### **Module 1 Glossary: Git and GitHub Fundamentals**

| **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. |
| **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. |
| **Distributed version control system (DVCS)** | A system that keeps track of changes to code, regardless of where it is stored. Multiple users 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 into your GitHub account. |
| **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. |
| **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. |
| **Merge** | A process to combine changes from one branch to another, typically merging a feature branch into the main branch. |
| **Pull request** | A process used to request that someone review and approve your changes before they become final. |
| **Repository** | A data structure for storing documents, including application source code. It contains the project folders that are set up for version control. |
| **SSH Protocol** | A method for secure remote login from one computer to another. |
| **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. |