

Git-flow

12/21/20

How have we been using Git-Hub?

- Karyn has been working on one branch, while Tony and I have been working on another.
- Occasionally merging the differences between our branches to see each other's changes.

Issues:

- We weren't always up to date with changes on the other branch
- No centralized "development" branch.
- No way of knowing what code is currently deployed on the server

What is Git-flow?

A Git workflow defining a branching model designed around structured project releases. It was first published and popularised by [Vincent Driessen](#) (in 2010).

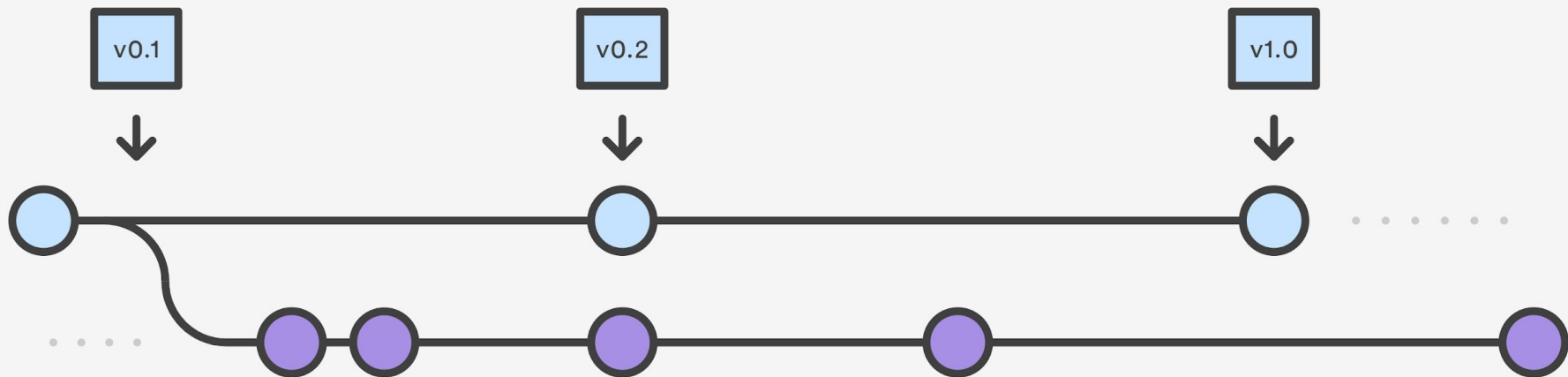
It dictates what kind of branches should be made for different parts of development, and details how they should interact with each other. There is a git-flow plugin which helps streamline and enforce some the concepts in the workflow.

The Main Branches

- master - HEAD always reflects production-ready (currently deployed) code. Each point in master is tagged with the version number of that release.
- develop - HEAD always reflects a state with the latest delivered development changes for the next release.

Master

Develop



Feature Branches

Branches forked off of the develop branch. They never directly interact with master.

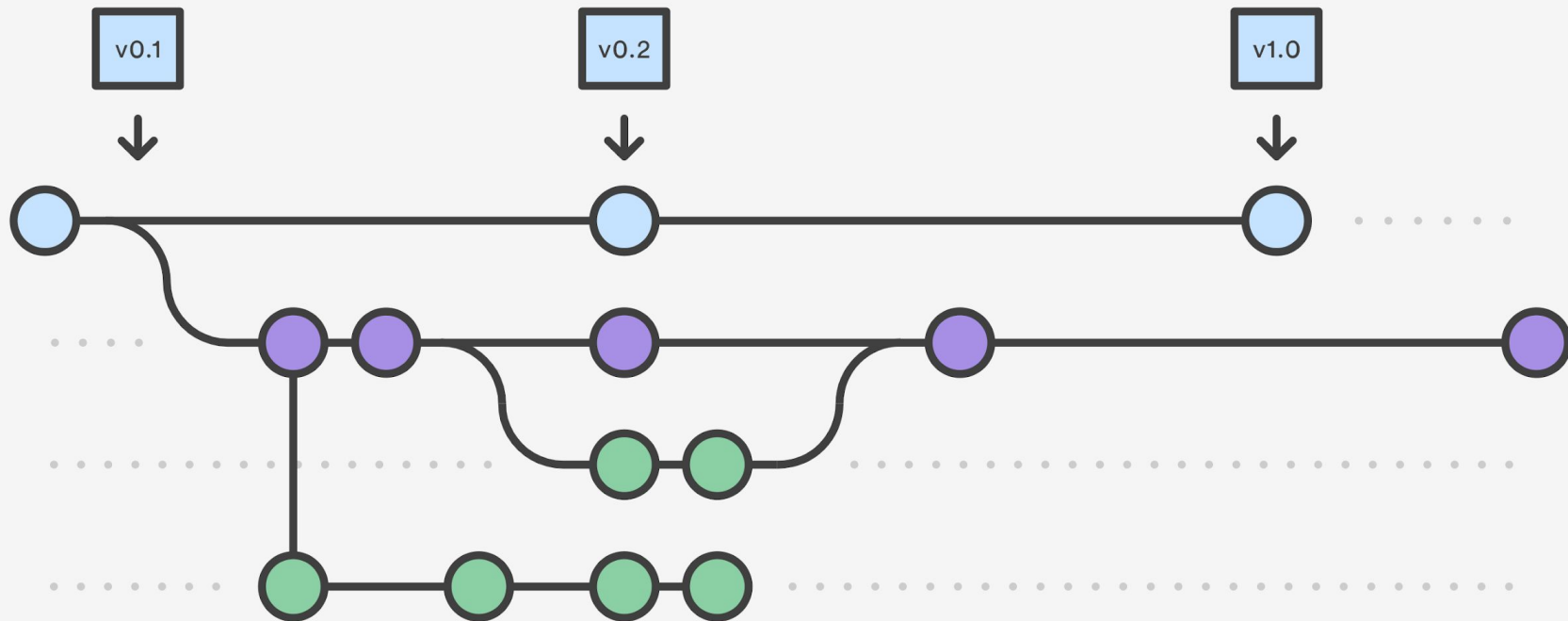
When a feature is complete, it is merged back into the develop branch

Master

Develop

Feature

Feature



Release Branches

When develop has enough new features/updates for a release, a release branch is forked off of develop. No new features will be added to this branch, only bug fixes and release oriented tasks.

Any features added to the develop branch during this time will be for the next release.

After the release is finalized, the branch will be merged into master, tagged with a version number, and back merged into develop.

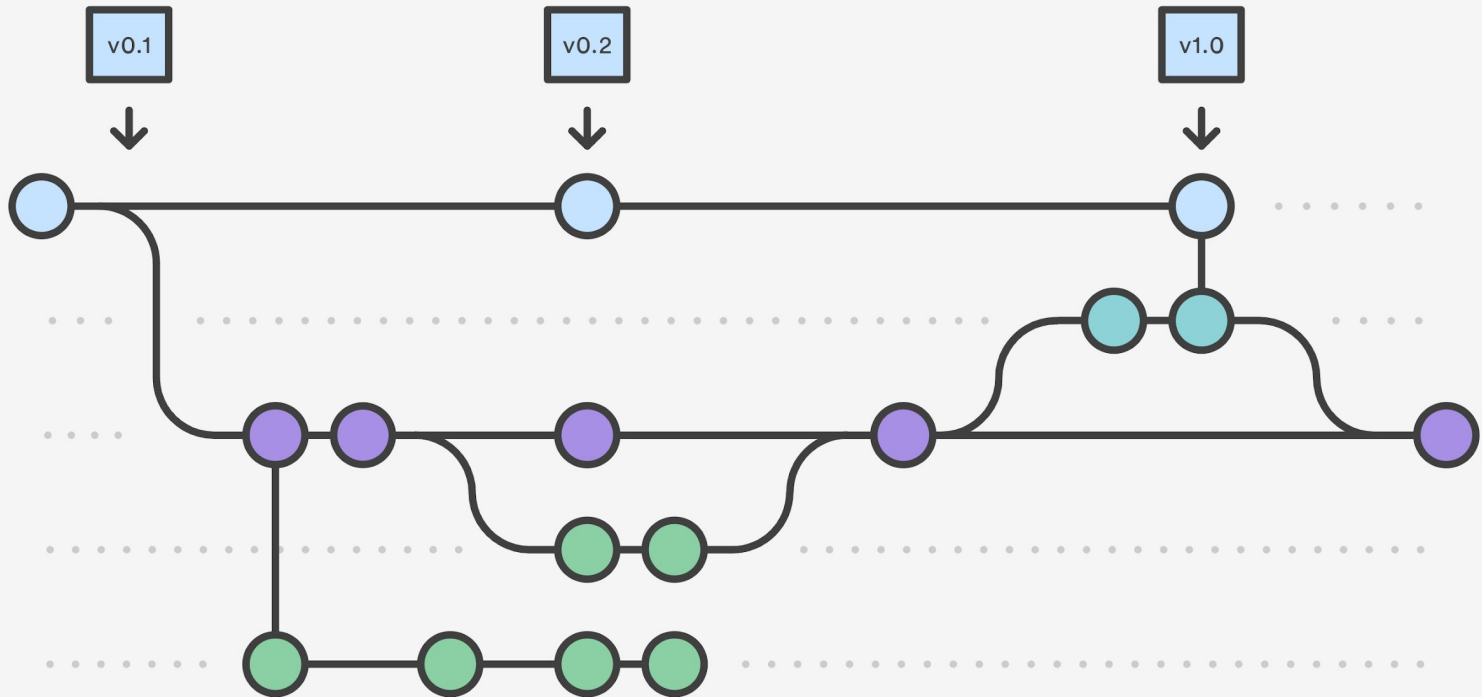
Master

Release

Develop

Feature

Feature



Hotfix Branches

Used to patch production releases.

This branch forks off of the master branch. Once the bug has been fixed, it should be merged into both master and develop, and master should be tagged with the new version number.

Master

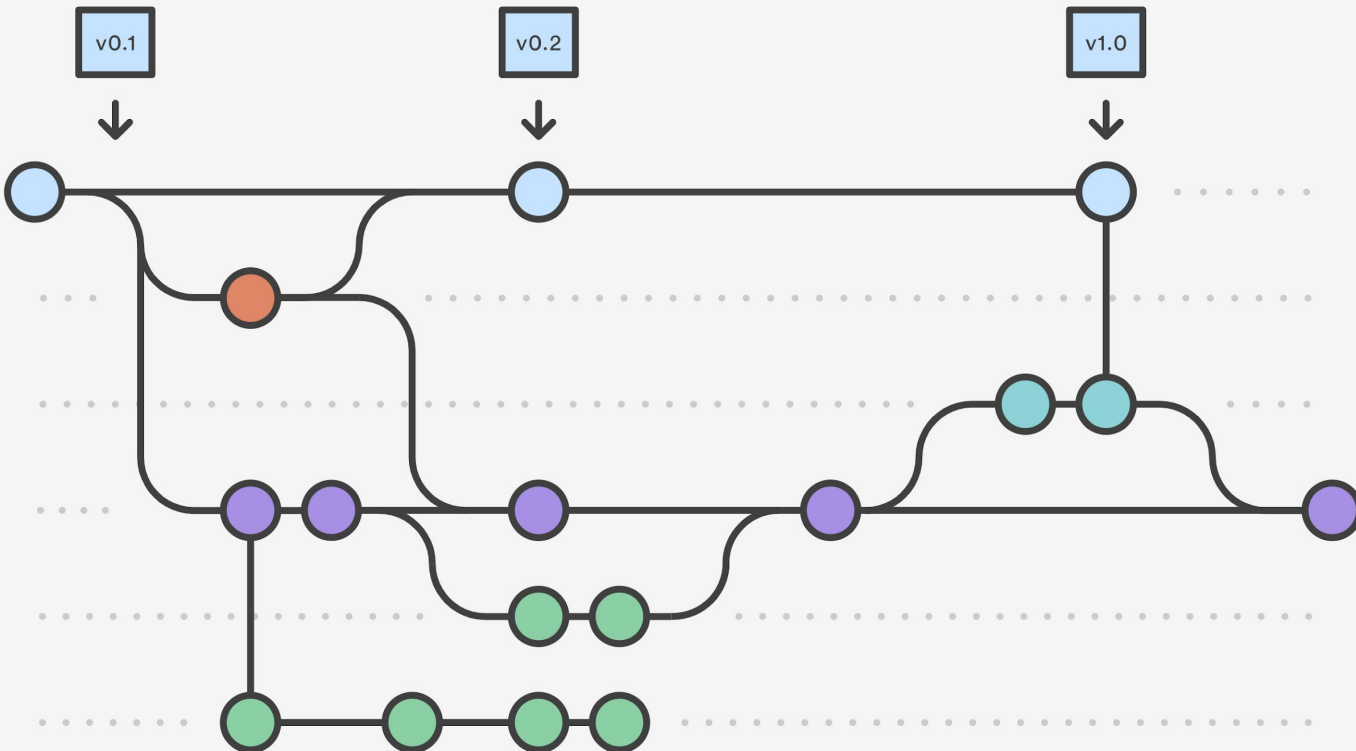
Hotfix

Release

Develop

Feature

Feature



How to remember all these rules and procedures?

You mostly won't need to!

git-flow is an extension on top of git which provides high-level commands based on Vincent Driessen's git-flow branching model.

Demo?

How to install the git-flow extension

Windows

- If you installed git from gitforwindows.org, you're all set because it is included by default!

Mac

- Using Homebrew: `$ brew install git-flow`

[Full installation instructions](#)

Helpful Links

- [Atlassian: Gitflow Workflow](#)
- [Original Vincent Driessen blog post](#)
- [git-flow plugin article by Jeff Kreeftmeijer](#)
- [git-flow plugin GitHub](#)
- [git-flow autocomplete](#) (when pressing tab in the terminal)