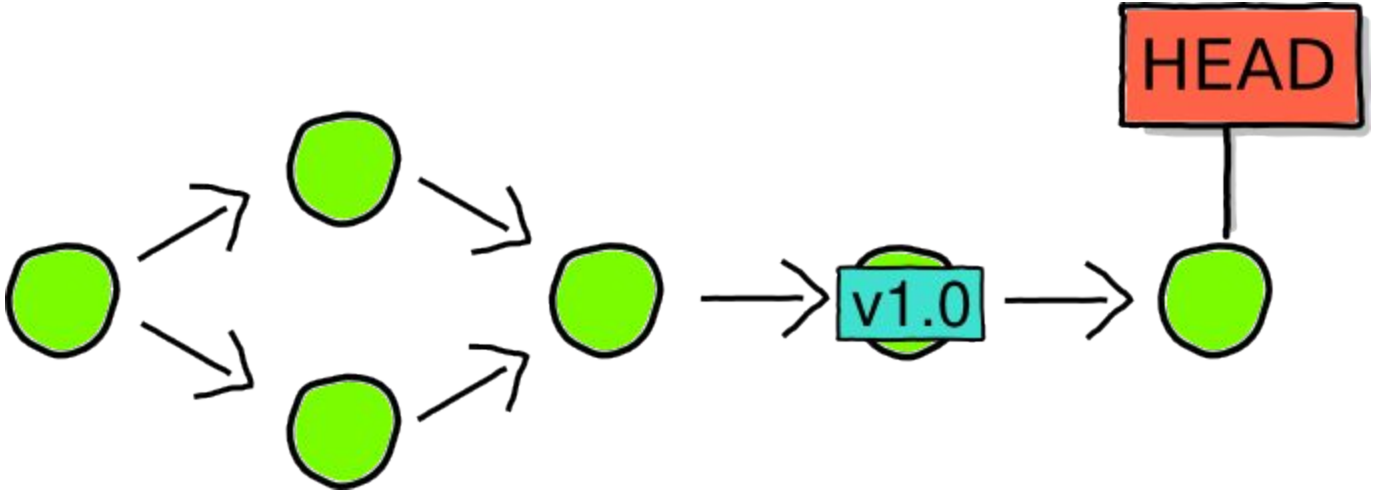
Tags & Branches

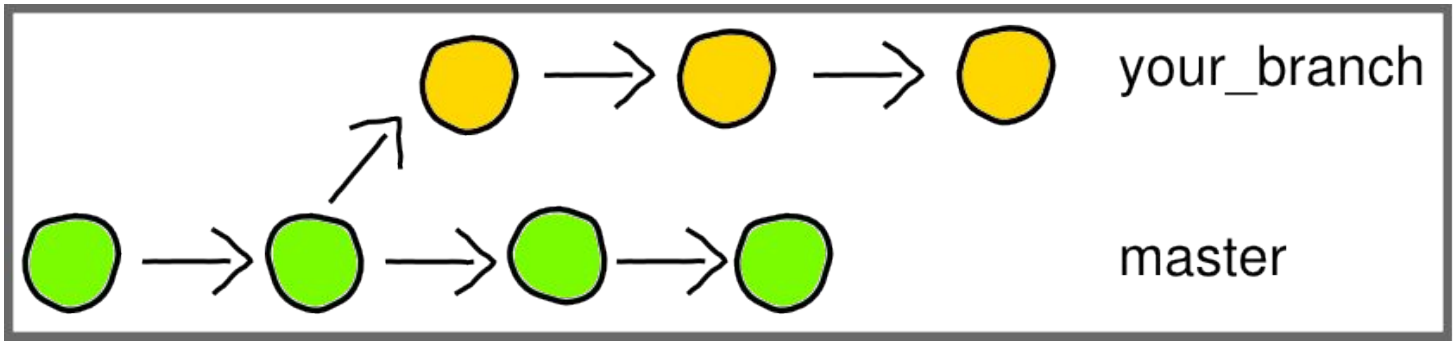
Adding a tag

```
git tag [version]

git push origin [version]
```



What is a branch?



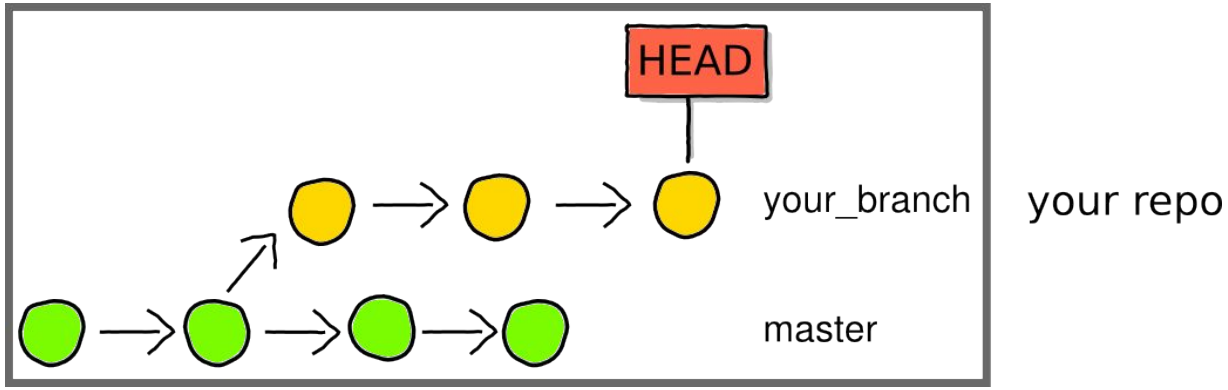
your repo

Creating a branch:

```
git branch [branch-name]
```

Switching between branches

`git checkout [mybranch]`



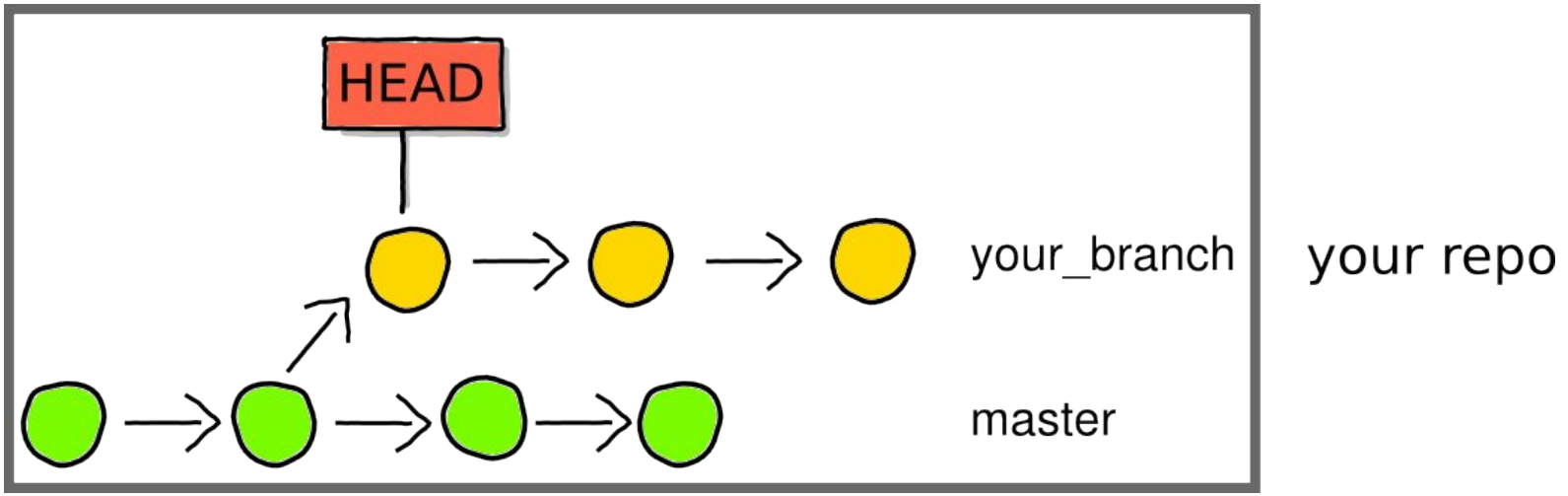
- Resets the content of the working copy to the content of the branch
- Moves the HEAD, where your commits are appended

`git branch`

Shows on which branch you are currently working

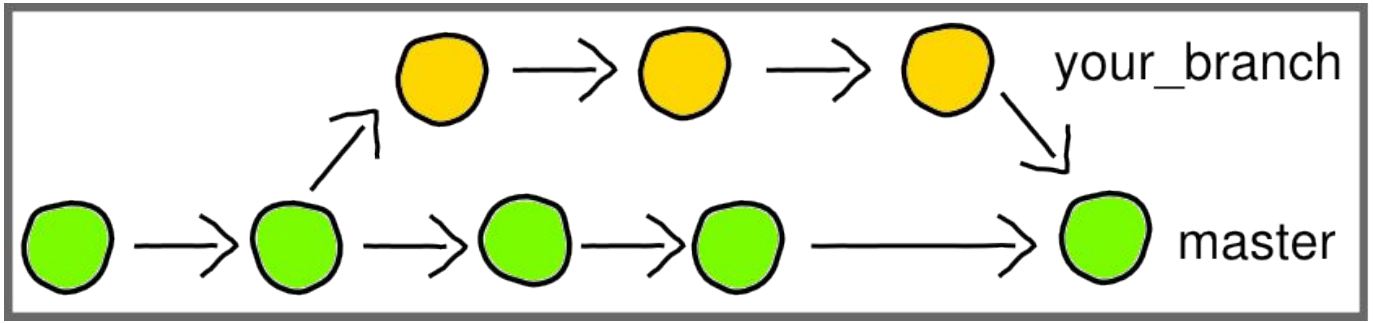
Exkursion: git checkout

- git checkout can be used to switch your Working copy and HEAD to ANY position in the graph



Combining branches via merge

```
git merge [branch-name]
```



your repo

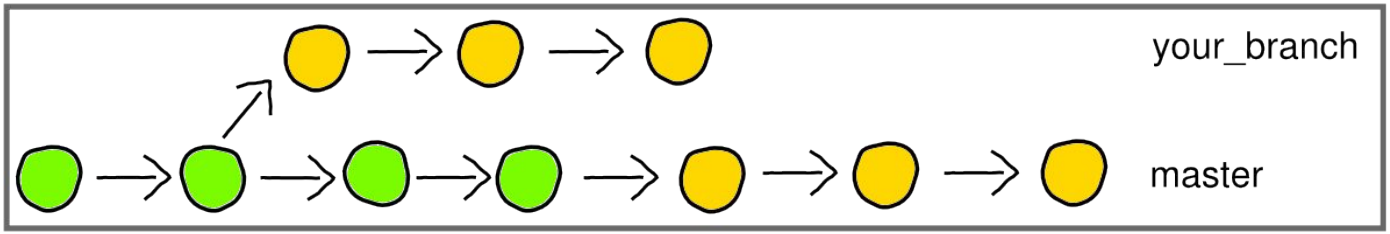
Example:

```
git checkout master
git merge your_branch
```

Combining branches via rebase

`git rebase [branch]`

Appends commits of your current branch on top of the commits of [branch]



your repo

Example

```
git checkout your_branch
git rebase master
git checkout master
git merge your_branch
```

Exercise

After heavy development of demohttpserver at the last exercise we will now create a 1.0 release and a website for it

- Create a tag v1.0 and push it to GitHub. Check the “releases” section of your repos GitHub website
- Create a branch `gh-pages`. Add the file `index.html` (see course materials) to the branch and push the branch to GitHub. Visit `https://<your_username>.github.io/<your_repo>`
- Switch to the master branch and create a new branch `greeting_feature`. Add the lines from the following slides to `demohttpserver.py` (line 30) commit it and merge the feature branch to the master

```
if self.path == '/hi':
    self.set_headers()
    self.wfile.write(b'hi')
```

GitHub Pull Requests

Pull Requests

What are they?

- A suggestion, that someone should include one or more commits of you in a repository

What are they good for?

- Contributing to a GitHub repo you don’t have push access to
- Explicitly want someone to review and agree with your code

Exercise

1. Fork the repository of your partner on github
2. Clone the forked repository from your github account
3. Create a branch
4. Commit a change
5. Push the branch to github
6. Create a pull request to the repository of your partner