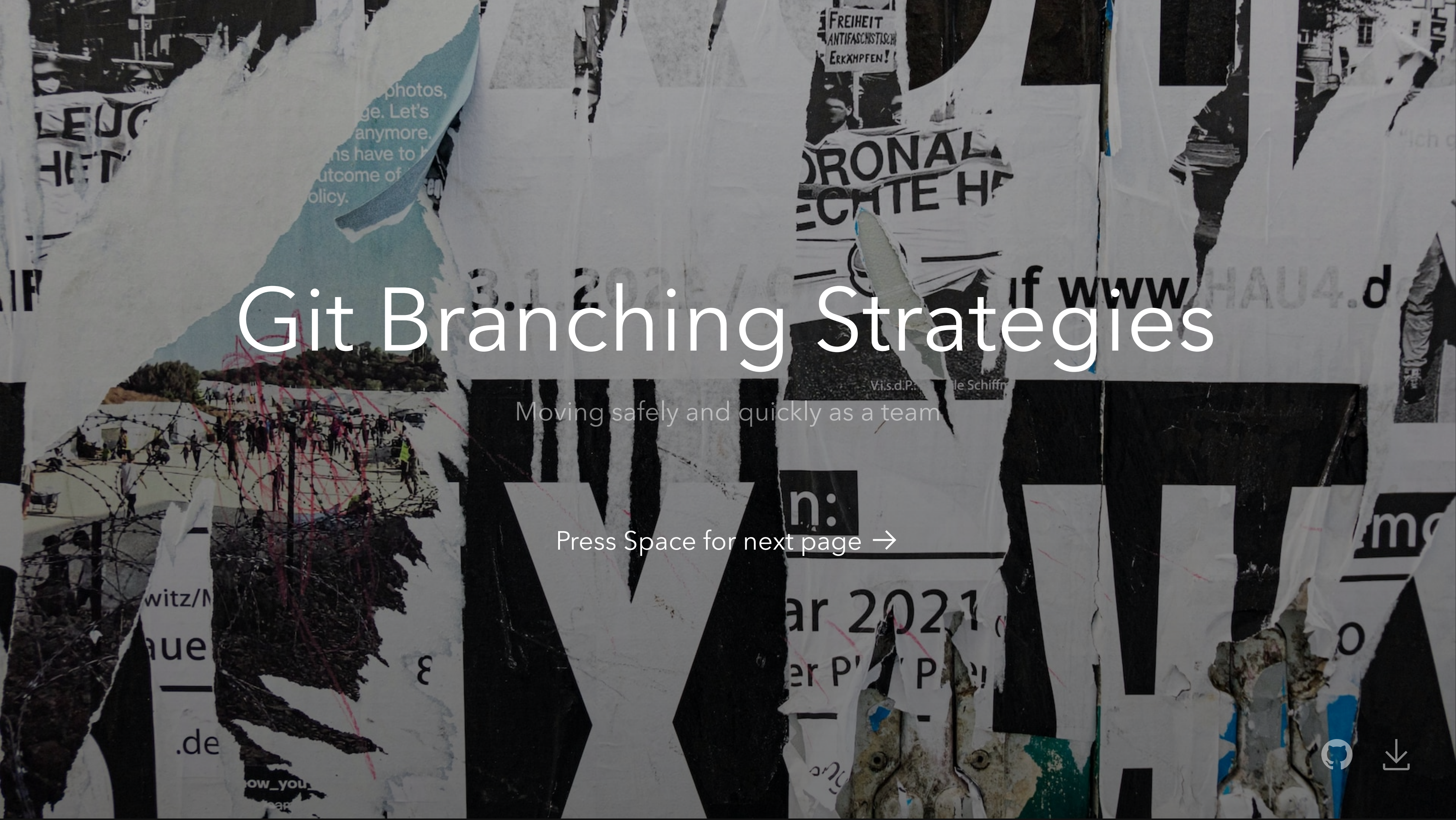

Git Branching Strategies

Moving safely and quickly as a team

Press Space for next page →

Kevin Chen

Software Engineer at Teaching Strategies.

Formerly at The Drivers Coop, Care.com, and IrisVR.

Fan of chess, racket sports, skiing, guitar.

kevinmichaelchen

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Table of Content

What is a Git branch?

- 🖖 Branches allow developers to **diverge** from the main branch by creating separate branches to isolate code changes
- 👉 A branch is essentially a reference or a **pointer** to the latest commit in a given context; it’s not a container for commits.
- 🪶 The Git branching model is **lightweight** compared to other version control systems.
- ⛓️ Branches allow for **independent** lines of code that branch off the master branch, allowing developers to work independently before merging their changes back to the code base.

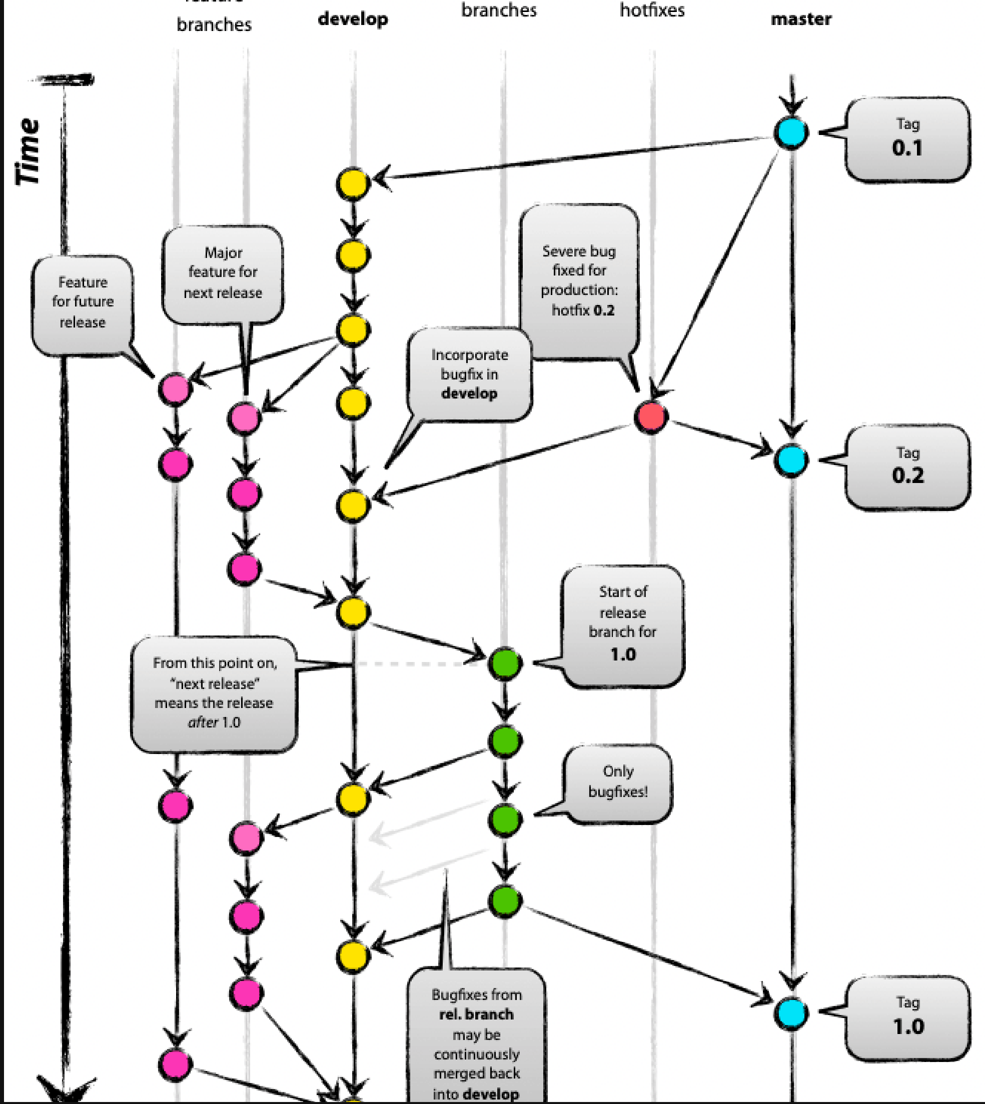
What is a Git branching strategy?

Branching strategies help to

- 🧠 Enhance productivity by ensuring proper **coordination among developers**
- ⛓️ Enable **parallel development**
- 🏗️ Help organize a series of **planned, structured releases**
- 🛣️ Map a clear **path** when making changes to software through to production
- 🐛 Maintain a **bug-free** code where developers can quickly fix issues and get these changes back to production without disrupting the development workflow

GitFlow

Created by Vincent Driessen:[1]



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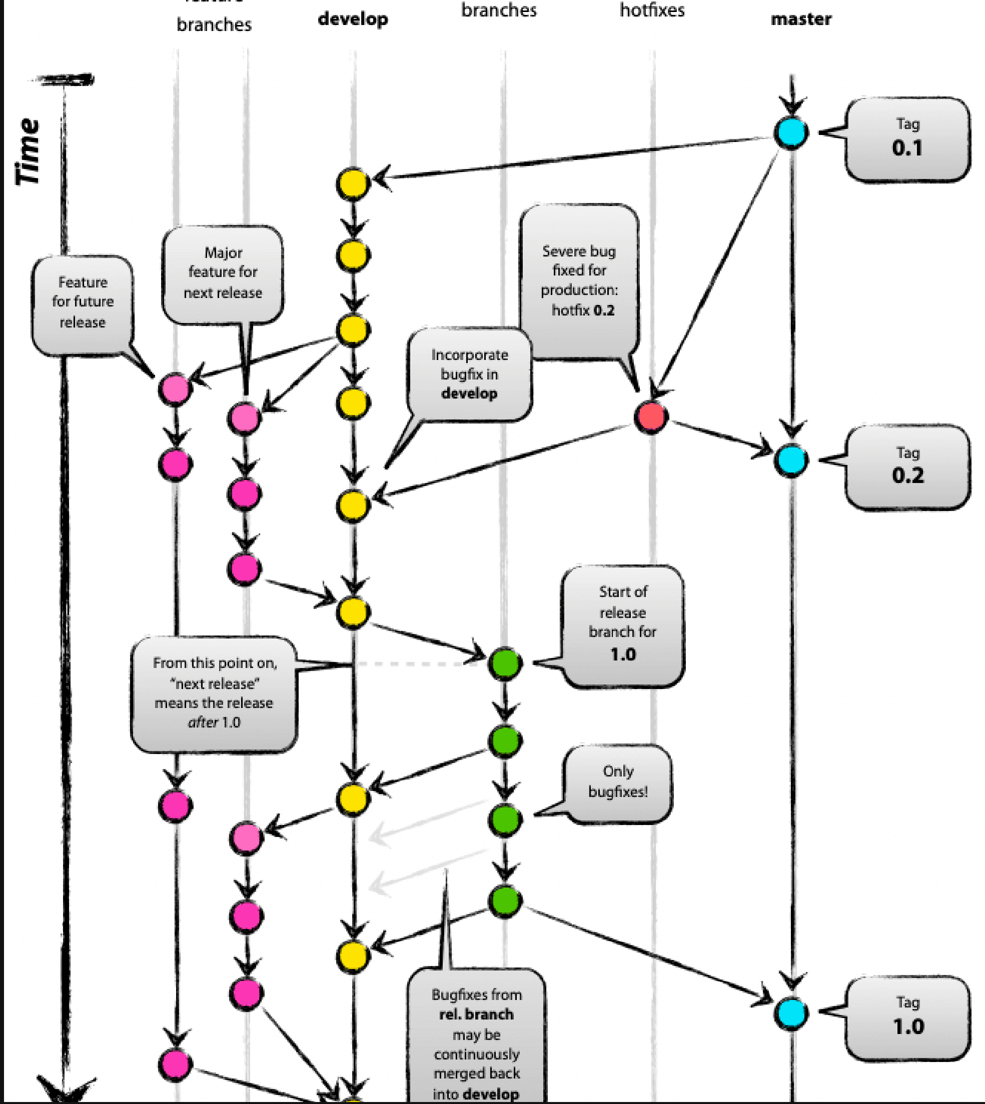
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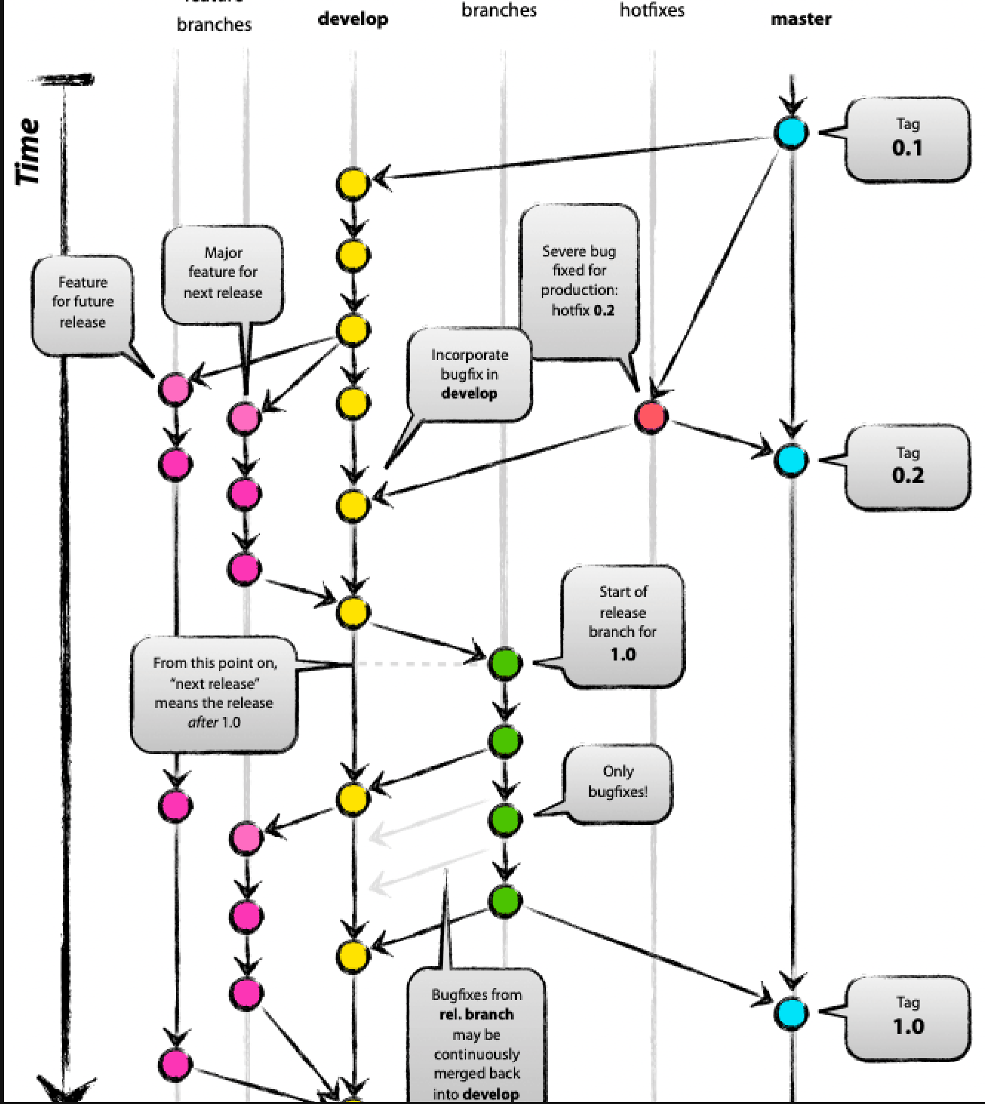

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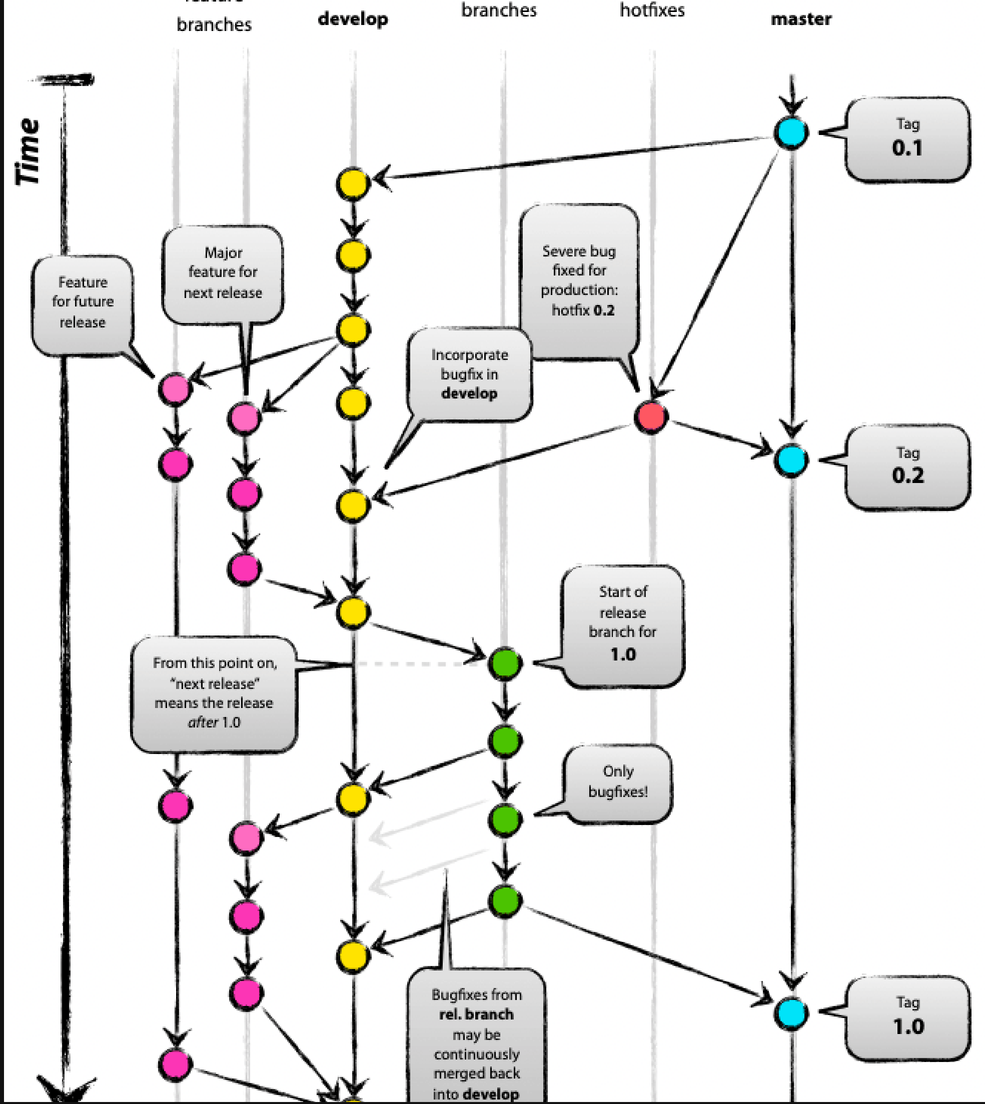
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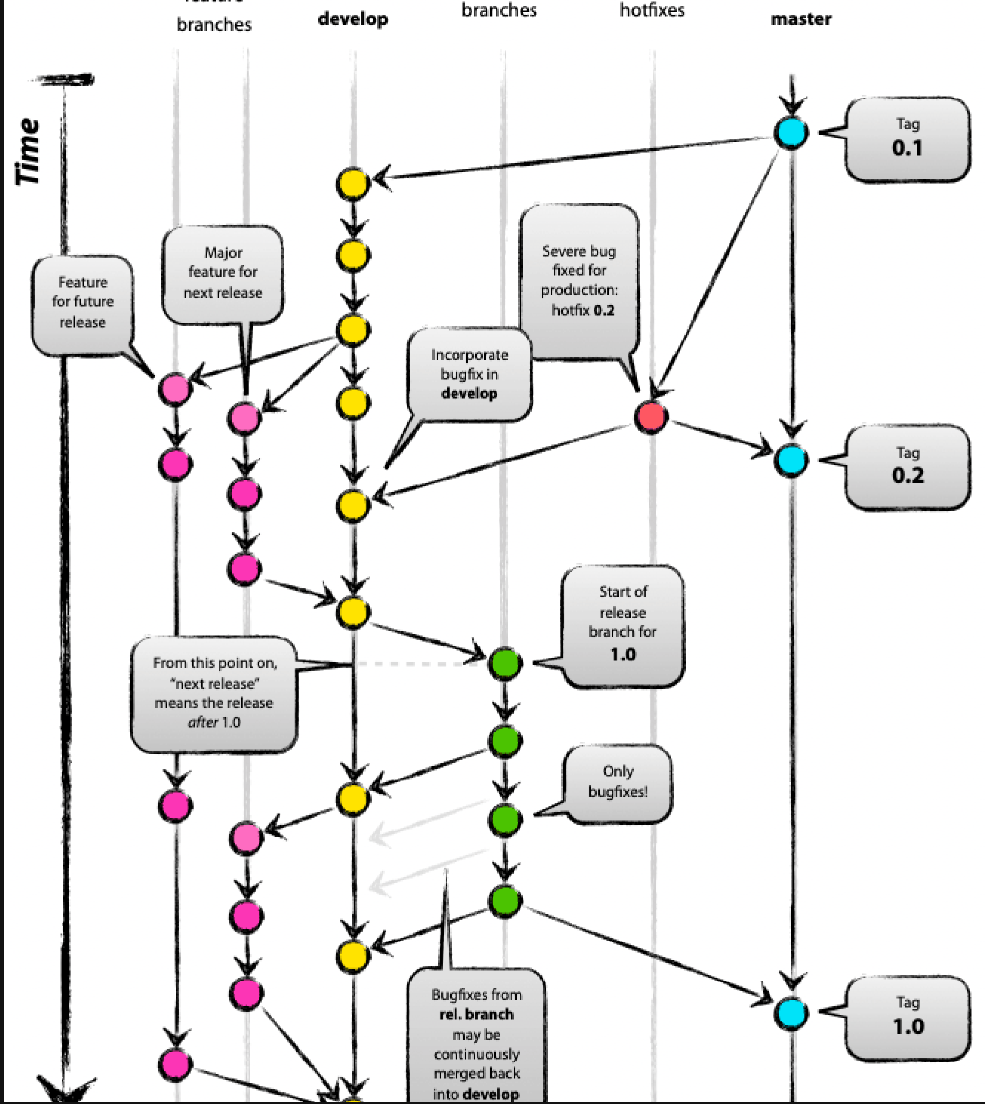
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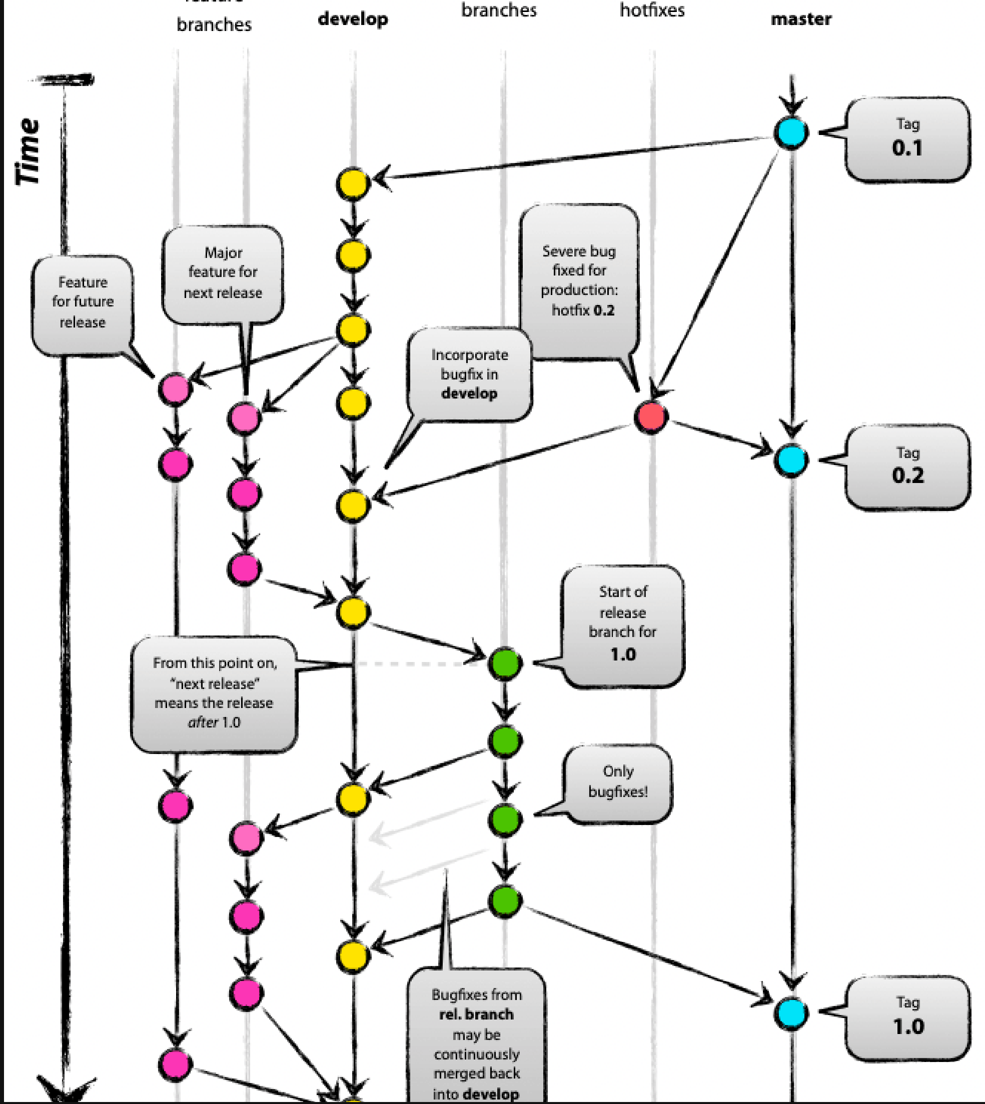
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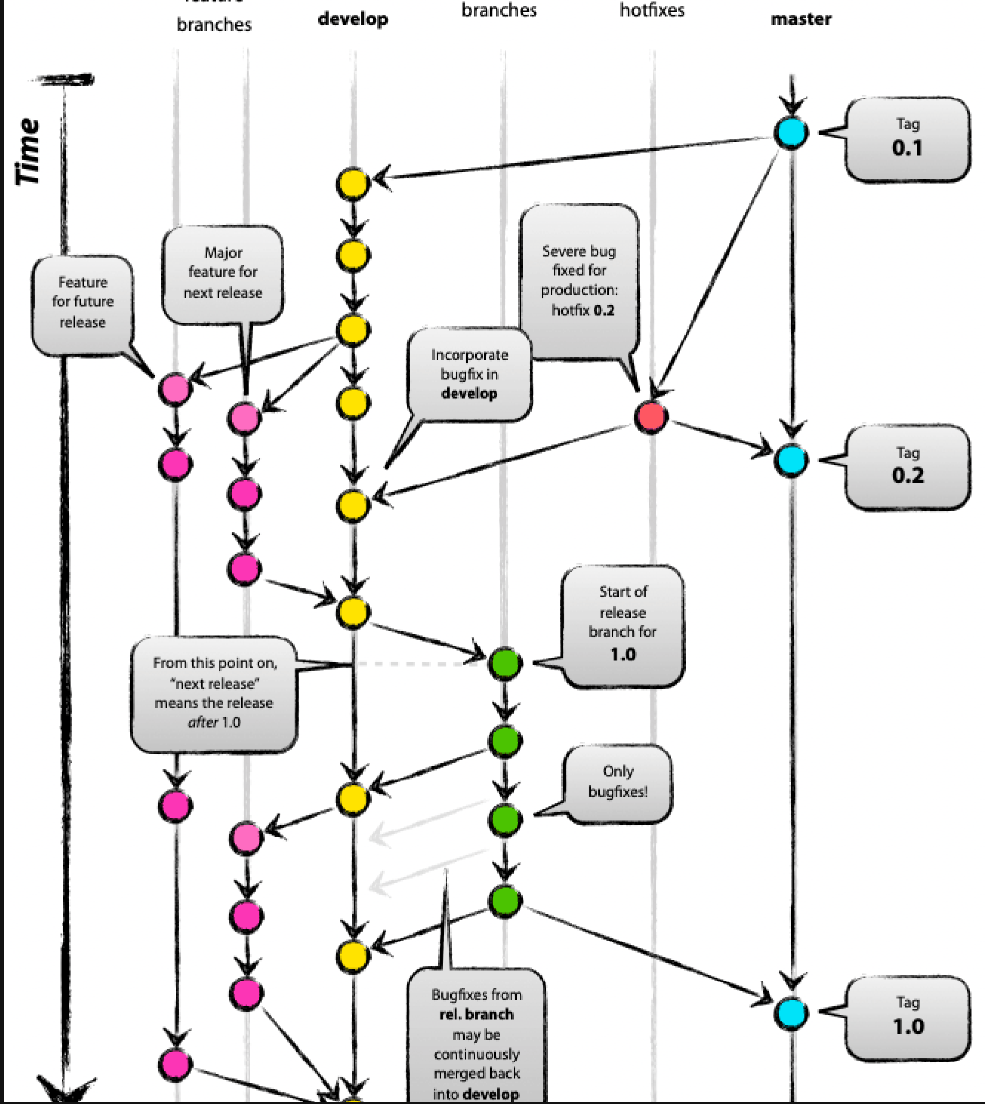
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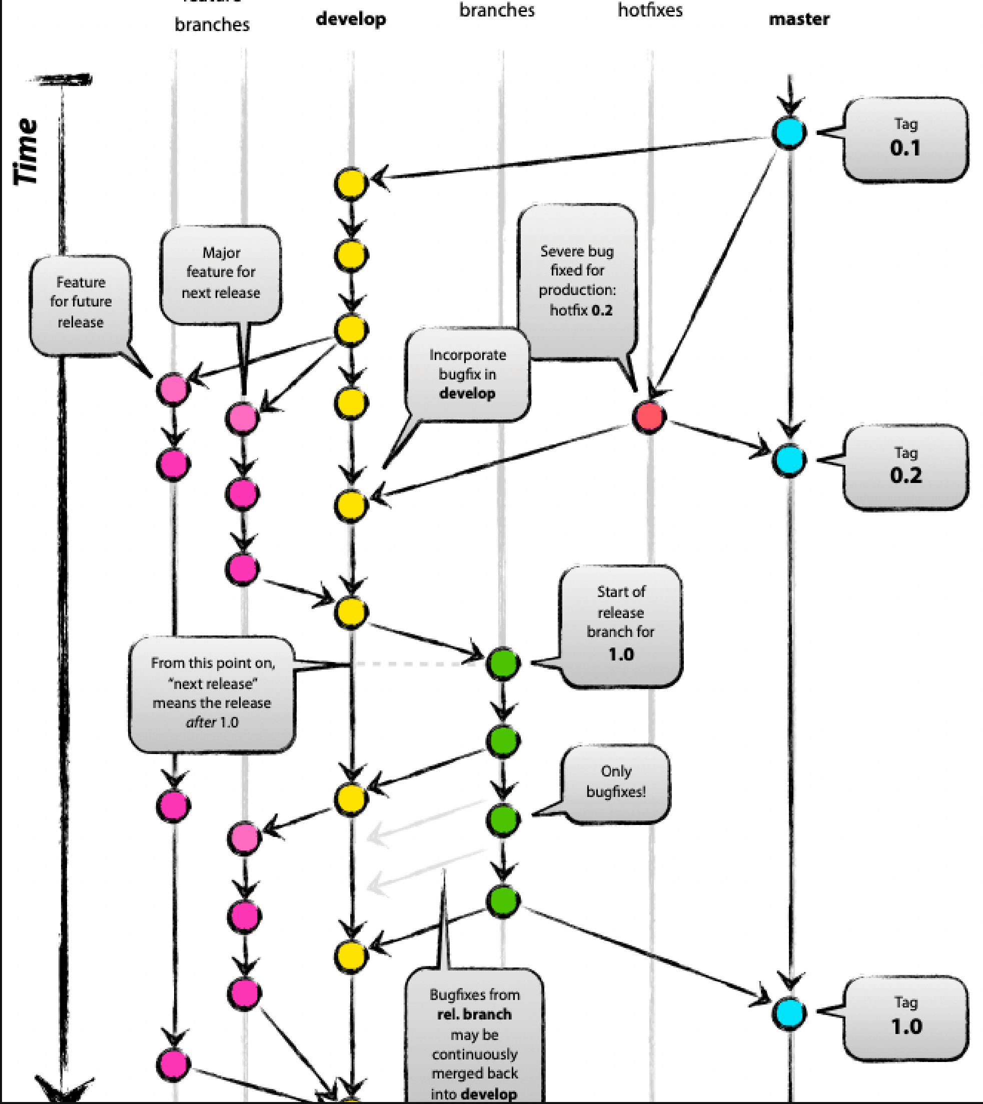

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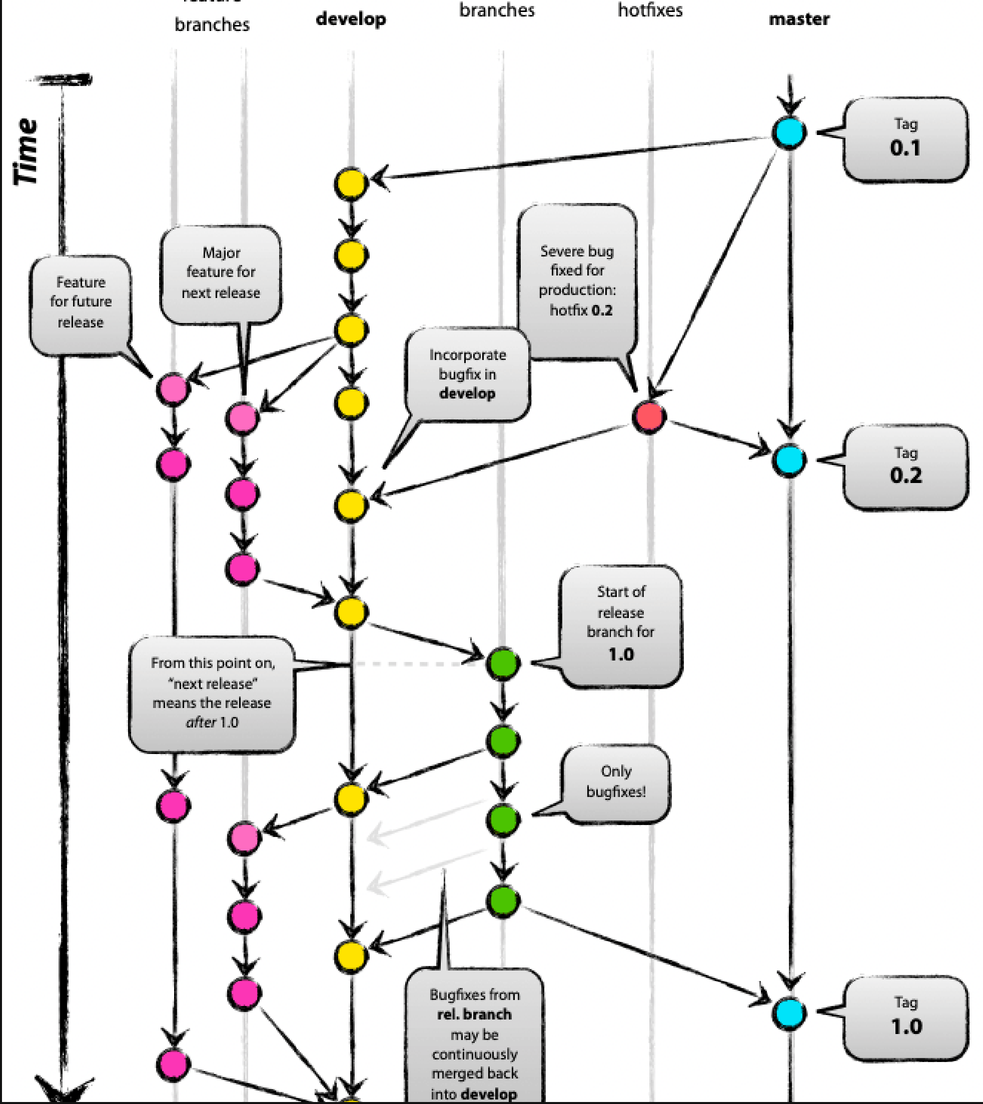
When `develop` basically resembles a new release, that's when the release branch is created.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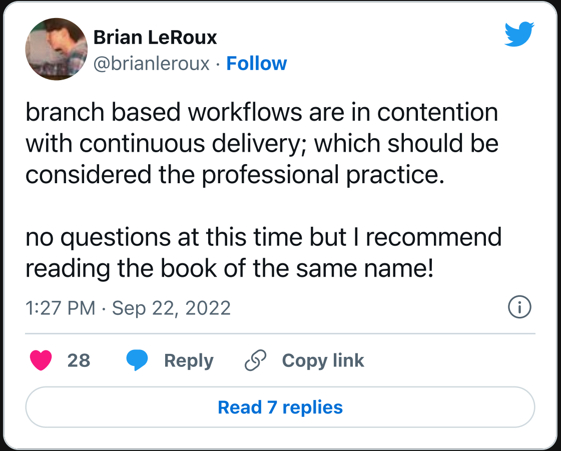
Downsides of GitFlow

A note from Gitflow's creator:

> Web apps are typically continuously delivered, not rolled back, and you don't have to support multiple versions of the software running in the wild...

> If your team is doing continuous delivery of software, I would suggest to adopt a much simpler workflow (like GitHub flow) instead of trying to shoehorn git-flow into your team...

> If, however, you are building software that is explicitly versioned, or if you need to support multiple versions of your software in the wild, then git-flow may still be as good of a fit to your team as it has been to people in the last 10 years.


Brian LeRoux
@brianleroux · Follow

branch based workflows are in contention with continuous delivery; which should be considered the professional practice.

no questions at this time but I recommend reading the book of the same name!

1:27 PM · Sep 22, 2022

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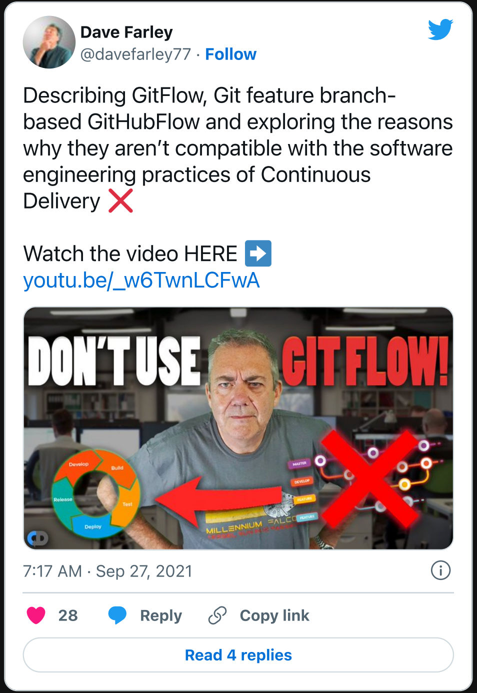
If not GitFlow, then what?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@davefarley77 · Follow

Describing GitFlow, Git feature branch-based GitHubFlow and exploring the reasons why they aren't compatible with the software engineering practices of Continuous Delivery ❌

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7:17 AM · Sep 27, 2021

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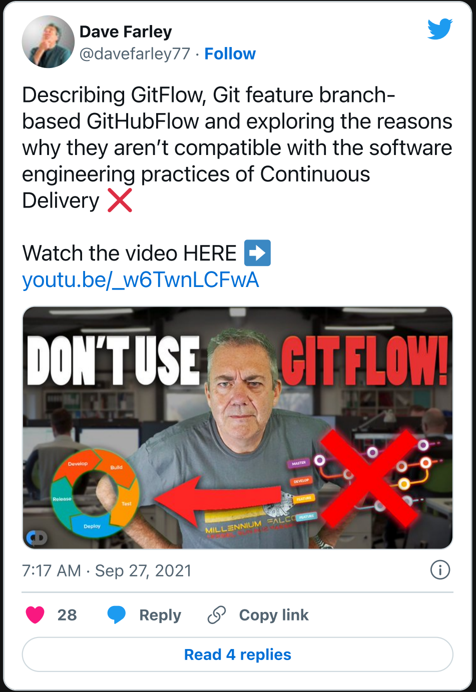
Constant, continuous feedback is ideal. We can't afford to wait too long to check if my changes work with yours.



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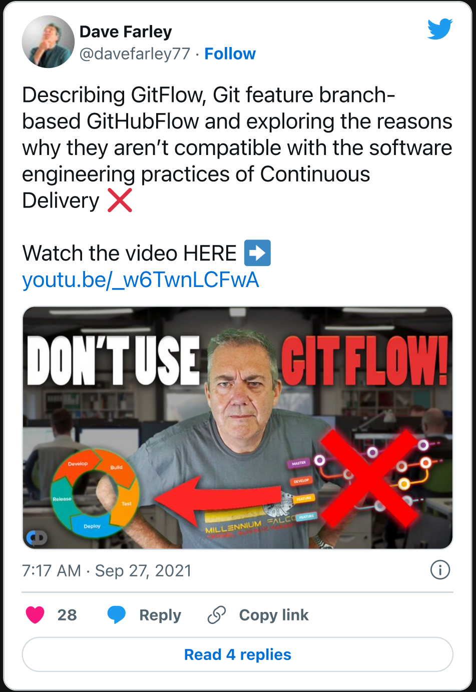

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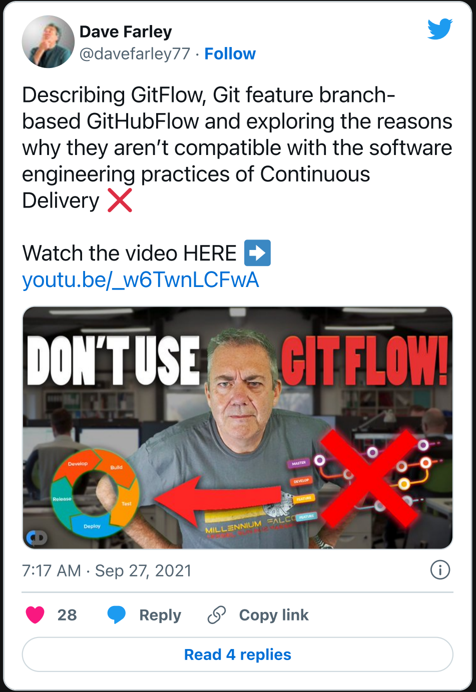

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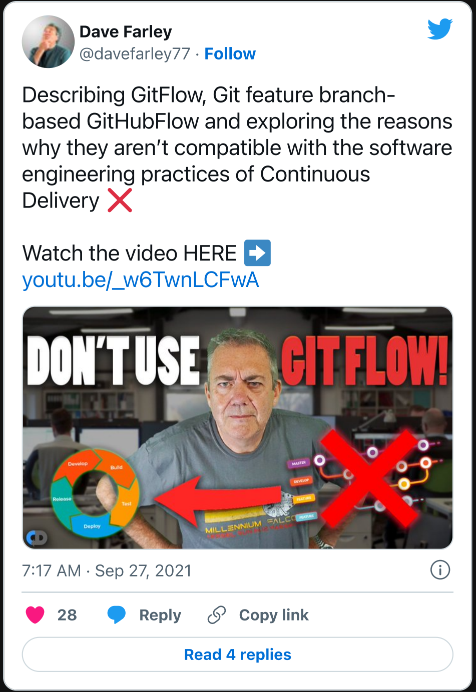
Farley encourages developers to merge directly into trunk, but that seems to subvert the Pull Request reviewing process. PRs are also useful for squashing commits and keeping trunk history tidy.



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Long-lived branches are eschewed.

Commits are flying into main branch.

A robust testing suite inspires confidence.

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Long-lived branches are eschewed.

Commits are flying into main branch.

A robust testing suite inspires confidence.

But what about work done towards a marketing release with a special launch date?

What if a new feature isn’t supposed to be enabled until the New Year, for example?

Feature flags to the rescue

finito