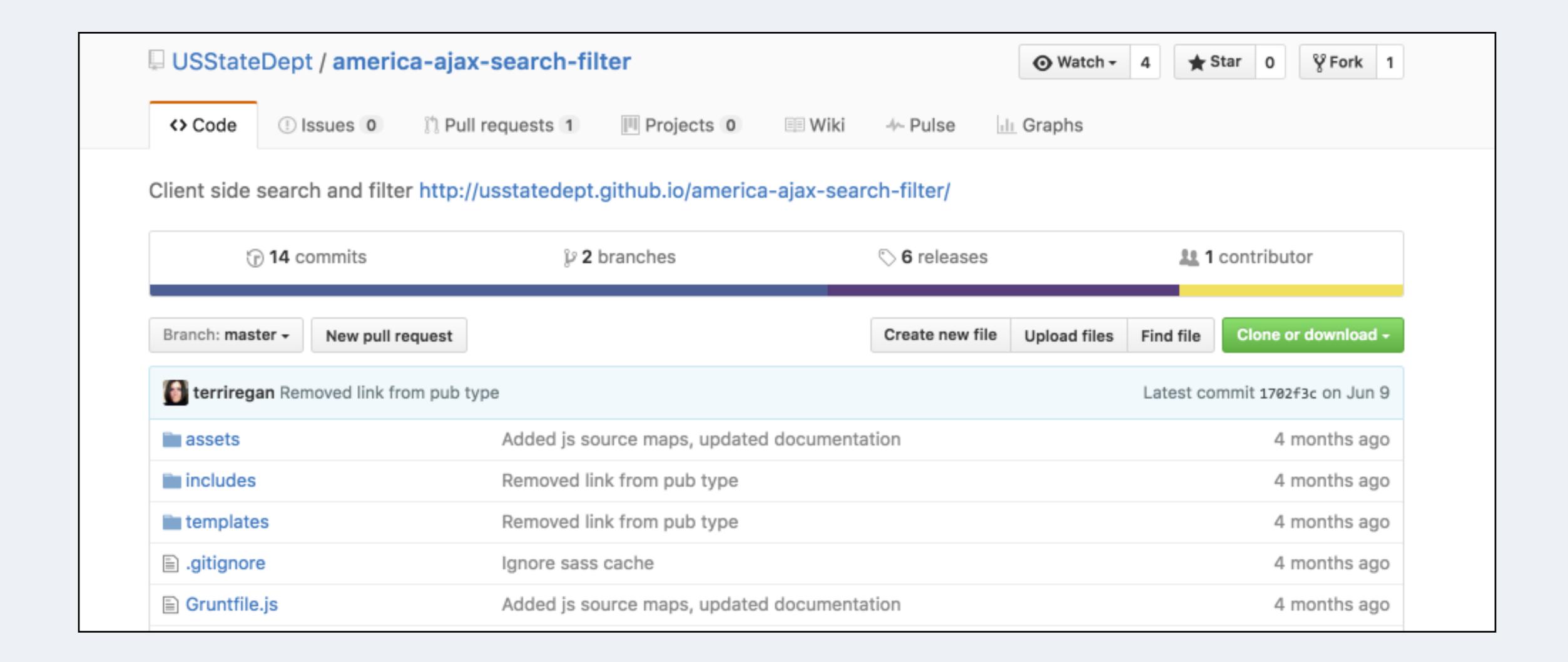
GitHub: How do you use it

- **Contributing to Open Source software projects (not just via code, but whatever your expertise is)**
- **Working on internal projects**
- **Policy development**
- **Open Commenting periods**
- **Documentation, StyleGuides**
- **Citizen Services**

General development

USStateDept / america-ajax-search-filter

Watch ▾ 4 · Star 0 · Fork 1

<> Code · ⓘ Issues 0 · ⱶ Pull requests 1 · Projects 0 · Wiki · Pulse · Graphs

Client side search and filter http://usstatedept.github.io/america-ajax-search-filter/

| 🕐 14 commits | 2 branches | 🏷 6 releases | 👥 1 contributor |

Branch: master ▾ · New pull request · Create new file · Upload files · Find file · Clone or download ▾

terriregan Removed link from pub type		Latest commit 1702f3c on Jun 9
assets	Added js source maps, updated documentation	4 months ago
includes	Removed link from pub type	4 months ago
templates	Removed link from pub type	4 months ago
.gitignore	Ignore sass cache	4 months ago
Gruntfile.js	Added js source maps, updated documentation	4 months ago

Policy Documentation

usnistgov / **800-63-3**

Watch ▾ 99   ★ Star 298   ⑂ Fork 36

<> Code   ⓘ Issues 28   Pull requests 3   Projects 1   Pulse   Graphs

Home to public development of draft Special Publication 800-63-3: Digital Authentication Guidelines

ⓟ **438** commits	⑂ **3** branches	◌ **0** releases	👥 **13** contributors

Branch: nist-pages ▾   New pull request   Create new file   Upload files   Find file   **Clone or download** ▾

👤 **jimfenton** committed on **GitHub** Merge pull request #402 from pgrassi-nist/ial2-biometrics ⋯	Latest commit 16efa37 2 hours ago
📁 .github	Update ISSUE_TEMPLATE.md	9 days ago
📁 _includes	Adding graphics in -B Sec 5	2 months ago
📁 _layouts	First Publishing	5 months ago
📁 assets	Better graphics	2 months ago
📁 sp800-63-3	Risk based language for agencies	8 hours ago
📁 sp800-63a	Fixed formatting of privacy section.	7 hours ago
📁 sp800-63b	Update definitions for asymmetric keys and digital signature. Resolves …	13 hours ago

Public Commenting

WhiteHouse / **source-code-policy**

Watch ⌄ 80 | ★ Star 203 | Fork 66

‹› Code   ⊙ Issues **9**   Pull requests 0   Projects 0   Pulse   Graphs

Filters ⌄   🔍 is:issue is:closed   Labels   Milestones   **New issue**

❌ Clear current search query, filters, and sorts

ⓘ 9 Open   ✓ **207 Closed**   Author ⌄   Labels ⌄   Milestones ⌄   Assignee ⌄   Sort ⌄

Comments from the Open Source Initiative (OSI)
#227 by massonpj was closed on Apr 19

Email Comment: Support for Open Source Licensing / Open by Default
#226 by OMBPublicComments was closed on Apr 19

Email Comment: Support for 100% Free Software   💬 4
#225 by OMBPublicComments was closed on Apr 19

Email Comment: Defending the public interest in this regulation
#224 by OMBPublicComments was closed on Apr 19

Support for FSF comments
#223 by willghatch was closed on Apr 19

the best way to build and ship software
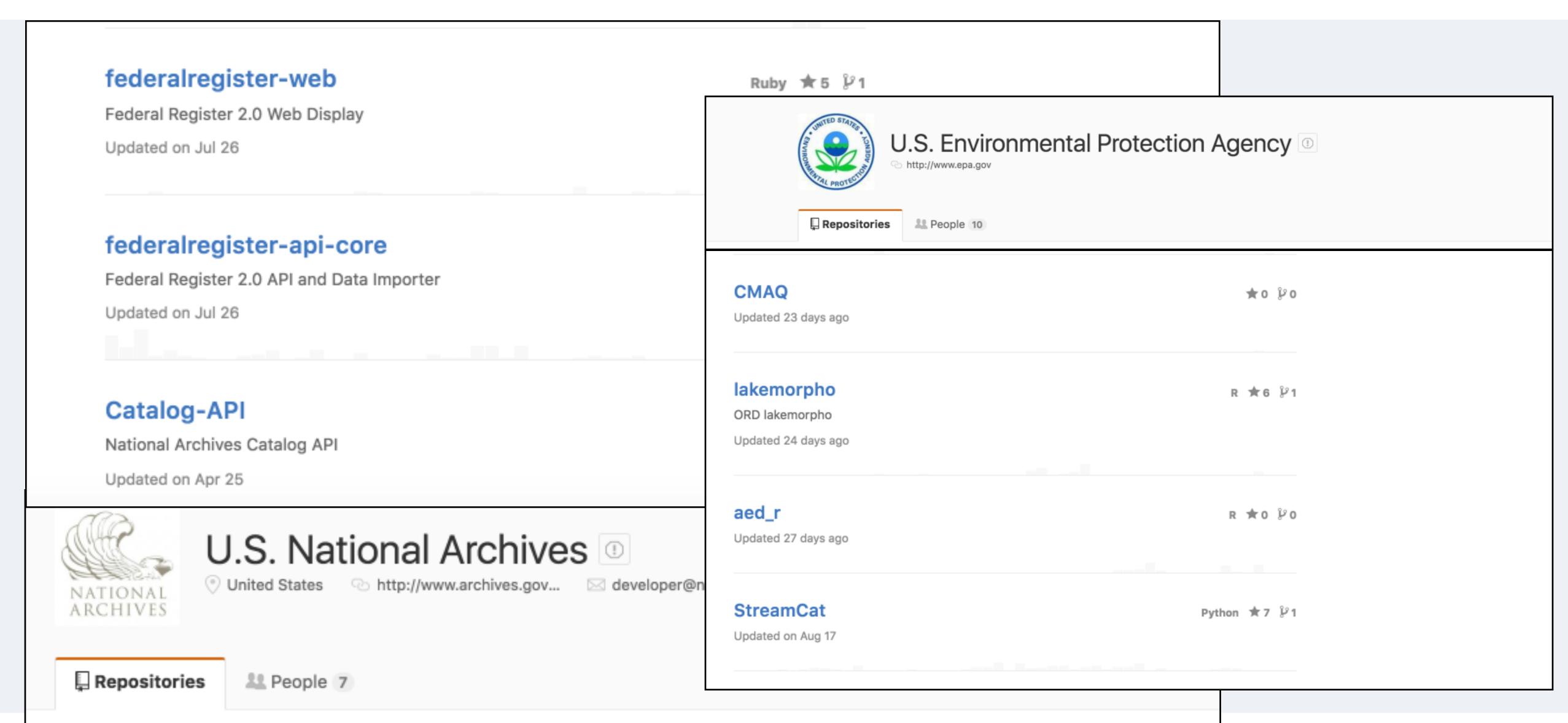
StyleGuides

Citizen Services

Best Practices

- **Naming**
- **Description**
- **Consistent Naming Scheme**
- **Using Teams. Using homepages for teams**
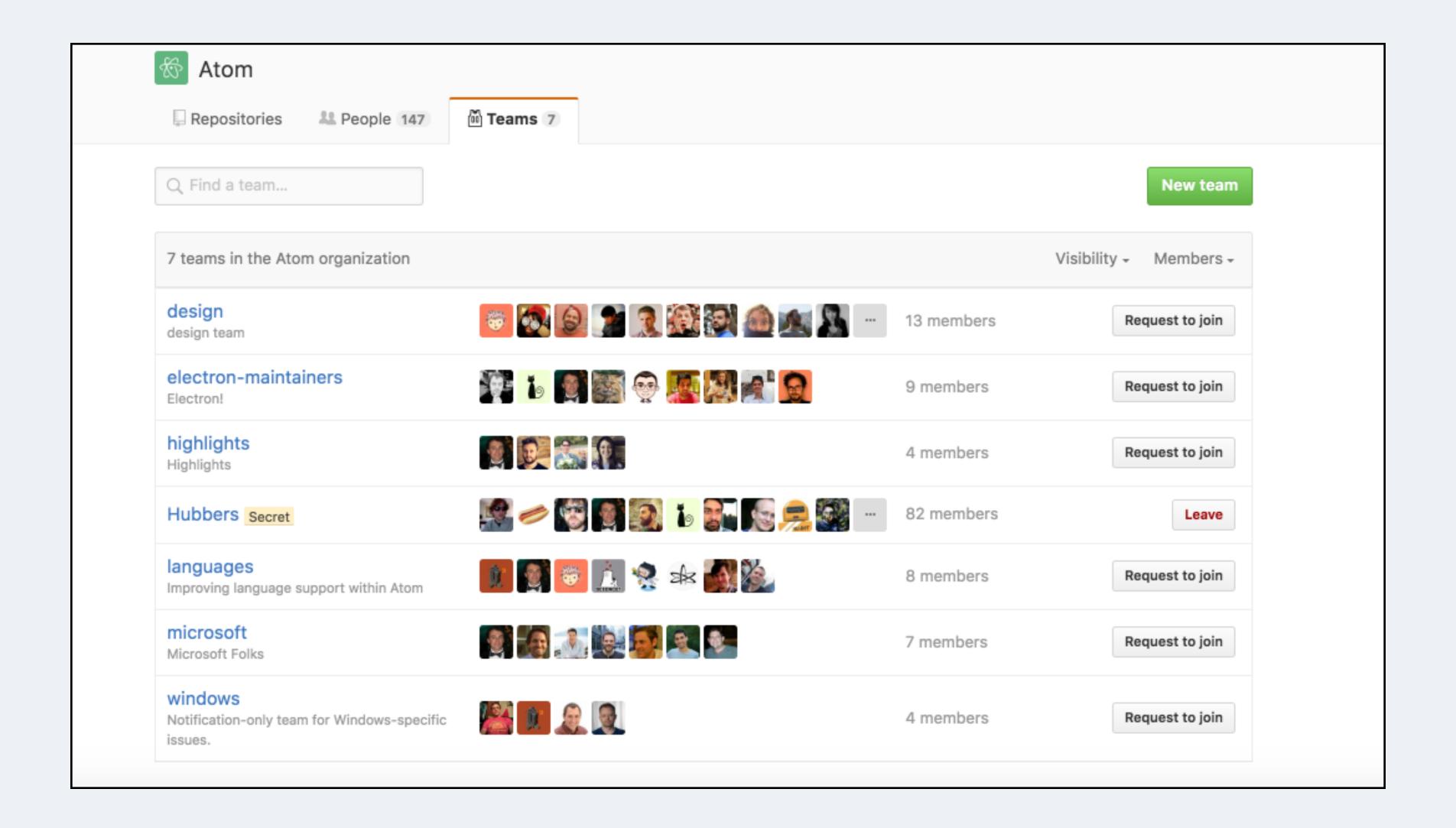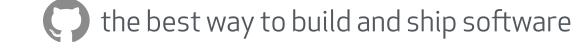
Naming & Descriptions matters

federalregister-web

Federal Register 2.0 Web Display

Updated on Jul 26

federalregister-api-core

Federal Register 2.0 API and Data Importer

Updated on Jul 26

Catalog-API

National Archives Catalog API

Updated on Apr 25

U.S. National Archives ⓘ

United States   http://www.archives.gov...   ✉ developer@n

📖 **Repositories**   👥 People **7**

Ruby ★ 5 ⑂ 1

U.S. Environmental Protection Agency ⓘ

http://www.epa.gov

📖 **Repositories**   👥 People **10**

CMAQ   ★ 0 ⑂ 0

Updated 23 days ago

lakemorpho   R ★ 6 ⑂ 1

ORD lakemorpho

Updated 24 days ago

aed_r   R ★ 0 ⑂ 0

Updated 27 days ago

StreamCat   Python ★ 7 ⑂ 1

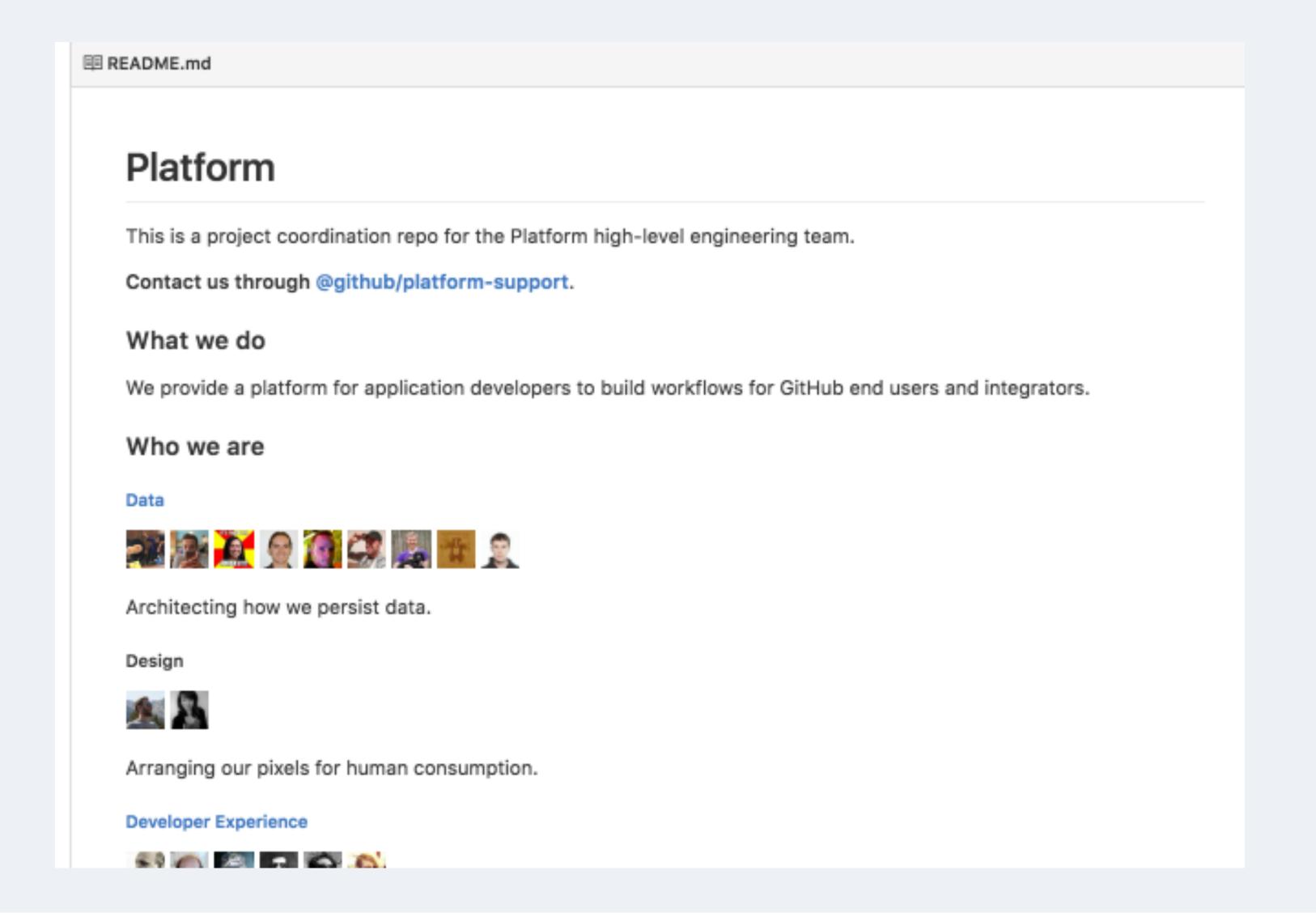Updated on Aug 17

Use Teams in your Org

Teams can have homes too
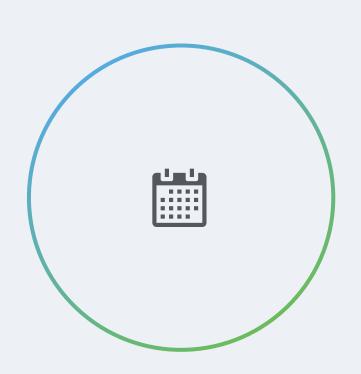
Managing a community

- **Document your process, transparency**
  - README.md, CONTRIBUTING.md, LICENSE, etc
- **Make barrier to entry minimal**
  - Issue & Pull Request Templates
- **Be Involved**
  - Commenting in Issues, Providing Code Reviews, Setting direction
- **Governance**
  - Who can commit/merge
- **Integrations can help maintain the project for you**
  - CLA-BOT
  - Test Runners
  - Static Code Analysis

What next?

JBJONESJR@GITHUB.COM

- https://www.github.com/jbjonesjr/github-in-government
- Slides are posted already, feel free to use issues for questions
- Will updated this repository with links and new information

HTTPS://GOVERNMENT.GITHUB.COM

- Government peer group shares best practices around (any) technology
- Great place to ask questions and source information