

# Git for Grown-ups

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[<http://twitter.com/emmajanehw>]

slides: <https://github.com/emmajane/gitforteam>s  
[<https://github.com/emmajane/gitforteam>s]

**Hello! My Name is Emma**  
[[http://en.wikipedia.org/wiki/Emma\\_Jane\\_Hogbin](http://en.wikipedia.org/wiki/Emma_Jane_Hogbin)]

I have been using version control for 10+ years and had the great misfortune of teaching CVS to arts majors before distributed version control was a thing.

## Warning!

This is not a talk about all the commands you can run in Git.

### Resources for Commands:

- **Introduction to Git**  
[<http://drupalize.me/series/introduction-git-series>]  
video lessons
- **Git Documentation**  
[<http://git-scm.com/doc>]
- **Pro Git**  
[<http://git-scm.com/book>]
- **ungit**  
[<https://github.com/FredrikNoren/ungit>]  
web UI / visualization tool

**"I've tried! I can't learn this stuff."**

~ most people

It's not your fault. Honest. The way we teach web stuff isn't the way that you probably need to be exposed to the information in order to learn it. Blame the teachers, not yourself. Or maybe not blame but, be persistent when working to solve important and sticky problems.

**"I am a Git rockstar."**

~ some people

hopefully this session will show  
alternate ways of teaching people  
git.

**Git was conceived for (and by) Linux kernel developers.**

Quick show of hands: How many people will raise their hand when asked? Great. And how many people here are Linux kernel developers?

**How we typically teach people "how to tech" has nothing to do with adult education best practices.**

RTFM: read the manual. Here are all the commands, here are all the options. Memorize everything, and figure out later how to apply the knowledge.

**Adults learn best  
when they can be selfish.**

Andragogy assumes the following about the design of learning: Adults have the need to know why they are learning something. Adults learn through doing. Adults are problem-solvers. Adults learn best when the subject is of immediate use.



**"Please memorize all Git commands  
and use only rebasing  
when merging your work."**

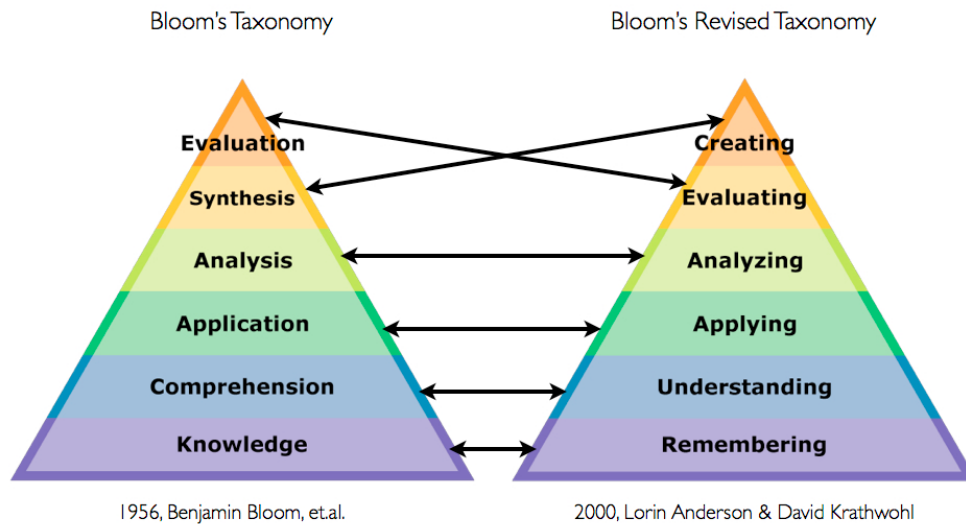
~ No client ever.

Your problem might sound like:  
My client keeps changing his  
mind, and but they don't want to  
pay me to redo the work. Your  
problem doesn't sound like: My  
client wants me to memorize all  
the parameters for using Git at the  
command line.

**Start with the whole  
to solve real problems.**

Define your real problem clearly. Learn how to use a tool to get your problem solved. Try solving the problem. Take notes about how smooth it was to solve your problem. Write recommendations to your future self on how you'd solve the problem in the future now that you know what you know.

# Bloom's Taxonomy



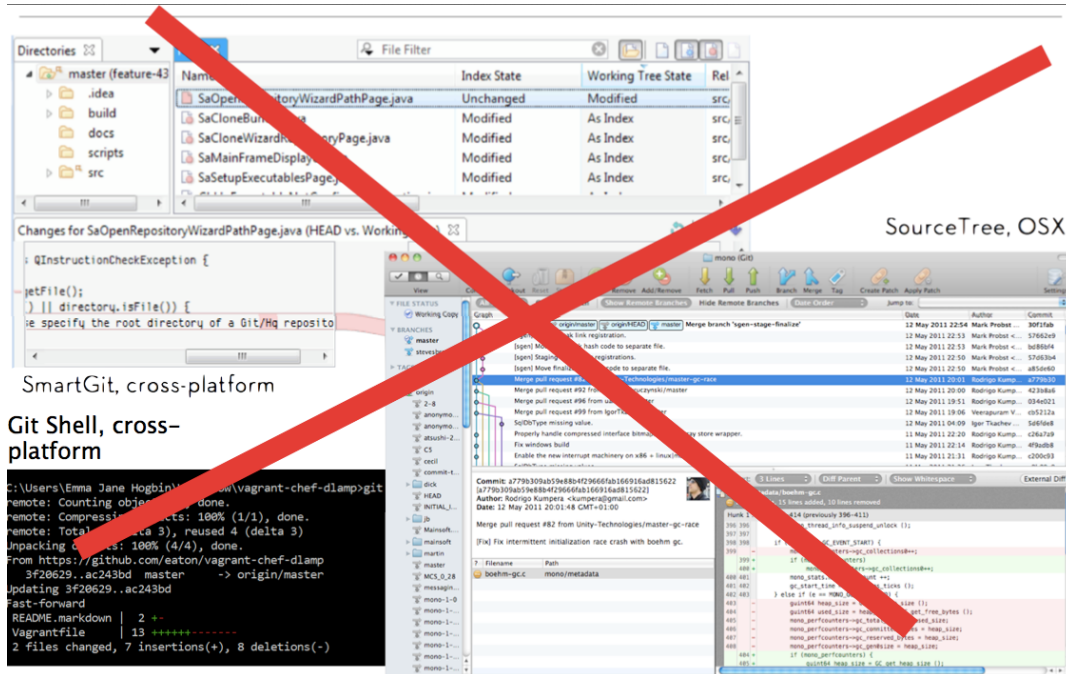
Remember: recall the information. memorize, define, duplicate. Understand/Explain: Explain ideas or concepts. Recognize, paraphrase, describe. Apply: Use the information in a new way. Illustrate, demonstrate. Analyze: distinguish between different parts. Compare, contrast, experiment, question, test. Evaluate: justify a stand or a decision. Judge, defend, argue. Create: Create new product or POV. Assemble, construct, design.

Source: education ambassador

[<http://educationambassador.com/resources/entry/android-apps-for-blooms-remembering>]

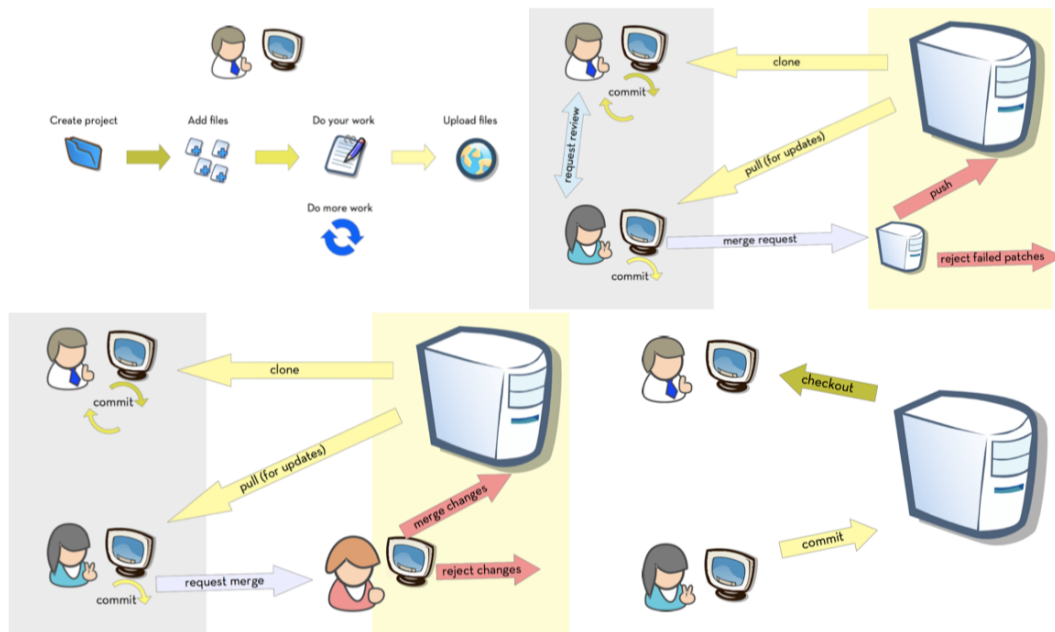
## Agenda

- Sketching workflow
- Branch management strategies
- Q&A / therapy session



GUIs add a visual complexity that won't necessarily help you understand what you're dealing with and almost lull you into a false sense of security. To be fair: working at the command line can also be frustrating. Do what works for you today.

Any workflow you can imagine, Git can probably handle.



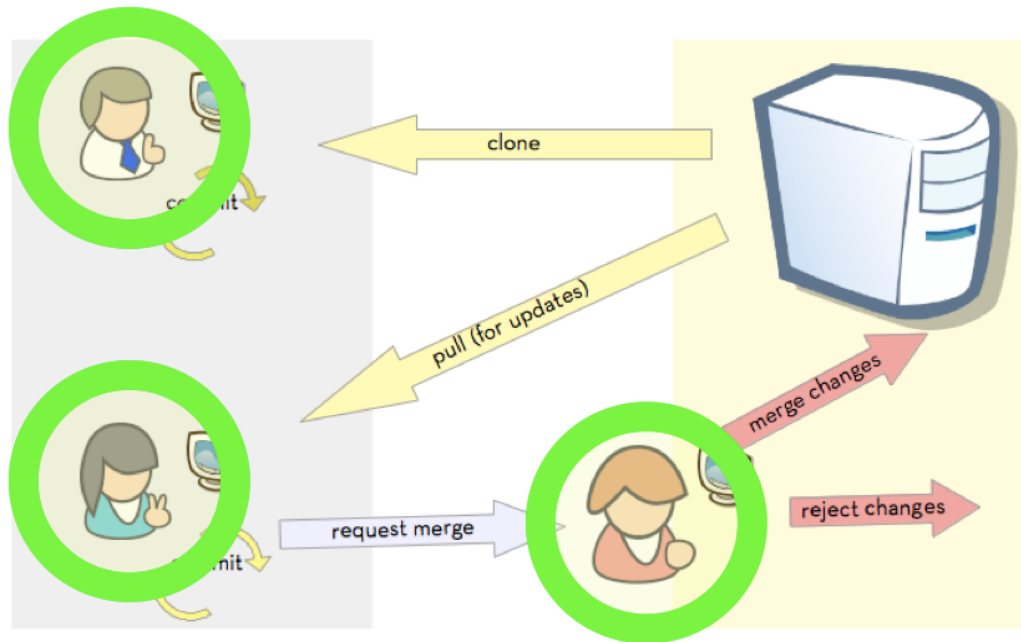


Which is just a fun way of saying,  
"Git don't care!"

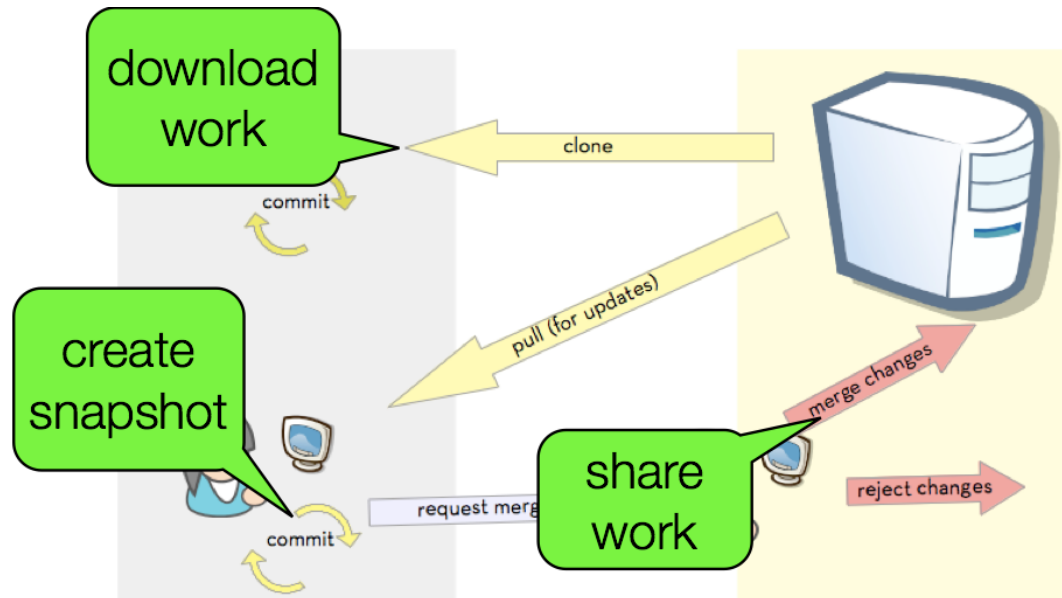




**Your problems are (mostly) social.**



If you're working on a very large teams, think in terms of roles, instead of individual people if it's easier.



once you've identified people on your team, write down the tasks they need to accomplish.

## Who's on your code team?

- developers
- designers
- project managers
- clients

Write down a list of all of the people on your code team. This list may include:

### **Within your team what does everyone do?**

- Write code.
- Review code.
- Push tested code to the server.
- Fix broken code.

Maybe you do everything. Maybe you only do some things. Write a list of all the tasks you and your teammates are actually responsible for.

## What are your tools and constraints?

- Version control software (we'll always assume Git)
- Code hosting system (Bitbucket, GitHub, self-hosted)
- Server ecosystem (dev / staging / live)
- Code editors & integrated developer environments (vim, Dreamweaver, Sublime, PHPstorm)
- Automated testing systems or review “gates”

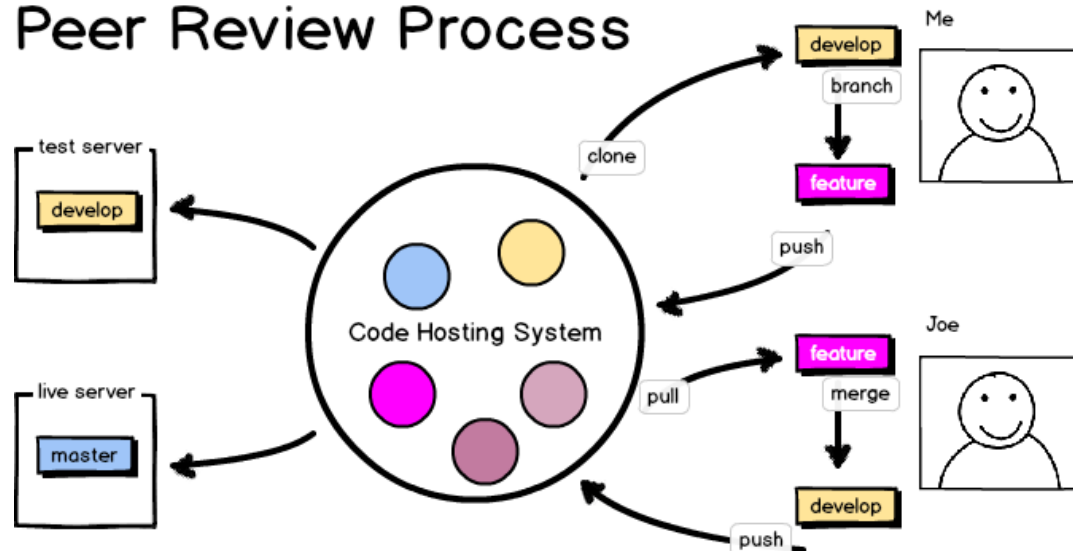
Often there are other things we need to fit into our workflow. Create a third list of any tools and restraints you are aware of.

## **Sketch out your workflow**

- Identify the roles on your team.
- Identify the relationships between the team members.
- Draw arrows to show how code flows between team members.
- Map the Git commands onto the arrows.

## Sample Workflow

### Peer Review Process

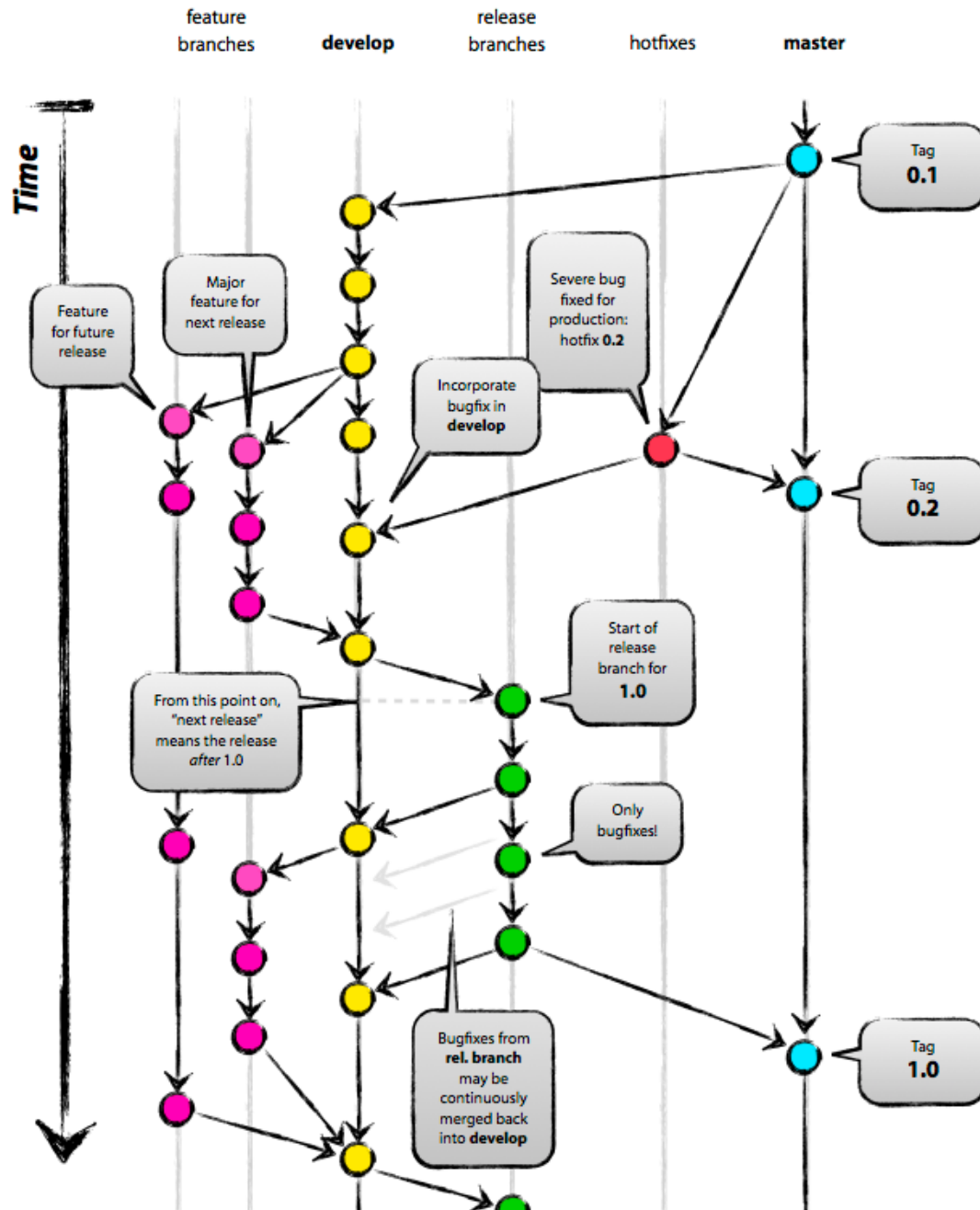


this is the star wars sprintflow.  
There are more layers for the WP  
workflow.

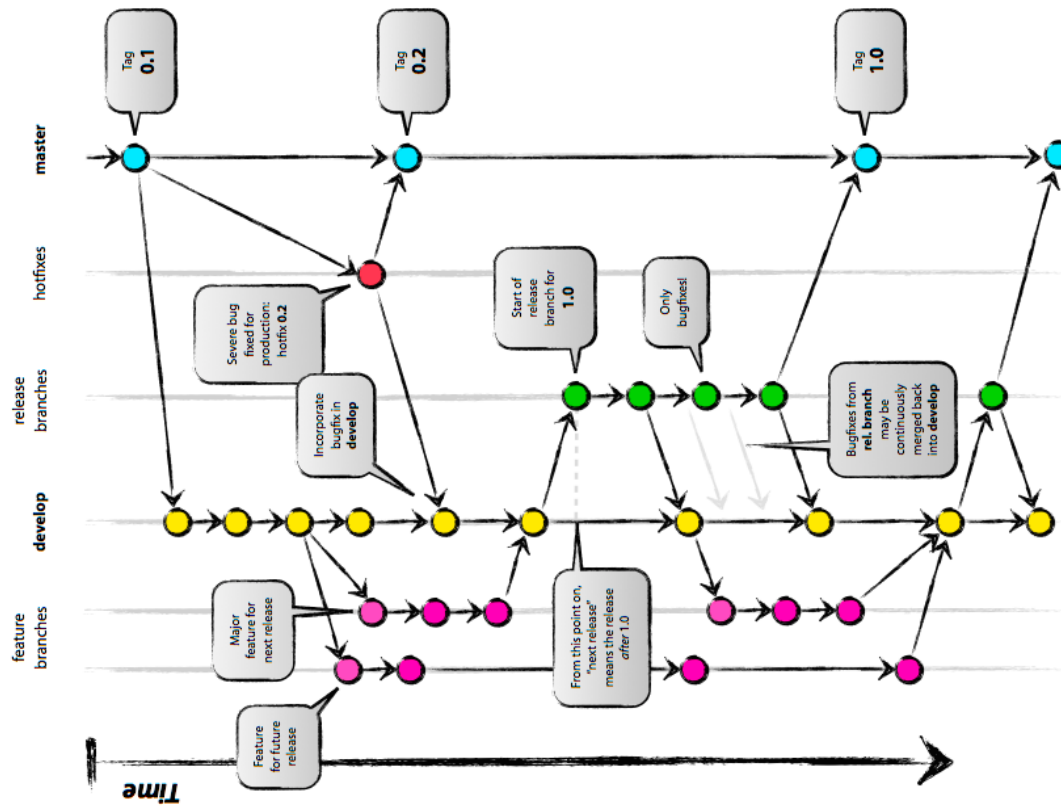


## Interlude

## When Learning a New Topic Start by Redrawing the Diagram



completed diagrams can be really hard to tease apart. Rebuild the diagrams to make them your own. First copy the diagram verbatim, and then go back to the explanation and see if you can follow along. Then read the explanation and try to draw your own diagram from scratch.



Project managers, take a look at these diagrams sideways and you (sort of) get a Gantt chart.

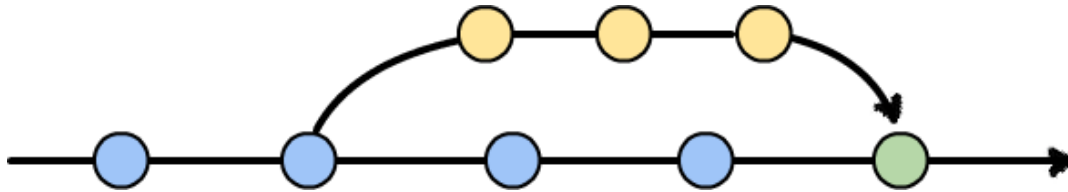
**</Interlude>**

## Branching Strategies

- Scheduled Deployment: [Gitflow](http://nvie.com/posts/a-successful-git-branching-model/)  
[<http://nvie.com/posts/a-successful-git-branching-model/>]  
or [Simplified Gitflow](http://drewfradette.ca/a-simpler-successful-git-branching-model/)  
[<http://drewfradette.ca/a-simpler-successful-git-branching-model/>]
- Continuous Deployment: [Branch Per Feature](https://www.acquia.com/blog/pragmatic-guide-branch-feature-git-branching-strategy)  
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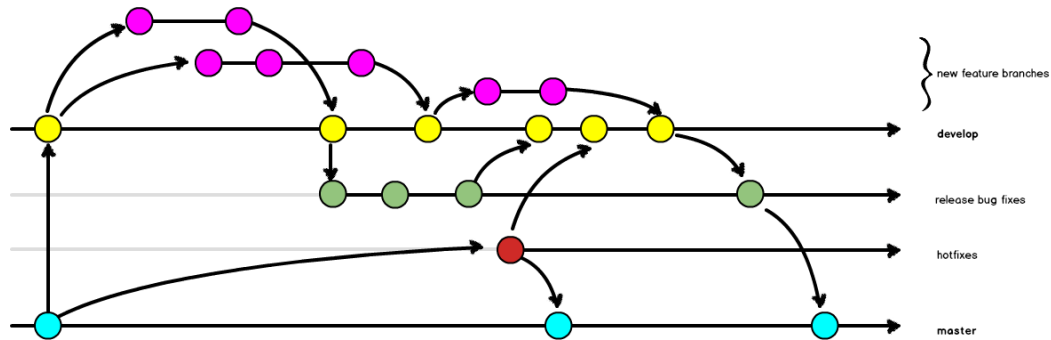
With the team members identified, it's time to sketch out how these people (ideally) work together.

## "Continuous Deployment"



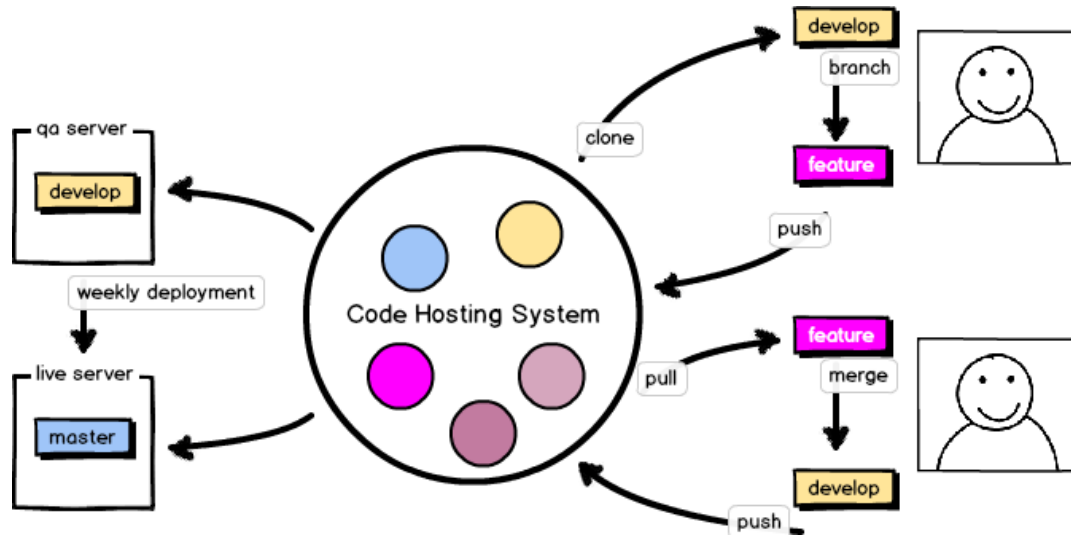
Code is deployed faster than scheduled releases. Requires (trusted) test coverage. Typically uses a mechanical gatekeeper to check in code to the master branch. Fewer branches to maintain / keep updated.

## Scheduled Deployment



Incorporates human-reviews, and possibly automated tests. Allows you to collate many smaller changes into a single release.

## Sample Workflow Whispering Pines Workflow



Aiming for stability first, speed second. Some test coverage. Changes are collated weekly onto a QA server, and deployed from there.



## Resources

- [github.com/emmajane/gitforteams](https://github.com/emmajane/gitforteams)
- [Workflow for Developers](http://developerworkflow.com/)  
[<http://developerworkflow.com/>]
- [Managing Chaos: Digital Governance by Design](http://www.rosenfeldmedia.com/books/web-governance/)  
[<http://www.rosenfeldmedia.com/books/web-governance/>]
- [Workflows and Permissions Strategies](https://www.atlassian.com/git/workflows)  
[<https://www.atlassian.com/git/workflows>]
- Scheduled Deployment (GitFlow): [Gitflow](http://nvie.com/posts/a-successful-git-branching-model/)  
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([Cheatsheet](http://danielkummer.github.io/git-flow-cheatsheet/)  
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- Continuous Deployment: [Branch Per Feature](https://www.acquia.com/blog/pragmatic-guide-branch-feature-git-branching-strategy)  
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or [GitHub Flow](http://scottchacon.com/2011/08/31/github-flow.html)  
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Show me your sketches!

@emmajanehw

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<https://github.com/emmajane/gitforteam5>

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