

1. Agile

Agile is a major buzzword across the entire tech industry right now. Agile web development essentially refers to a particular way of working, and you'll often hear this term in the startup world. In an agile team, web developers will work according to weekly or biweekly sprints.

A sprint usually consists of five phases: design, develop, test, deploy and review.

2. Algorithm

An algorithm is basically a set of steps for carrying out certain tasks. In computer programming, algorithms are a key part of problem-solving. When creating an algorithm, developers will document all the necessary steps it took to arrive at a solution to a problem, and what each step involved.

3. API

API stands for Application Programming Interface. An API enables two different programs to communicate with each other by making some parts of the website code available to developers. Developers can use this code, i.e. the API, to build tools and widgets that can be connected to that particular website. A classic example is the Facebook API, which enables apps like Facebook Messenger and Words with Friends.

4. Application

You're no doubt familiar with apps, and probably use several on a daily basis. An application is basically a type of software that enables the user to perform different tasks—whether it's setting an alarm on your smartphone or typing a document in Microsoft Word. As a developer, you need to be familiar with the difference between desktop apps, mobile apps and web apps. See also: Web app.

5. Adaptive design

The way in which a website is built determines how it appears on different devices. Adaptive design creates a website in several different layouts, each suited for different screen sizes. Depending on what device is being used to access the website, the website will adapt and deliver the appropriate layout. See also: responsive design and mobile-first.

6. Bootstrap

Bootstrap is a free, open-source frontend framework for designing websites and web apps.

It was developed by Mark Otto and Jacob Thornton at Twitter in order to encourage consistency across internal tools. Bootstrap includes HTML and CSS-based design templates for **typography**, forms, buttons, tables, navigation, modals and more, plus JavaScript plugins.

7. Backend

Backend development essentially refers to everything that goes on behind the scenes.

What happens at the backend—or server-side—powers what happens at the frontend, i.e. what the user sees and interacts with. Backend development can be broken down into four main components of a software stack: the server, the database, the operating system, and the software.

8. Browser

A web browser is the software used to access the internet and display web pages. When you type a web address or URL into the browser, you are effectively sending out a series of requests. The browser will gather all the different elements that make up that particular webpage, such as images, ads and content, from wherever

they are stored (i.e. different directories or servers) in order to display the page that you see. The most common browsers include Microsoft Internet Explorer, Google Chrome, Mozilla Firefox, Safari for Apple, and Opera.

9. Bug

If you **want to work as a web developer**, this is one word you'll definitely need in your vocabulary! Put simply, a bug is an error that prevents a website or app from running as it should. In the world of web development, you'll often deal with bug reports and be tasked with fixing said bugs.

10. Cache

A cache is a temporary storage space for data. When you visit a website, the files that you request are automatically stored in the cache. If you return to that same website in the near future, your browser will retrieve the necessary files from your cache rather than from the original server—so the webpage will load quicker.

11. Code

Of course, you can't call yourself a web developer until you know what code is! Code is essentially what web developers write using programming languages (scroll down to languages in this glossary!). To see exactly what code looks like, right-click on your internet browser window and click "view page source". You'll then be able to see the code that's behind this particular website.

12. CSS

CSS stands for Cascading Style Sheets. It is a markup language responsible for the visual elements of a website.

HTML (another markup language) is used to determine the structure and content of the webpage. Web developers will then use CSS to style this content; in other words, CSS tells the browser how the HTML elements should be displayed. CSS is

used to apply colors and to determine font, text size and alignment, to name just a few.

13. Data structures

A crucial aspect of development and programming, data structures are a way of organizing and storing data for maximum efficiency—much like books in a library. Data structures make it easy to find, access, sort, insert and delete data. There are many different types of data structures, including linked lists, stacks, queues and sets.

14. Debugging

Remember those bugs we talked about? Well, debugging is the process of identifying and dealing with them. Debugging is a multistep process: the developer locates the problem, isolates the source and then either gets to work fixing it or comes up with a workaround. The debugging process ends with testing and, if necessary, further fixes.

15. Deployment

Deployment is a key step in the web development process. Once a website or an app has been developed and tested, it's ready to go live; in other words, it's ready to be deployed. There are several different stages to deploying a website, with the last being hosting it. These days, **you can host a website on the internet for free**—all you need is an email address!

16. Documentation

A crucial part of **web development and software engineering**, documentation is essentially the central point of reference for anyone involved in managing, maintaining or using a website or piece of software. Documentation may provide

information on requirements, architecture and design, technical properties, information for the end user, or marketing.

17. Domain name

A website's domain name is essentially its address on the world wide web.

It's the address that users type into the browser in order to view a website—such as “CareerFoundry.com”. Every website can be identified by its IP address (a series of numbers), and the domain name is just a more user-friendly label for these numbers.

Domains are split into two levels: in the case of CareerFoundry's website, the “CareerFoundry” part is the top-level domain, while the “.com” part is the second level domain.

18. Frameworks

Frameworks were invented to make the process of building a website faster and easier.

You can think of a framework as a collection of solutions, tools and components that you can access in one central location—rather than seeking them all out separately each time. Some common frameworks include Ruby on Rails, Bootstrap, React JS, AngularJS and Joomla.

19. Frontend

Remember how the backend is everything that goes on behind the scenes, and powers what goes on at the frontend? The frontend of a website, also known as client-side, is what the end user sees and interacts with. Frontend languages include HTML, CSS and JavaScript, which all have a hand in determining the visual output of a website.

20. Full-stack

We've already covered both the frontend and the backend: now it's time to throw full-stack development into the mix. **Full-stack developers work across all three layers**: the frontend, the backend, and the database layer.

Because of the sheer depth of their knowledge across **the entire tech stack**, this kind of developer tends to have years of industry experience and gets paid well for it.

21. Git

An absolute staple in the web development world, Git is a version control system where developers can store and manage their code.

As a web developer, you'll make constant changes to your code whenever you're in the process of creating something, be it an app or a website. Git enables you to track these changes and reverse them if necessary, and also to work together with other teams and manage multiple projects at once.

22. GitHub

GitHub is a cloud interface for Git. It has been around since 2008 and now has over 28 million users worldwide, making it the largest host of source code in the world! GitHub offers all the version control functionality of Git, but also offers its own features, such as bug tracking, task management and project wikis.

23. HTML

HTML stands for Hypertext Markup Language. Simply put, it's a computer language used to create websites. Or is it one? There's a big debate about **if HTML is a programming language or not**, but safe to say it's one of the building blocks of the web.

Essentially, HTML describes how a document should be displayed by an internet browser as a webpage. It consists of tags, elements and attributes and, once you've got the hang of it, is pretty simple to work with!

24. HTTP

Yet another acronym to get your head around: HTTP stands for Hypertext Transfer Protocol, and is used to transfer data across the internet. HTTP sends the data (say, a HTML document or an image) from an HTTP server program (a web server) to an HTTP client program (a web browser).

25. Information Architecture

Information architecture is the practice of organizing complex information in a clear and logical way. In terms of websites and apps, this means creating a user-friendly structure that makes it easy for the user to find their way around.

IA is not just for designers; developers are information architects, too, in the way they structure their code. Generally speaking, site maps, hierarchies, categorizations, navigation and metadata are all part of IA.

Curious about a career in Web Development?

Start learning for free!



26. Java

Java is one of the most popular programming languages out there. One of the main reasons it is so popular is that it is platform-independent, meaning that programs built using Java can be run on any device, regardless of what operating system is being used.

Java has been around since 1995, and is a concurrent, class-based and object-oriented language.

27. JavaScript

While we're on the subject of popular programming languages, let's talk about JavaScript. JavaScript is primarily used as a client-side language, meaning that it is embedded into the HTML of a page and sent to the browser.

28. jQuery

Remember JavaScript? Well jQuery is a JavaScript library (we'll go into libraries further down the glossary).

jQuery basically simplifies the task of using JavaScript on your website by condensing several lines of JavaScript code into a single line. Rather than adding

many lines of JavaScript code, the developer can simply take the “compact version” from the jQuery library.

29. Languages

L is for languages, and web development is full of them! We’ve already mentioned a few languages in this glossary (remember CSS, HTML and Java?), but what exactly is a language in this context?

Languages are basically what programmers use to build websites, apps and software. There are programming languages, markup languages, style sheet languages and database management languages—

30. Libraries

As we saw with the example of JavaScript (the programming language) and jQuery (a JavaScript library), libraries can save developers considerable time and effort. Libraries are stores of pre-written code, or modules, that programmers can take and insert into the code they’re writing.

31. Minification

Minification is one of my favorite web development buzzwords—it’s the process of minimizing code and markup in order to reduce the file size.

When creating a HTML file, for example, developers will most likely use spacing, comments and variables to make the code more readable as they work with it. To minify the code once the webpage is ready to go live, developers will remove these comments and spaces to ensure a quicker page-load time (crucial for delivering a good user experience!)

32. Mobile-first

Mobile-first is an approach to **web design and development** that prioritizes mobile devices. Rather than building a website with desktop in mind and then considering how it might look on a mobile device, with a mobile-first approach, the website is first built for the small screen. Mobile-first means adopting either responsive or adaptive design (both are included in this glossary!).

33. MVP

It's crucial not to get your sports buzzwords and your web development buzzwords mixed up.

Programmers might often hear talk of “MVP”—or **minimum viable product**. The minimum viable product is the most pared-down version of a product that can be released to market. When adopting an MVP approach, developers will first focus on the core features and functions that are absolutely crucial.

Then, once the product has been released and user feedback has been gathered, they will continue to build the complete set of features.

34. MySQL

MySQL is the world's most popular open-source database management system.

If you're brand new to web development, this might not mean much to you just yet, so let me explain. A database is a structured collection of data, and an essential component of most websites. A database management system is a type of software that manages these databases.

35. Operating system

An operating system, or OS, is a type of software that enables the user to run applications on a device. Say you have a Samsung Galaxy smartphone; the

operating system in this case is Android. Any apps that have been built for the Android OS can run on your Samsung. The iPhone, on the other hand, uses the iOS operating system and can only run apps that have been built with this in mind.

36. PHP

PHP stands somewhat confusingly for PHP: Hypertext Preprocessor, which is an example a **recursive acronym**. Confusing naming origin aside, PHP is a server-side (or backend) scripting language.

Among other things, PHP can be used to generate dynamic page content, to send and receive cookies, to control user access and to encrypt data. Why PHP? Well, it's compatible with almost all servers used today, it's fairly easy to learn, supports a wide range of databases, and it's free to download!

37. Plugin

A plugin is basically an extension that adds extra functionality to an existing software, such as plugins for your browser or add-ons for the WordPress CMS. Why would you build an app to support plugins? First of all, it's an easy way to add new features as it enables third-party developers to build upon the existing app, and secondly, it can help to reduce the size of an app.

38. Python

Another programming language, Python was named after Monty Python—true story! Python is widely adopted and supported; Google, Reddit, NASA, and Dropbox are among some of the most well-known companies using it.

Python is especially useful for data science, machine learning, automation and API development. At the same time, it's known for its readability and is therefore fairly easy for beginners to learn and use. Web developers are particularly fond of two of its frameworks, Django and Flask.

39. Resolution

Resolution is a metric used to describe the size and quality of an image. It also refers to the display capabilities of a computer or mobile device—i.e. how many pixels a screen is able to display both horizontally and vertically. In a web development context, it's important to think about how different images will render on different screen sizes.

40. Responsive design

Responsive design ensures that a website is displayed correctly no matter what device the user is viewing it on. Responsive websites are built in such a way that they adapt to different screen sizes, so the user gets the same quality and ease-of-use regardless of whether they're browsing on desktop, mobile, or tablet.

41. Ruby and Ruby on Rails

Ruby is another programming language—a dynamic, open-source programming language with a focus on simplicity and productivity, in fact. Ruby on Rails is a framework (remember frameworks?) that is built in Ruby. In the web development world, you might hear Ruby on Rails referred to simply as “Rails”.

42. Sitemap

A sitemap is an outline of all the pages on a website. There are three different types of sitemaps: those used by web designers when planning a website, hierarchical listings intended for the human user, and structured listings intended for search engines. Web developers use XML sitemaps to publish lists of links across their websites, in line with Google's Sitemaps Protocol.

43. Software stack

Software stacks make up the backend of a website, and they are essentially bundles of software that work together. In the case of a smartphone, for example, the software stack would be made up of the operating system, the phone app, the web browser and other basic applications.

44. SSL

SSL stands for Secure Sockets Layer. It's a standard security protocol for ensuring that all data transmitted between the web server and the browser remains encrypted—and therefore unreadable to the naked eye. You can tell if a website has an SSL certificate by looking at the web address: if the URL starts with “https”, the website is secure. You'll also see a padlock symbol in the browser bar.

45. Text editor

One of the key tools you'll use in web development is a text editor. A text editor is just a type of software used to write plain, unformatted text. You'll use a text editor such as SublimeText, TextEdit, or TextWrangler to write your initial code. Then, later on, it will be formatted to make it computer-readable.

46. UI Design

UI design stands for user interface design, and it's all about the screens and interactive touchpoints that make up a website or an app. Swiping motions, scrollbars and clickable buttons are all part of UI design—essentially anything that makes up the user interface.

47. UX Design

As a web developer, you'll also work closely with UX designers, so it helps to understand what they do. UX design stands for user experience design, and it's all

about providing a smooth, user-friendly experience for the end user as they navigate around a website or an app.

48. Version control

Version control is all about recording and managing the changes you make along the way—be it changes to the code you're writing, to a website, a computer program or a document. As already mentioned, Git is one of the most popular **version control systems used by developers** because it allows them to track and reverse any changes to their code.

49. Web app

It's important to **distinguish between mobile apps and web apps**, as they are built differently. Native mobile apps are built for a specific platform, such as iOS for iPhone, and are installed and run on the device itself. Web apps, on the other hand, are accessed via the internet browser and will adapt to whichever device you're viewing them. They're not native to a specific system, nor do they need to be downloaded or installed.

50. Wireframe

Wireframes help designers to communicate to web developers how a website should be structured.

A wireframe is essentially a bare-bones blueprint of the website, showing the page layout, how the content should be arranged, which interface elements and navigational systems should be included, and how all these components work together. The focus is on functionality rather than aesthetics.