



Gitflow

Overview

A guide how git flow could be implemented.

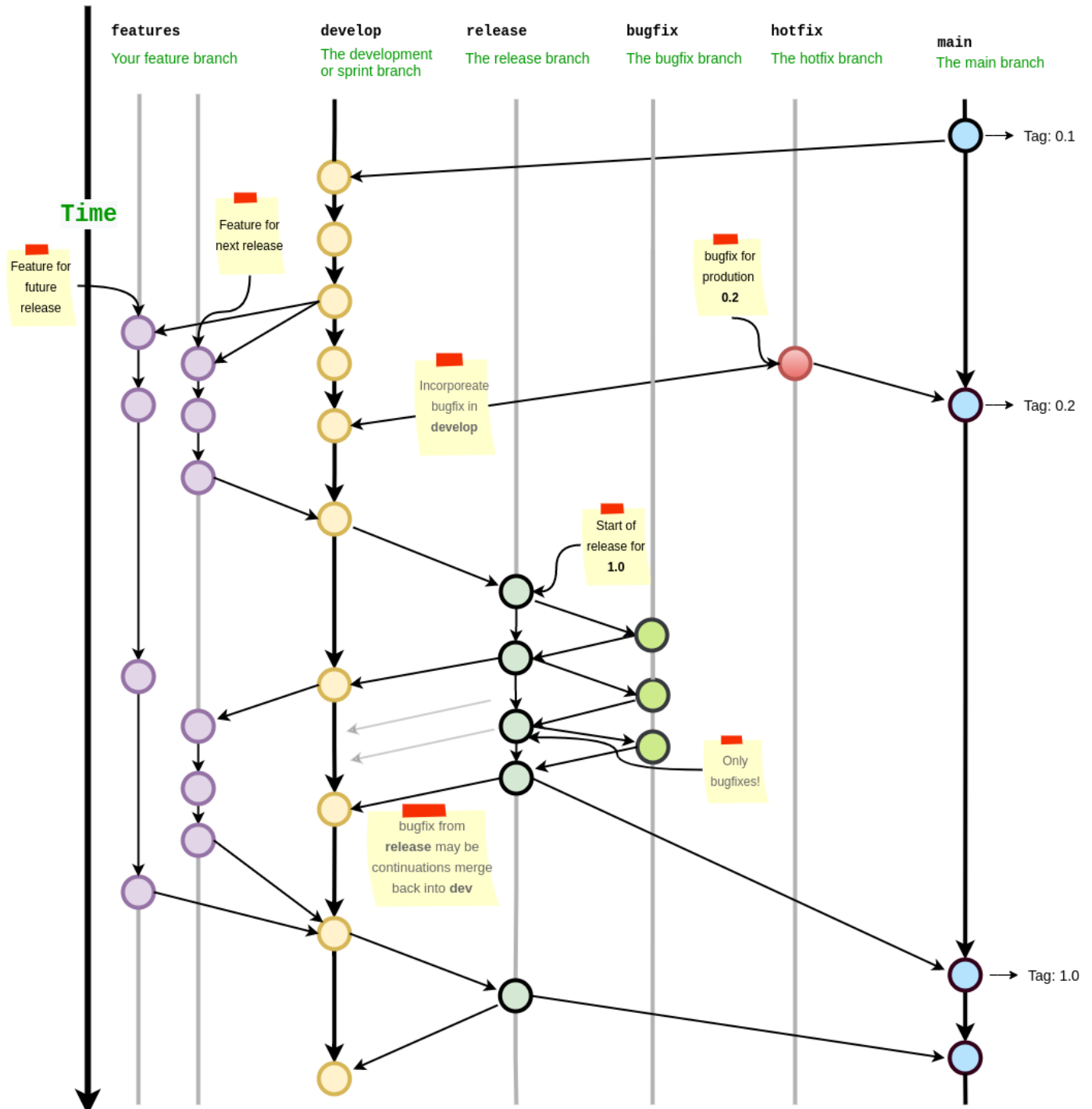
Objectives

1. Devops best practices
2. Support further CI automation
3. Improve code quality

Get Started

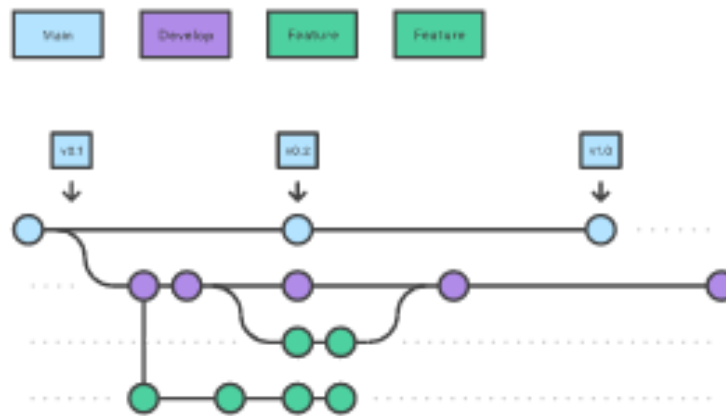
Branches overview:

- **main** - Live code. Updated only from PR. Abridged history version
- **develop** - Dev code (current Sprint). Complete history version
- **feature** - Branch off of develop. When a feature is complete, it gets merged back into develop
- **release** - Branch off of develop. No new feature at this point, only bug fixes. Merged into main(live) and tagged in addition merged back into develop when complete.
- **hotfix** - Quickly patch production releases. Only branch forked directly off of main. Merged into both main and develop(or current release).
- **bugfix** - Branch off release, It gets merged back into release.



Example

Creating a feature branch:

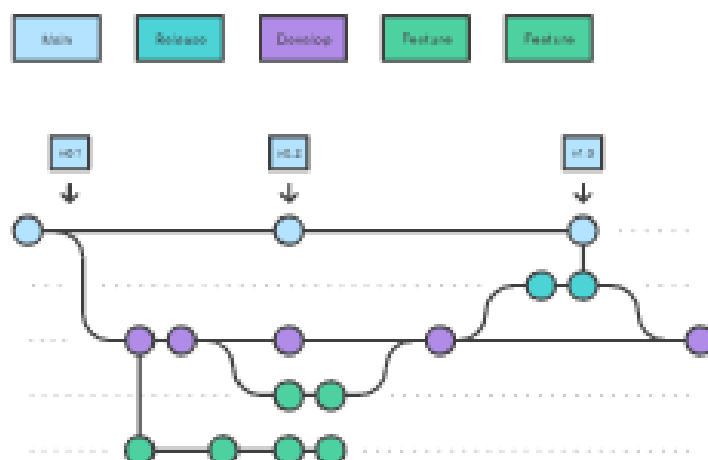


```
git checkout -b feature/login develop
```

Finishing a feature branch:

When you're done with the development work on the feature, the next step is to create a pull request to **develop**.

Creating a release branch:



This starts a new cycle, so no new features can be added after this point—only bug fixes.

```
git checkout -b release/v1.1.0 develop
```

When the release branch is finished, the next step is to create a pull request to **main**.

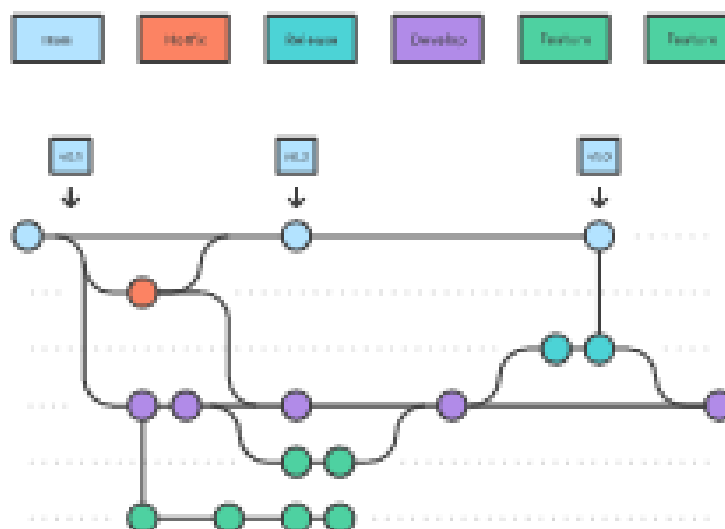
Create a **tag**:

```
git tag -a 1.1.0
git push --tags
```

Finally Pull Request to merge **release** into **develop**. Also resolve potential conflicts and mark the **release** branch to be deleted.

```
git checkout release/v1.1.0
git merge --no-ff origin develop
#Pull request to develop here
git branch -D release/v1.1.0
git push -d origin release/v1.1.0
```

Creating a hotfix branch:



Same as **release** branch:

```
git checkout -b hotfix/v1.1.1 main
```

To finalize a hotfix branch, create a pull request to **main**.

Create **tag**:

```
git tag -a v1.1.1
git push --tags
```

Merge **develop** into **hotfix**, to fix potential conflicts on **hotfix** and merge **hotfix** into **develop** and delete **hotfix**:

```
git checkout hotfix/v1.1.1
git merge --no-ff origin develop
git checkout develop
git merge --no-ff hotfix/1.1.1
git branch -D hotfix/v1.1.1
git push -d origin hotfix/v1.1.1
```

Pull Requests in a Gitflow Model

On all Pull requests, it is desirable to make meaningful comments.

To develop branch: A pull request is created by developers from their respective **feature** branches to merge code to the develop branch. Also a PR is created by technical lead or developer from **release** or **hotfix** to incorporate fixes to develop.

To release branch: A pull request is created by a developer from a **bugfix** branch to merge code to the release branch.

To main branch: A pull request is created by a technical lead or developer from the **release** branch or **hotfix** to merge code to the main branch.