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Introduction:

GitHub is an open source version control system, an interface allowing collaboration among several people to make changes to web pages simultaneously. It can track these changes and provide a “portfolio” for employers. It is based on Git, a time-saving source code management tool for software developers. Webstorm is an IDE developed by JetBrains, a smart code editor with numerous tools and features for efficient coding.

Installations/Set-up:

Github account sign up:<https://github.com/join>

Git download: <https://git-scm.com/downloads>

Webstorm Download: <https://www.jetbrains.com/student/>

Tutorial:

1. Connect GitHub by pressing Ctrl+Alt+0S to open settings and then select Version Control, GitHub. Sign in by clicking Log in via GitHub.
2. In GitHub, create a new repository, make it public, and add a readme file. This can also be done through WebStorm by clicking VCS → Import into Version Control → Create and name a repository

To import a repository into WebStorm, VCS → Checkout from Version Control → Git → enter GitHub repository name → enter local path name

1. Create a WebStorm file, choose HTML file, or select Stylesheet to create a CSS file.
2. Add files to Git with Add to Git - it will add files to local system. Comment a message and commit changes.
3. Push changes to remote repository by pressing Ctrl→Shift→K or VCS→Git→Push. The file is now on GitHub.
4. To properly set up GitHub pages, go to settings of repository, then to pages, and change the Branch setting from None to main. Then click Save - your site should be established within a range of ten minutes to a couple days. Check by pasting the page’s GitHub.io URL into a browser.

Glossary:

**Branch -** A parallel version of a repository contained within the repository, but does not disturb the main branch until you want to publish changes.

**Clone -** A copy of the repository that resides on your computer rather than on a web server. You can edit these files offline in your preferred editor and keep track of changes in Git, then once online you can push these changes to the remote version as the clone is still connected to it.

**Commit -** A change or revision to your files that also contains a brief message of what was changed. Git keeps a record of every commit and its details.

**Fetch -** Using git fetch allows you to review added changes from a remote repository to your local branch before commitment.

**GIT -** An open source program that keeps track of changes in text files, and is the basis of GitHub.

**Github -** An open source version control system, an interface allowing collaboration among several people to make changes to web pages simultaneously, as well as keeping a record of these changes.

**Merge -** Takes the changes from one branch to another, usually as a pull request.

**Merge Conflict -** When two branches are different from each other and unable to merge, such as different changes to the same line in the files or one person edits a file while another deletes that same file.

**Push -** To send committed local changes to a remote repository on GitHub.

**Pull -** Fetching in changes and merging them.

**Remote -** A version of a repository that is hosted on a server, usually GitHub

**Repository -** A project folder, the most basic element of GitHub.

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