### **Getting Started with Git and GitHub**

Welcome! This alphabetized glossary contains many of the terms in this course. This comprehensive glossary also includes additional industry-recognized terms not used in course videos. These terms are essential for you to recognize when working in the industry, participating in user groups, and in other professional certificate programs.

**Estimated reading time:** 5 minutes

| **Term** | **Definition** |
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| **Branch** | A separate line of development that allows to work on features or fixes independently. |
| **Clone** | A local copy of the remote Git repository on the computer. |
| **Cloning** | A process of creating a copy of the project's code and its complete version history from the remote repository on the local machine. |
| **Commit** | A snapshot of the project's current state at a specific point in time, along with a description of the changes made. |
| **Continuous delivery (CD)** | The automated movement of software through the software development lifecycle. |
| **Continuous integration (CI)** | A software development process in which developers integrate new code into the code base at least once a day. |
| **Developer** | A computer programmer who is responsible for writing code. |
| **Distributed version control system (DVCS)** | A system that keeps track of changes to code, regardless of where it is stored. It allows multiple users to work on the same codebase or repository, mirroring the codebase on their computers if needed, while the distributed version control software helps manage synchronization amongst the various codebase mirrors. |
| **Fork** | A copy of a repository. You can fork a repository to use it as the base for a new project or to work on a project independently. |
| **Forking** | Forking creates a copy of a repository on which one can work without affecting the original repository. |
| **Git** | Free and open-source software distributed under the GNU General Public License. It is a distributed version control system that allows users to have a copy of their own project on their computer anywhere in the world. |
| **GitHub** | A web-hosted service for the Git repository. |
| **GitHub branches** | A branch stores all files in GitHub. Branches are used to isolate changes to code. When the changes are complete, they can be merged back into the main branch. |
| **GitLab** | A complete DevOps platform delivered as a single application. It provides access to Git repositories, controlled by source code management. |
| **Integrator** | A role that is responsible for managing changes made by developers. |
| **Master branch** | A branch that stores the deployable version of your code. The master branch is created by default and is definitive. |
| **Merge** | A process to combine changes from one branch to another, typically merging a feature branch into the main branch. |
| **Origin** | A term that refers to the repository where a copy is cloned from. |
| **Pull request** | A process used to request that someone reviews and approves your changes before they become final. |
| **Remote repositories** | Repositories that are stored elsewhere. They can exist on the internet, on your network, or on your local computer. |
| **Repository** | A data structure for storing documents, including application source code. It contains the project folders that are set up for version control. |
| **Repository administrator** | A role that is responsible for configuring and maintaining access to the repository. |
| **SSH protocol** | A method for secure remote login from one computer to another. |
| **Staging area** | An area where commits can be formatted and reviewed before completing the commit. |
| **Upstream** | A term used by developers to refer to the original source where the local copy was cloned from. |
| **Version control** | A system that allows you to keep track of changes to your documents. This process allows you to recover older versions of the documents if any mistakes are made. |
| **Working directory** | A directory in your file system that contains files and subdirectories on your computer that are associated with a Git repository. |