Intro to Git and GitHub
What is Git?

- Distributed version-control system
- Developed by Linus Torvalds in 2005
- Initially used for Linux kernel development
What is GitHub?

- Founded in 2008
- Web-hosting for Git repositories
- Collaboration and social tools for developers
- 3 million users / 5 million repos
Why use GitHub?

- Online backup for version history
- Makes collaborating on projects with multiple developers simple
- Easy to fork and contribute to existing projects
- Social platform for discovering the work of millions of fellow open-source developers
Daniel Shiffman

Contributions

Repositories

Popular repositories

- **The-Nature-of-Code**
  Raw source of The Nature of Code book...
  654 ★

- **The-Nature-of-Code-Examples**
  Repository for example code from The ...
  176 ★

- **libfreenect**
  Just working on Processing library here
  122 ★

- **Most-Pixels-Ever**
  The Most Pixels Ever is an open-source...
  108 ★

- **PBox2D**
  Processing JBox2D helper library and e...
  72 ★

Repositories contributed to

- **runemadsen/Magic-Book-Project**
  The Magic Book Project is an open-sour...
  321 ★

- **processing/processing-web**
  Repository for the Processing.org web site...
  57 ★

- **processing/processing**
  Source code for the Processing Develop...
  552 ★

- **ITPNU/ICM**
  ICM Class Main Repo
  22 ★

- **ITPNU/BigScreens**
  All examples for the Big Screens class
  2 ★

Public contributions

- 1,691 Total
  Jul 10 2012 - Jul 10 2013

- 13 days
  November 24 - December 06

- 2 days
  July 08 - July 09

Organizations

- P
- ITP
Daniel Shiffman

Contributions
Repositories
Public Activity

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Public contributions

Summary of Pull Requests, issues opened and commits. Learn more.

- **1,691 Total**
  Jul 10 2012 - Jul 10 2013

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Year of Contributions

Longest Streak

Current Streak
The Nature of Code book project

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What the fork?

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GitHub Network Graph Viewer v4.0.0
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How does it work?

Your laptop

GitHub repo

Repository
How does it work?

GitHub repo
How does it work?
How does it work?

GitHub repo

Terminal

GitHub for Windows

GitHub for Mac
Basic Git commands

- `git push`
- `git add`
- `git commit`
- `git pull`
- `git clone`
- `git init`
- `git remote`
Understanding git push
git push

GitHub repo

My changes
Before you can git push...

1. git add
2. git commit
3. git push

GitHub repo
Before you can git push...

```
git add .
git commit -m "first commit!"
git push origin master
```
git pull

GitHub repo

New changes
git clone

GitHub repo
Pull request

GitHub
repo

My changes
Pull request

GitHub repo

Ok!

???

My changes
Pull request

GitHub repo

Ok!

My changes
Demo
Demo

```bash
git init
git remote add origin [URL]
git pull origin master

git add .
git commit -m "first commit"
git push origin master
```
1.2 · Checking the Status

Good job! As Git just told us, our "octobox" directory now has an empty repository in .git/. The repository is a hidden directory where Git operates.

To save your progress as you go through this tutorial -- and earn a badge when you successfully complete it -- head over to create a free Code School account. We'll wait for you here.

Next up, let's type the git status command to see what the current state of our project is:

```
$ git status
```

Press enter to submit commands

> git init

Initialized empty Git repository in /.git/

Success!

$ |