GitHub For Planners

APA
Tech

American Planning Association
Making Great Communities Happen

What is the American Planning Association?

About the American Planning Association

- We are the oldest and largest community of domestic and international planners.

- We are an association, which means we exist to serve your needs—help you get hired, do better at your job, connect with others, and channel your voice into the planning conversation.

- We have 47 state or regional chapters and 21 interest- and population-specific divisions. Many have student or young professional groups tailor-made for your involvement.

What is the APA Technology Division?

APA Technology Division consists of planners, technologists, and other APA Division members interested in how technology can assist in the planning design and decision-making process to create new opportunities to enhance public involvement, share information, and make more informed decisions in cities and towns throughout the country.

Website
Facebook
LinkedIn

Upcoming Events

- NPC 2021
    - Planning Technology & The Future of your Career (Post NPC Webinar)
    - Annual Technology Division Meeting
- APA Elections – Technology Division Positions
    - Secretary & Chair
- Future Webinars
    - Topics on concerning AI, Equity, Engagement, and their connections to technology
- Continued Engagement on GitHub
    - Contribute to our repositories or suggest a project

Presenters

David Wasserman, AICP

Data Science Practice Leader

Marshall Ballard, GISP

Data Liberator

APA
Tech

Outline

- Why talk about this?
- What is GitHub & Git?
- How do you navigate a repository?
    - 4 Examples
- Dialogue Through Issues
- Cloning A Repository
    - What is Markdown?
- Pushing Changes to a Repo
    - When you own it
- Pull Requests & Changes to Other's Repositories
    - When someone else does
- Process Demonstration
    - Repositories Owned by You
    - Repositories Owned by Others

https://github.com/varoudis/depthmapX

Why talk about this?

- If we hear:
  - "Code is the new concrete"
  - "Data is the new oil"
- It might be a good idea of what the mixer & refineries look like

Source: SpaceNews

How can GitHub help planners & planning?

- There are lots of free tools & resources on the internet

- Provides a location for planners & technologists to collaborate

- You can create web hosted portfolios & basic web pages with GitHub

- Contemporary Transportation Technology uses Software

- Open Source Software enables bottom-up solutions to civic problems

- Cities are increasingly benefit from being digitally savvy to be in a post-pandemic world

Planning Repositories

curbLR

USBuildingFootprints

Planning Repositories
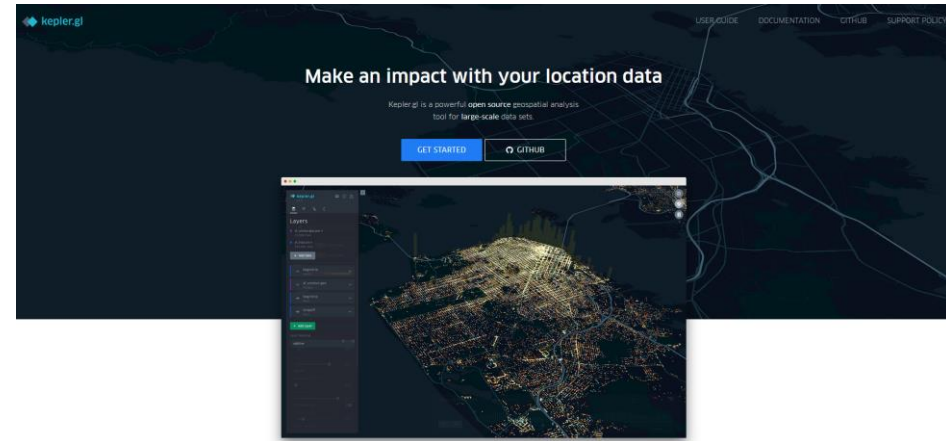
Open Trip Planner   Kepler.gl

Urban Computing Landscape

Examples

Planning Repositories

StreetMix

Complete Street Rule

What is it?
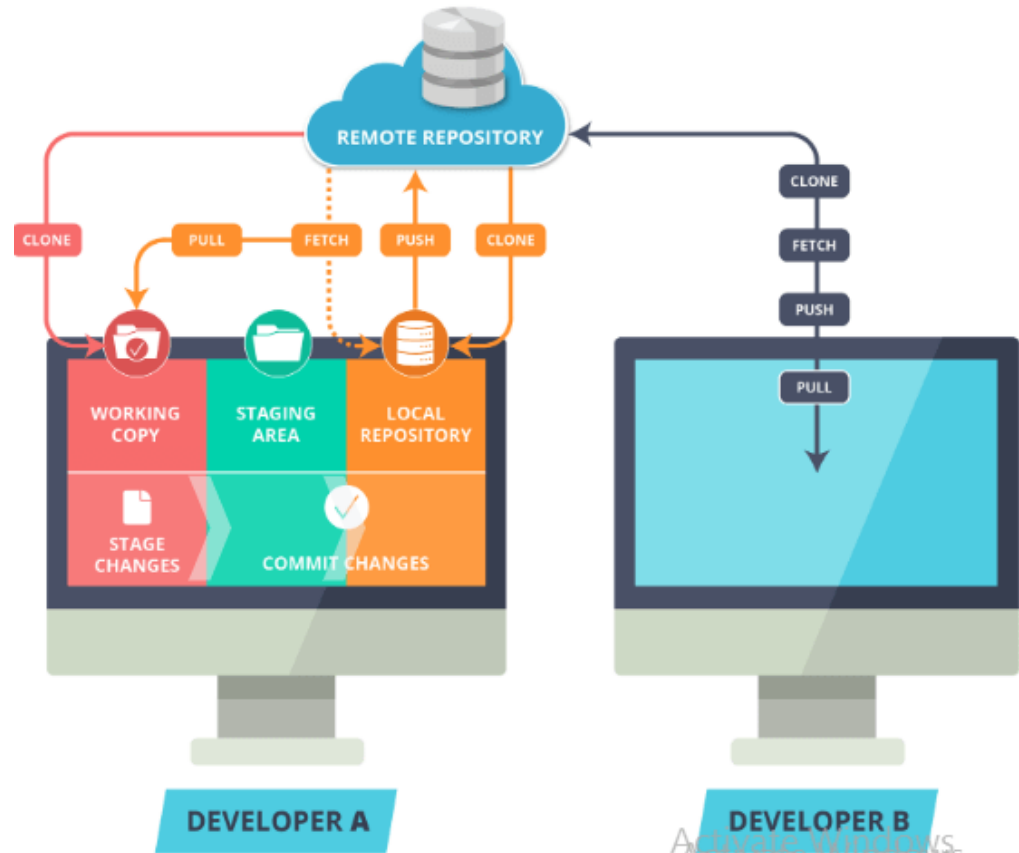
Planning Technology Resources

How do we build something together?

What is Git?

Git - is software for tracking changes in any set of [files](#) typically as part of the software development process.

* Developed in 2005 by Linus Torvalds (Linux OS Creator)

What is Git?

- Distributed Version Control System- like track changes in MS Word, but for multiple files & folders

- Primarily used by software developers

- A layer on top of a filesystem that tracks changes to files and retains historical changes.

- Allows for variations of projects to be created and maintained.

- Single source of truth or record of a project.

- What are GitLab, GitHub, Atlassian?

What is GitHub?

- Microsoft subsidiary

- One of the largest development communities

- Cloud based Git resource

APA
Tech
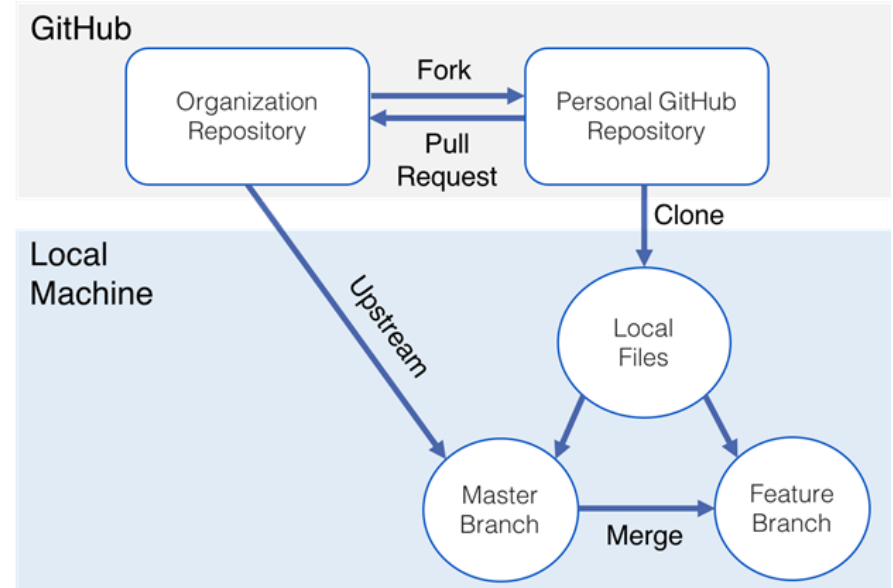
Terminology

- **Clone** - A clone is a copy of a repository that lives on your computer instead of on a website's server somewhere, or the act of making that copy

- **Commit** - A commit, or "revision", is an individual change to a file (or set of files)

- **Fork** - A fork is a personal copy of another user's repository that lives on your account

- **Push** - To push means to send your committed changes to a remote repository

- **Pull** - Pull refers to when you are fetching in changes and merging them

Taken From: https://docs.github.com/en/github/getting-started-with-github/github-glossary

Tools to use

- GitHub Desktop

- Git Bash

- Visual Studio Code, Sublime, Notepad++
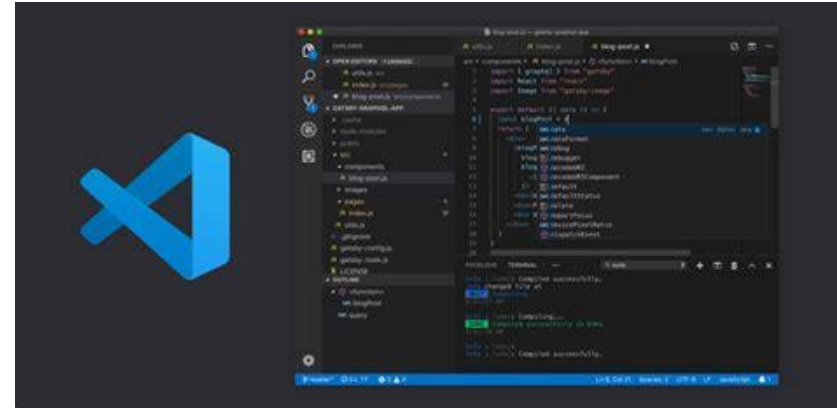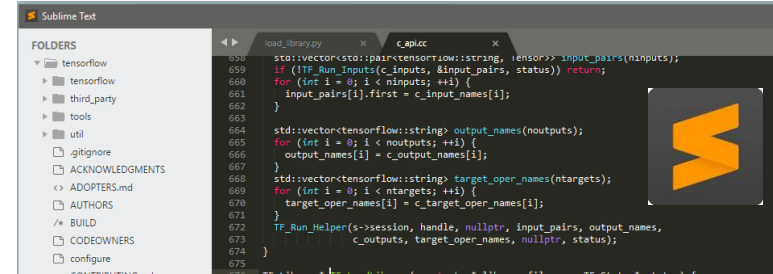
Issues

Talking to Issue Owners

- Filing an issue is a non-technical exercise that all planners can use to engage with technologists and exchange ideas

- Most repository owners respond favorably to well meaning questions & suggestions

Step 1: Go to Issues Tab
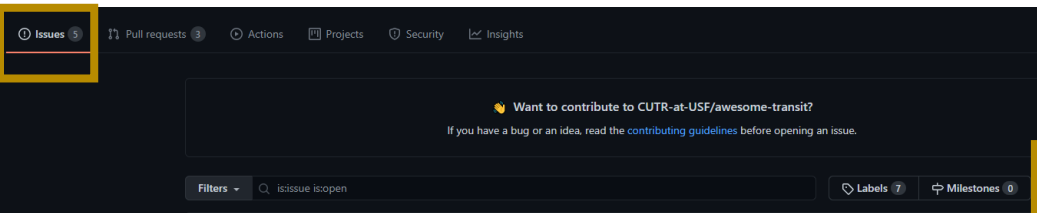
Step 2: Click New Issue

Clone A Repository

- Cloning a repository creates a local copy of files associated with a project on your drive.

Online
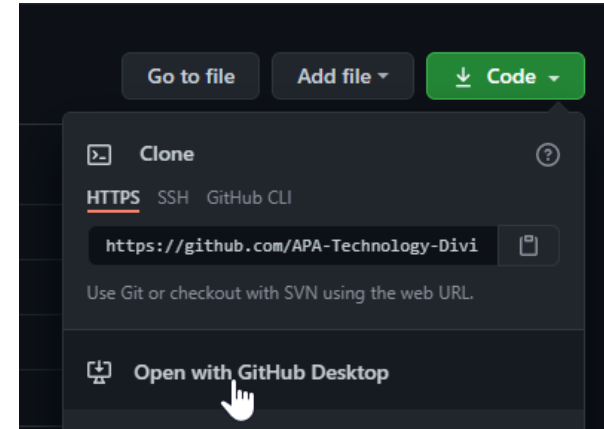
OR   GitHub Desktop
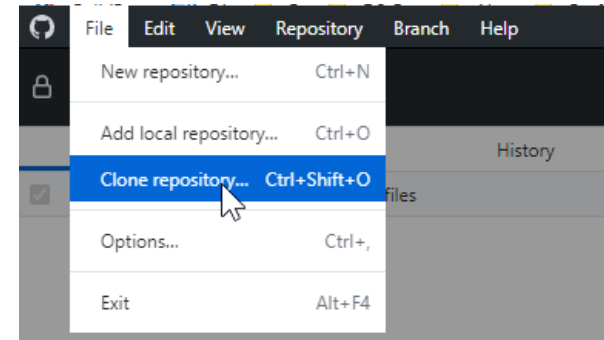
What is Markdown?

Markdown – is a text based formatting language that can be used to format and layout webpages on GitHub and similar sites.

Basic Syntax

These are the elements outlined in John Gruber's original design document. All Markdown applications support these elements.

Element	Markdown Syntax
Heading	# H1 ## H2 ### H3
Bold	**bold text**
Italic	*italicized text*
Blockquote	> blockquote
Ordered List	1. First item 2. Second item 3. Third item
Unordered List	- First item - Second item - Third item
Code	`code`
Horizontal Rule	---
Link	[title](https://www.example.com)
Image	![alt text](image.jpg)

https://www.markdownguide.org/cheat-sheet/

Pushing Changes to a Repository you "Own"

JS/HTML/CSS
Front-end web related packages and resources

* **Resource Name**: Name of the resoure
    * Description: A description of what it provides to viewers in a sentence or two.
    * License: The type of open source license applied to the resource if any. Non-opensource resources should be
    * Provider: Who is the sponsor or provider of the resource.
    * Links: Hyper-Link(s) to the resource.

JS/HTML/CSS
Front-end web related packages and resources

* **Turf.js**
    * Description: Advanced geospatial analysis for browsers and Node.js.
    * License: MIT License
    * Provider: Turfjs
    * Links: [About](https://turfjs.org/) / [GitHub](https://github.com/Turfjs/turf)

Pushing Changes to a Repository you "Own"

Pushing Changes to a Repository you "Own"

Updated on Page

Pull Requests to Other People's Repositories

fork – By forking a repository you can edit, and eventually fill a pull request to merge into the original repo if desired.
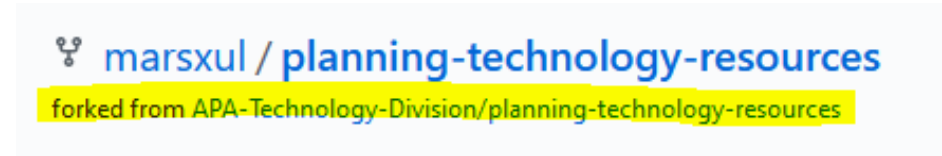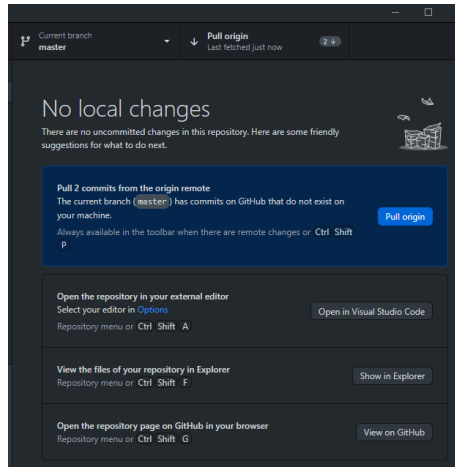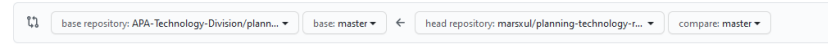
Pull Requests to Other People's Repositories

Comparing changes

Create Pull Request

Add notes

Merging Pull Requests from Others

- Review Request

- Merge it into master repo
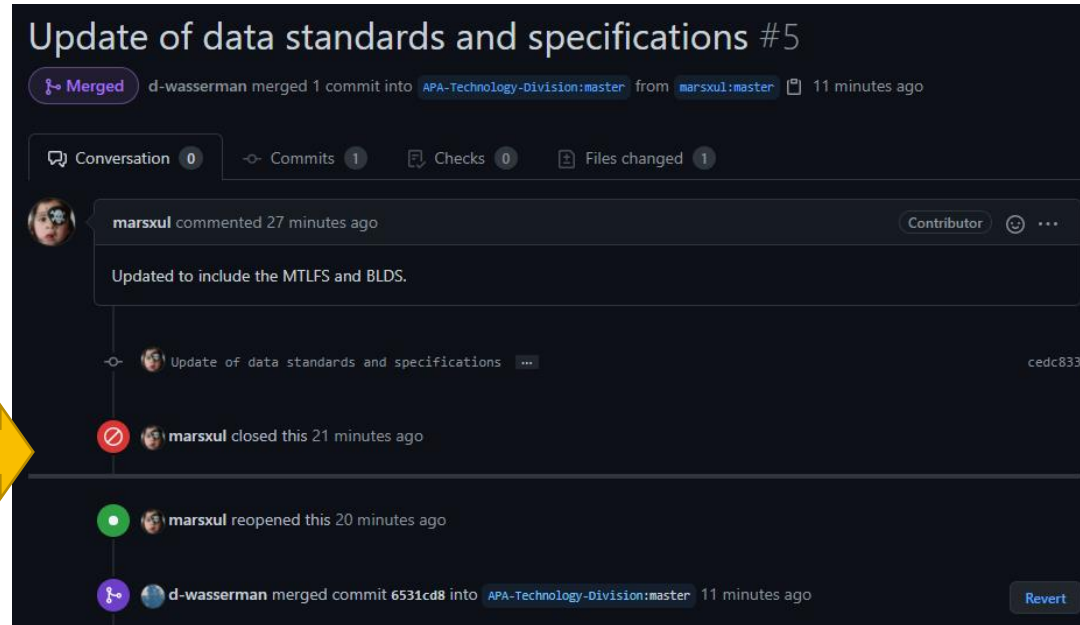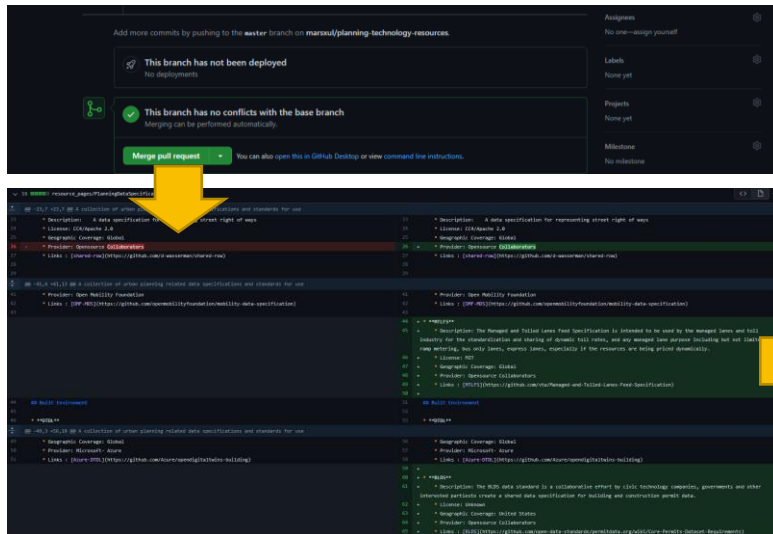
A Different Way to Collaborate

Open Sustainable Technology

A curated list of open technology projects to sustain a stable climate, energy supply, and vital natural resources.

"True sustainability is open." - protontypes

Our ambition is to list all high quality and actively maintained projects worldwide. Your contribution is necessary to keep this list alive, increase the quality and to expand it. Read more about it's origin and how you can participate in the contribution guide, community chat, presentation slides and related blog post. Please contact us to give feedback, hints and ideas for OpenSustain.tech or create an issue.

Community Chat

https://github.com/protontypes/open-sustainable-technology

APA
Tech

Demonstration

Planning Technology Resources

- Safe practice area for anyone to contribute

- Help us build a useful resource, collectively constructed

Q&A

David Wasserman, AICP

Email: dwasserman@altago.com

LinkedIn: https://www.linkedin.com/in/david-j-wasserman/

Marshall Ballard, GISP

m.ballard@fehrandpeers.com

LinkedIn: https://www.linkedin.com/in/marshall-wilson-ballard/

Division Contact

https://tech.planning.org/

apatechdivision@gmail.com

American Planning Association

Making Great Communities Happen