Tecniche e architetture avanzate per lo sviluppo del software

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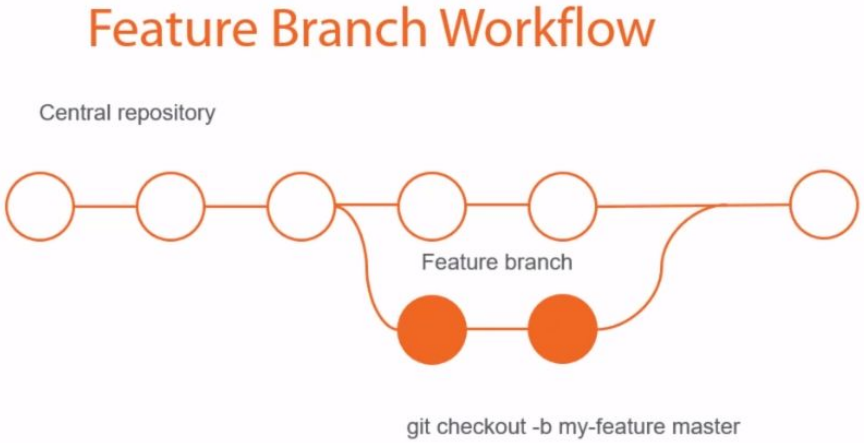
Universita' degli Studi Di Torino - Dipartimento di Informatica

Gitflow

Comparison

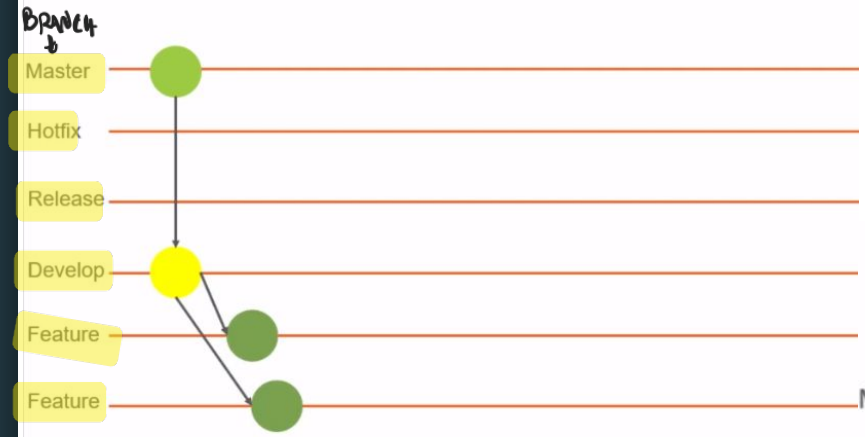
- Centralized (like SVN, CVS):
  - Centralized repository
  - End users clone the repository
  - Pull changes from repository to loca
  - Push local changes to central repository
- Feature branch:



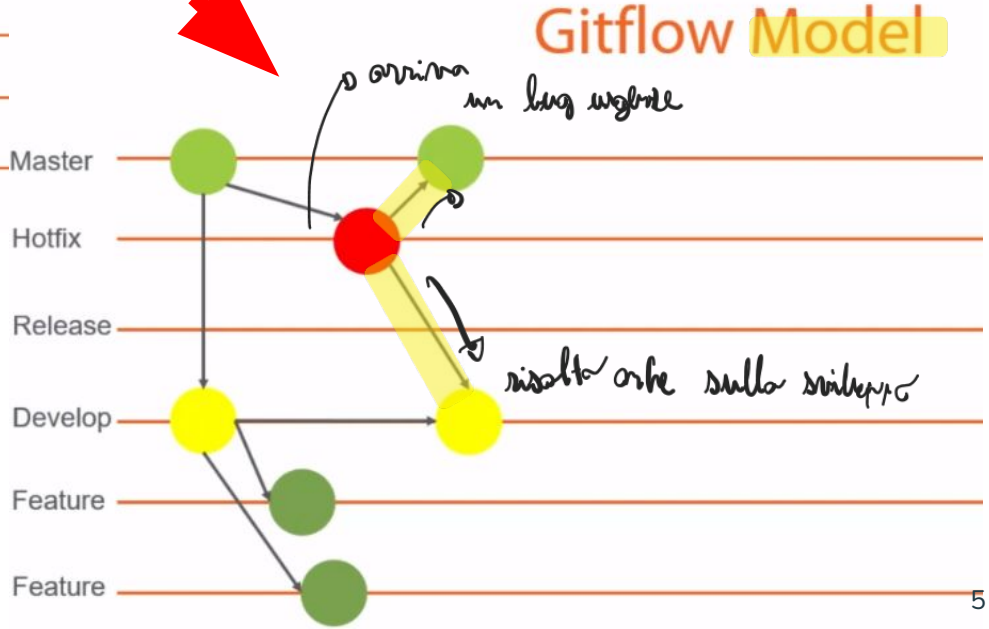
What is Gitflow?

- More complicated than feature branch workflow
- Two branches record history of the project
  - master and develop
- Features reside in their own branches…
- … as do hotfixes → fix bug molto urgenti
- Release branches branch off develop

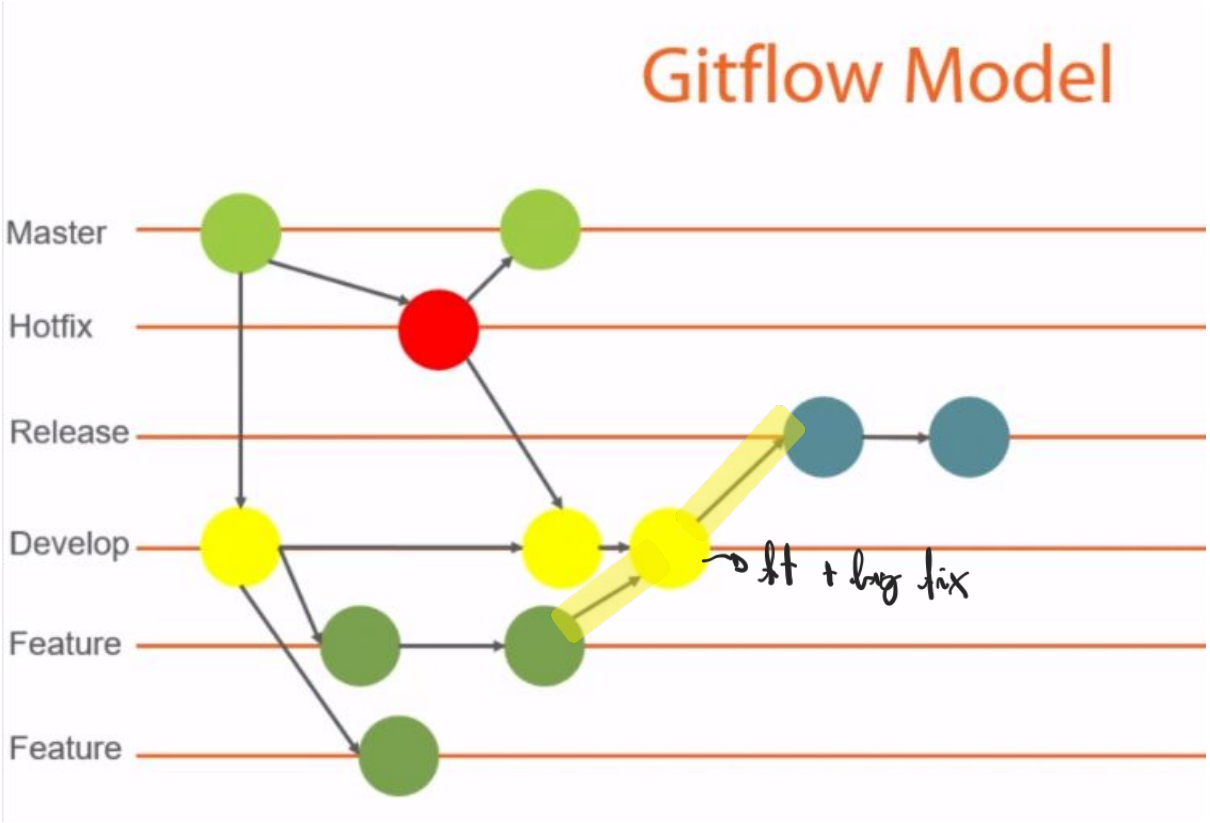
Gitflow Model



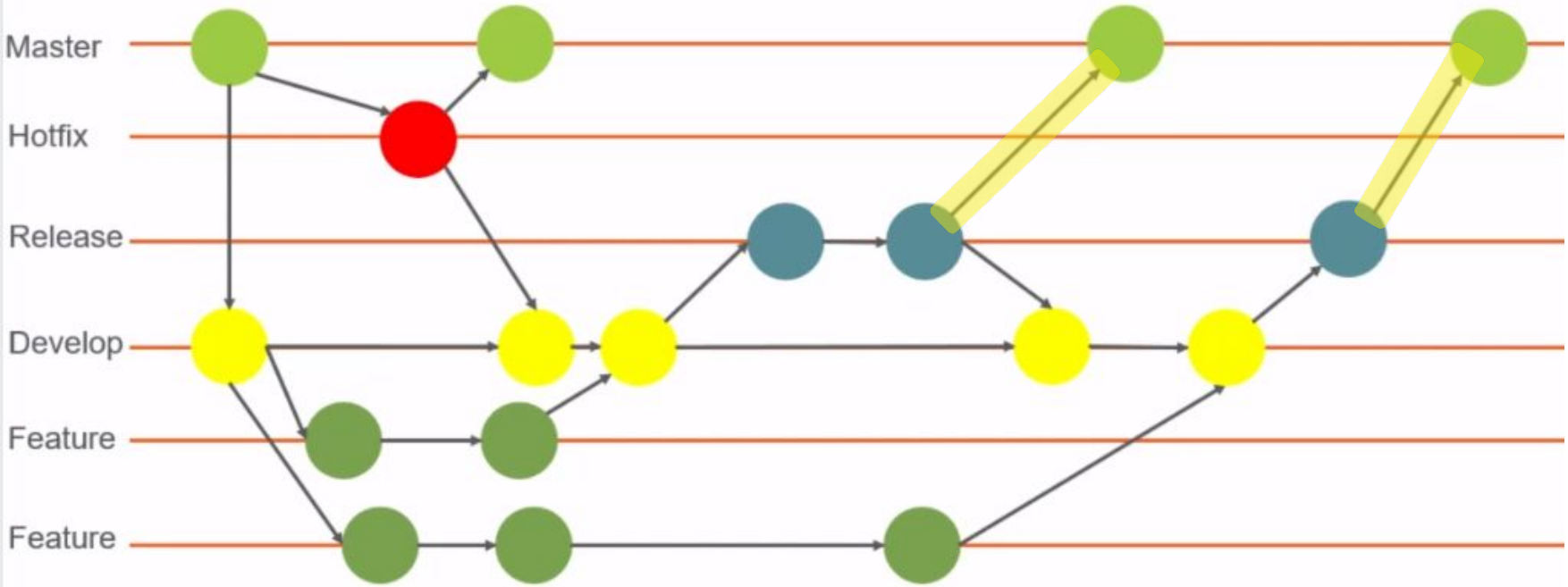
Gitflow Model



Release and feature branches



Gitflow Model



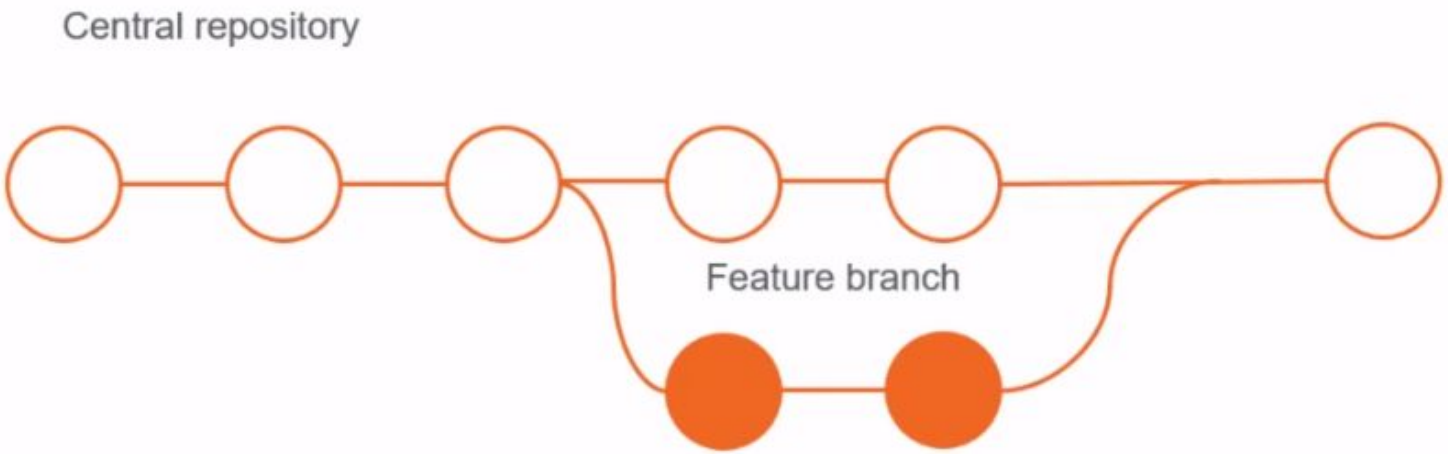
Install Git Flow

- Gitflow is a set of scripts that extend git
  - Can use standard git commands but scripts make it easier
- Has to be installed separately to git
  - https://github.com/nvie/gitflow/wiki/Installation
  - https://github.com/nvie/gitflow/wiki/Mac-OS-X
  - https://github.com/nvie/gitflow/wiki/Windows
  - https://github.com/nvie/gitflow/wiki/Linux

What is a Feature Branch?

- Place where work for a specific feature is done
- Don't want all work done on the main branch
  - Difficult to track
  - Difficult to manage merges
  - Difficult to back out
  - Difficult to experiment

Feature Branch Workflow



git flow feature finish feature-name

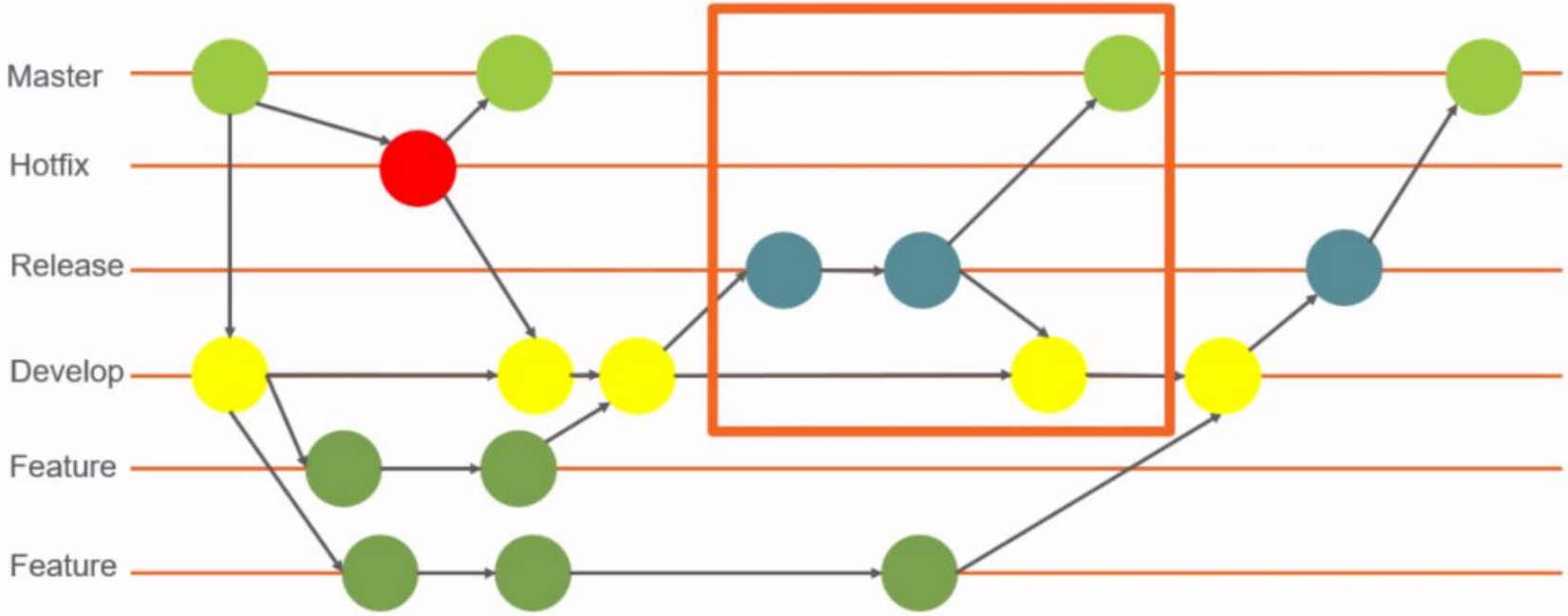
The players

- Gio - the architect: creates branch release (0)
- Alf - the reviewer: reviews the feature before pushing this branch into development(2)
- Rachel - the developer: creates a feature branch (1)
- Marc - the build manager

Where Now?

- Feature is published to develop
- Now need to create a release

Gitflow Model



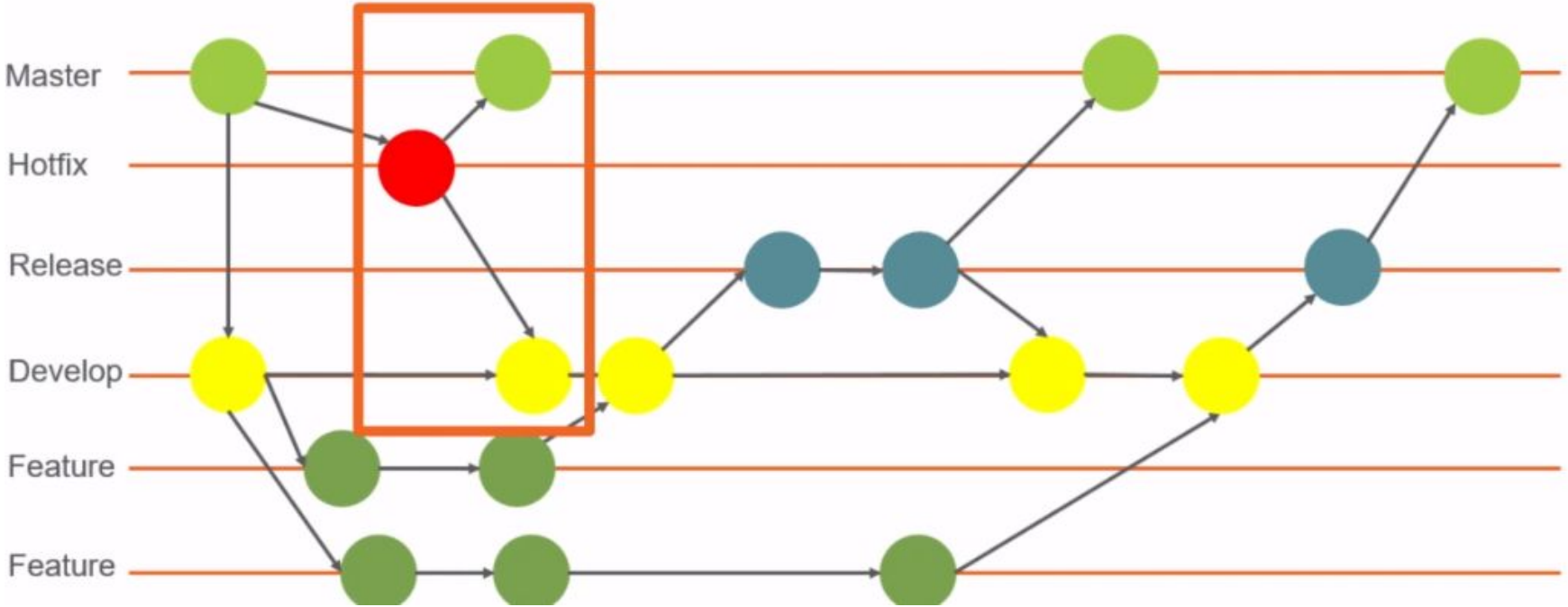
Why Hotfixes?

- Code is never perfect
  - Often spot bugs in production code
- Hotfix allows us to update the production branch

What is a Hotfix Branch?

- An emergency fix to the released code
- Branch of master to create the hot fix
- All fixes are merged into master and develop

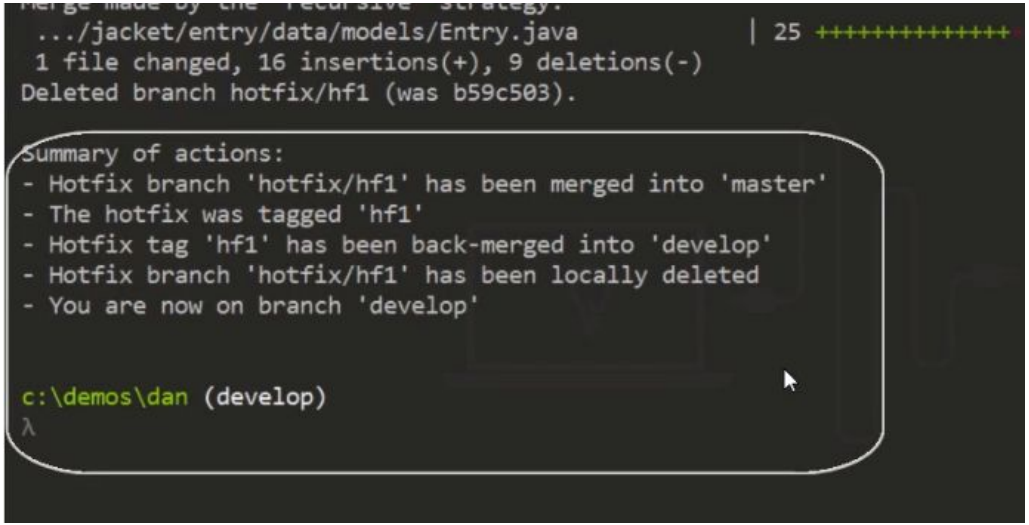
Gitflow Model



Git Flow Hot Fix

- git flow hotfix start <version>
- git flow hotfix finish <version>
- git flow hotfix publish <version>
- git flow hotfix track <version>

Changes back to Master and Develop



References

Using GitFlow, Kevin Jones