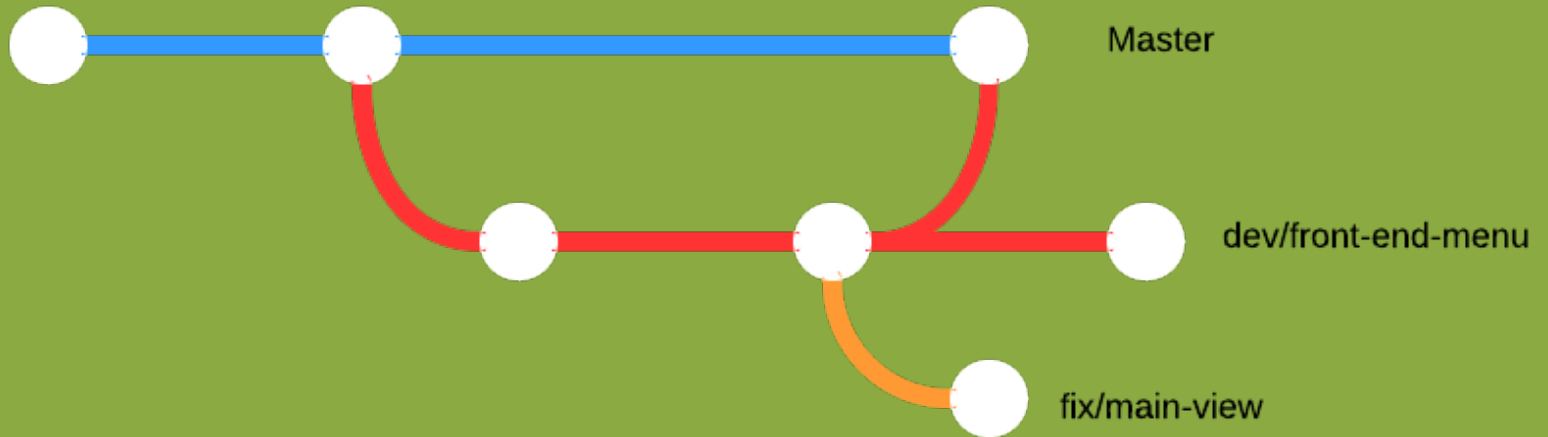


# Objetivos

- Aprender buenas practicas de Git.
- Crear un ambiente de trabajo exitoso en equipo.
- Mitigar, identificar y solucionar problemas que surjan en estos ambientes.

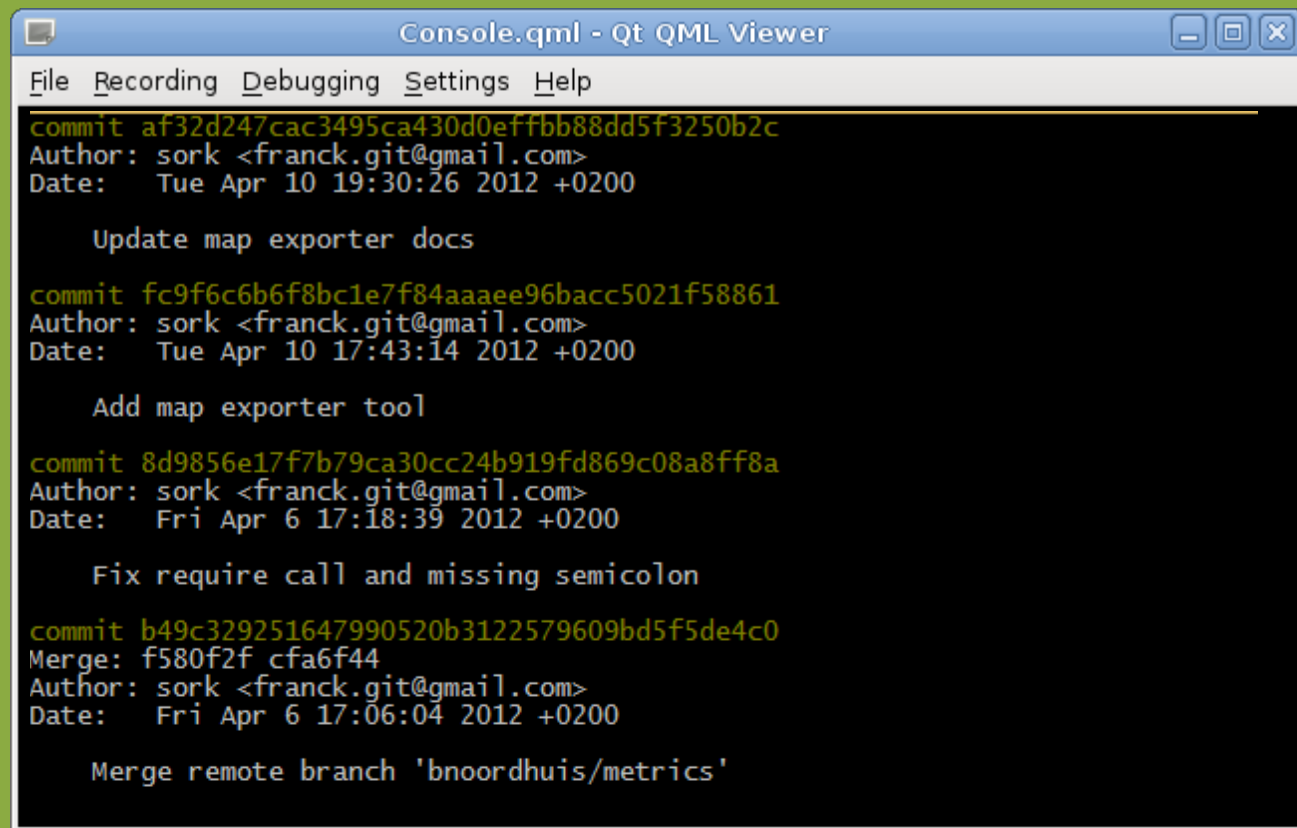
# Master es intocable\*



# Haz Commit regularmente

- Hacer commit por cambios, no por tiempo.
- Escribir un comentario relevante (short summary)

# Dale cariño a git log

A screenshot of a Qt QML Viewer window titled 'Console.qml - Qt QML Viewer'. The window has a menu bar with 'File', 'Recording', 'Debugging', 'Settings', and 'Help'. The main area is a black console with yellow and white text showing the output of a 'git log' command. The log shows four commits by 'sork' with their respective messages and dates.

```
commit af32d247cac3495ca430d0effbb88dd5f3250b2c
Author: sork <franck.git@gmail.com>
Date:   Tue Apr 10 19:30:26 2012 +0200

    Update map exporter docs

commit fc9f6c6b6f8bc1e7f84aaee96bacc5021f58861
Author: sork <franck.git@gmail.com>
Date:   Tue Apr 10 17:43:14 2012 +0200

    Add map exporter tool

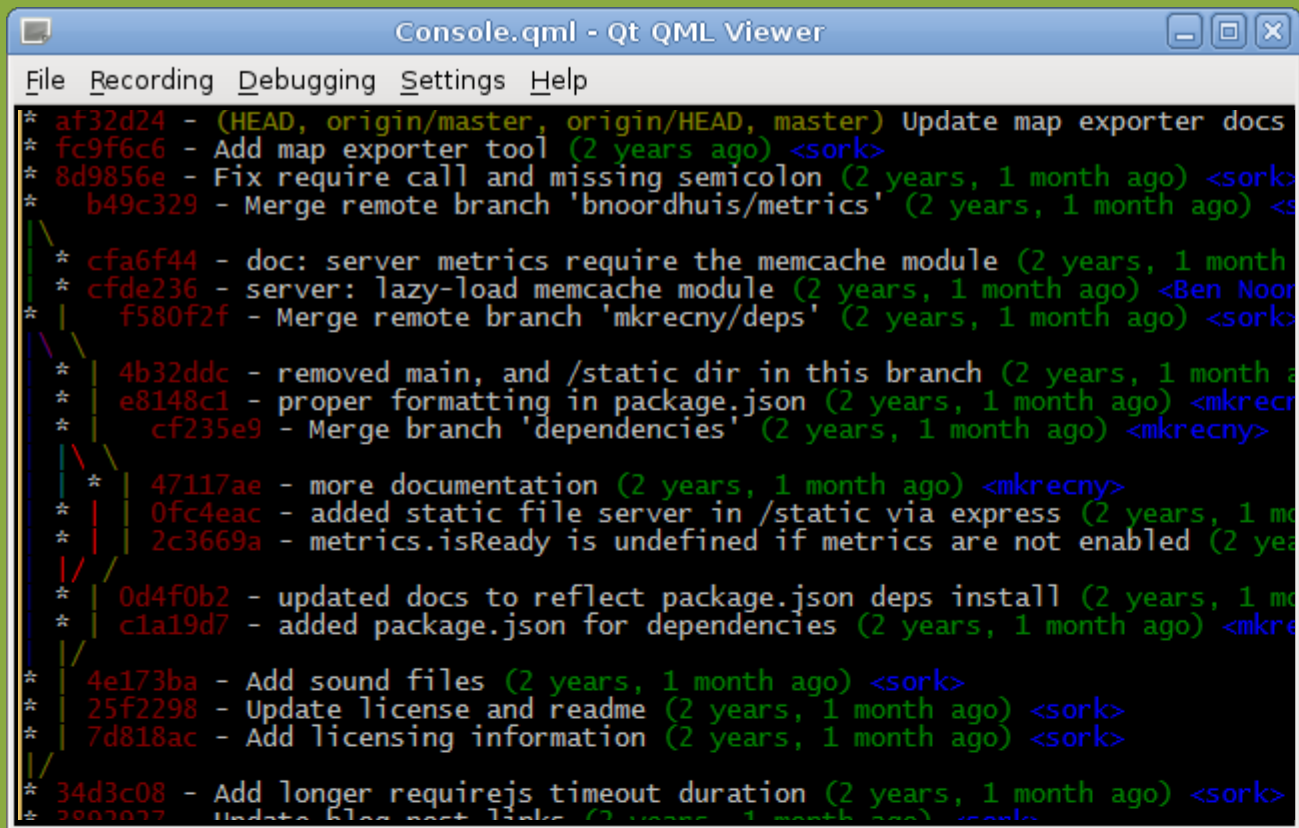
commit 8d9856e17f7b79ca30cc24b919fd869c08a8ff8a
Author: sork <franck.git@gmail.com>
Date:   Fri Apr 6 17:18:39 2012 +0200

    Fix require call and missing semicolon

commit b49c329251647990520b3122579609bd5f5de4c0
Merge: f580f2f cfa6f44
Author: sork <franck.git@gmail.com>
Date:   Fri Apr 6 17:06:04 2012 +0200

    Merge remote branch 'bnoordhuis/metrics'
```

# Dale cariño a git log



```
Console.qml - Qt QML Viewer
File Recording Debugging Settings Help
* af32d24 - (HEAD, origin/master, origin/HEAD, master) Update map exporter docs
* fc9f6c6 - Add map exporter tool (2 years ago) <sork>
* 8d9856e - Fix require call and missing semicolon (2 years, 1 month ago) <sork>
* b49c329 - Merge remote branch 'bnoordhuis/metrics' (2 years, 1 month ago) <sork>
* cfa6f44 - doc: server metrics require the memcache module (2 years, 1 month ago) <sork>
* cfde236 - server: lazy-load memcache module (2 years, 1 month ago) <Ben Noordhuis>
* f580f2f - Merge remote branch 'mkrecny/deps' (2 years, 1 month ago) <sork>
* 4b32ddc - removed main, and /static dir in this branch (2 years, 1 month ago) <sork>
* e8148c1 - proper formatting in package.json (2 years, 1 month ago) <mkrecny>
* cf235e9 - Merge branch 'dependencies' (2 years, 1 month ago) <mkrecny>
* 47117ae - more documentation (2 years, 1 month ago) <mkrecny>
* 0fc4eac - added static file server in /static via express (2 years, 1 month ago) <sork>
* 2c3669a - metrics.isReady is undefined if metrics are not enabled (2 years, 1 month ago) <sork>
* 0d4f0b2 - updated docs to reflect package.json deps install (2 years, 1 month ago) <sork>
* c1a19d7 - added package.json for dependencies (2 years, 1 month ago) <mkrecny>
* 4e173ba - Add sound files (2 years, 1 month ago) <sork>
* 25f2298 - Update license and readme (2 years, 1 month ago) <sork>
* 7d818ac - Add licensing information (2 years, 1 month ago) <sork>
* 34d3c08 - Add longer requirejs timeout duration (2 years, 1 month ago) <sork>
* 3802027 - Update blog post links (2 years, 1 month ago) <sork>
```

# **.gitignore**

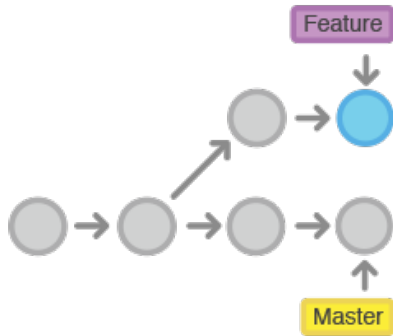
- Claves e información sensible.
- Archivos auto-generados y de usuarios.
- Componentes externos

# Prohibido usar rebase, squash, --amend

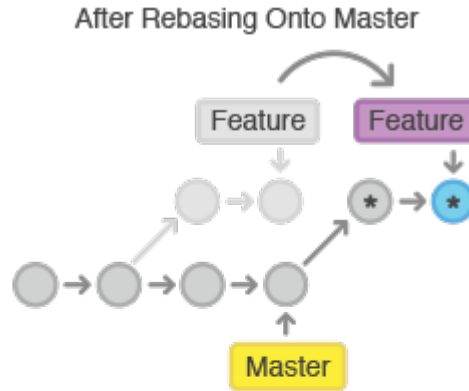
- Desordena los commits
- Se pierde el sentido de progresión
- Afecta el uso de herramientas como git bisect

# Rebase

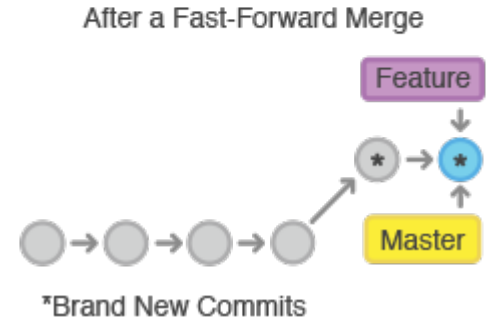
**A**



**B**



**C**





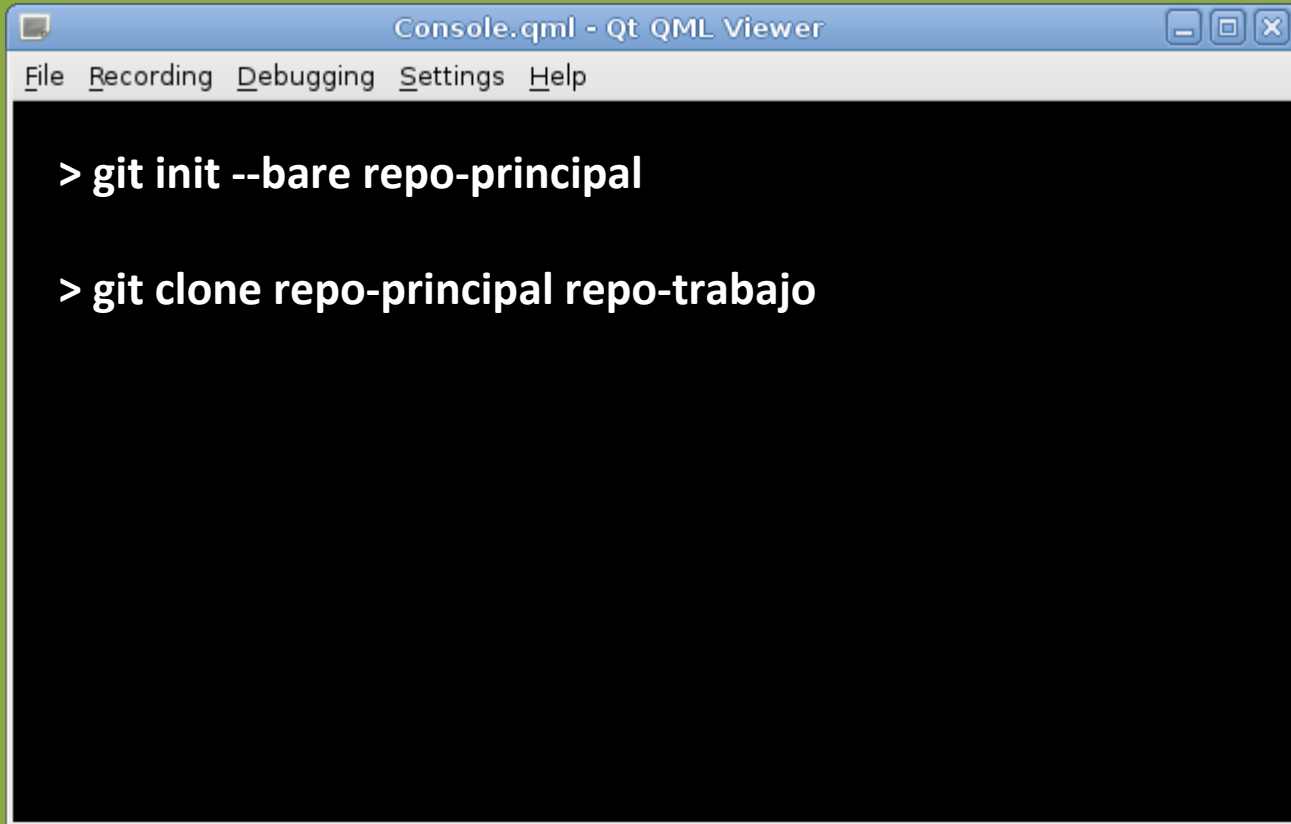
# Trabajando en Equipo



# Repositorio centralizado



# Repositorio local



The image shows a screenshot of a Qt QML Viewer application window. The title bar reads "Console.qml - Qt QML Viewer". Below the title bar is a menu bar with the following items: File, Recording, Debugging, Settings, and Help. The main area of the window is a black console with two lines of white text, each preceded by a prompt character ">".

```
> git init --bare repo-principal  
  
> git clone repo-principal repo-trabajo
```

# Repositorios Remotos



Github



Bitbucket



VPS

# Interface Web

The screenshot displays the GitLab Dashboard for a user named John Smith. The main content area lists recent activities, including comments on commits and issues, and the opening or closing of issues. The sidebar on the right provides filters for Projects (5) and Groups (1), a search bar for filtering by name, and a list of projects with their last activity. Below the sidebar, there is a News Feed section with links to the Homepage, Blog, and @gitlabhq.

**Dashboard** Search

**Projects** Issues: 5 Merge Requests: 4 Help

**John Smith** commented on commit 90a90a350 at GitLab / gitlabhq about 3 hours ago.  
test comment.

**John Smith** opened issue #95 at GitLab / gitlab-ci about 8 hours ago.  
oh dear

**John Smith** commented on issue #95 at GitLab / gitlab-ci about 8 hours ago.  
Hope you re feeling better now

**John Smith** closed issue #95 at GitLab / gitlab-ci about 8 hours ago.  
oh dear

**John Smith** commented on commit 96af55bb8 at GitLab / gitlabhq about 21 hours ago.  
What's ActiveRecord? Shouldn't this be ActiveRecord?

**John Smith** closed issue #714 at GitLab / gitlabhq about 23 hours ago.  
test

**John Smith** commented on commit 7c9330796 at GitLab / gitlabhq about 23 hours ago.  
writing something

**John Smith** commented on commit 7c9330796 at GitLab / gitlabhq 1 day ago.  
xxx

**John Smith** opened issue #95 at GitLab / gitlab-ci 1 day ago.  
oh dear

**John Smith** commented on issue #95 at GitLab / gitlab-ci 1 day ago.  
Test

**John Smith** closed issue #95 at GitLab / gitlab-ci 1 day ago.  
oh dear

**Projects** 5 Groups: 1

Filter by name

- GitLab / gitlabhq  
Last activity: about 3 hours ago
- GitLab / gitlab-ci  
Last activity: about 8 hours ago
- GitLab / gitlab-recipes  
Last activity: 1 day ago
- GitLab / gitlab-shell  
Last activity: 1 day ago
- GitLab / gitlab\_git  
Last activity: 3 months ago

**News Feed**

Homepage Blog @gitlabhq



# GITLAB

<https://www.gitlab.com/>

# Workflows

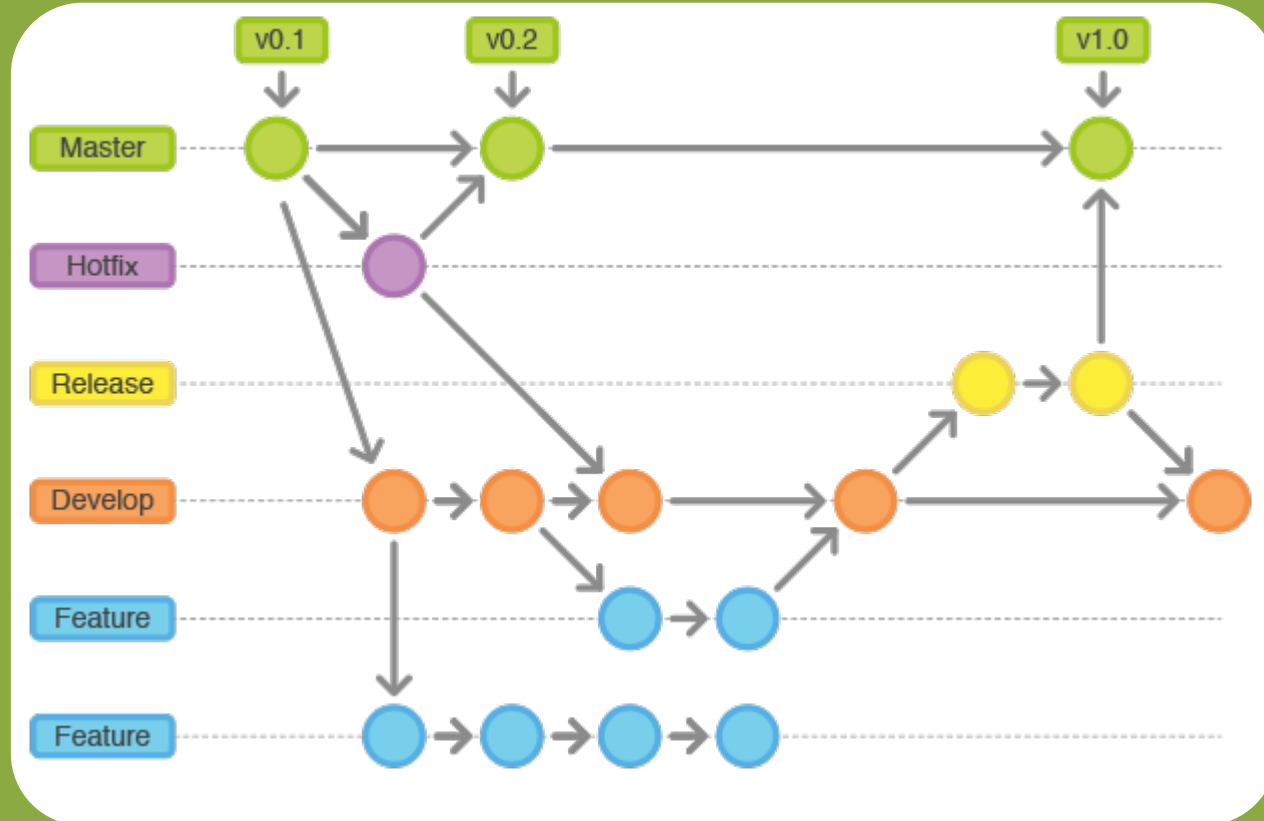
Git Flow



Github Flow

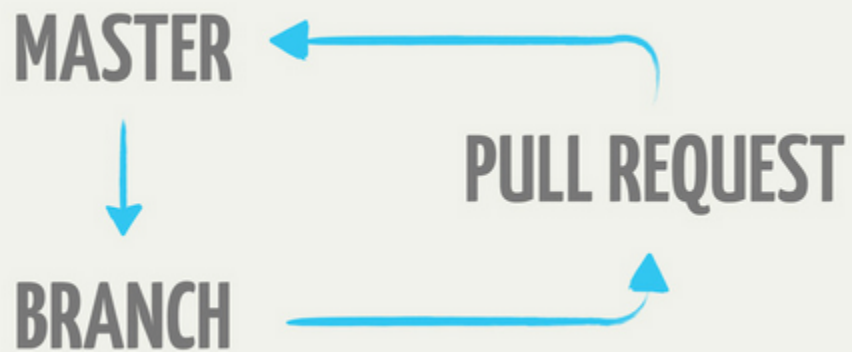


# Git Flow

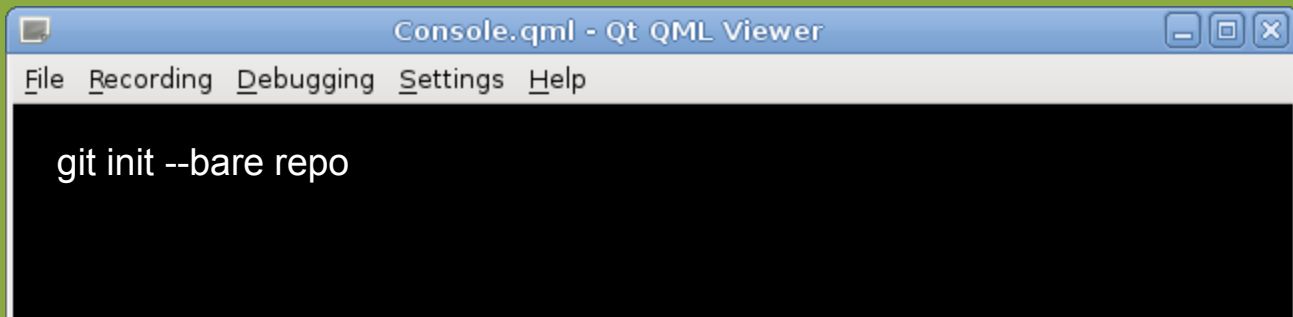


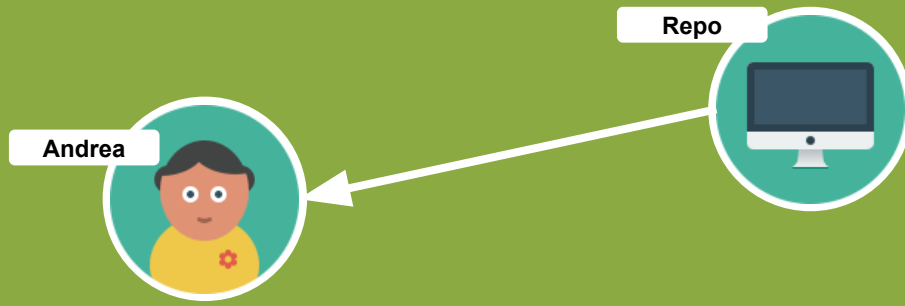


# Github flow



Repo





Console.qml - Qt QML Viewer

File Recording Debugging Settings Help

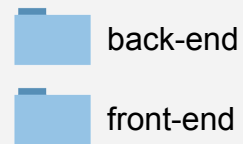
```
git clone //servidor/repo repo-andrea
```

Andrea



[head] master ea3f127

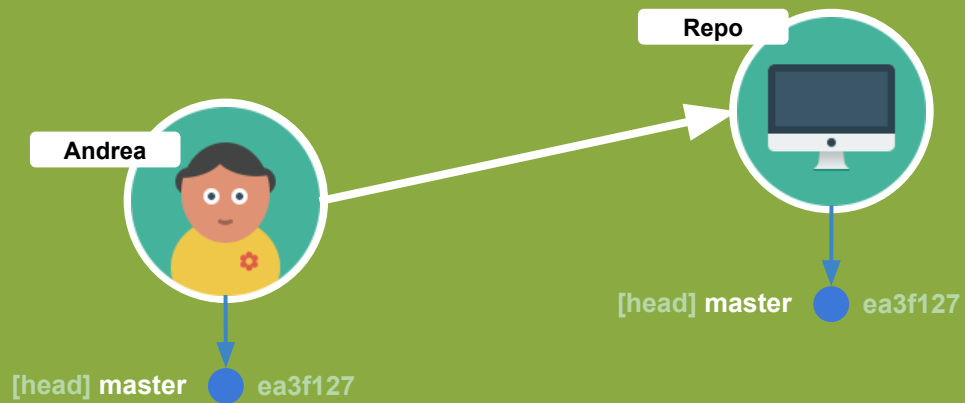
Repo



Console.qml - Qt QML Viewer

File Recording Debugging Settings Help

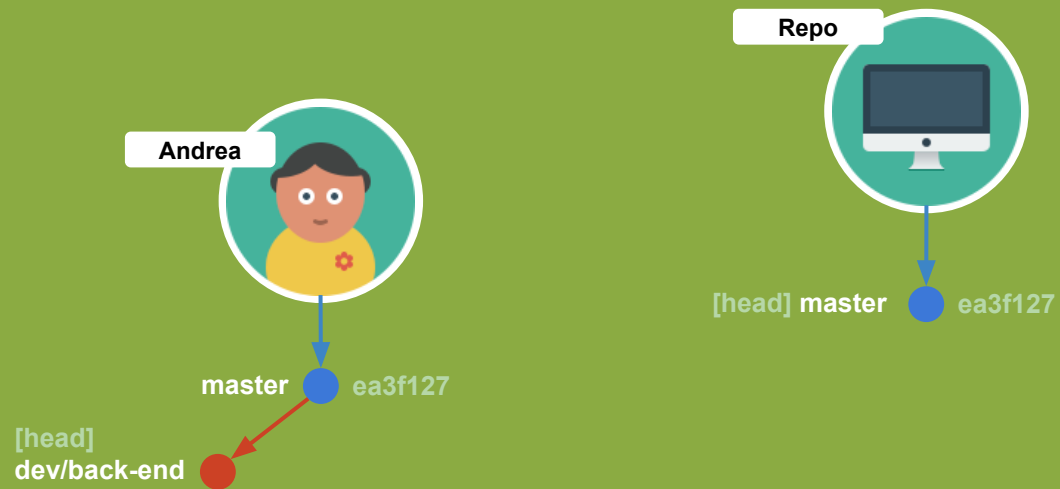
```
git status
git add .
git commit -m "commit inicial"
```



Console.qml - Qt QML Viewer

File Recording Debugging Settings Help

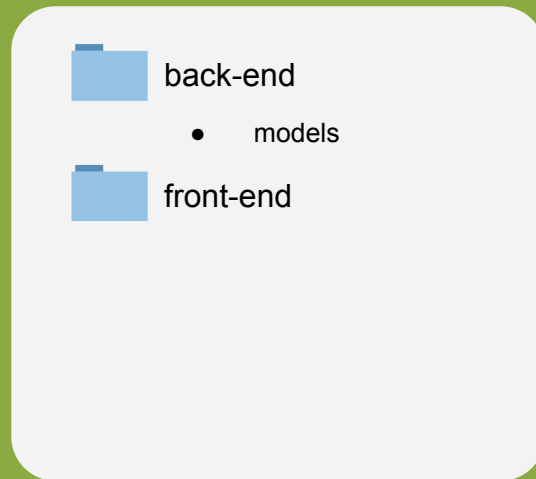
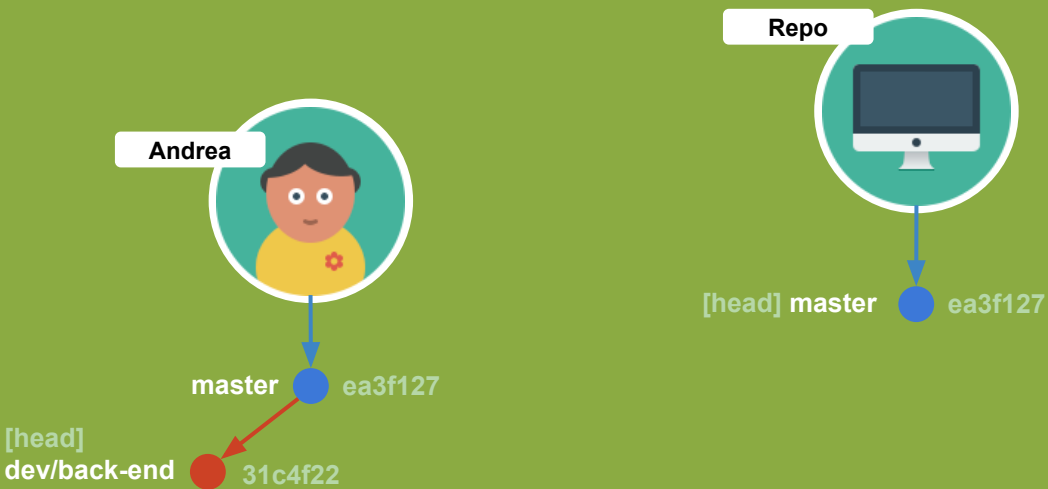
```
git pull origin master  
git push origin master
```



Console.qml - Qt QML Viewer

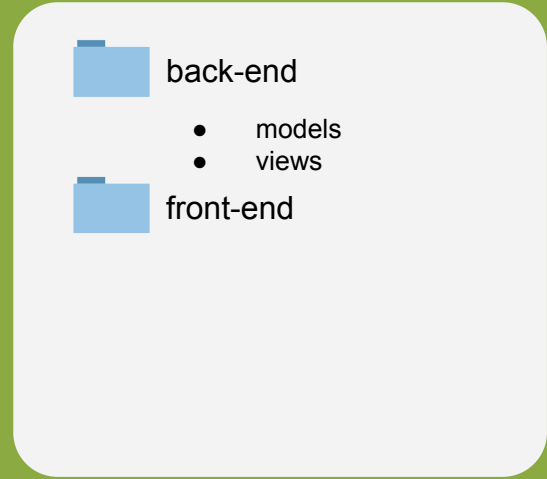
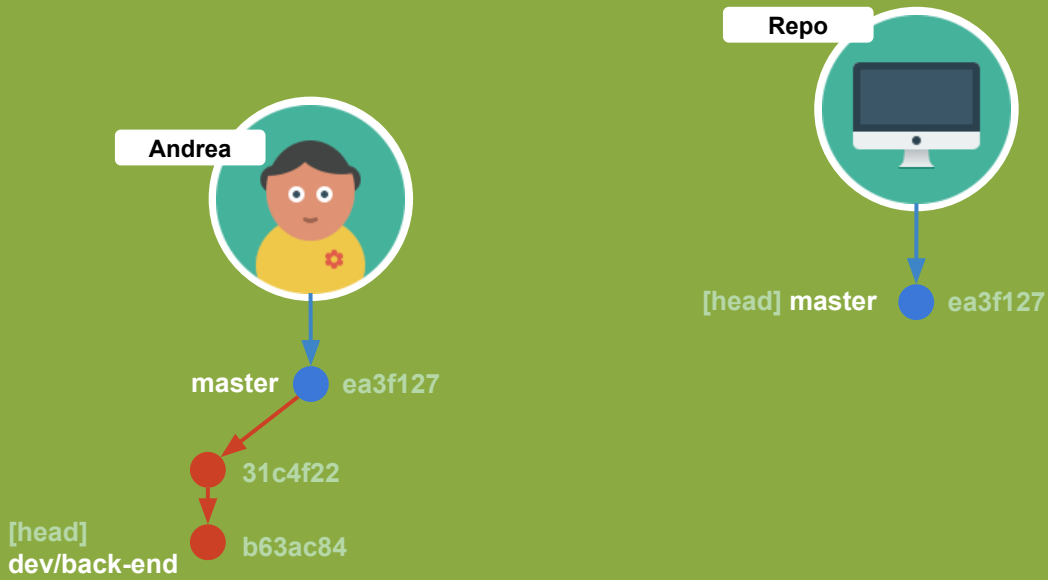
File Recording Debugging Settings Help

```
git branch dev/back-end
git checkout dev/back-end
```



```
Console.qml - Qt QML Viewer
File Recording Debugging Settings Help

git status
git add .
git commit -m "add back-end models"
```



Console.qml - Qt QML Viewer

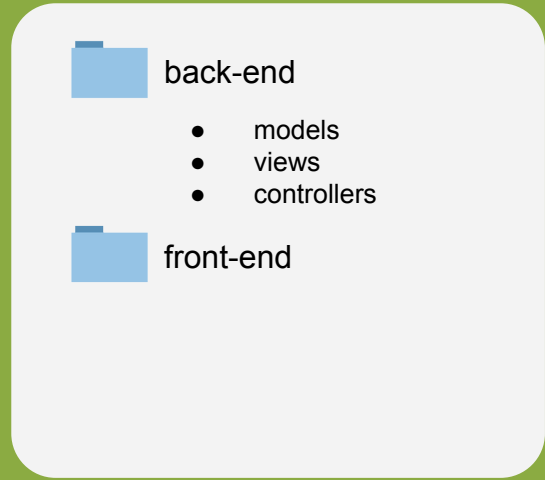
File Recording Debugging Settings Help

```
git status
git add .
git commit -m "add back-end views"
```





[head] master ea3f127



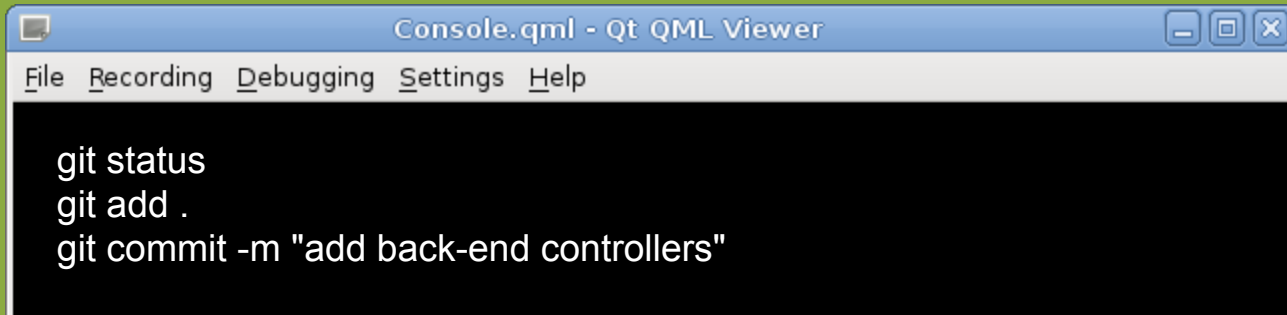
master ea3f127

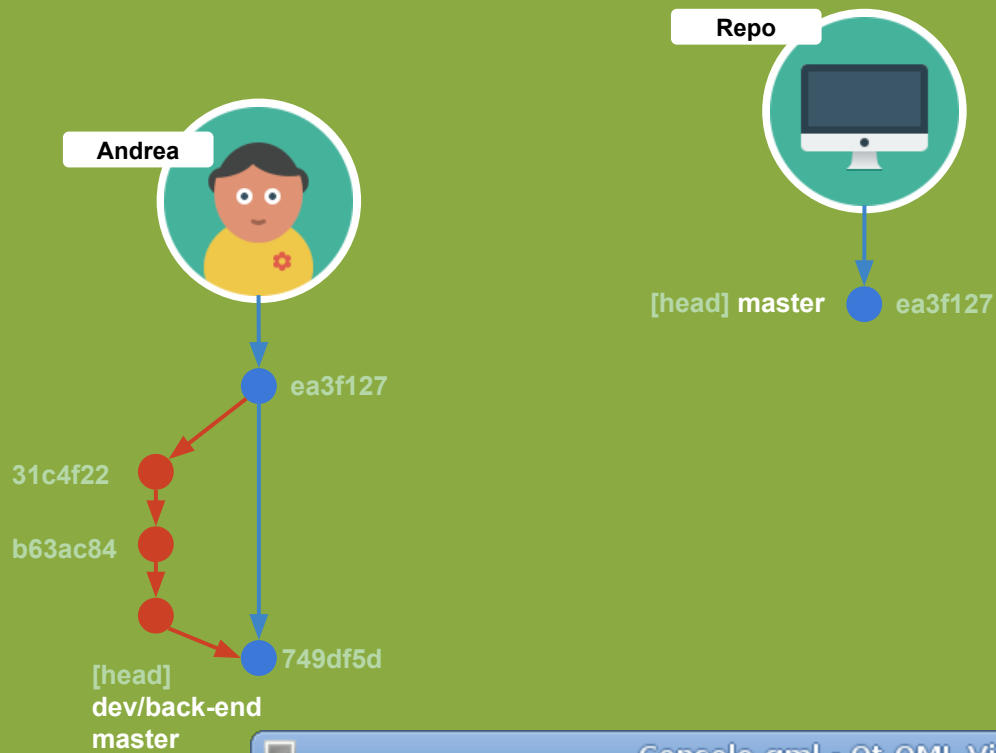
31c4f22

b63ac84

749df5d

[head]  
dev/back-end

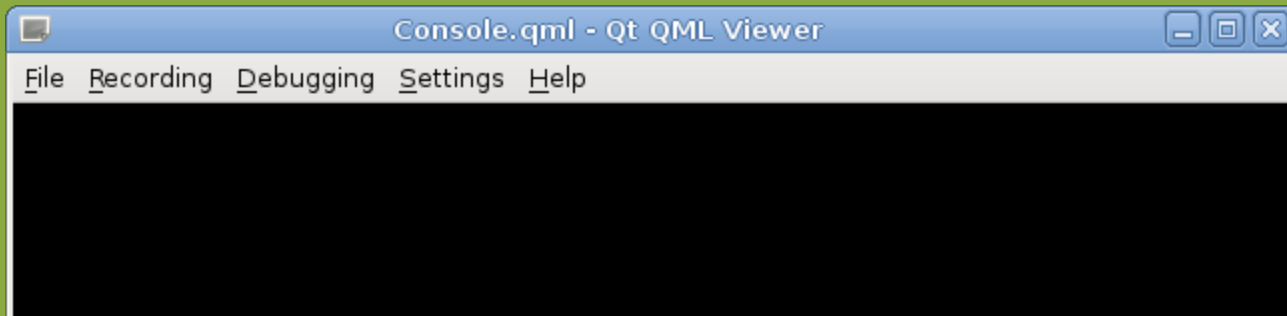
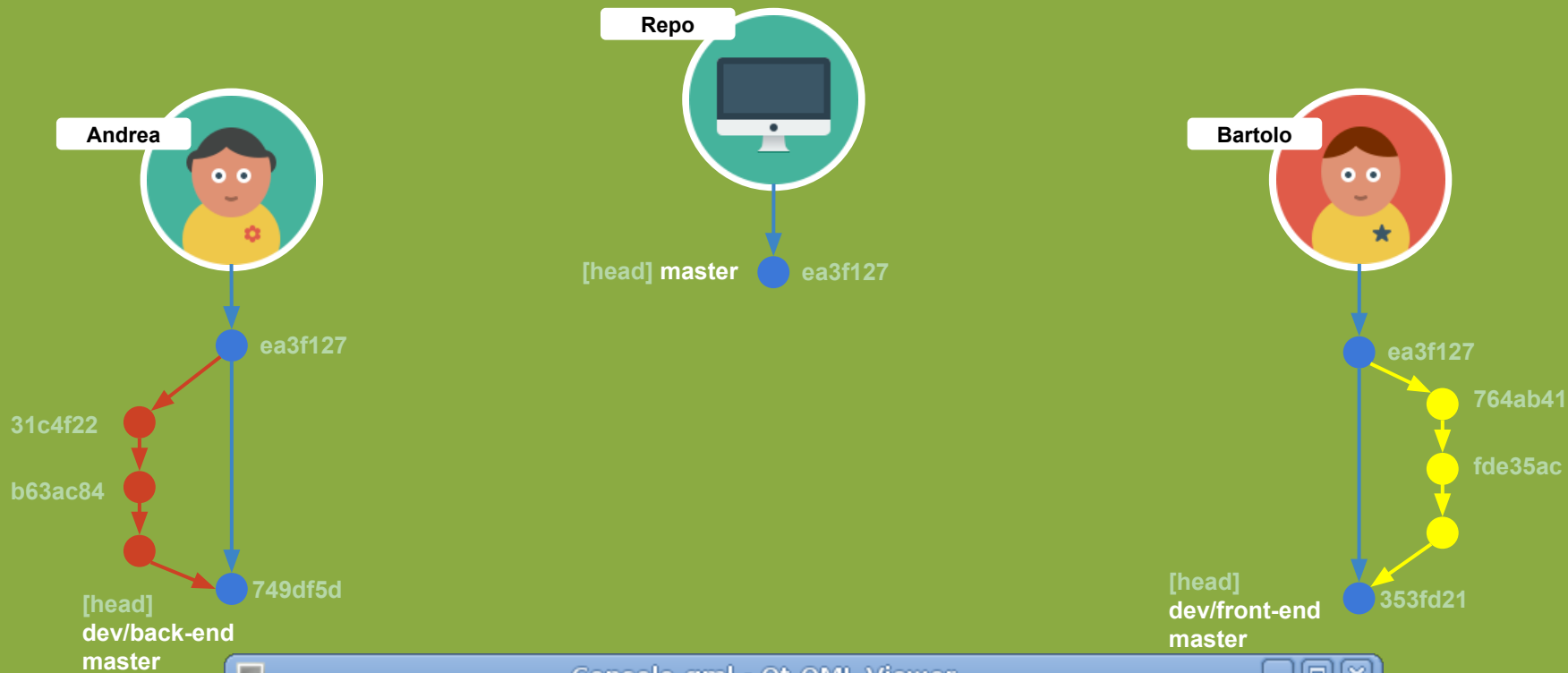


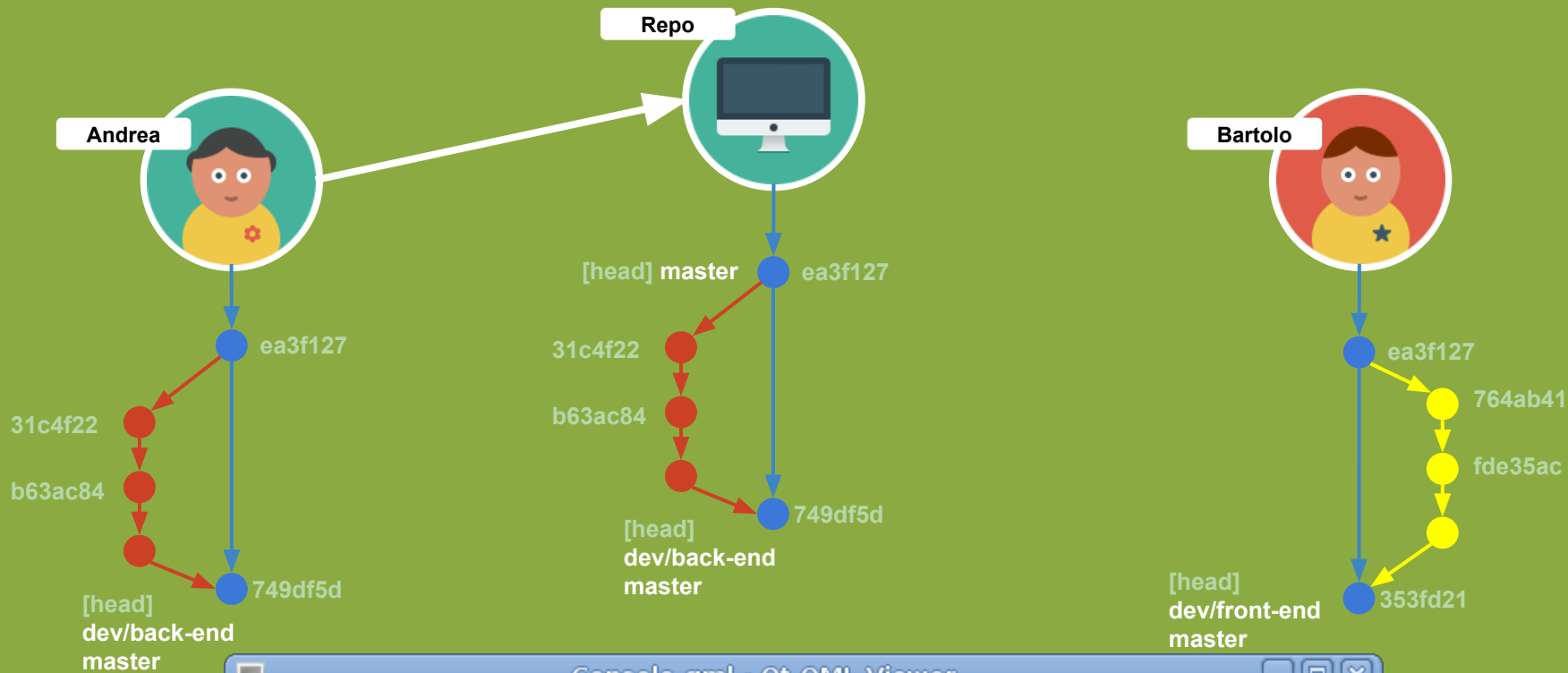


Console.qml - Qt QML Viewer

File Recording Debugging Settings Help

```
git checkout master
git merge dev/back-end
```

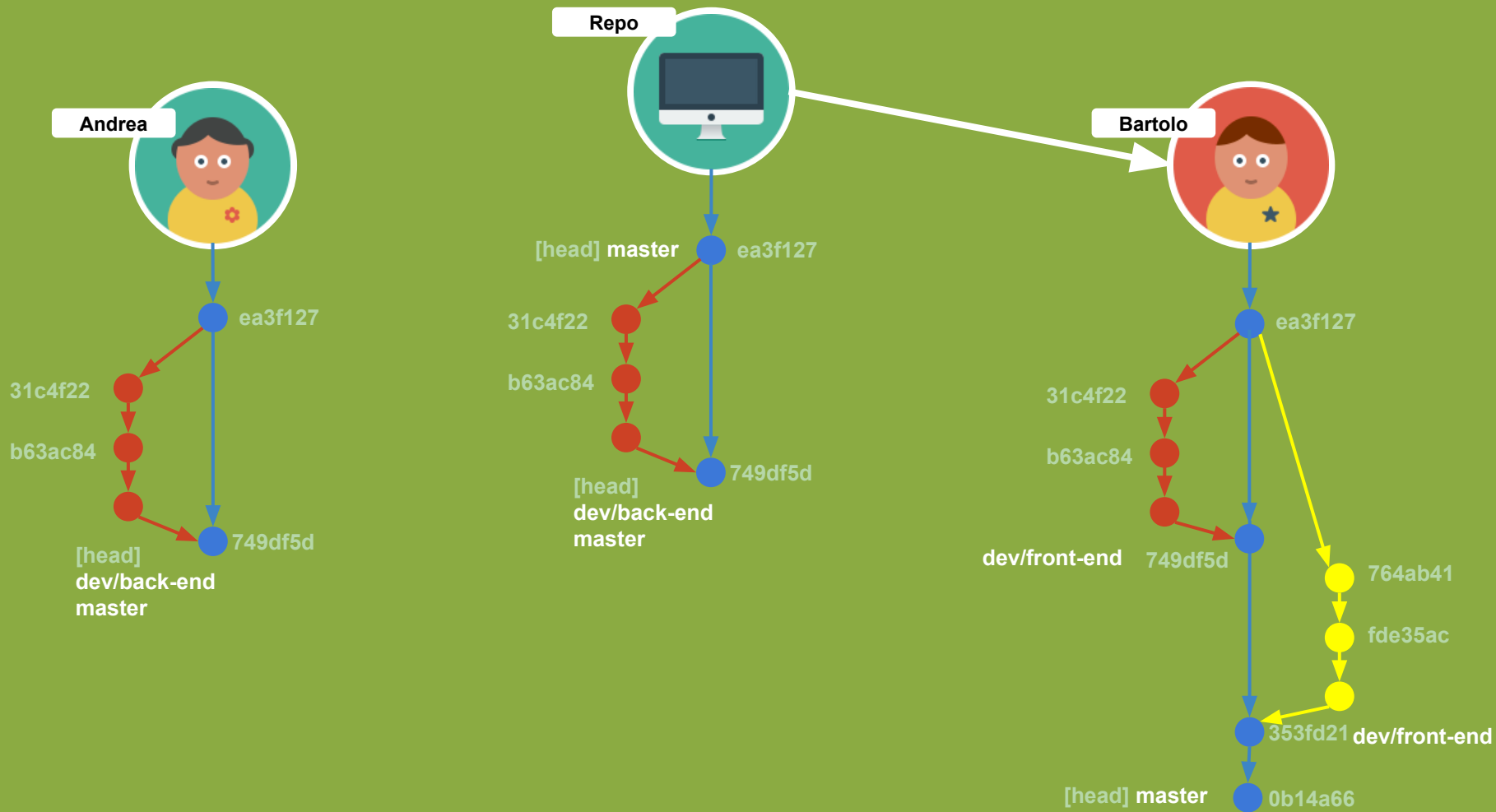




Console.qml - Qt QML Viewer

File Recording Debugging Settings Help

```
git pull origin master
git push origin master
```

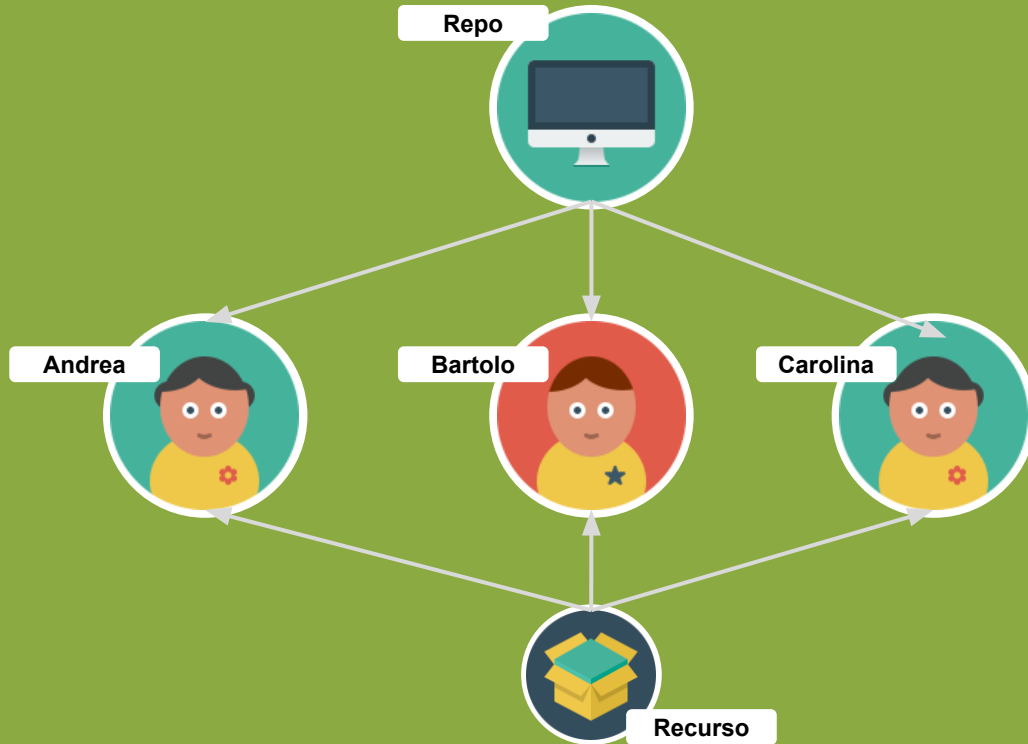


# Resolución de Conflictos

# Problemas con Recursos Compartidos

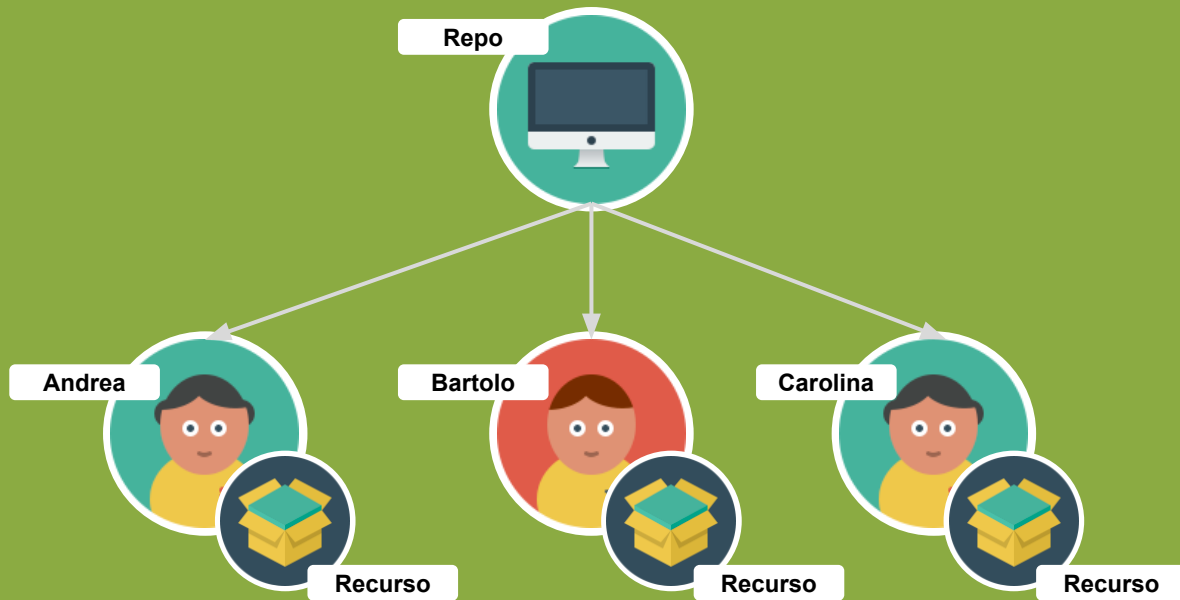
Bases de Datos y Archivos

# Recurso Centralizado

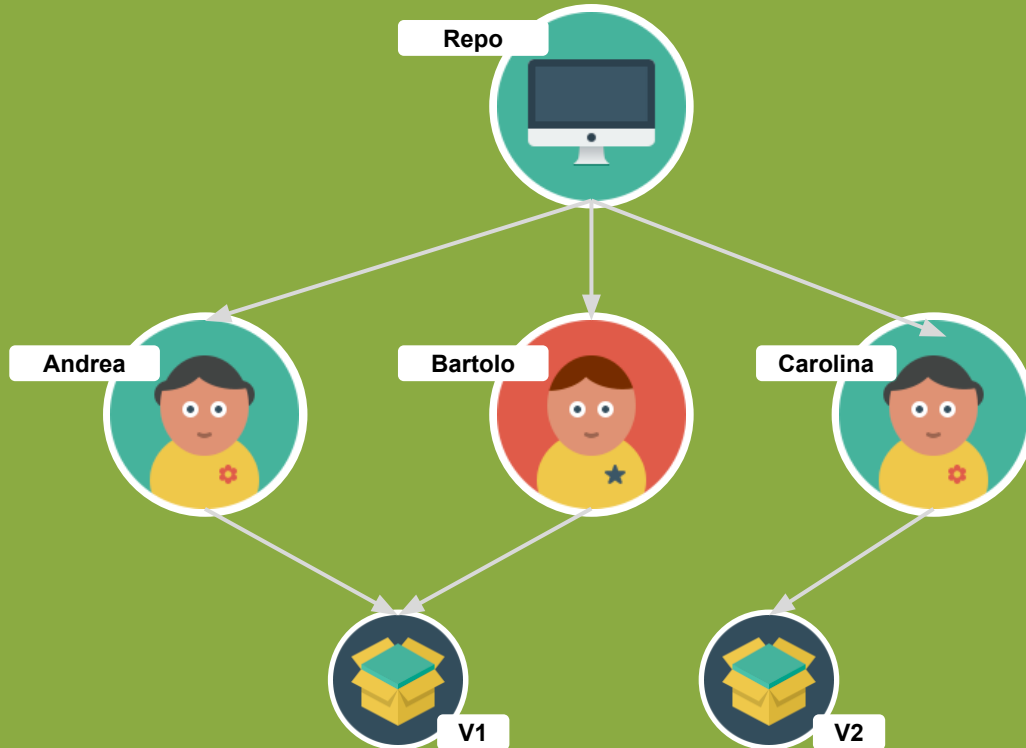




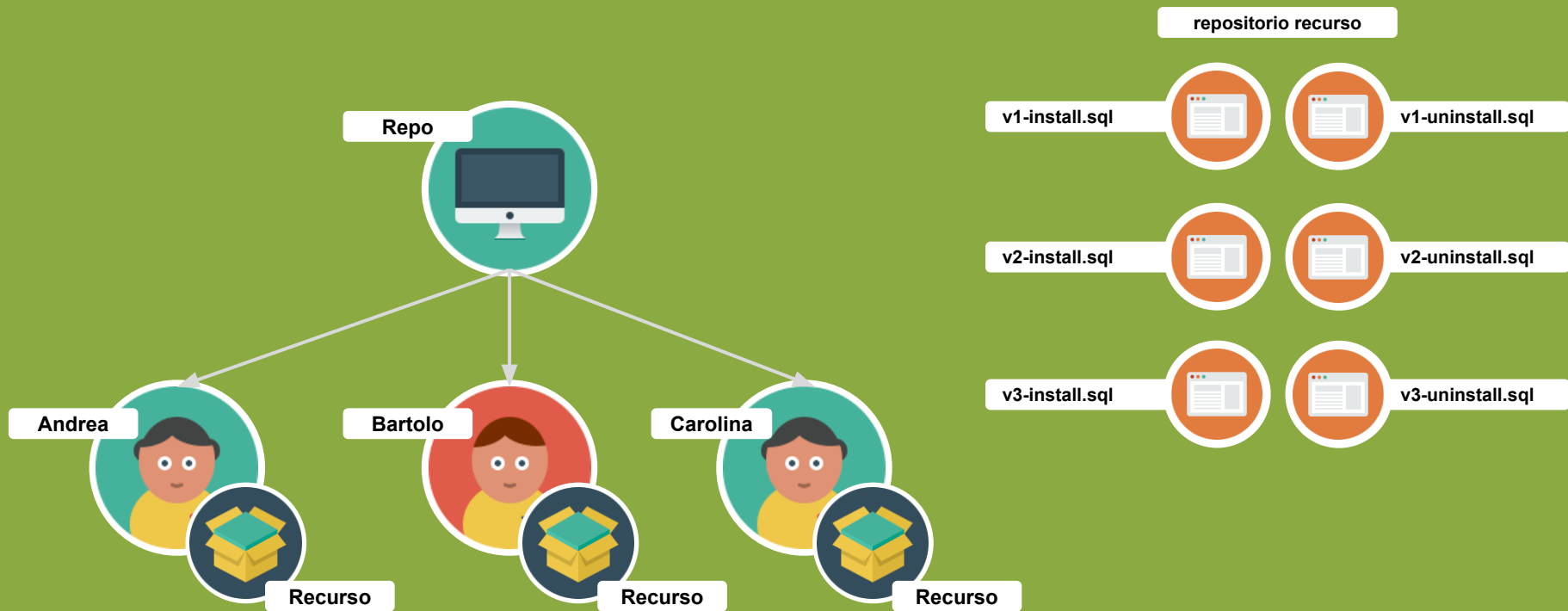
# Recurso Descentralizado



# Recurso Versionado



# Recurso Versionado por Git



# Merge Conflict

```
1  <!DOCTYPE html>
2
3  <html>
4      <head>
5          <title></title>
6
7          <!-- CSS -->
8
9          <!-- /CSS -->
10
11         <!-- JS -->
12
13         <!-- /JS -->
14     </head>
15
16     <body>
17         <!-- HTML -->
18
19         <!-- /HTML -->
20     </body>
21 </html>
```

```
1  <!DOCTYPE html>
2
3  <html>
4      <head>
5          <title></title>
6
7          <!-- CSS -->
8              <style>
9                  body {
10                      color: #999;
11                  }
12              </style>
13          <!-- /CSS -->
14
15          <!-- JS -->
16              <script type="text/javascript">
17                  document.write('---');
18              </script>
19          <!-- /JS -->
20      </head>
21
22      <body>
23          <!-- HTML -->
24
25          <!-- /HTML -->
26      </body>
27  </html>
```

```
1  <!DOCTYPE html>
2
3  <html>
4      <head>
5          <title></title>
6
7          <!-- CSS -->
8
9          <!-- /CSS -->
10
11         <!-- JS -->
12
13         <!-- /JS -->
14     </head>
15
16     <body>
17         <!-- HTML -->
18         <div id="wrapper">
19             <h1>This is the HTML</h1>
20
21             <p>Thanks for your patronage</p>
22         </div>
23         <!-- /HTML -->
24     </body>
25 </html>
```

```
1 <!DOCTYPE html>
2
3 <html>
4   <head>
5     <title></title>
6
7     <!-- CSS -->
8     <style>
9       body {
10         color: #999;
11       }
12     </style>
13   <!-- /CSS -->
14
15   <!-- JS -->
16   <script type="text/javascript">
17     document.write('---');
18   </script>
19   <!-- /JS -->
20 </head>
21
22 <body>
23   <!-- HTML -->
24   <div id="wrapper">
25     <h1>This is the HTML</h1>
26
27     <p>Thanks for your patronage</p>
28   </div>
29   <!-- /HTML -->
30 </body>
31 </html>
```



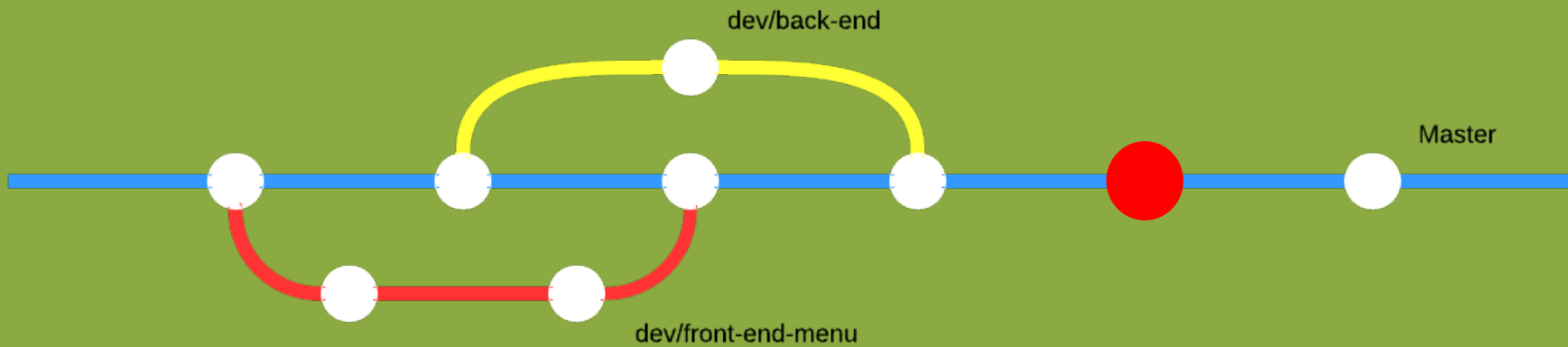
```
4      <head>
5      <<<<<< HEAD
6      <title>This is the title of my project</title>
7      =====
8      <title>This is just the title</title>
9      >>>>>> dev/content
10
11      <!-- CSS -->
12      <style>
13          body {
14              color: #999;
15          }
16      </style>
17      <!-- /CSS -->
18
19      <!-- JS -->
20      <script type="text/javascript">
21          document.write('---');
22      </script>
23      <!-- /JS -->
24  </head>
```

# Como evitar Merge Conflicts

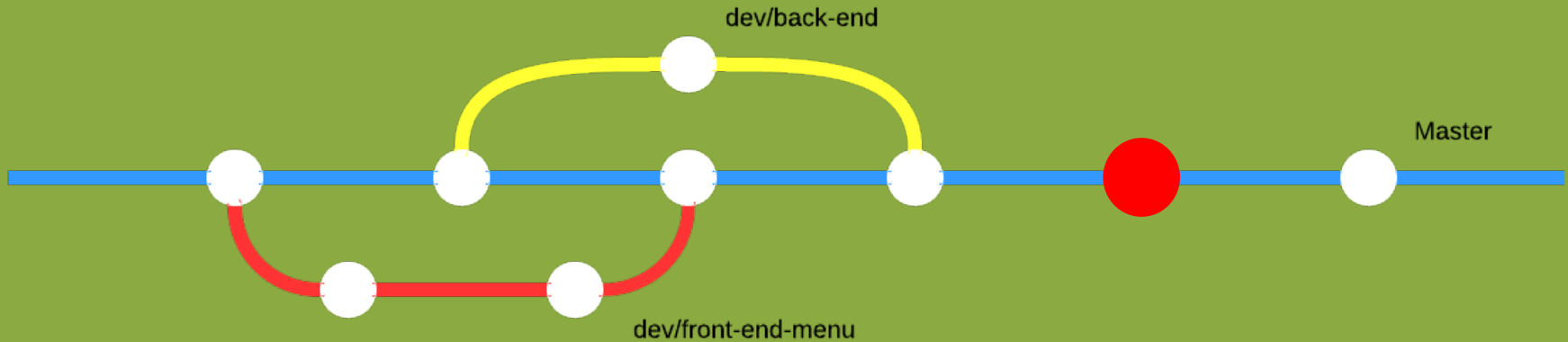
- Evitar trabajar en el mismo archivo
- Separar concernimientos
- En caso de que sea necesario trabajar en el mismo archivo coloquen **placeholders** (evitar)

**kdiff3**

# Git Bisect

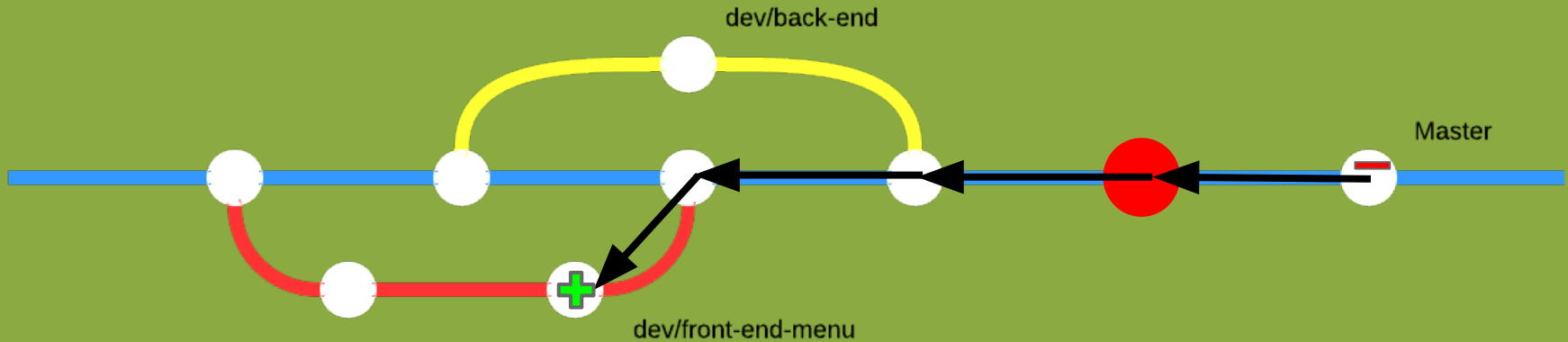


# Git Bisect



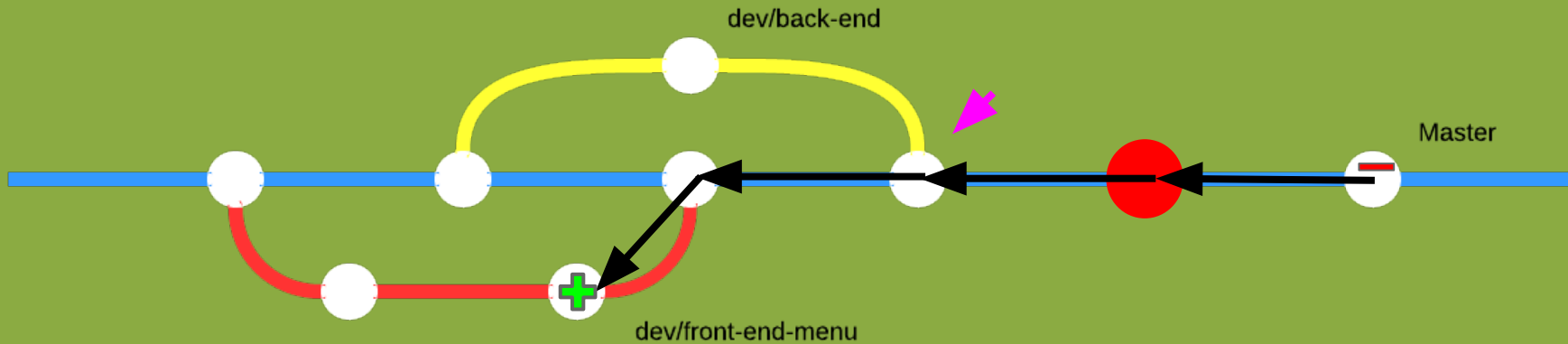
```
Console.qml - Qt QML Viewer
File Recording Debugging Settings Help
git bisect start
git bisect good dev/front-end-menu
git bisect bad master
```

# Git Bisect



```
Console.qml - Qt QML Viewer
File Recording Debugging Settings Help
Bisecting: 2 revisions left to test after this (roughly 2 steps)
```

# Git Bisect

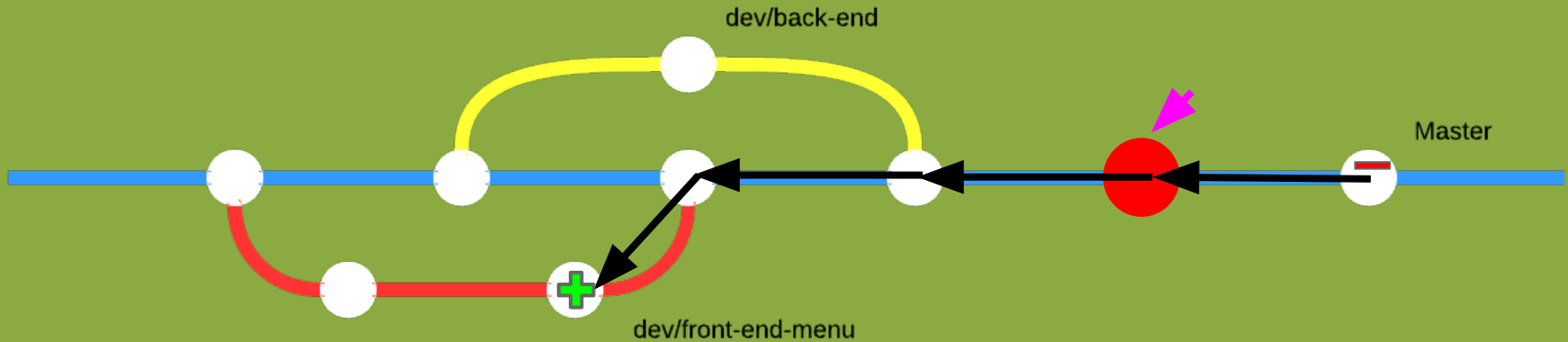


```
Console.qml - Qt QML Viewer
File Recording Debugging Settings Help

git bisect good

Bisecting: 0 revisions left to test after this (roughly 1 step)
```

# Git Bisect



```
Console.qml - Qt QML Viewer
File Recording Debugging Settings Help

git bisect bad
< ... sha ... > is the first bad commit
```