



Centre de Calcul de l'Institut National de Physique Nucléaire et de Physique des Particules

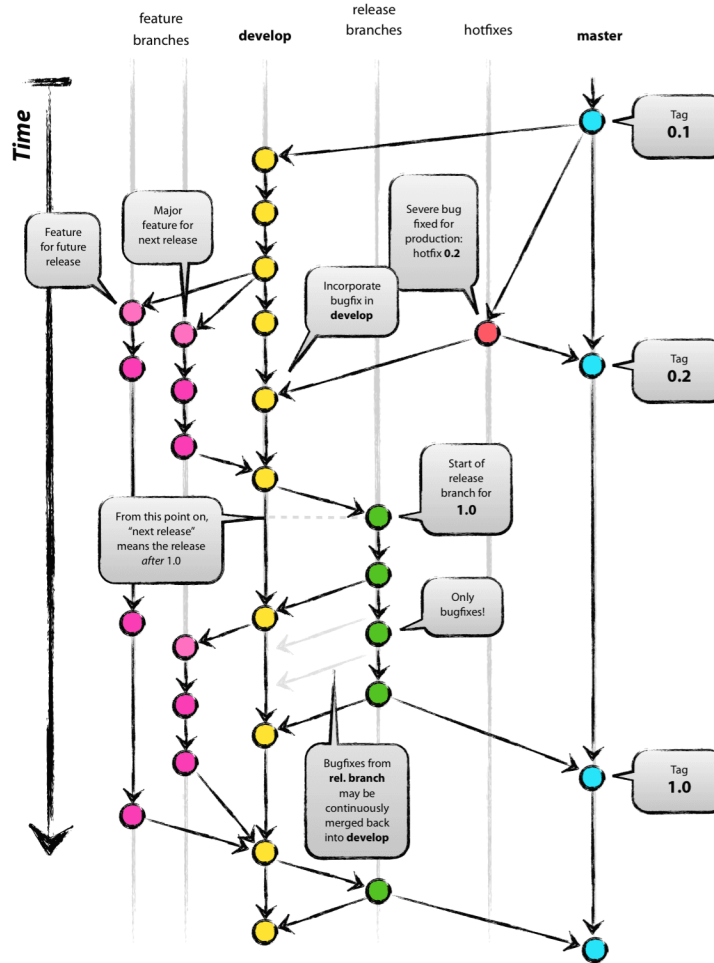
Gitflow

Aramis, 26 avril 2018, Jean-René ROUET



- ▶ Gitflow est une implémentation d'une méthodologie de développement logiciel en utilisant Git
- ▶ Il utilise massivement les branches
- ▶ C'est un outil ligne de commande
- ▶ Il ajoute des super commandes (qui utilisent des commandes Git)
- ▶ Tout est décrit sur un seul schéma

Le gros dessin



Author: Vincent Driessep
Original blog post: <http://nvie.com/archives/323>
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- ▶ <https://github.com/nvie/gitflow/wiki/Installation>
- ▶ On se place dans un dépôt
- ▶ On tape la commande « git flow init »

```
rouet@ccrouet ▶ ~/Documents/Experimentations/gitflow-demo ▶ master ▶ git flow init
```

```
Which branch should be used for bringing forth production releases?
```

```
- master
```

```
Branch name for production releases: [master]
```

```
Branch name for "next release" development: [develop]
```

```
How to name your supporting branch prefixes?
```

```
Feature branches? [feature/]
```

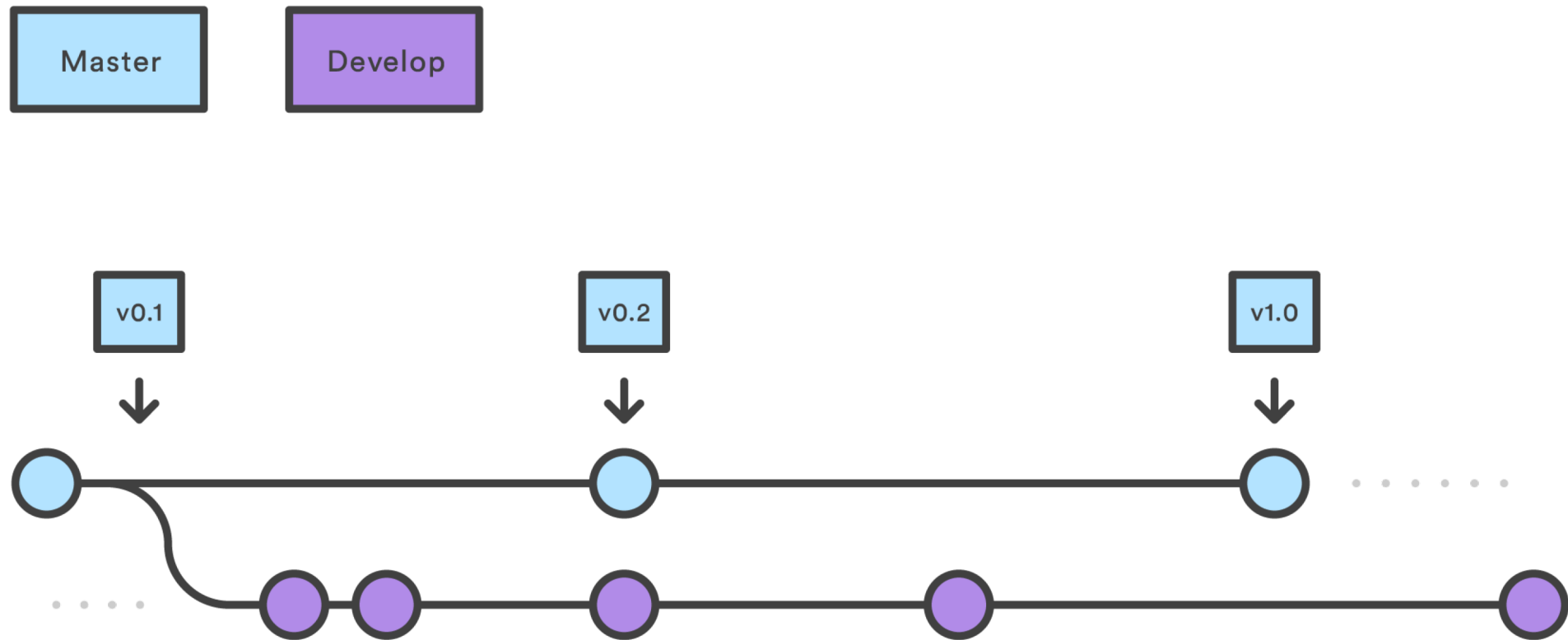
```
Release branches? [release/]
```

```
Hotfix branches? [hotfix/]
```

```
Support branches? [support/]
```

```
Version tag prefix? [] v
```

Une branche « Master » et une branche « Develop »



▶ On veut développer une nouvelle fonctionnalité

```
rouet@ccrouet ~/Documents/Experimentations/gitflow-demo develop git flow feature start
Missing argument <name>
usage: git flow feature [list] [-v]
       git flow feature start [-F] <name> [<base>]
       git flow feature finish [-rFK] <name|nameprefix>
       git flow feature publish <name>
       git flow feature track <name>
       git flow feature diff [<name|nameprefix>]
       git flow feature rebase [-i] [<name|nameprefix>]
       git flow feature checkout [<name|nameprefix>]
       git flow feature pull <remote> [<name>]

X rouet@ccrouet ~/Documents/Experimentations/gitflow-demo develop git flow feature start "introduction"
Switched to a new branch 'feature/introduction'

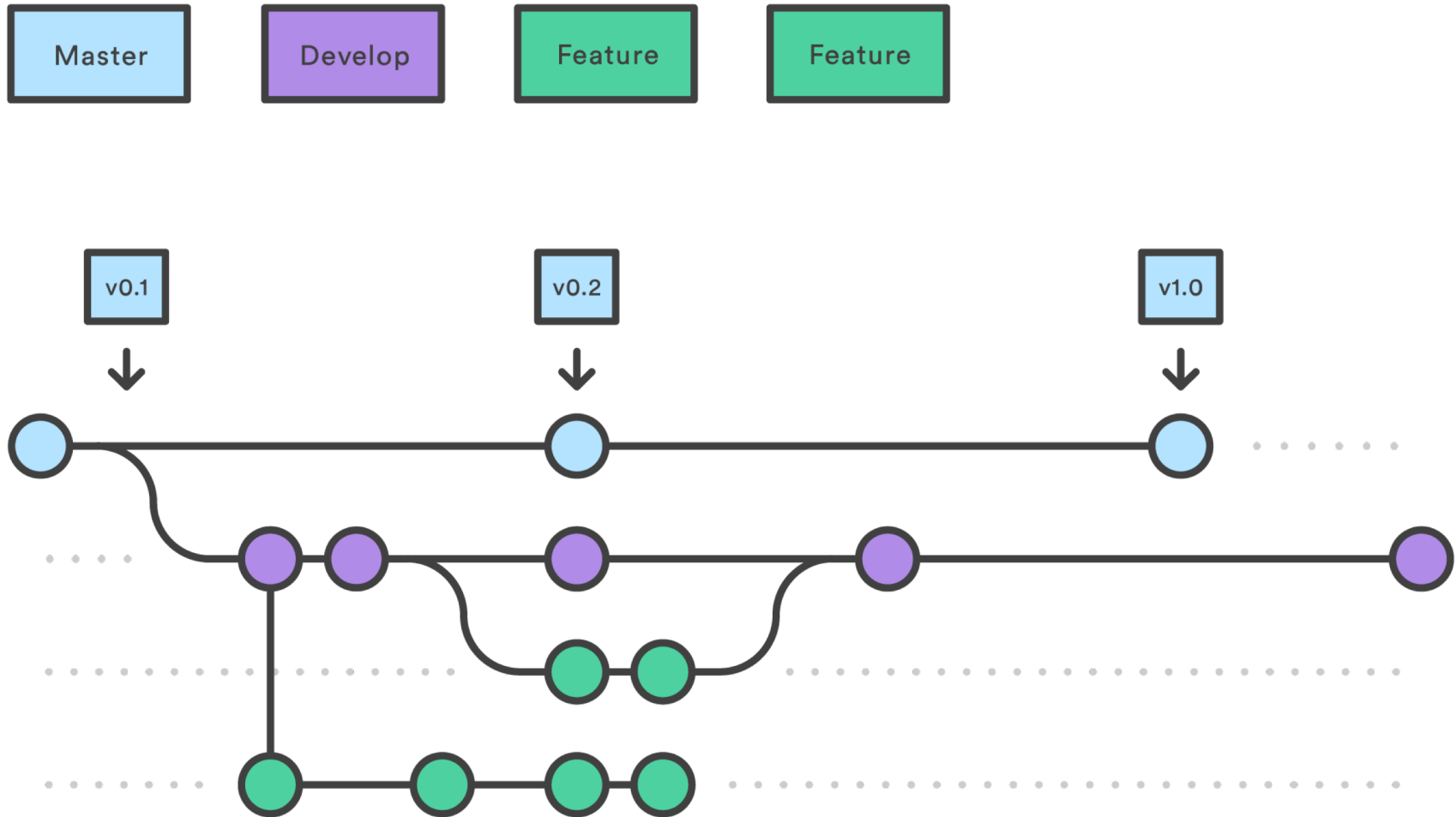
Summary of actions:
- A new branch 'feature/introduction' was created, based on 'develop'
- You are now on branch 'feature/introduction'

Now, start committing on your feature. When done, use:

    git flow feature finish introduction

rouet@ccrouet ~/Documents/Experimentations/gitflow-demo feature/introduction git branch | cat
develop
* feature/introduction
master
rouet@ccrouet ~/Documents/Experimentations/gitflow-demo feature/introduction
```

Des branches « Feature » »



- ▶ On code
- ▶ On finale « Feature »

```
rouet@ccrouet ~/Documents/Experimentations/gitflow-demo | feature/introduction | git st
On branch feature/introduction
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

       modified:   README.md

no changes added to commit (use "git add" and/or "git commit -a")
rouet@ccrouet ~/Documents/Experimentations/gitflow-demo | feature/introduction | git add .
rouet@ccrouet ~/Documents/Experimentations/gitflow-demo | feature/introduction | git commit -m "introduction"
[feature/introduction 257054e] introduction
 1 file changed, 3 insertions(+), 1 deletion(-)
rouet@ccrouet ~/Documents/Experimentations/gitflow-demo | feature/introduction | git flow feature finish "introduction"
Switched to branch 'develop'
Updating d033100..257054e
Fast-forward
 README.md | 4 +++-
 1 file changed, 3 insertions(+), 1 deletion(-)
Deleted branch feature/introduction (was 257054e).

Summary of actions:
- The feature branch 'feature/introduction' was merged into 'develop'
- Feature branch 'feature/introduction' has been removed
- You are now on branch 'develop'

rouet@ccrouet ~/Documents/Experimentations/gitflow-demo | develop |
```


▶ On veut fournir une « Release »

```

rouet@ccrouet ~~/Documents/Experimentations/gitflow-demo develop git flow release start "1.0"
Switched to a new branch 'release/1.0'

Summary of actions:
- A new branch 'release/1.0' was created, based on 'develop'
- You are now on branch 'release/1.0'

Follow-up actions:
- Bump the version number now!
- Start committing last-minute fixes in preparing your release
- When done, run:

  git flow release finish '1.0'

rouet@ccrouet ~~/Documents/Experimentations/gitflow-demo release/1.0 git add .
rouet@ccrouet ~~/Documents/Experimentations/gitflow-demo release/1.0 git st
On branch release/1.0
Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

    modified:   README.md

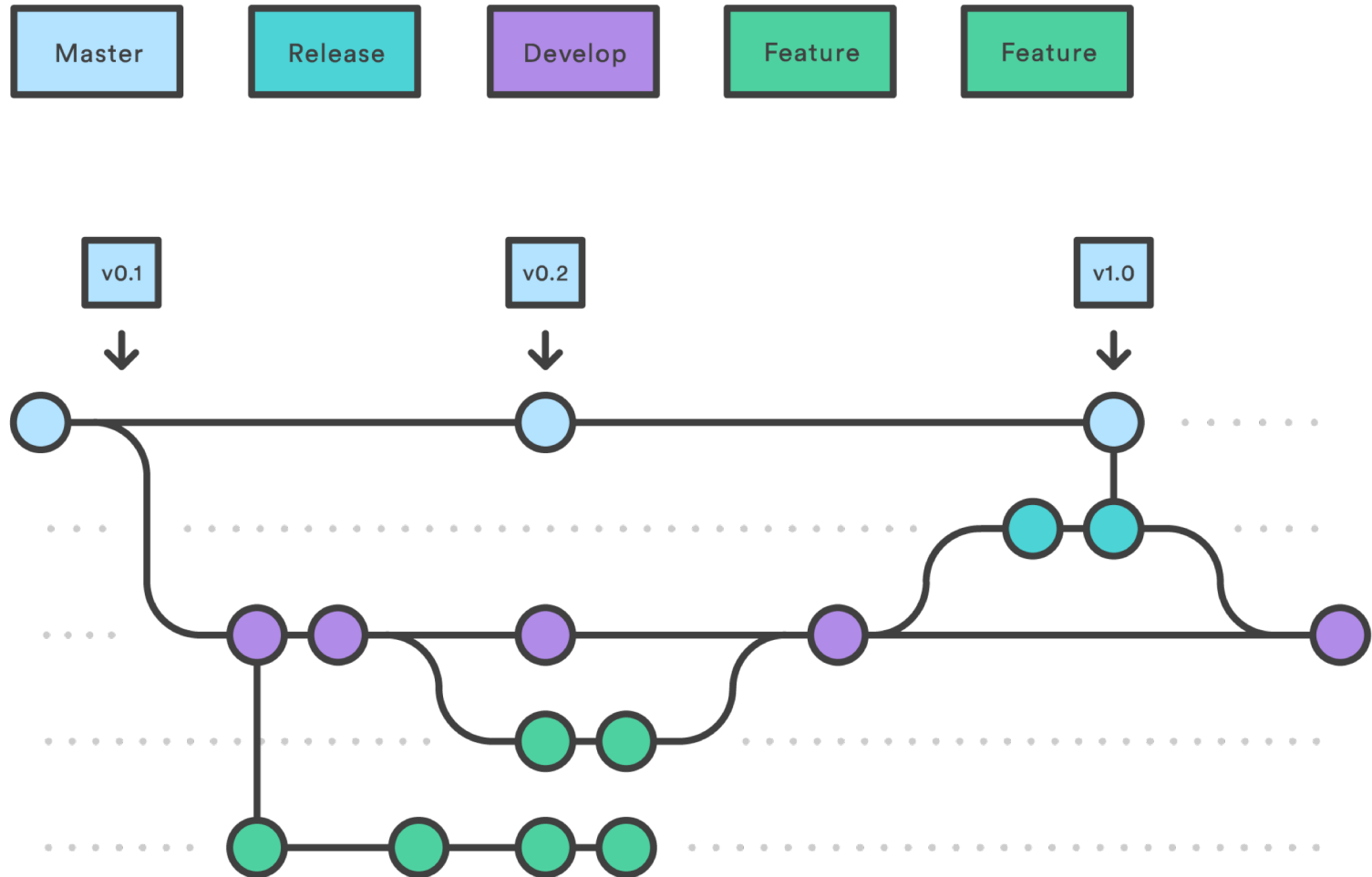
rouet@ccrouet ~~/Documents/Experimentations/gitflow-demo release/1.0 git commit -m "add release text"
[release/1.0 0e50b0a] add release text
1 file changed, 3 insertions(+), 1 deletion(-)
rouet@ccrouet ~~/Documents/Experimentations/gitflow-demo release/1.0 git flow release finish "1.0"
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
Merge made by the 'recursive' strategy.
 README.md | 5 +++++
1 file changed, 5 insertions(+)
Switched to branch 'develop'
Merge made by the 'recursive' strategy.
 README.md | 4 +++-
1 file changed, 3 insertions(+), 1 deletion(-)
Deleted branch release/1.0 (was 0e50b0a).

Summary of actions:
- Latest objects have been fetched from 'origin'
- Release branch has been merged into 'master'
- The release was tagged 'v1.0'
- Release branch has been back-merged into 'develop'
- Release branch 'release/1.0' has been deleted

rouet@ccrouet ~~/Documents/Experimentations/gitflow-demo develop

```

Une branche « Release »



- ▶ Mais il y a des développements en cours « Develop » ou « Feature »

```
rouet@ccrouet ~/Documents/Experimentations/gitflow-demo develop git flow feature start "chapitre_1"
Switched to a new branch 'feature/chapitre_1'

Summary of actions:
- A new branch 'feature/chapitre_1' was created, based on 'develop'
- You are now on branch 'feature/chapitre_1'

Now, start committing on your feature. When done, use:

    git flow feature finish chapitre_1

rouet@ccrouet ~/Documents/Experimentations/gitflow-demo feature/chapitre_1 git flow hotfix start "1.0.1"
Branches 'master' and 'origin/master' have diverged.
And local branch 'master' is ahead of 'origin/master'.
Switched to a new branch 'hotfix/1.0.1'

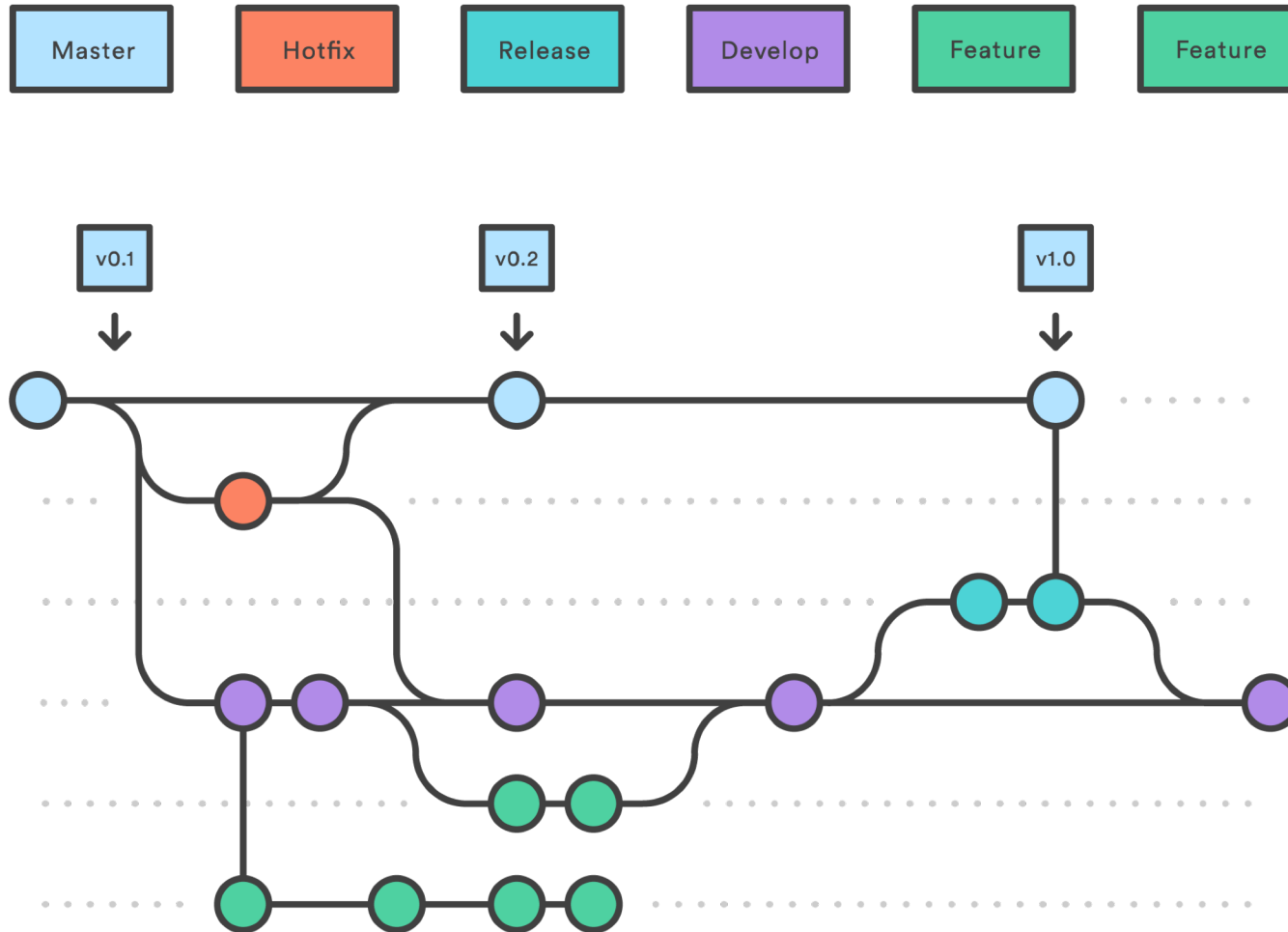
Summary of actions:
- A new branch 'hotfix/1.0.1' was created, based on 'master'
- You are now on branch 'hotfix/1.0.1'

Follow-up actions:
- Bump the version number now!
- Start committing your hot fixes
- When done, run:

    git flow hotfix finish '1.0.1'

rouet@ccrouet ~/Documents/Experimentations/gitflow-demo hotfix/1.0.1 git branch| cat
develop
feature/chapitre_1
* hotfix/1.0.1
master
rouet@ccrouet ~/Documents/Experimentations/gitflow-demo hotfix/1.0.1
```

Une branche « Hotfix »



```
rouet@ccrouet ~/Documents/Experimentations/gitflow-demo hotfix/1.0.1 git st
On branch hotfix/1.0.1
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git checkout -- <file>..." to discard changes in working directory)

        modified:   README.md

no changes added to commit (use "git add" and/or "git commit -a")
rouet@ccrouet ~/Documents/Experimentations/gitflow-demo hotfix/1.0.1 git add .
rouet@ccrouet ~/Documents/Experimentations/gitflow-demo hotfix/1.0.1 git commit -m "hotfix"
[hotfix/1.0.1 01a46b4] hotfix
1 file changed, 1 insertion(+), 1 deletion(-)
rouet@ccrouet ~/Documents/Experimentations/gitflow-demo hotfix/1.0.1 git flow hotfix finish "1.0.1"
Branches 'master' and 'origin/master' have diverged.
And local branch 'master' is ahead of 'origin/master'.
Switched to branch 'master'
Your branch is ahead of 'origin/master' by 4 commits.
  (use "git push" to publish your local commits)
Merge made by the 'recursive' strategy.
 README.md | 2 +-
1 file changed, 1 insertion(+), 1 deletion(-)
Switched to branch 'develop'
Merge made by the 'recursive' strategy.
 README.md | 2 +-
1 file changed, 1 insertion(+), 1 deletion(-)
Deleted branch hotfix/1.0.1 (was 01a46b4).

Summary of actions:
- Latest objects have been fetched from 'origin'
- Hotfix branch has been merged into 'master'
- The hotfix was tagged 'v1.0.1'
- Hotfix branch has been back-merged into 'develop'
- Hotfix branch 'hotfix/1.0.1' has been deleted

rouet@ccrouet ~/Documents/Experimentations/gitflow-demo develop git branch| cat
* develop
  feature/chapitre_1
  master
rouet@ccrouet ~/Documents/Experimentations/gitflow-demo develop
```

```
rouet@ccrouet > ~/Documents/Experimentations/gitflow-demo > develop > git co feature/chapitre_1  
Switched to branch 'feature/chapitre_1'  
rouet@ccrouet > ~/Documents/Experimentations/gitflow-demo > feature/chapitre_1 >
```

- ▶ <http://nvie.com/posts/a-successful-git-branching-model/>
- ▶ <https://www.atlassian.com/git/tutorials/comparing-workflows/gitflow-workflow>
- ▶ <http://blog.xebia.fr/2018/03/28/gitflow-est-il-le-workflow-dont-jai-besoin/>