

Development Crash Course

Development Environment and git

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Overview

- ▶ sX Makers
- ▶ Crash course
- ▶ Tips, Tools, and Traps
- ▶ Variables, conditionals, loops, arrays?

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- ▶ Variables, conditionals, loops, arrays?
- ▶ You already know how to code*
- ▶ Syntax and algorithms

Where do I start?

Development Environment

- ▶ Unix-like (Linux or OSX)
- ▶ Why not Windows?
- ▶ Virtualbox
- ▶ Ubuntu
- ▶ Command line introduction:

<http://vic.gedris.org/Manual-ShellIntro/1.2/ShellIntro.pdf>

git and GitHub

git

- ▶ SCM and version control
- ▶ History: 2005
- ▶ kernel
- ▶ `sudo apt-get install git`

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GitHub

- ▶ Cloud repositories
- ▶ Startup, 2011
- ▶ restrictions

Vocabulary

- ▶ repository - a place to store code
- ▶ commit - changes to the code
- ▶ branch - separate series of commits
- ▶ clone vs. fetch vs. pull
 - ▶ clone - download and create a local repository
 - ▶ fetch - download current branches to existing local repository
 - ▶ pull - download the current remote branch and merge it with current local branch
- ▶ fork - create a new repository based on existing
- ▶ <http://git-scm.com/book/en/>

Basic Usage

```
git clone https://github.com/<username>/<repository>.git
git checkout -b <branch_name>
<make changes>
git status
git add .
git commit
git merge <branch_name>
git push origin master
```

<http://try.github.io>