

SHE BUILDS BLACK | MONICA POWELL

INTRO TO GIT HOOKS

INTRODUCTION

Monica Powell, I'm a Full Stack Engineer at Meetup and organizer of the React Ladies Meetup group. I've written about git and other tech adventures in publications such as FreeCodeCamp, Hacker Noon and Code Like A Girl.

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FOLLOW ALONG

- ▶ GitHub Repository

- ▶ <https://github.com/M0nica/git-hooks-workshop>

GIT – VERSION CONTROL SOFTWARE



git



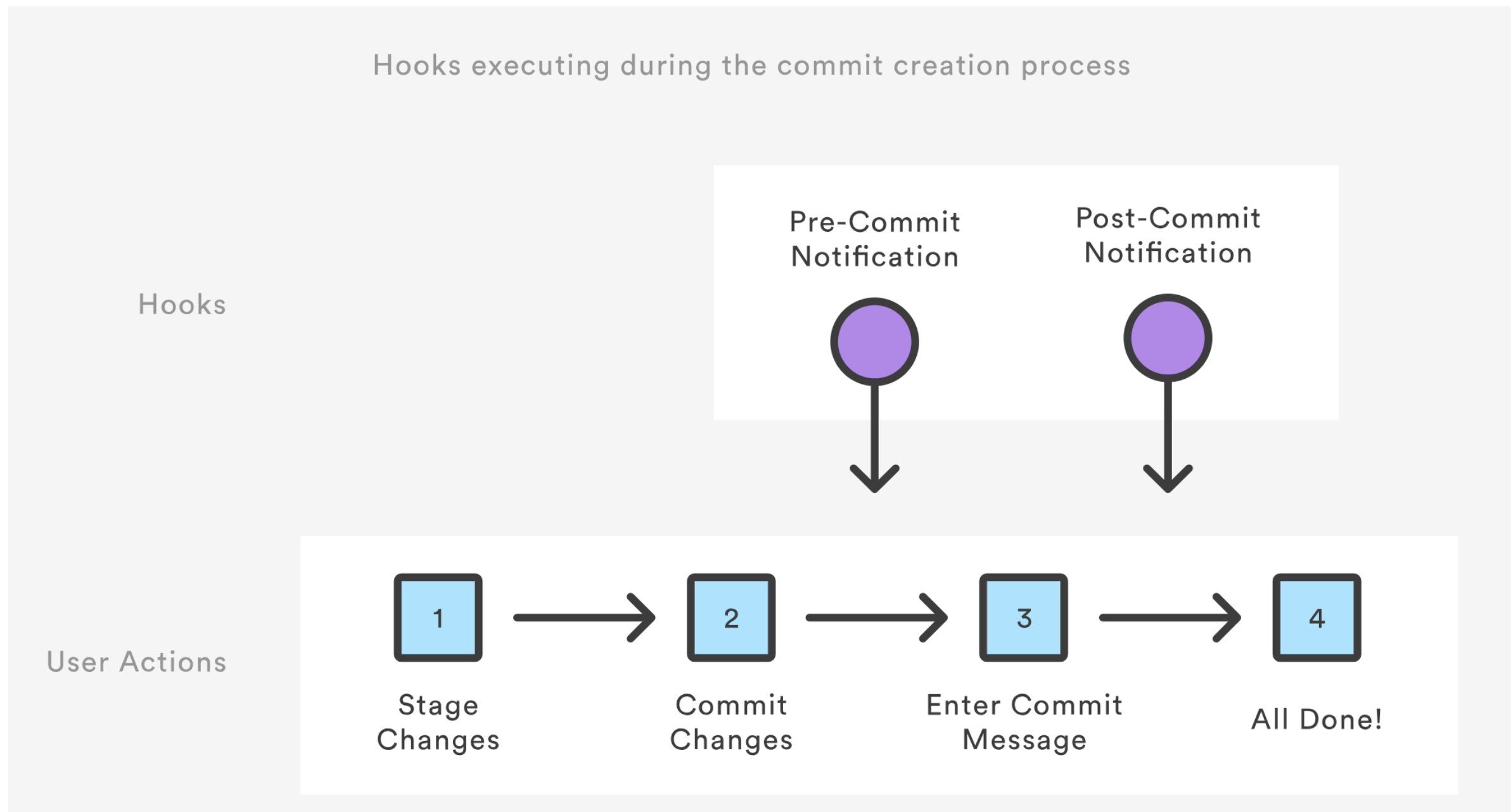
WHAT'S A GIT HOOK

if this then that

Trigger Action

WHAT'S A GIT HOOK

Image Source: Atlassian




WHAT'S A GIT HOOK

- ▶ Bash scripts that are executed at specific points within the git workflow.
- ▶ precommit, postcommit, prepush, postpush, etc....
- ▶ Git Hooks Documentation:
 - ▶ <https://git-scm.com/docs/githooks>

HOW CAN GIT HOOKS BE USED?

- ▶ Warn when committing to master
- ▶ Run linting and tests before committing
- ▶ Warn or abort when committing code with `console.logs()`, sensitive credentials, merge conflict strings or large files.
- ▶ Send notifications after a commit is pushed
- ▶ And 1270824+ other ways

INTRO TO GIT HOOKS



```
protected_branch='master'
current_branch=$(git symbolic-ref HEAD | sed -e 's,.*\/\(.*\),\1,')

# define bash colors to display
yellow='\033[0;33m'
red='\033[0;31m'
green='\033[0;32m'
no_color='\033[0m'

if [ $protected_branch = $current_branch ];
then echo "${yellow}You're about to push to $protected_branch, is that what you intended? [y|n]${no_color}"
  read < /dev/tty
  if echo $REPLY | grep -E '^[^Yy]$' > /dev/null; then
    echo "${red}This commit has been aborted.${no_color}"
    exit 1 # push will not execute if there is not explicit 'Y' typed
  else
    echo "${green}This commit is proceeding...${no_color}"
    exit 0 # push will execute
  fi
else
  exit 0 # push will execute
fi
```

HOW CAN GIT HOOKS BE USED?

```
Monicas-MBP:git-hooks-workshop monica$ git push
You're about to push to master, is that what you intended? [y|n]
y
This commit is proceeding...
husky > pre-push (node v8.11.3)
yarn run v1.9.4
[$ eslint . --ext .js,.jsx --fix
✨ Done in 1.17s.
Everything up-to-date
Monicas-MBP:git-hooks-workshop monica$ git push
[You're about to push to master, is that what you intended? [y|n]
n
This commit has been aborted.
error: failed to push some refs to 'git@github.com:M0nica/git-hooks-workshop.git'
Monicas-MBP:git-hooks-workshop monica$
```

LIMITATIONS ON ENFORCEMENT

- ▶ `-no-verify`
- ▶ Local hooks \neq shared hooks
 - ▶ `.git/hooks` not in version control

LET'S SET UP A PLAYGROUND

- ▶ Fork <https://github.com/M0nica/git-hooks-workshop>
- ▶ yarn
- ▶ yarn husky
- ▶ yarn eslint --init touch
- ▶ index.js

LET'S AUTOMATE LINTING OUR CODE

Add index.js with bad styling that should fail ESLint

```
const nameChecker = function (name) {  
  if (name == 'Cardi') {  
    console.log('Party with Cardi');  
  }  
}
```

```
function doSomething() {  
  console.log('do something');  
}  
};
```

LET'S SET UP A PLAYGROUND

- ▶ Fork <https://github.com/M0nica/git-hooks-workshop>
- ▶ Add to package.json and then run **yarn lint**

```
"scripts": {
```

```
  "lint": "eslint . --ext .js,.jsx --fix"
```

```
},
```

LET'S SET UP A PLAYGROUND

- Fork <https://github.com/M0nica/git-hooks-workshop>
- Add to package.json and Add linting hook to enforce eslint rules and then
- Try to commit changes with ill-formatted JavaScript to index.js

```
"husky": {
```

```
  "hooks": {
```

```
    "pre-commit": "yarn lint",
```

```
    "pre-push": "yarn lint"
```

```
  }
```

```
},
```

LET'S SET UP A PLAYGROUND

- ▶ View sample git hooks in .git/hooks directory
- ▶ Edit the pre-commit hook (can use this example: <https://github.com/M0nica/git-hooks-workshop/blob/master/prepush.sample>)
- ▶ Push to the master branch and see what happens