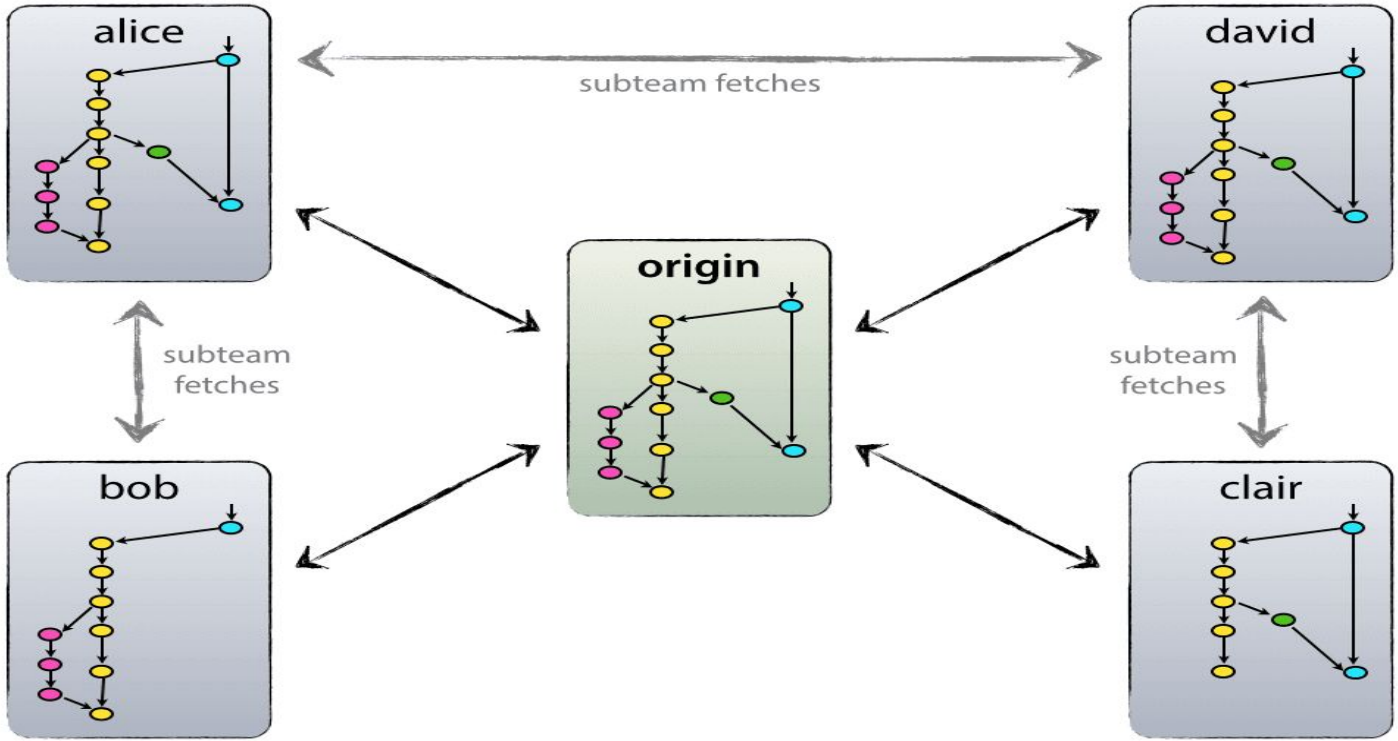
A Successful Git Branch Modeling

Decentralized but Centralized

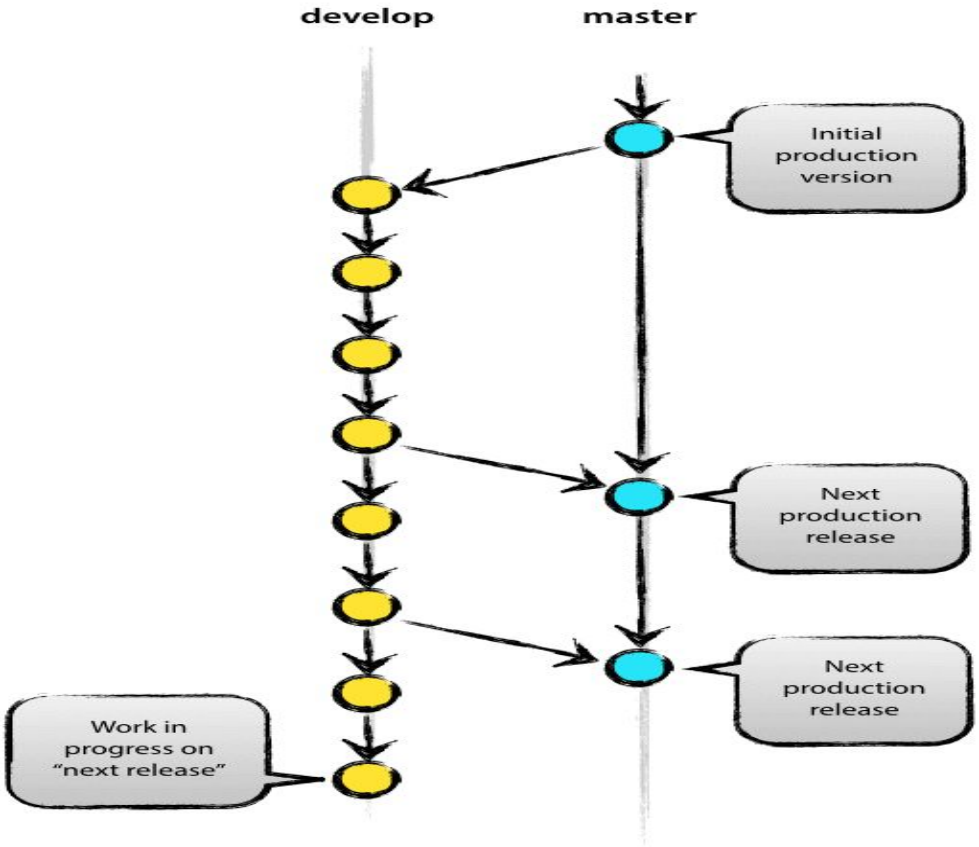


Main Branches

Master

Develop

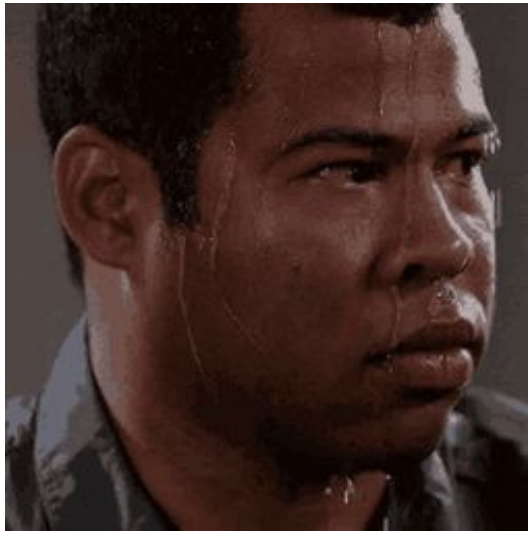
Main Branches (cont'd)



Supporting Branches

Feature

Release



Hotfix

Feature Branch

May branch off from:

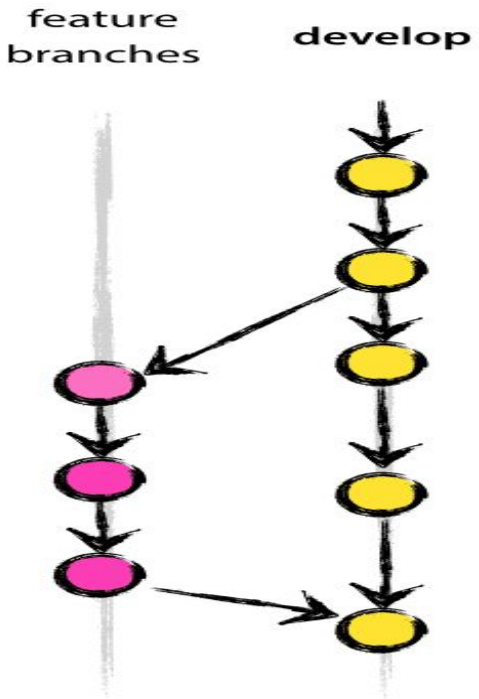
`develop`

Must merge back into:

`develop`

Branch naming convention:

anything except `master`, `develop`, `release-*`, or `hotfix-*`



Feature Branch (cont'd)

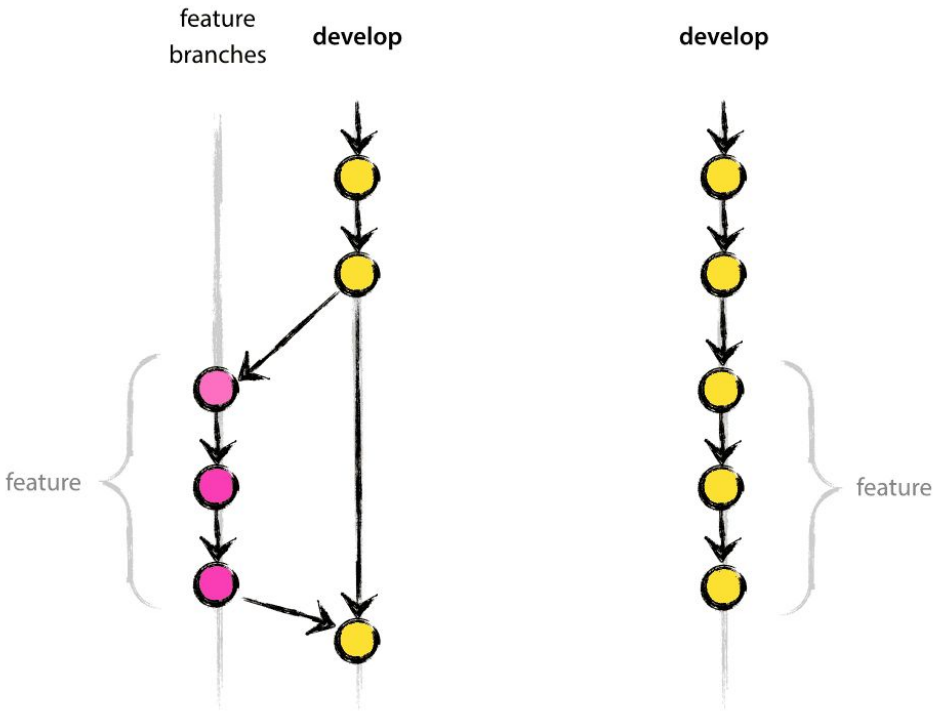
I) Creating a feature branch

```
$ git checkout -b myfeature develop
```

II) Incorporating a finished feature on develop

1. `$ git checkout develop`
2. `$ git merge --no-ff myfeature`
3. `$ git branch -d myfeature`
4. `$ git push origin develop`

Feature branch (cont'd)



Release Branch

May branch off from:

`develop`

Must merge back into:

`develop` and `master`

Branch naming convention:

`release-*`

When the code is going pretty well and ready for release.

Release Branch (cont'd)

➔ Creating a release branch

1.
```
$ git checkout -b release-1.2 develop

Switched to a new branch "release-1.2"
```

2.
```
$ git commit -a -m "Bumped version number to 1.2"

[release-1.2 74d9424] Bumped version number to 1.2

1 files changed, 1 insertions(+), 1 deletions(-
```

Release Branch (cont'd)

First two steps in Git:

I. Merge to master and tag
   1. `$ git checkout master`
   2. `$ git merge --no-ff release-1.2`
   3. `$ git tag -a 1.2`

➔ Merge back into develop
   1. `$ git checkout develop`
   2. `$ git merge --no-ff release-1.2`

Hotfix Branch

May branch off from:

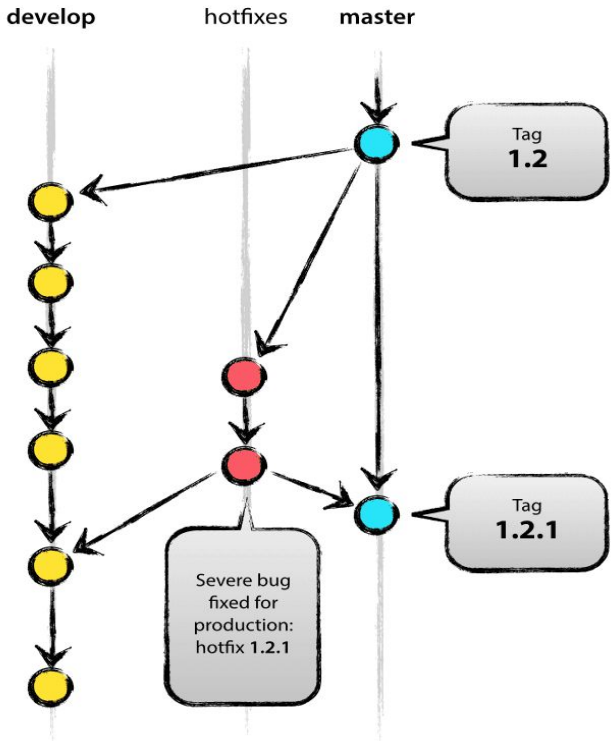
`master`

Must merge back into:

`develop` and `master`

Branch naming convention:

`hotfix-*`



Hotfix Branch (cont'd)

Creating the Hotfix Branch

```
1.  $ git checkout -b hotfix-1.2.1 master
2.  $ git commit -a -m "Bumped version number to 1.2.1"
```

Then, fix the bug and commit the fix

```
$ git commit -m "Fixed severe production problem"
```

Hotfix Branch

Finishing a hotfix branch

I. Update master and tag the release

```
1.  $ git checkout master
2.  $ git merge --no-ff hotfix-1.2.1
3.  $ git tag -a 1.2.1
```

II. Included the bugfix in develop branch

```
1.  $ git checkout develop
2.  $ git merge --no-ff hotfix-1.2.1
```

THANK YOU!