

# Practical Git

## Git For Everyone

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# Agenda

## Part 1 – Git...what?

Resources

Useful Tools for your Git Toolbelt

Demo Time

## Part 2 – Github Actions

Resources

Demo Time

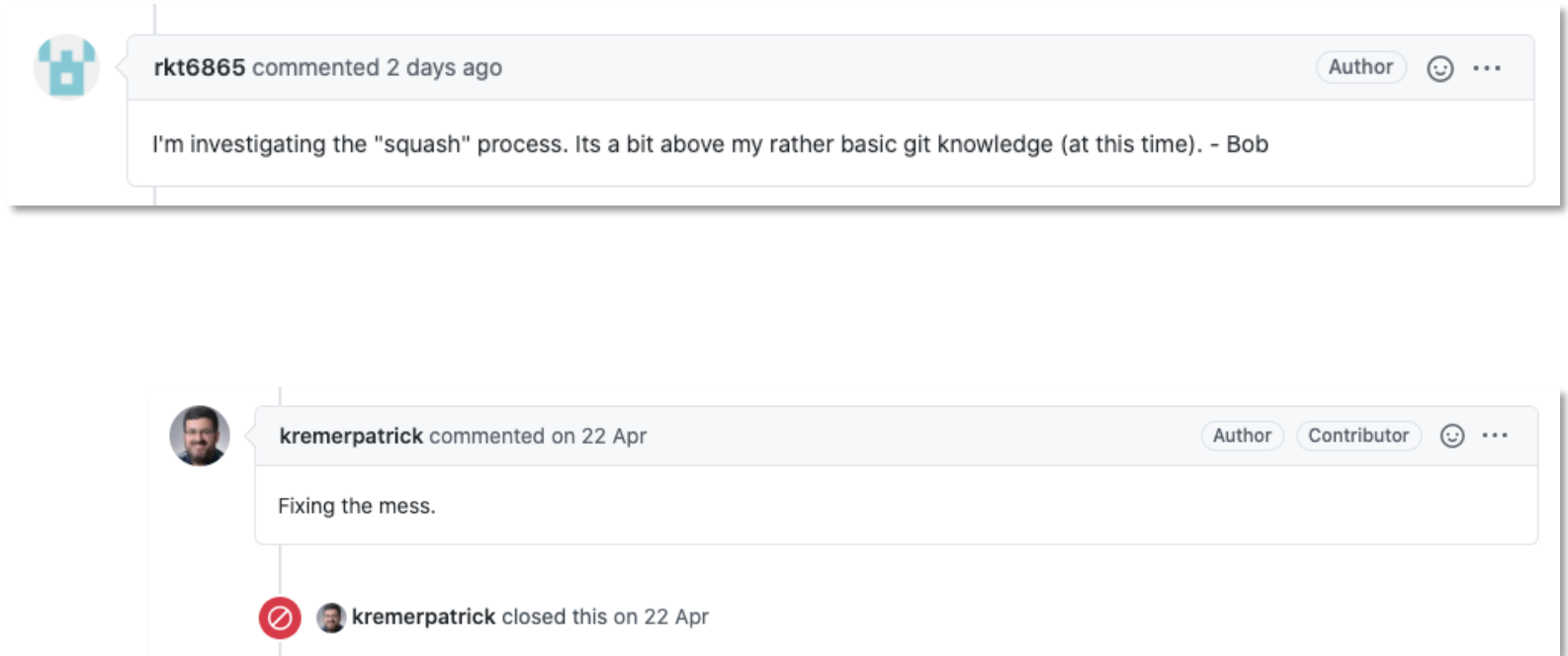
# Git...what?

~~Master~~  
Branch Merge Github Fork Rebase  
Pull Staging SCM Commit  
Upstream Track Push Origin  
Clone Remote Squash  
Conflict

# Git shouldn't be that hard!



@xkcdComic



“Git is for Developers!”

Everyone  
“Git is for ~~Developers!~~”

# Git Benefits for Everyone

## Mapping Routine Tasks to Git Concepts

Scripts

Configuration Files (TF, Kubernetes, etc.)

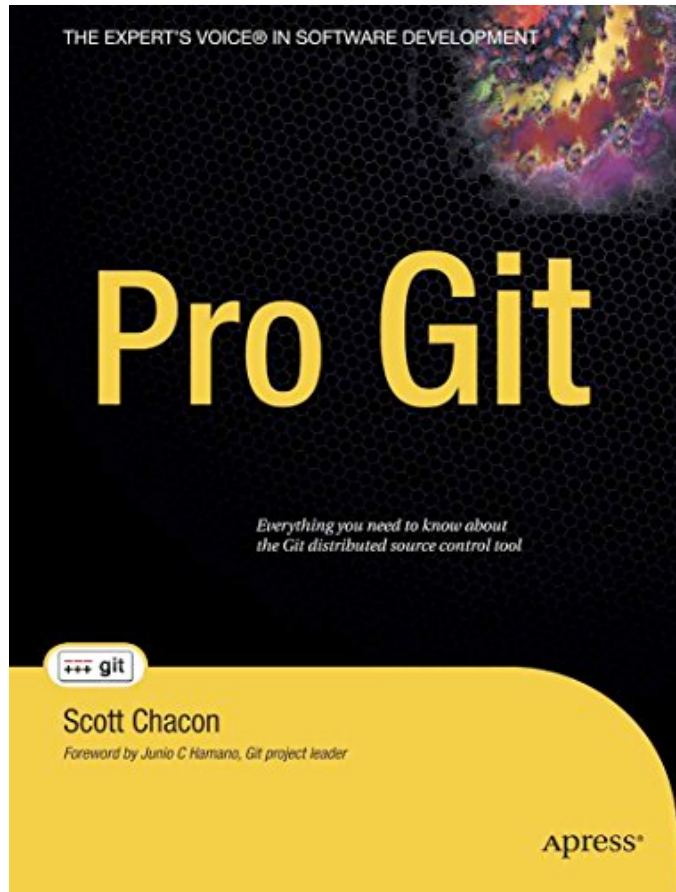
Dotfiles

Documentation (READMEs, etc.)

| What you want...                              | ...is what you Git ☺       |
|---|----------------------------|
| Snapshots (“I want unlimited UNDO”)           | Commits and Tags (History) |
| Documentation (“Why the heck did I do that?”) | Commit Messages            |
| Virtual Folders/Files/Environments            | Branches                   |
| Backup  | Remotes                    |
| Share Files                                   | Remotes                    |



# Git Resources



<https://git-scm.com/book/en/v2>



<https://thoughtbot.com/upcase/mastering-git>

# Git Resources

Of course, there's more

<https://guides.github.com/>

<http://ndpsoftware.com/git-cheatsheet.html#loc=stash;>

<https://dev.to/citizen428/10-common-git-problems-and-how-to-fix-them-234o>

<http://sethrobertson.github.io/GitFixUm/fixup.html>

<https://www.git-tower.com/blog/git-cheat-sheet/>

# Useful Tools for your Git Toolbelt

Your Terminal of choice 🧐

<https://code.visualstudio.com/>

<https://github.com/ohmyzsh/ohmyzsh>

<https://github.com/so-fancy/diff-so-fancy>

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

## VS Code Extensions

- Git Lense|Blame|Graph
- Markdown Preview Github
- Github Theme
- Github Pull Requests

Demo Time!

“Show me the Money!”

# Github Actions

# A Workflow Engine for Everyone



## Automate your workflow from idea to production

GitHub Actions makes it easy to automate all your software workflows, now with world-class CI/CD. Build, test, and deploy your code right from GitHub. Make code reviews, branch management, and issue triaging work the way you want.

[Explore GitHub Actions](#)



<> Edit new file

Preview

```
1 # This is a basic workflow to help you get started with Actions
2
3 name: CI
4
5 # Controls when the action will run. Triggers the workflow on push or pull request
6 # events but only for the master branch
7 on:
8   push:
9     branches: [ master ]
10  pull_request:
11    branches: [ master ]
12
13 # A workflow run is made up of one or more jobs that can run sequentially or in parallel
14 jobs:
15   # This workflow contains a single job called "build"
16   build:
17     # The type of runner that the job will run on
18     runs-on: ubuntu-latest
19
20     # Steps represent a sequence of tasks that will be executed as part of the job
21     steps:
22       # Checks-out your repository under $GITHUB_WORKSPACE, so your job can access it
23       - uses: actions/checkout@v2
24
25       # Runs a single command using the runners shell
26       - name: Run a one-line script
27         run: echo Hello, world!
28
29       # Runs a set of commands using the runners shell
30       - name: Run a multi-line script
31         run: |
32           echo Add other actions to build,
33           echo test, and deploy your project.
34
```

# Github Actions Resources

<https://docs.github.com/en/actions/getting-started-with-github-actions/about-github-actions>

<https://docs.github.com/en/actions/getting-started-with-github-actions/overview>

<https://docs.github.com/en/actions/language-and-framework-guides/publishing-docker-images>

<https://docs.github.com/en/actions/reference/workflow-syntax-for-github-actions>

# Github Actions Resources

<https://docs.github.com/en/actions/reference/events-that-trigger-workflows>

<https://docs.github.com/en/developers/webhooks-and-events/github-event-types>

<https://docs.github.com/en/actions/reference/context-and-expression-syntax-for-github-actions>

<https://docs.github.com/en/actions/reference/software-installed-on-github-hosted-runners>

[https://www.edwardthomson.com/blog/github\\_actions\\_advent\\_calendar.html](https://www.edwardthomson.com/blog/github_actions_advent_calendar.html)



# Useful Tools for your Actions Toolbelt

<https://github.com/nektos/act>

<https://marketplace.visualstudio.com/items?itemName=cshleiden.vscode-github-actions>

<https://marketplace.visualstudio.com/items?itemName=me-dutour-mathieu.vscode-github-actions>

It's Demo Time again!

“Show me more Money!”



# Thank You

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