

Week 1: Productivity Tools

Creativity Through Code

2015-10-30

Abstract

Before delving into the actual specifics of web development, we will be introducing various productivity tools as well as a development environment to make your life easier.

1 Programming Environment

Brackets is a modern, lightweight, and open source text editor. Some of the very convenient features that it supports include inline editors, live preview, and preprocessor support. Overall, Brackets is a very powerful editor out of the box and it is highly recommended for this course.

Download Link: <http://brackets.io/>

Atom is GitHub's recent "hackable" editor. It supports cross-platform editing, built-in package manager, smart autocompletion, file system browser, and multiple panes. It is also easily customizable with thousands of open source packages. Definitely choose this editor if you want to adjust your editor to suit your liking.

Download Link: <https://atom.io/>

Sublime Text is a very sophisticated and beautiful editor. It can support additional packages with its package manager, but the salient aspect about Sublime Text is its slick user interface and amazing features. Sublime text supports Goto Anything, Multiple Selections, Command Palette, Distraction Free Mode, and Split Editing.

Download Link: <http://www.sublimetext.com/>

2 Meteor

Meteor is a complete platform for developing and building web and mobile apps in Javascript. We will be using Meteor throughout the course.

Download Link: <https://www.meteor.com/>

3 GitHub

GitHub is an essential tool for any programmer that is used for distributed version control, collaborative coding, and source code management. Projects can be uploaded to GitHub as repositories. We will be learning about both the desktop graphical interface and the command-line tool. For a list of commonly used git commands, please refer to Table 1: Commonly Used Git Commands.

Table 1: Commonly Used Git Commands

Git Task	Command	Meaning
Initialization	git config --global user.name "Jeffrey Xiao"	Configures the author name to be used with your commits
	git config --global user.email jeffrey@xiao.com	Configures the author email to be used with your commits
Adding a repository	git init	Creates a new local repository
	git clone /path/to/repository	Creates working copy of a local repository
	git clone https://github.com/USER/REPO	
Adding files	git add -A	Adds all files to stage
	git add "filename"	Adds "filename" to stage
Committing	git commit -m "Commit Message"	Commits changes to head (but not yet to the remote repository)
	git commit -a	Commits any files you have added with git add or changed
Pushing	git push origin master	Sends changes to the master branch of your remote repository
Branches	git checkout -b "branchname"	Creates a new branch and switches to it
	git checkout "branchname"	Switches from the current branch to branchname
	git branch	Tells you what branch you are in currently and lists all the branches in your repo
	git branch -d "branchname"	Deletes branchname
	git branch push origin "branchname"	Pushes branchname to your remote repo
	git branch push --all origin	Pushes all branches to your remote repo
	git branch push origin : "branchname"	Deletes branchname from your remote repo
Updating Local Repo	git pull	Fetches and merges changes from your remote repo to your working directory
	git merge "branchname"	Merges branchname into your active branch
	git diff	Views all merge conflicts