**Programming Tools & debugging**

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## **7 Great Web Development Tools**

**1. [Sublime Text](http://www.sublimetext.com/)**

Let’s start with the basics: a first-rate code editor – one that features a well-designed, super efficient, and ultra speedy user interface. There are several that do this well, but arguably the best (and most popular) is Sublime Text.

Artfully run by a one-man development team, the secret to Sublime’s success lies in the program’s vast array of keyboard shortcuts - such as the ability to perform simultaneous editing (making the same interactive changes to multiple selected areas) as well as quick navigation to files, symbols, and lines. And when you’re spending 8+ hours with your editor each day, those precious few seconds saved for each process really do add up…

**2. Chrome Developer Tools**

Wouldn’t it be great if you could edit your HTML and CSS in real-time, or debug your JavaScript, all while viewing a thorough performance analysis of your website?

Google’s built-in Chrome Developer Tools let you do just that. Bundled and available in both Chrome and Safari, they allow developers access into the internals of their web application. On top of this, a palette of network tools can help optimize your loading flows, while a timeline gives you a deeper understanding of what the browser is doing at any given moment.

Google release an update every six weeks – so check out their website as well as the Google DevelopersYouTube channel to keep your skillset up-to date.

**3. jQuery**

JavaScript has long been considered an essential front-end language by developers, although it’s not without its problems: riddled with browser inconsistencies, its somewhat complicated and unapproachable syntax meant that functionality often suffered.

That was until 2006, when jQuery – a fast, small, cross-platform JavaScript library aimed at simplifying the front-end process – appeared on the scene. By abstracting a lot of the functionality usually left for developers to solve on their own, jQuery allowed greater scope for creating animations, adding plug-ins, or even just navigating documents.

And it’s clearly successful – jQuery was by far the most popular JavaScript library in existence in 2015, with installation on 65% of the top 10 million highest-trafficked sites on the Web.

**4. GitHub**

It’s every developer’s worst nightmare – you’re working on a new project feature and you screw up. Enter version control systems (VCS) – and more specifically, GitHub.

By rolling out your project with the service, you can view any changes you’ve made or even go back to your previous state (making pesky mistakes a thing of the past). The repository hosting service also boasts a rich open-source development community (making collaboration between teams as easy as pie), as well as providing several other components such as bug tracking, feature requests, task management, and wikis for every project.

Many employers will look for finely honed Git skills, so now’s the perfect time to sign up – plus it’s a great way to get involved and learn from the best with a wide array of open-source projects to work on.

**5. Twitter Bootstrap**

Getting tired of typing in that same styling for a container? How about that button that keeps cropping up? Once you start building front-end applications regularly, you’ll start to notice the same patterns emerging.

UI frameworks are an attempt to solve these problems by abstracting the common elements into reusable modules - meaning developers can scaffold the elements of new applications with speed and ease.

The most widely used of these frameworks is Bootstrap, a comprehensive UI package developed by the team at Twitter. Complete with tools to normalize stylesheets, build modal objects, add JavaScript plugins, and a plethora of other features, Bootstrap can dramatically cut down on the amount of code (and time) needed to build your project.

**6. Angular.js**

HTML is usually the cornerstone of any front-end developer’s toolbox, but it has what many perceive to be a serious flaw: it wasn’t designed to manage dynamic views.

This is where AngularJS, an open-source web application framework, comes in. Developed by Google, AngularJS lets you extend your application’s HTML syntax, resulting in a more expressive, readable, and quick to develop environment that could otherwise not have been built with HTML alone.

The project is not without its critics: some feel that this sort of data binding makes for a messy, non-separated code, but we still think it’s an invaluable skill to have in your front-end kit.

**7. Sass**

Web dev tools that save time are your best friend and one of the first things you’ll learn about code is that it needs to be DRY (“Don’t Repeat Yourself”). The second thing you’ll probably learn is that CSS is usually not very DRY.

Enter the world of the CSS preprocessor, a tool that will help you write maintainable, future-proof code, all while reducing the amount of CSS you have to write (keeping it DRY).

Perhaps most popular among them is Sass, an eight-year-old open-source project which pretty much defined the genre of modern CSS preprocessors. Although a little tricky to get to grips with initially, Sass’s combination of variables, nesting, and mixins will render simple CSS when compiled, meaning your stylesheets will be more readable and (most importantly) DRY.

**Sublime**



Sublime Text is a sophisticated text editor for code, markup and prose. You'll love the slick user interface, extraordinary features and amazing performance.

## **Some features:**

### **GOTO ANYTHING**

Use *Goto Anything* to open files with only a few keystrokes, and instantly jump to symbols, lines or words.

Triggered with Ctrl+P, it is possible to:

* Type part of a filename to open it.
* Type @ to jump to symbols, # to search within the file, and : to go to a line number.

These shortcuts can be combined, so tp@rf may take you to a function read\_file within a file text\_parser.py. Similarly, tp:100 would take you to line 100 of the same file.

### **GOTO DEFINITION**

Using information from syntax definitions, Sublime Text automatically generates a project-wide index of every class, method and function. This index powers *Goto Definition*, which is exposed in three different ways:

* A popup is displayed when hovering over a symbol
* Pressing F12 when the caret is on a symbol
* The *Goto Symbol in Project* functionality

Symbol indexing can be customized on a per-syntax basis via configuration files, allowing users to tailor the feature to their needs.

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### **MULTIPLE SELECTIONS**

### Make ten changes at the same time, not one change ten times. Multiple selections allow you to interactively change many lines at once, rename variables with ease, and manipulate files faster than ever.

Try pressing Ctrl+Shift+L to split the selection into lines and Ctrl+D to select the next occurrence of the selected word. To make multiple selections with the mouse, take a look at the Column Selection documentation.

### **COMMAND PALETTE**

The *Command Palette* holds infrequently used functionality, like sorting, changing the syntax and changing the indentation settings. With just a few keystrokes, you can search for what you want, without ever having to navigate through the menus or remember obscure key bindings.

Show the *Command Palette* with Ctrl+Shift+P.

### **POWERFUL API AND PACKAGE ECOSYSTEM**

Sublime Text has a powerful, Python API that allows plugins to augment built-in functionality.

Package Control can be installed via the command palette, providing simple access to thousands of packages built by the community.

### **CUSTOMIZE ANYTHING**

Key bindings, menus, snippets, macros, completions and more - just about everything in Sublime Text is customizable with simple JSON files. This system gives you flexibility as settings can be specified on a per-file type and per-project basis.

### **SPLIT EDITING**

Get the most out of your wide screen monitor with split editing support. Edit files side by side, or edit two locations in the one file. You can edit with as many rows and columns as you wish. Take advantage of multiple monitors by editing with multiple windows, and using multiple splits in each window.

Take a look at the View Layout menu for split editing options. To open multiple views into the one file, use the File New View into File menu item.

### **INSTANT PROJECT SWITCH**

Projects in Sublime Text capture the full contents of the workspace, including modified and unsaved files. You can switch between projects in a manner similar to *Goto Anything*, and the switch is instant, with no save prompts - all your modifications will be restored next time the project is opened.

### **PERFORMANCE**

Sublime Text is built from custom components, providing for unmatched responsiveness. From a powerful, custom cross-platform UI toolkit, to an unmatched syntax highlighting engine, Sublime Text sets the bar for performance.

### **CROSS PLATFORM**

Sublime Text is available for Mac, Windows and Linux. One license is all you need to use Sublime Text on every computer you own, no matter what operating system it uses.

Sublime Text uses a custom UI toolkit, optimized for speed and beauty, while taking advantage of native functionality on each platform.

**References**

1. **https://careerfoundry.com/en/blog/web-development/7-essential-tools-for-front-end-development/**
2. **https://www.sublimetext.com/**