git & GitHub Tutorial

UNM Psychology Coding Club
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Why use git and GitHub?
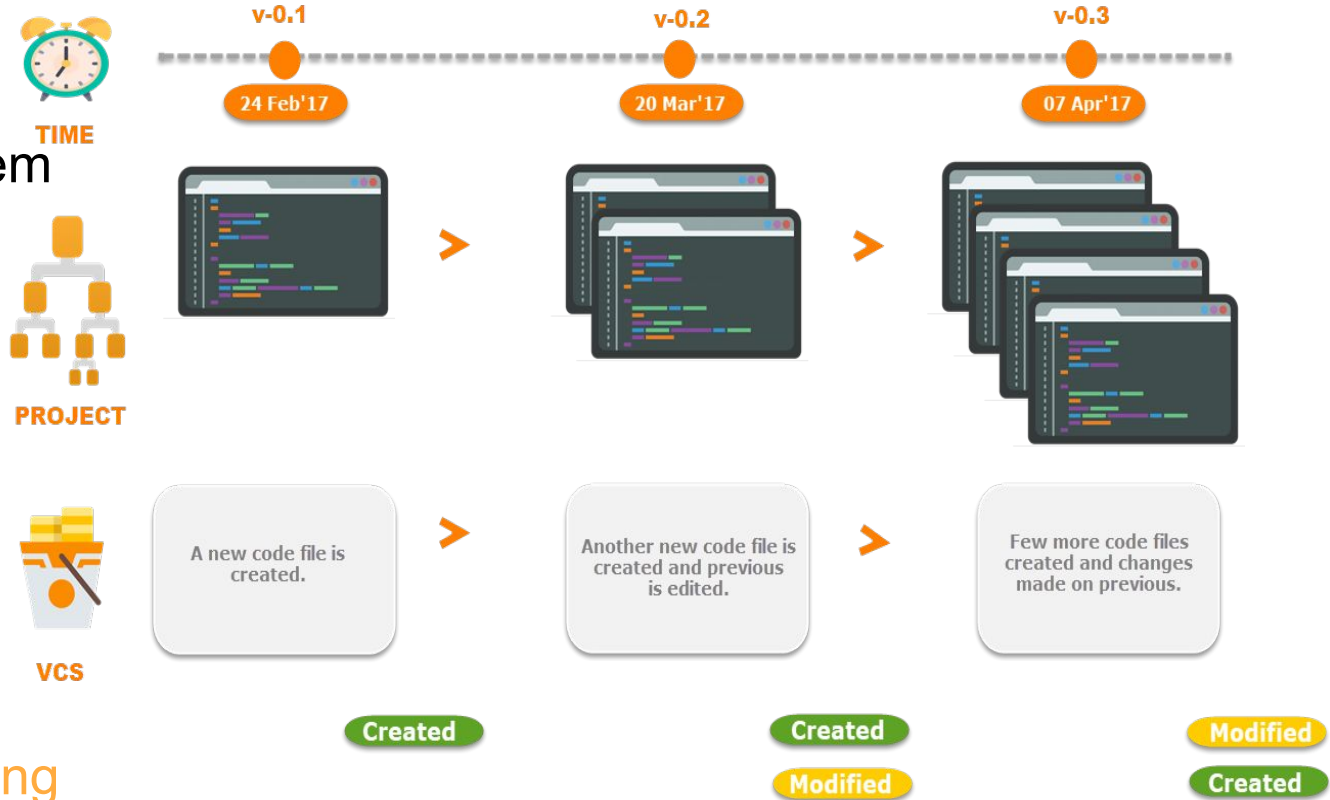
Version control System (VCS)
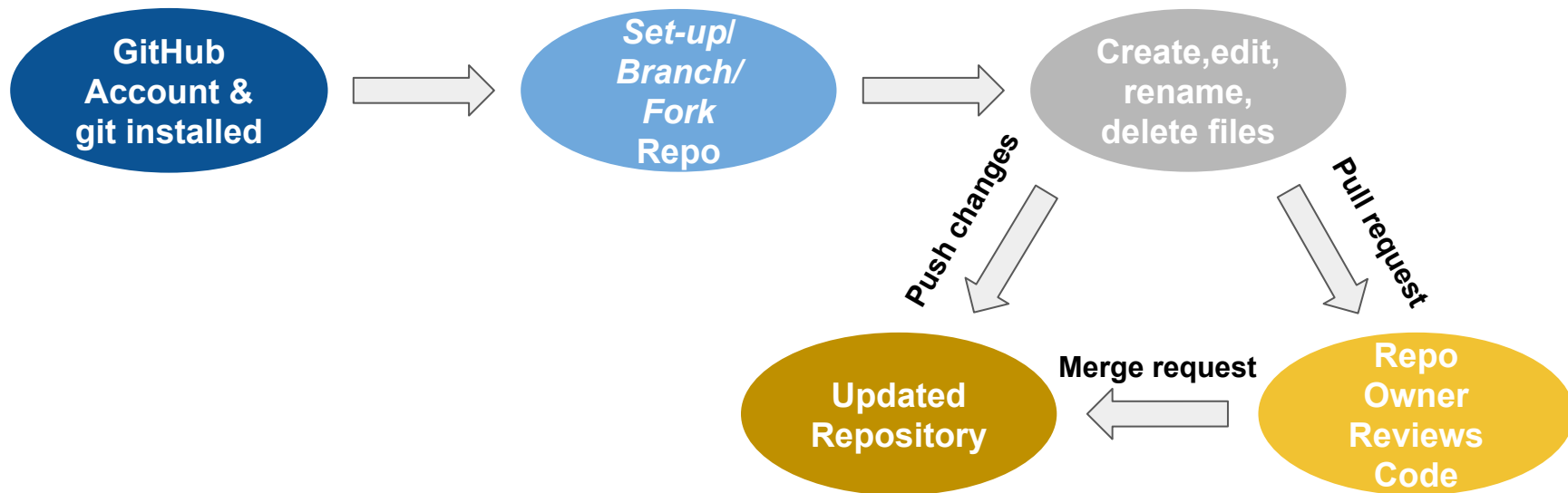
Open source code sharing

Project organization

git = VCS

GitHub = Code Sharing

TIME

v-0.1
24 Feb'17

v-0.2
20 Mar'17

v-0.3
07 Apr'17

PROJECT

VCS

A new code file is created.

Another new code file is created and previous is edited.

Few more code files created and changes made on previous.

Created

Created
Modified

Modified
Created

Example Workflow

Set up Git

0. **You can download Git here**: https://git-scm.com/downloads

1. **Verify that Git is ready**
    a. Open terminal, Mac [`command+space`, type "terminal",enter], Windows [search `cmd`, enter]
    b. Type `git --version` in terminal
2. **Set up your git account**

```
git config --global user.name "Your Name"

git config --global user.email "your@email.com"
```

Connect it to github

0. Go to github.

1. Log in to your account.
2. Click the 'new repository' button in the top-right. You'll have an option there to initialize the repository with a README file
3. Click the "Create repository" button.
4. Click "Clone or download" & copy link
5. In terminal, Cd to local folder where you want repo stored.
6. In terminal, type `git clone "`link`"`
7. Check out the newly created folder

Add, commit, push

0. Add some code or text file to that newly created folder

    a. `echo My first contribution > myfirstcommit.txt`

1. Create `.gitignore` if you have sensitive info (passwords, subject identification)
2. Type `git add "file name"` or `git add -A`
3. Type `git commit -m "first commit"`
4. Type `git push`
5. Your github password might not be there -- it will prompt you to enter github credential

    a. To change password:
        i. `git config --global --unset user.password`
        ii. `git push`

Pull changes

Others in your team will also commit and push changes

Before working on your code, make sure to `git pull` to get recent changes