

Discussion Section 10

- HW 9
- Regular expressions
- sed
- AWK
- Version control (Git)

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 - to get a number between 0 and 1, just divide by `RAND_MAX`

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 - '\b[A-Z0-9._%+~!@&*-]@[A-Z0-9.-]+\.[A-Z]{2,}\b': email addresses

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sed (stream editor)

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 - sed 's/old/new/' filename
- If you want to know more, here's a really good in-depth tutorial:
 - <http://www.grymoire.com/Unix/Sed.html>

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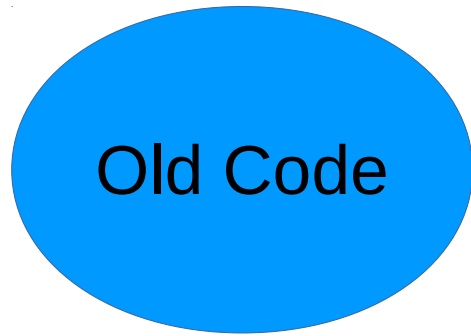
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Version Control (Git)

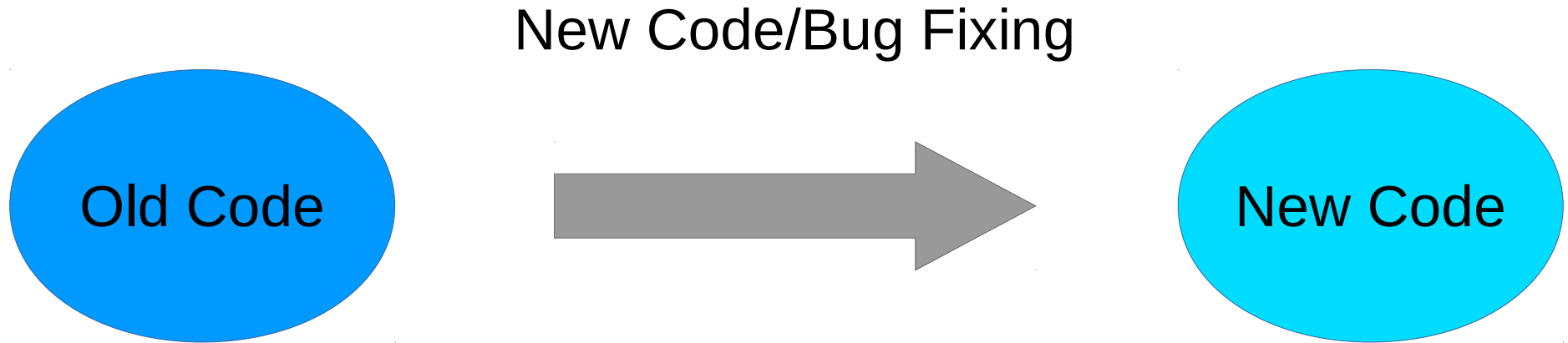
- Version control is useful for a variety of reasons that all boil down to keeping track of code and changes to that code
- You can use Git (and other version control systems) both on your own and in collaborative projects

Solo Git

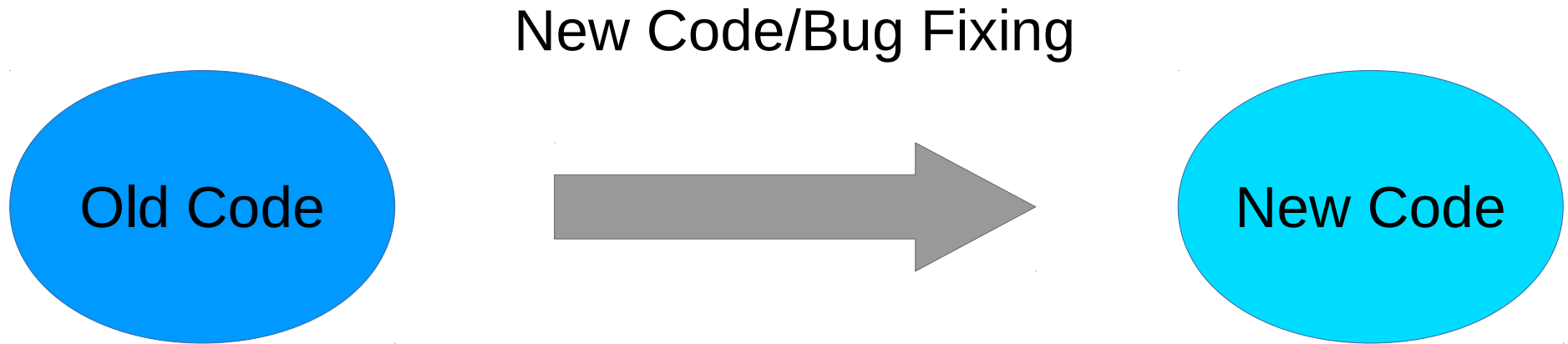
Keeping track of previous code



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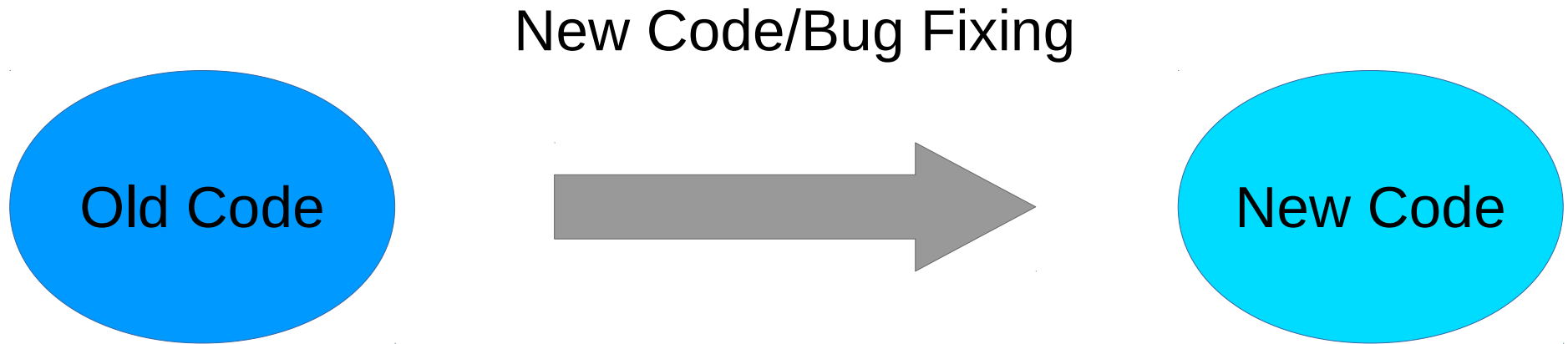


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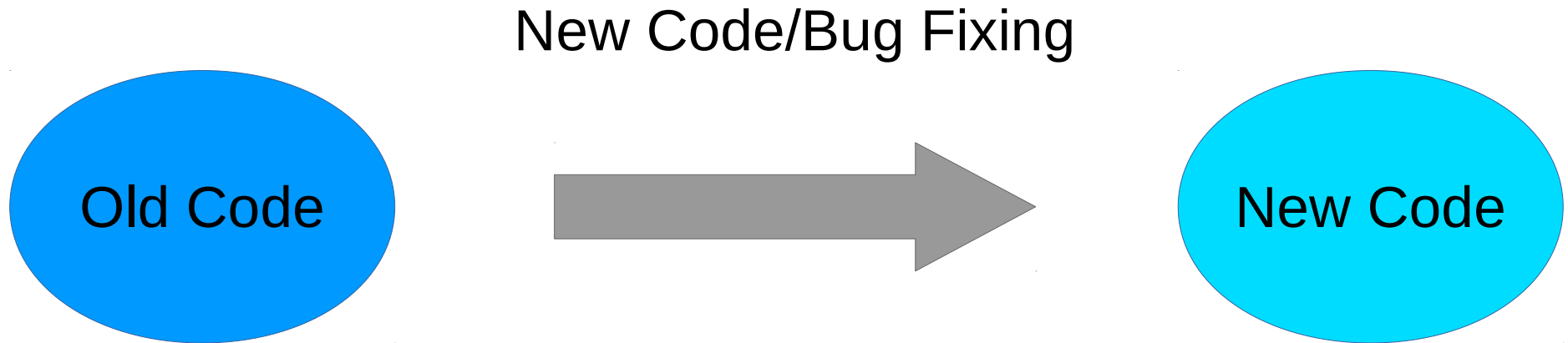
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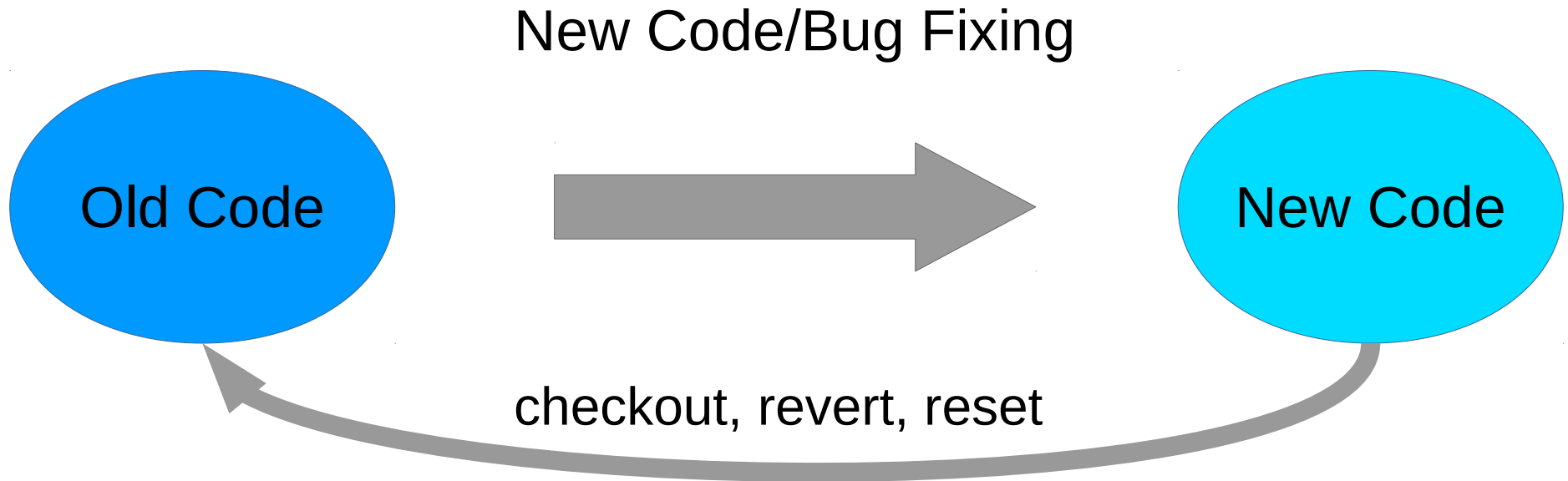
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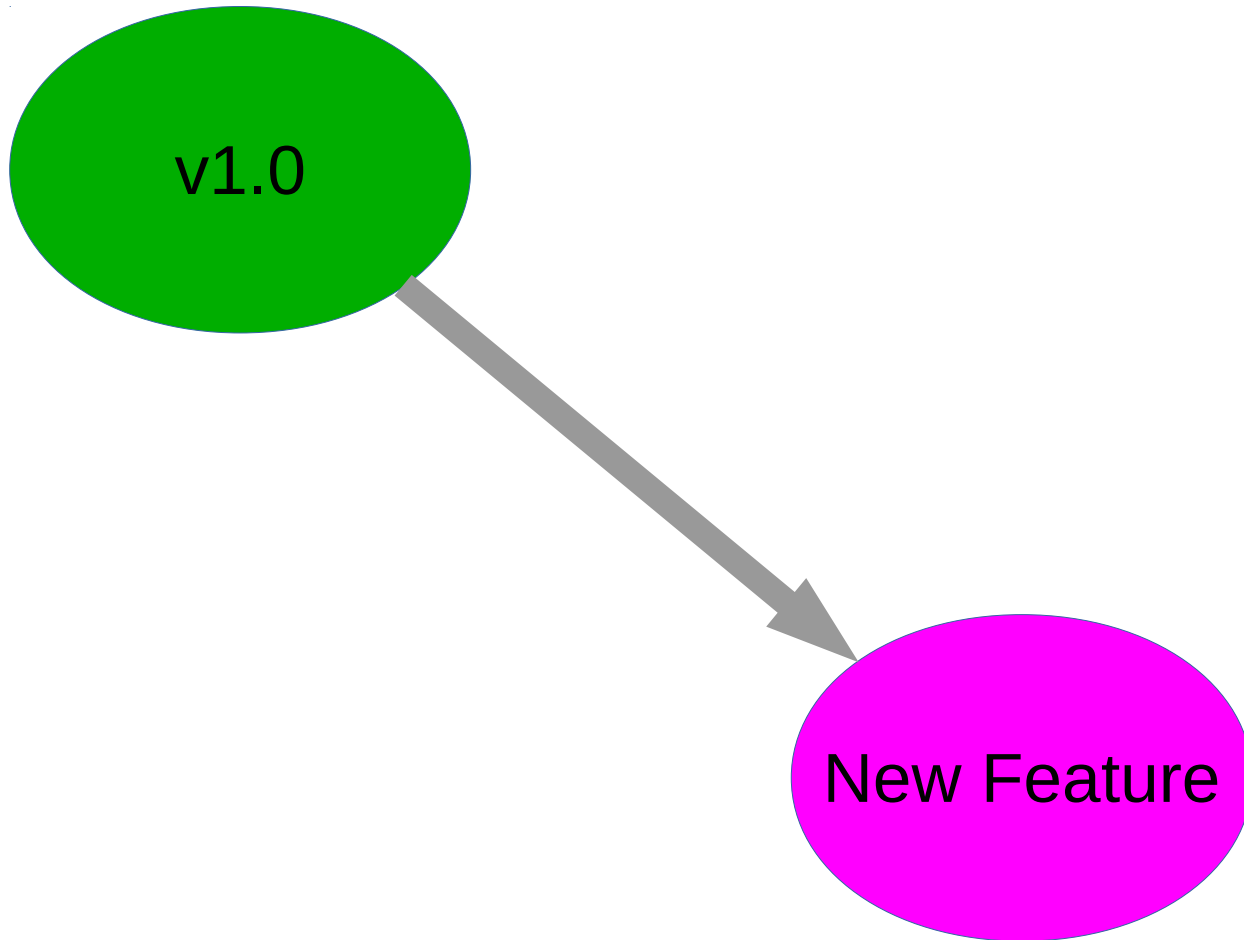
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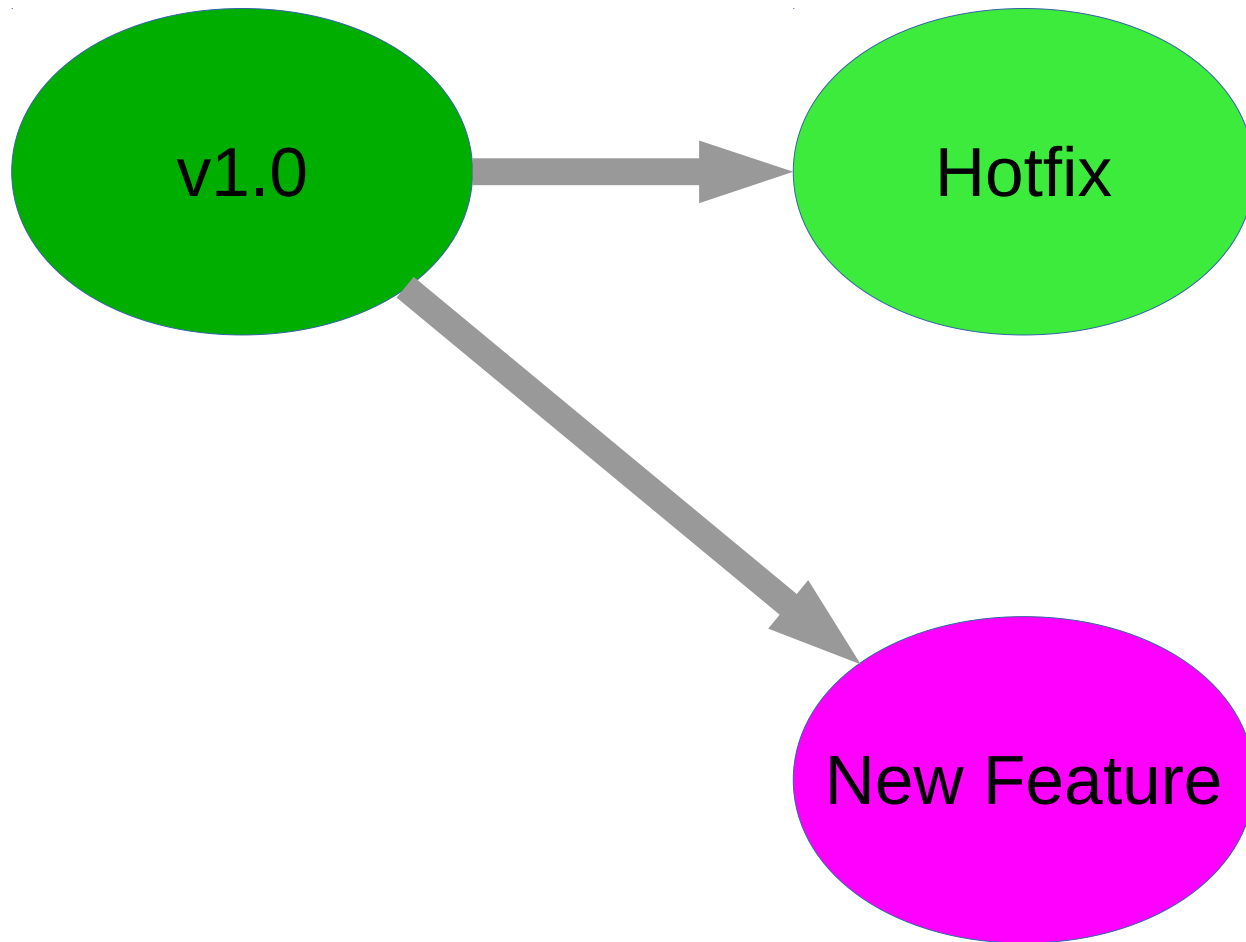
Developing/maintaining public software



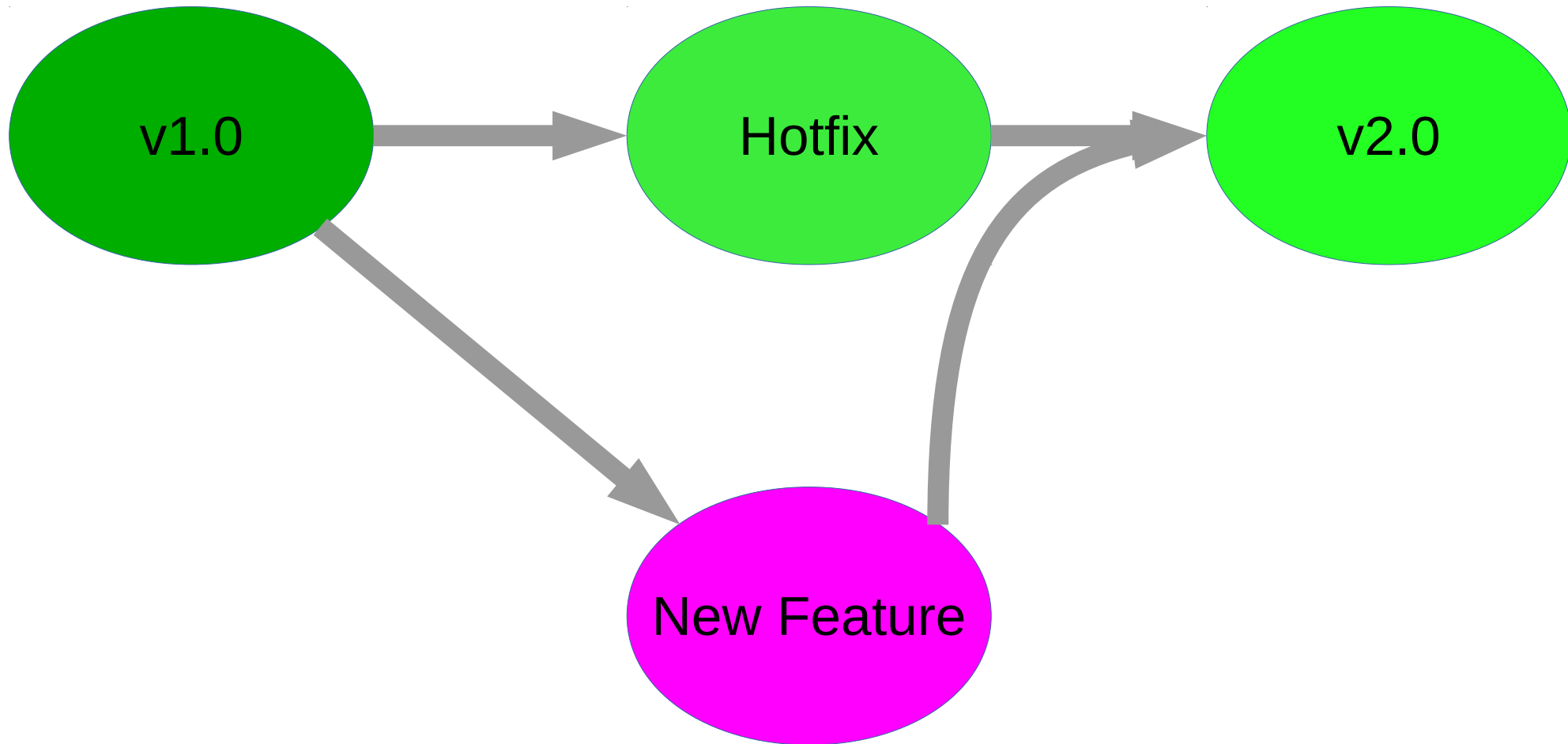
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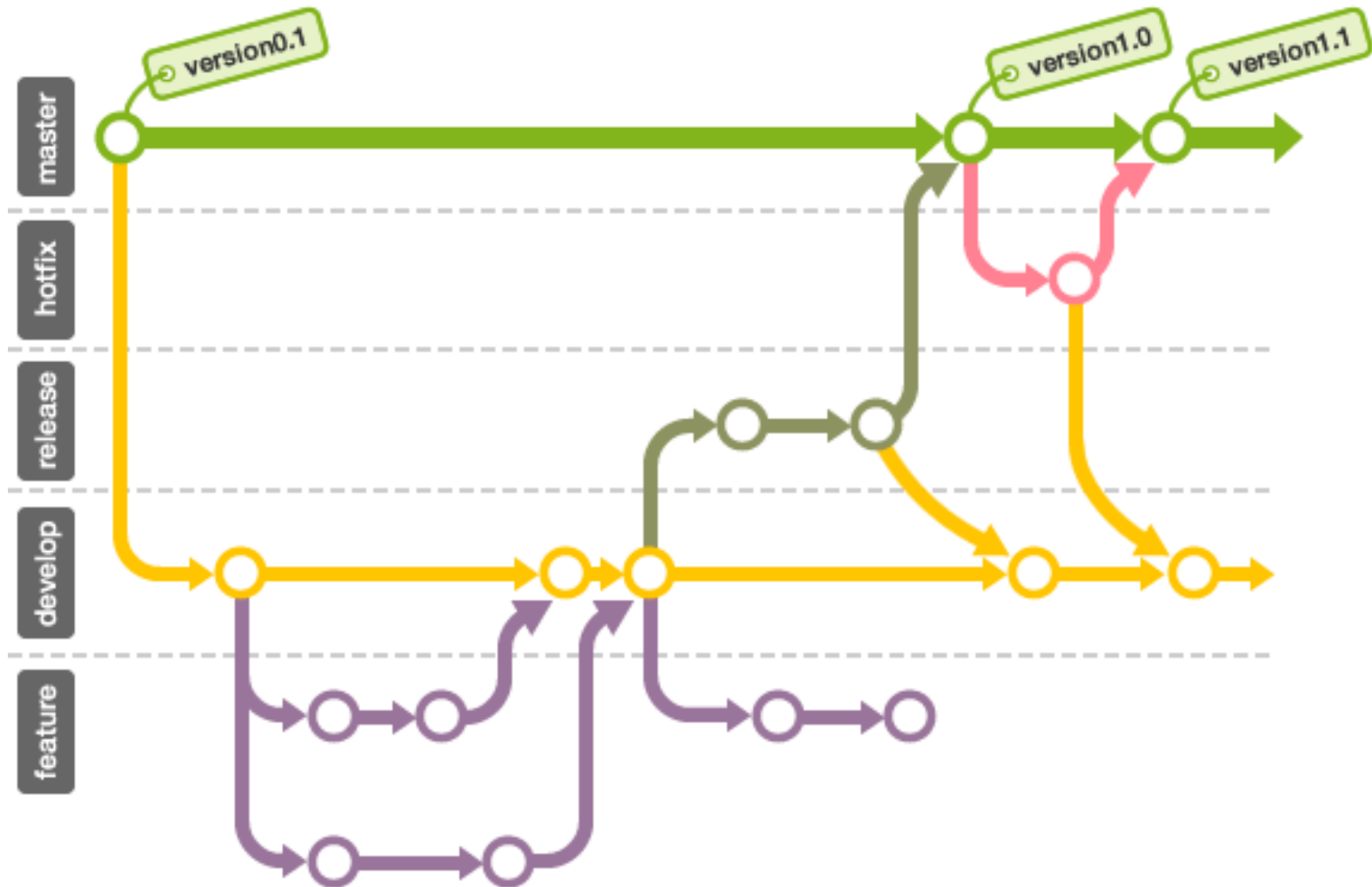


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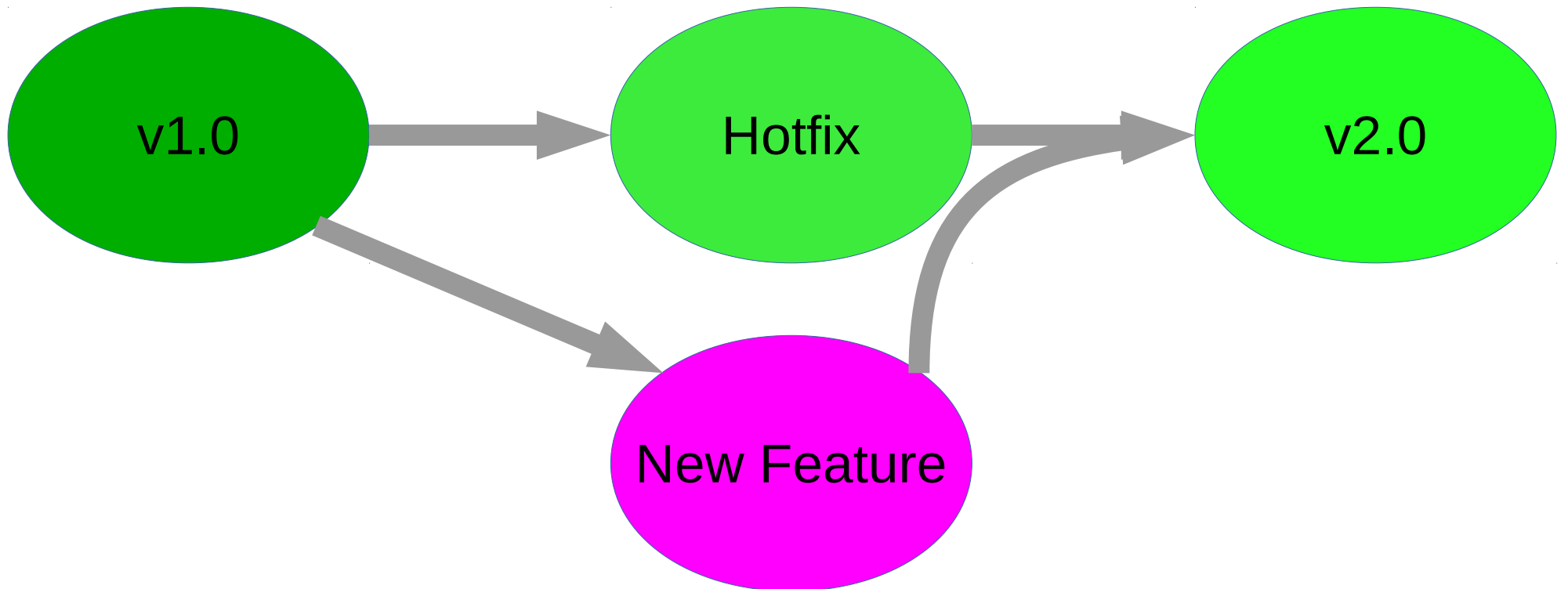


Collaborative Git

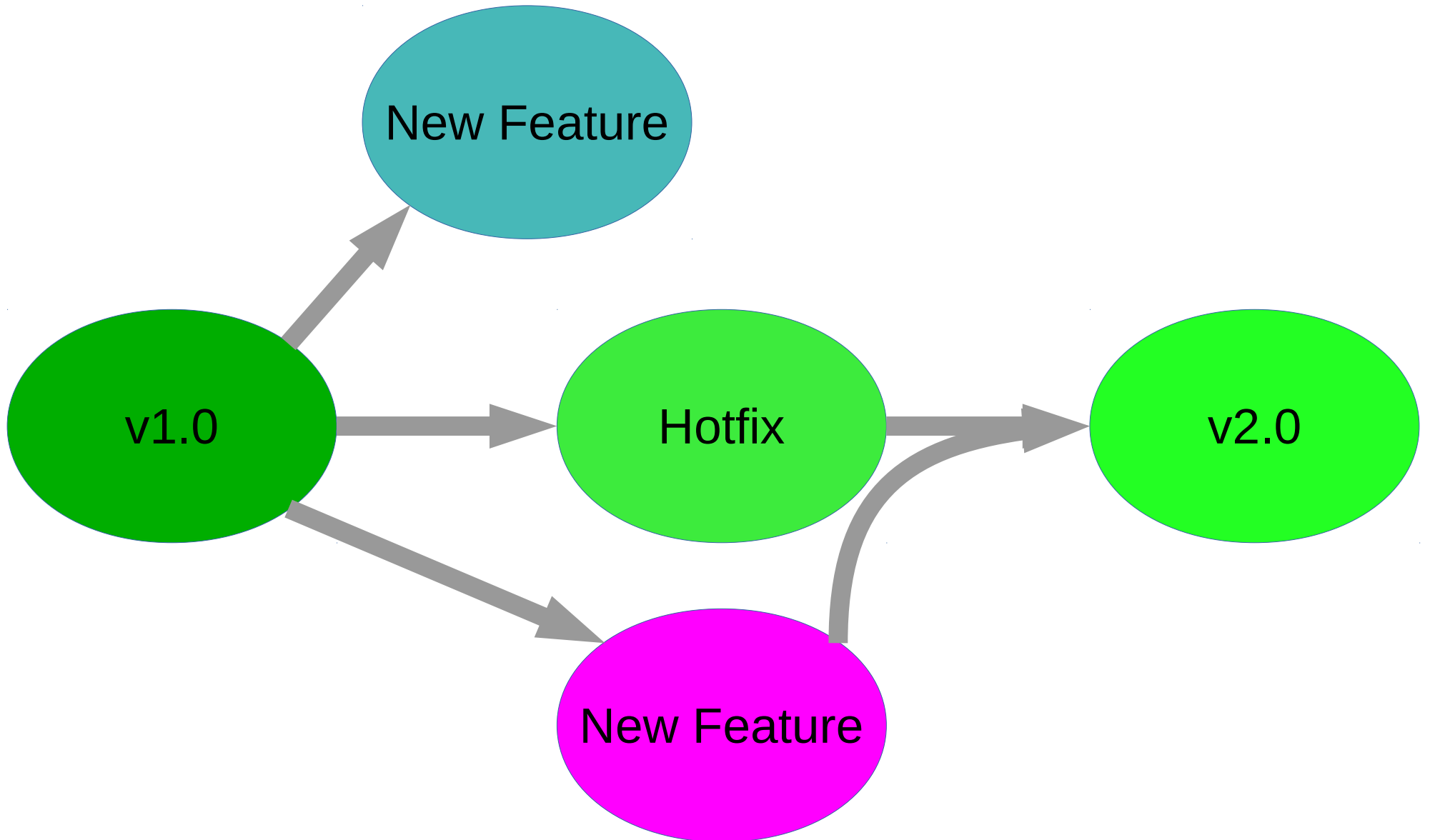
Branches allow testing and parallel collaboration



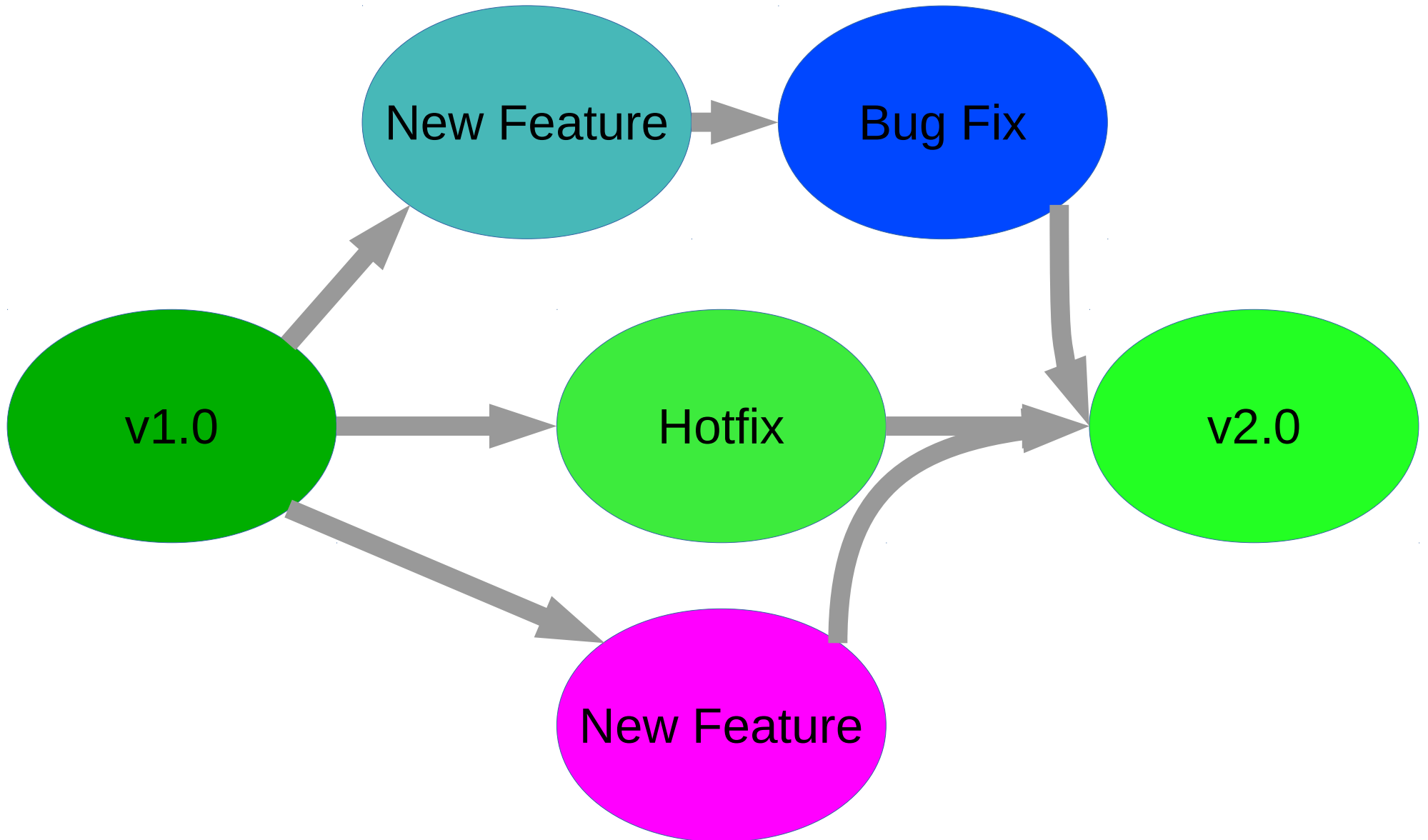
Group software development



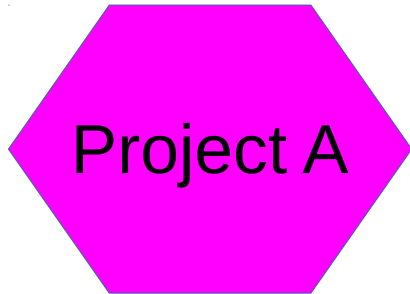
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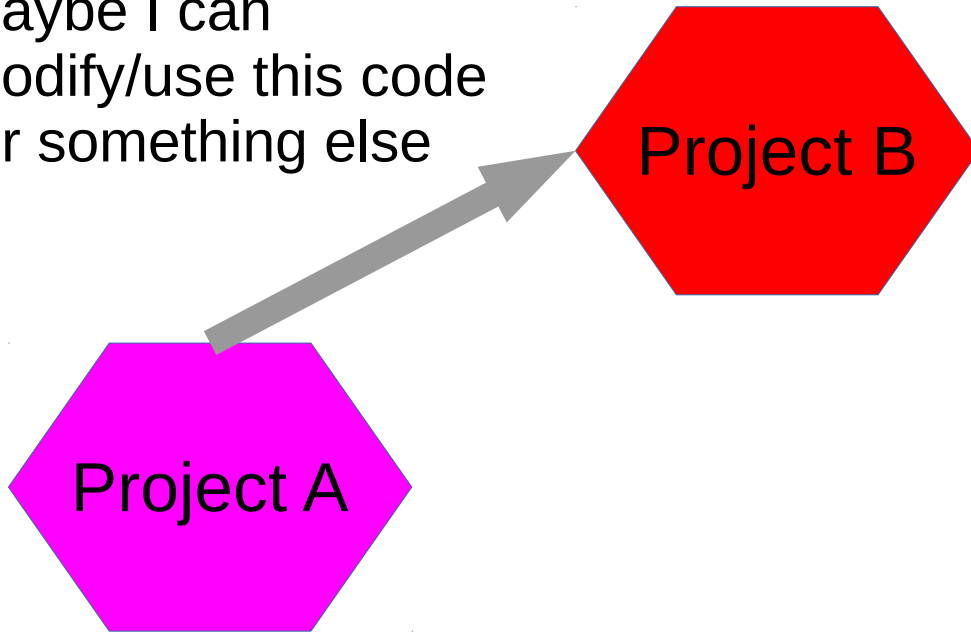


New project/software, same starting point or shared resources



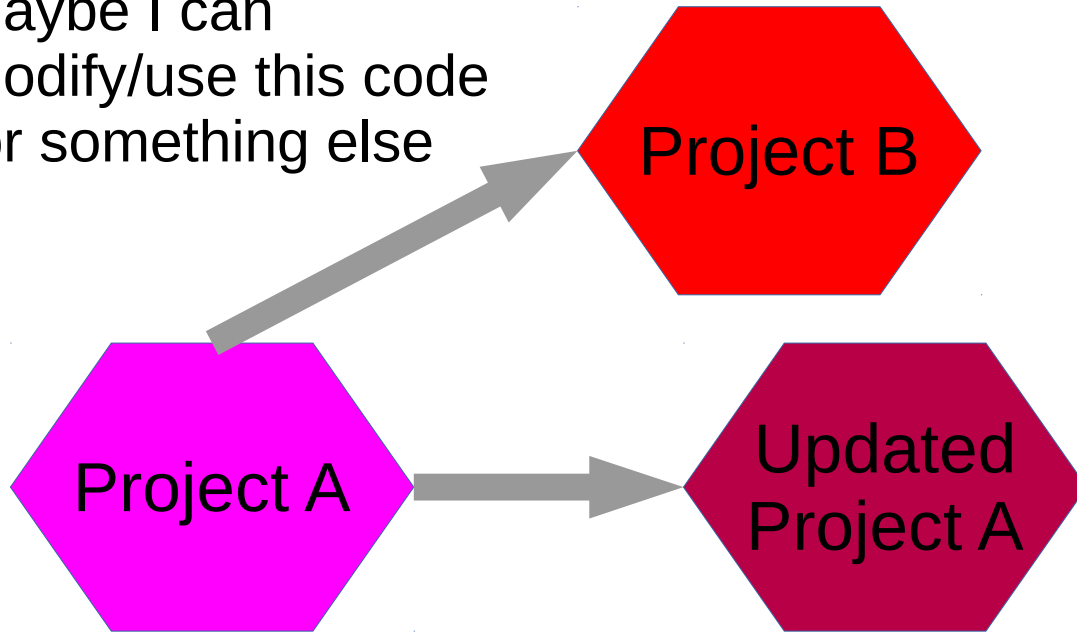
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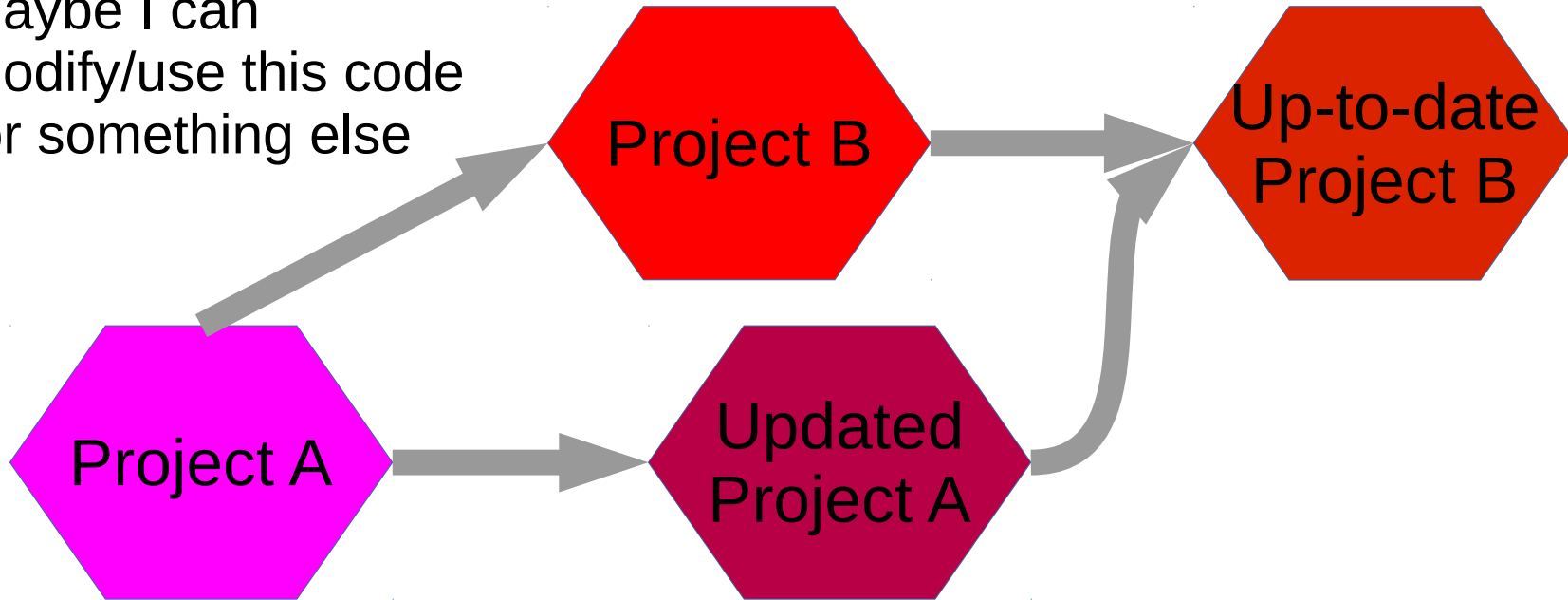
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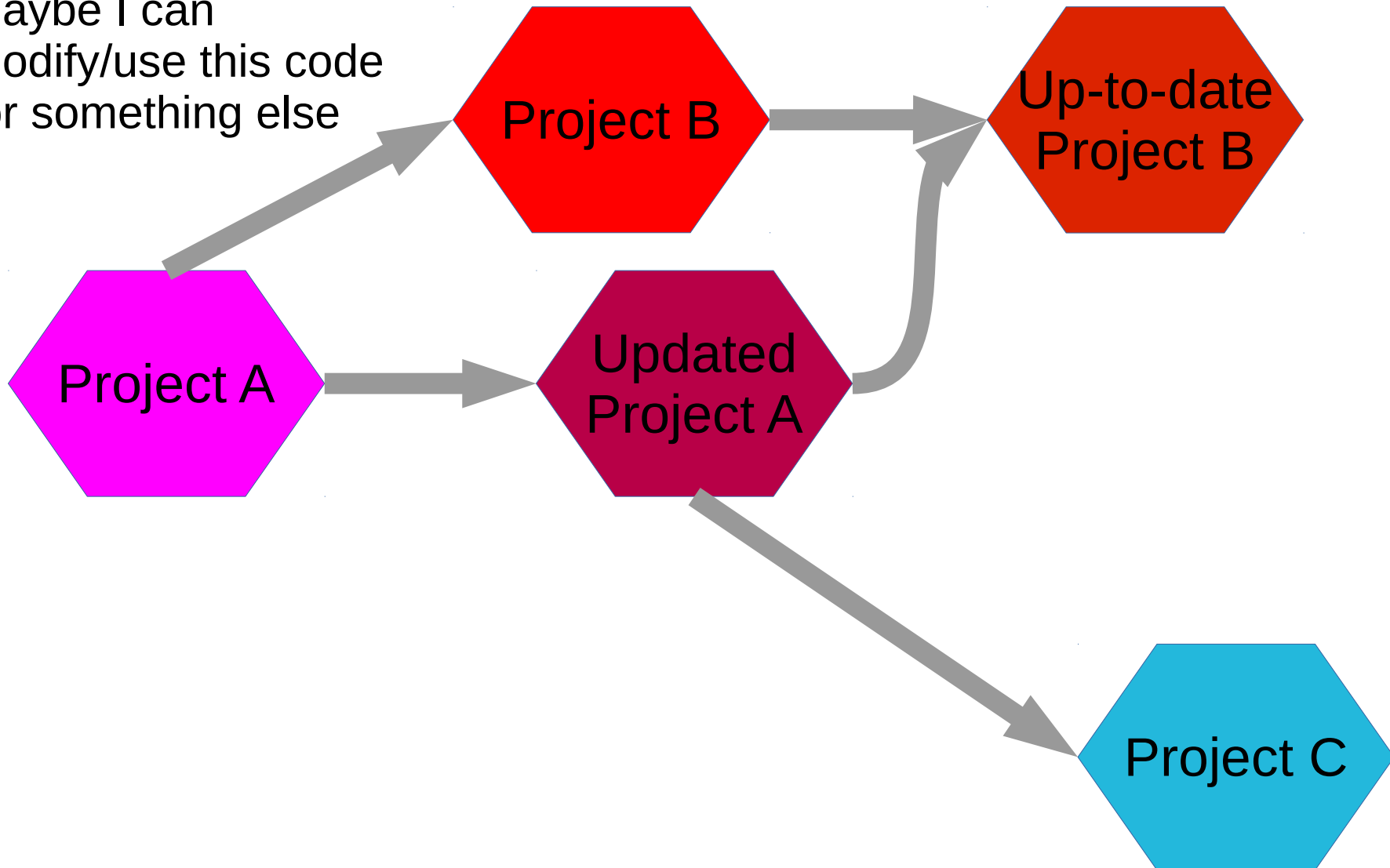
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Solo Commands

- Most important for solo work:
 - Creating a repo (git init)
 - Adding, deleting (git add, git rm)
 - Committing (git commit [-m])
 - Undoing changes (git reset [file])
 - Checking what files you've changed (git status)
 - Looking at the change log (git log [--stat] [-p])
 - Ignoring files (.gitignore)

Collaboration Commands

- Most important for collaborations:
 - Cloning a repo (git clone [address])
 - Pushing/Pulling (git push/pull [branch])
 - Safely undoing changes for everyone (git revert [commit])
 - Making a new branch (git branch [name])
 - Switching branches (git checkout [name])
 - Merging branches (git merge [name])