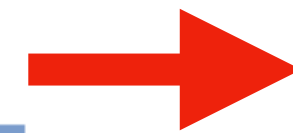# Git
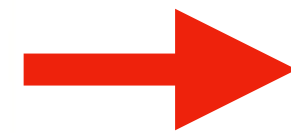
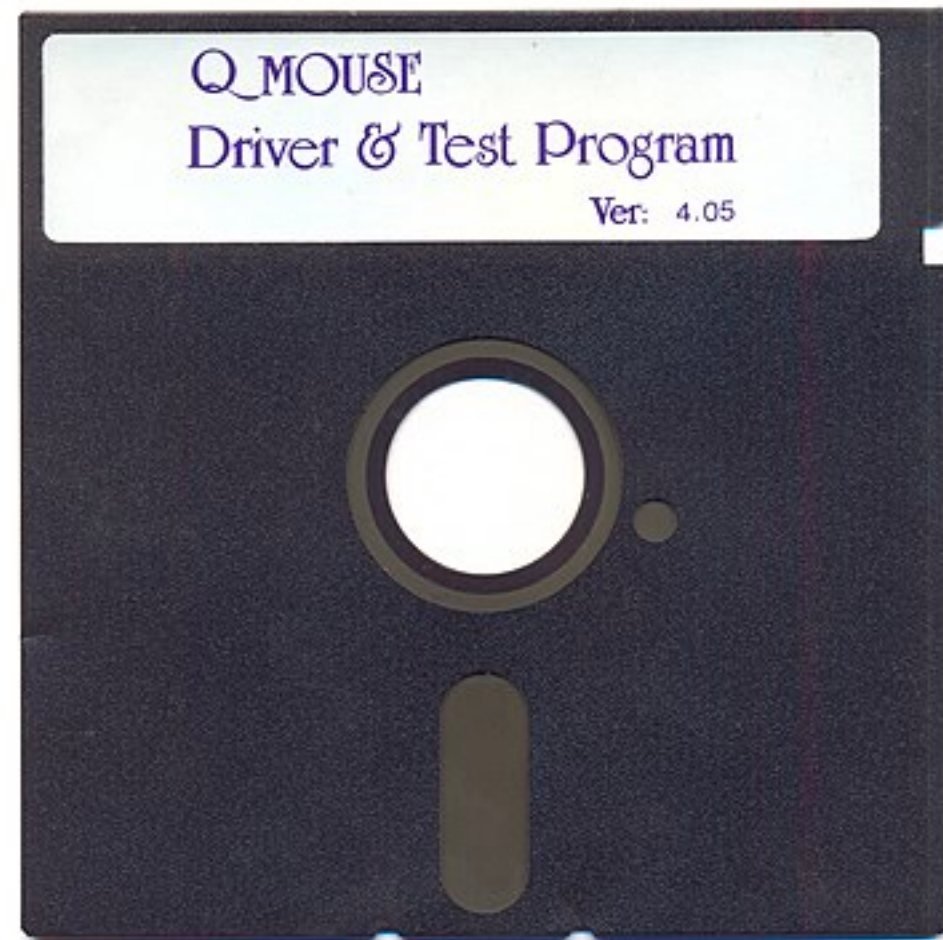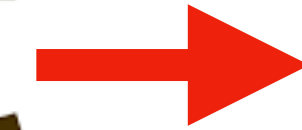**Roman Fedytskyi JSP React competency lead**
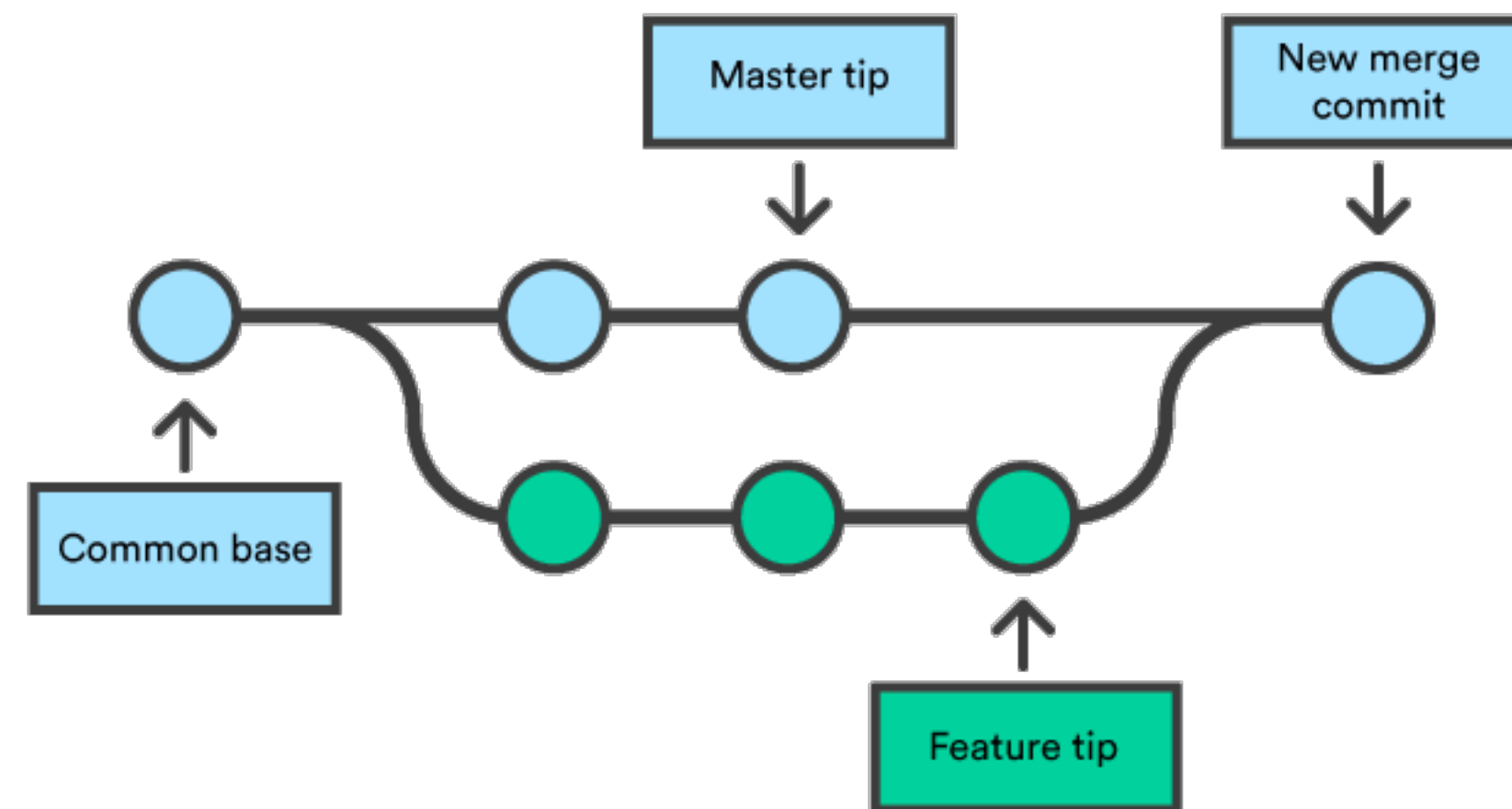
What was before?

It was a nightmare

What is Git?

Git is a free and open source distributed version control system designed to handle everything from small to very large projects with speed and efficiency.
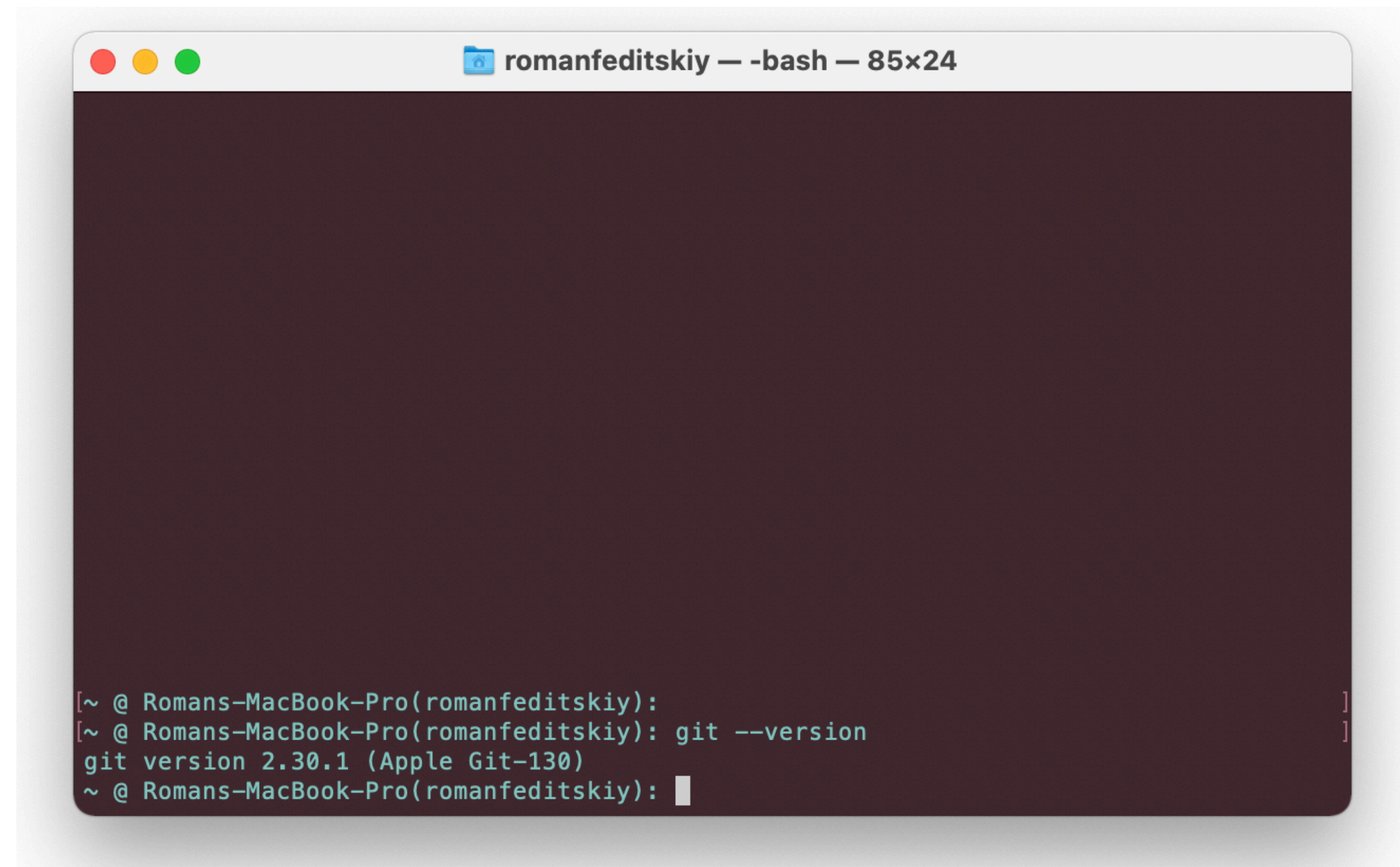
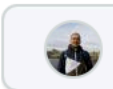# Download

WINDOWS

MAC OS

LINUX

Create project in GitHub

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? Import a repository.

Owner *

Repository name *

RomanFedytskyi ▾ / Git Basic ✓

Great repository names are shor... ut **curly-robot**?

> Your new repository will be created as **Git-Basic**.

Description (optional)

○ ● **Public**
Anyone on the internet can see this repository. You choose who can commit.

○ **Private**
You choose who can see and commit to this repository.

Initialize this repository with:
Skip this step if you're importing an existing repository.

☐ **Add a README file**
This is where you can write a long description for your project. Learn more.

☐ **Add .gitignore**
Choose which files not to track from a list of templates. Learn more.

☐ **Choose a license**
A license tells others what they can and can't do with your code. Learn more.

Create repository

```
[~ @ Romans-MacBook-Pro(romanfeditskiy): ls
Applications/                        Untitled.ipynb
Creative Cloud Files/                WarThunderLauncherLogs/
Creative Cloud Files (archived) (1)/  awscli-bundle/
Desktop/                             awscli-bundle.zip
Documents/                           cache/
Downloads/                           get-pip.py
Library/                             iCloud Drive (Archive)/
Movies/                              iCloud Drive (Archive) - 1/
Music/                               javasharedresources/
My Games/                            jsp-key/
Parallels/                           jsp-key.pub
Pictures/                            nano.save
Postman/                             node_modules/
Public/                              package-lock.json
SecuritySpy/                         roman@seed2lead.nl Creative Cloud Files/
[~ @ Romans-MacBook-Pro(romanfeditskiy): cd Desktop/
total 1156
-rw-r--r--@ 1 romanfeditskiy  staff    14K Nov  2 12:03 .DS_Store
-rw-r--r--@ 1 romanfeditskiy  staff   192K Nov  1 15:50 11 Fedytskyi.pdf
-rw-r--r--@ 1 romanfeditskiy  staff   194K Nov  1 15:50 12 Fedytskyi.pdf
-rw-r--r--@ 1 romanfeditskiy  staff   195K Nov  1 15:50 4_21 Fedytskyi.pdf
-rw-r--r--@ 1 romanfeditskiy  staff   195K Nov  1 15:50 8 Fedytskyy.pdf
-rw-r--r--@ 1 romanfeditskiy  staff   193K Nov  1 15:50 AKT nadanykh posluh.pdf
drwxr-xr-x  2 romanfeditskiy  staff    64B Nov  2 12:06 Git/
-rw-r--r--@ 1 romanfeditskiy  staff   159K Nov  1 21:43 Документ без назви.pdf
[~/Desktop @ Romans-MacBook-Pro(romanfeditskiy): cd Git/
[~/Desktop/Git @ Romans-MacBook-Pro(romanfeditskiy): git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /Users/romanfeditskiy/Desktop/Git/.git/
~/Desktop/Git @ Romans-MacBook-Pro(romanfeditskiy):
```
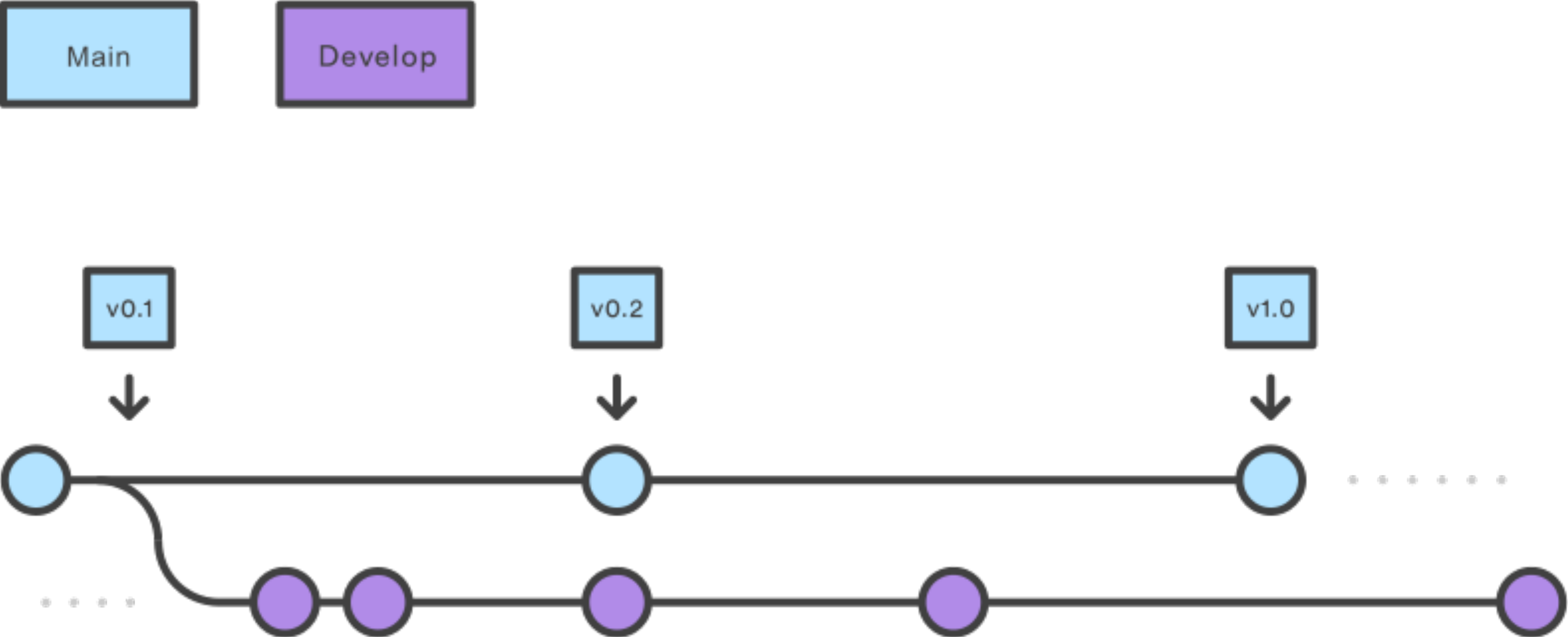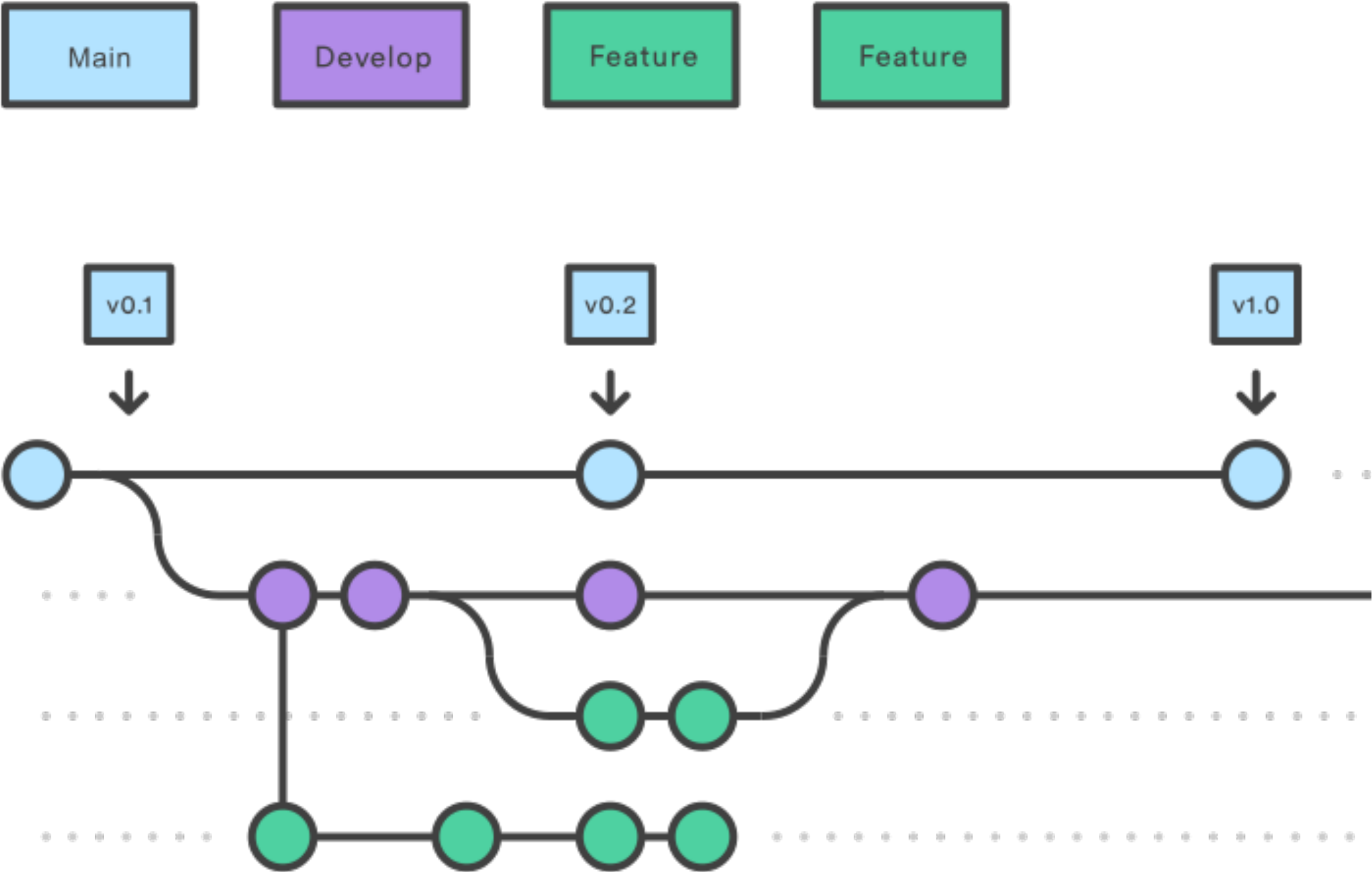
Basic commands

- git init

- git status

- git add
  - git add index.html
  - git add .

- git commit
  - git commit -m 'commit message'

- git branch
  - git branch
  - git branch branch-name
  - git branch -D branch-name

- git checkout
  - git checkout branch-name
  - git checkout -b branch-name

- git merge
  - git merge branch-name

- git config
  - git config --global user.name
  - git config --global user.name 'new user'
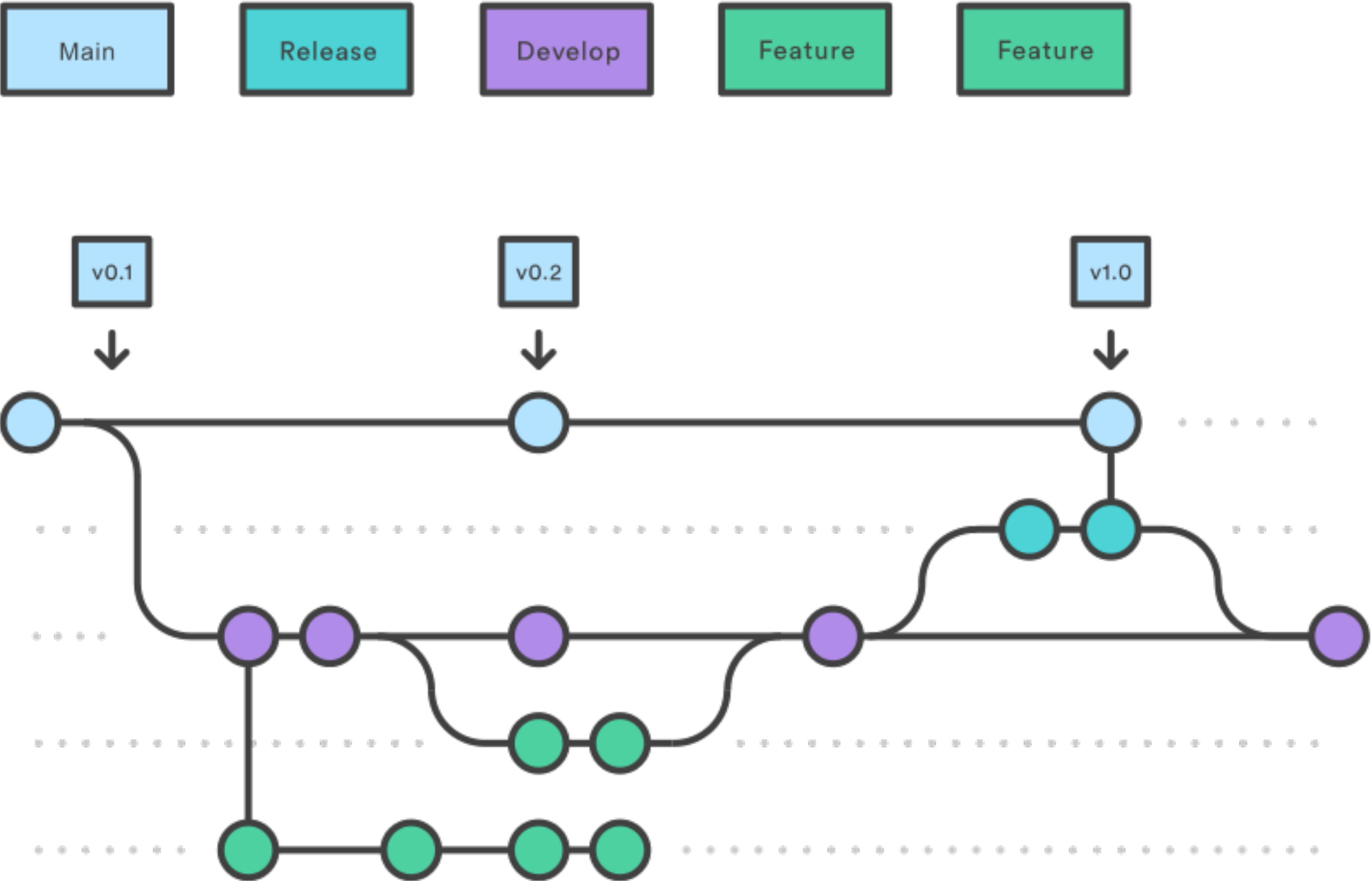 - git config --global user.email

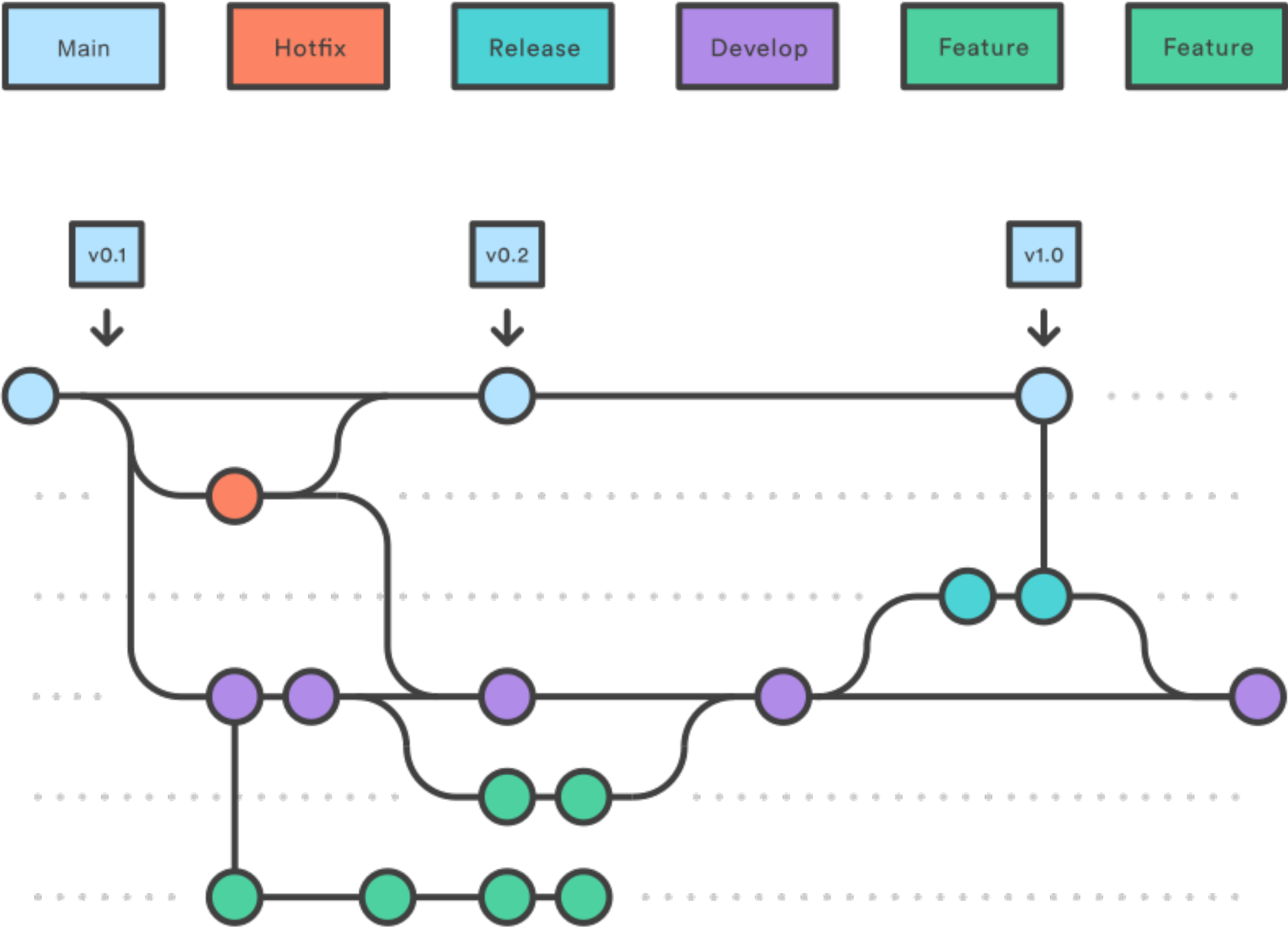- git push

- git pull

- git clone

Git Flow (Main flow)

Git Flow (Feature)

Git Flow (Release)

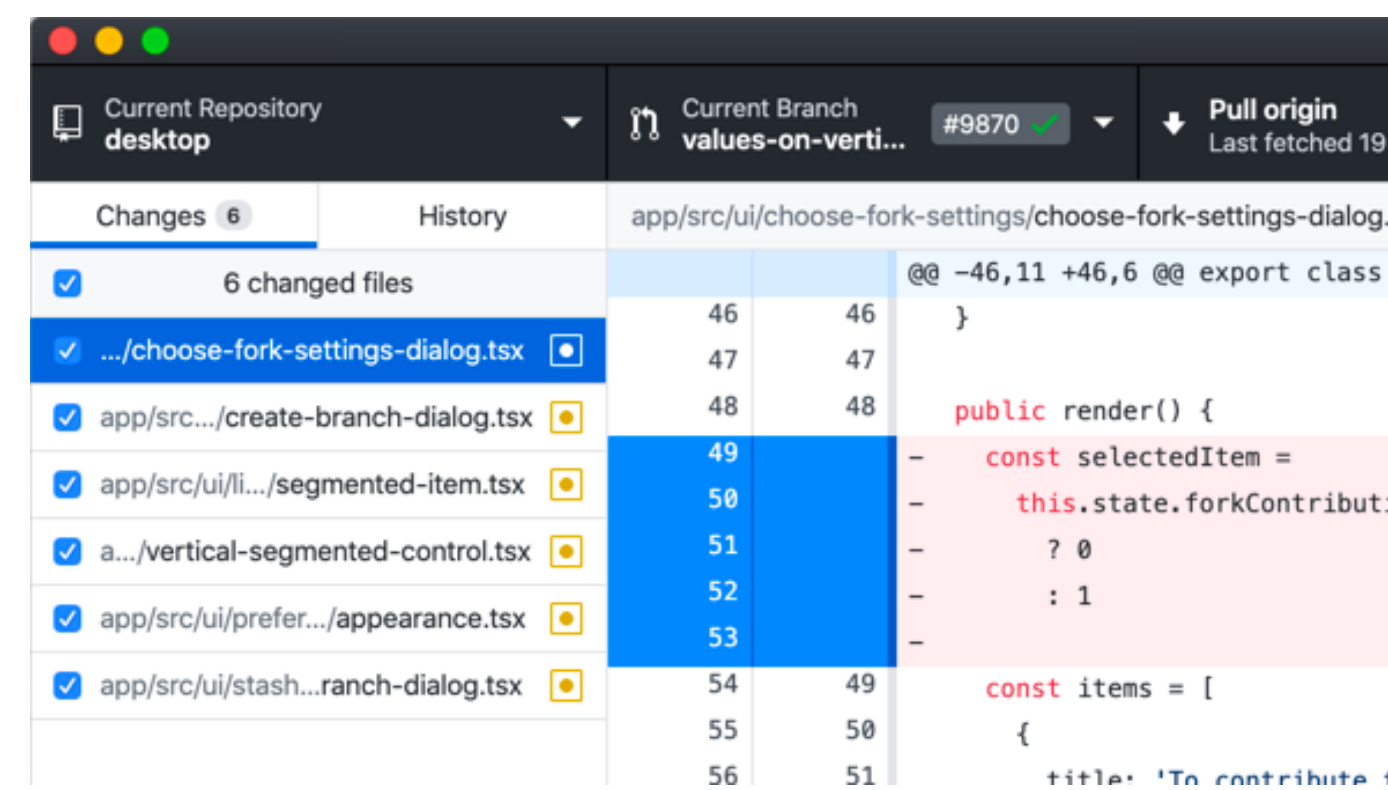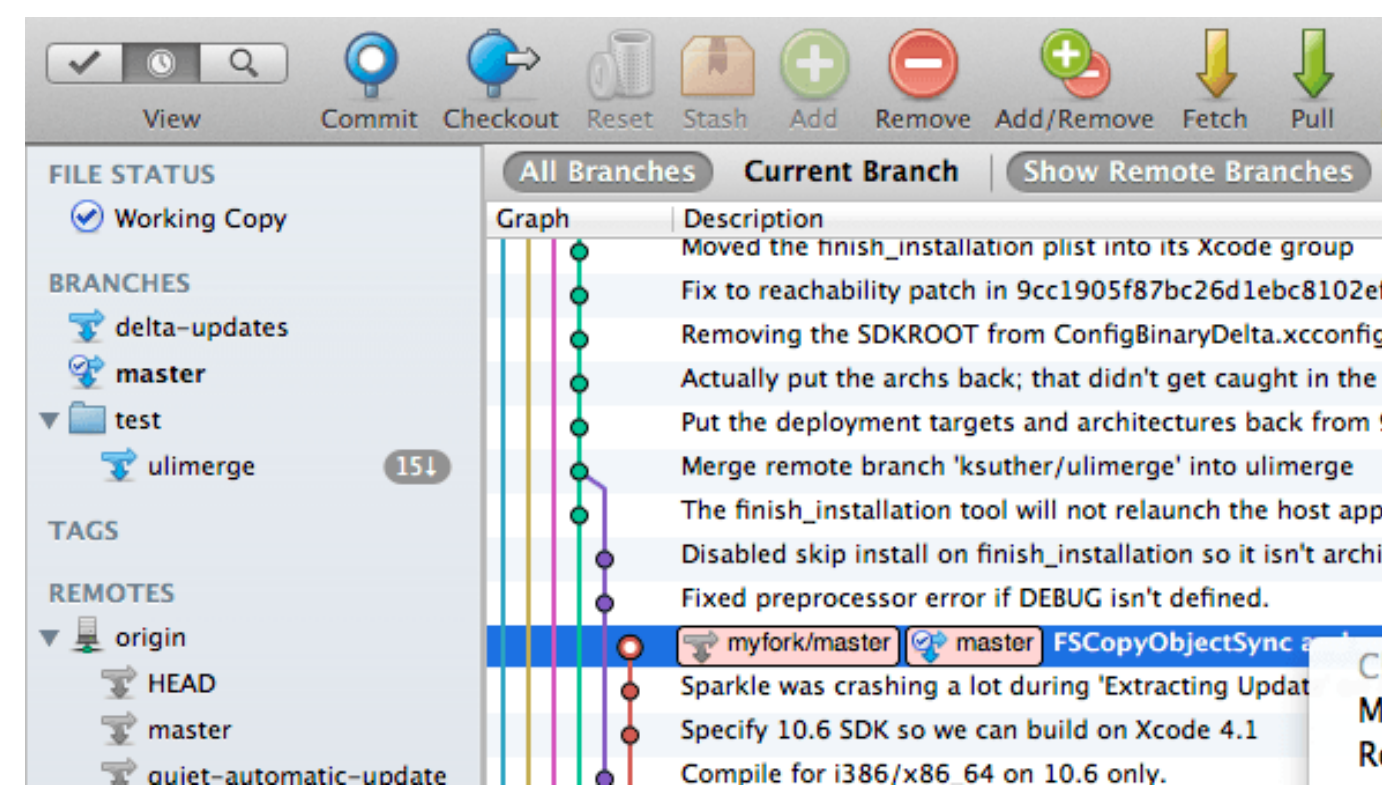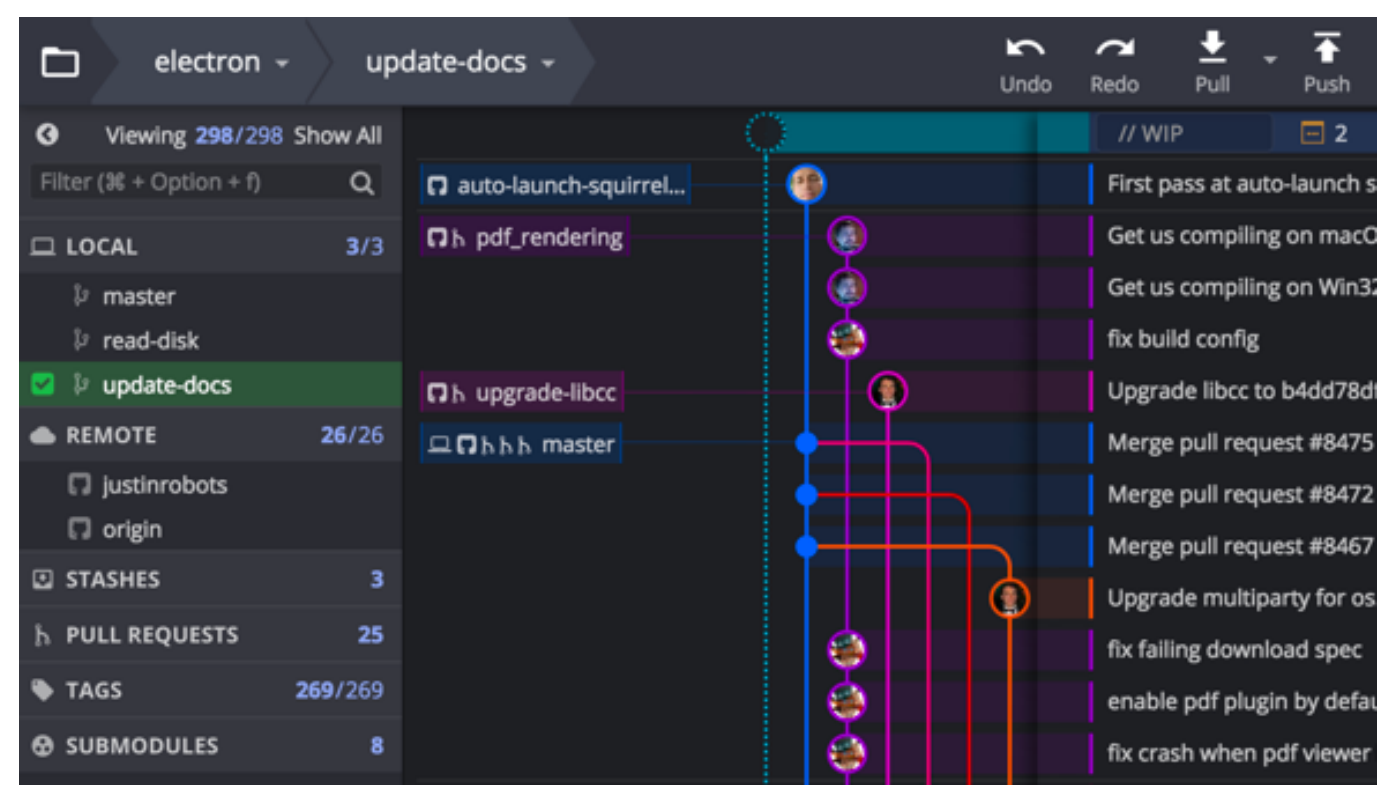# Git Flow (Hotfix)

Git visual client

GitHub Desktop

SourceTree

GitKraken