Getting Started with GitHub

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Why GitHub?

- A version control system helps manage your files and track the history of changes in your projects. In simple terms, you can think of it as a Google Doc for coders.
- A version control system makes it clear which changes to the project are made, who made those changes, and when those changes occurred.
 Version control also makes it easy to rewind to a previous version of your project if, for example, you discover a bug in your code and want to revert to a past version.

Intro to GitHub

GitHub is a code hosting platform for version control and collaboration. It lets you and others work together on projects from anywhere. GitHub Desktop allows you to store your local Git repositories in the cloud. With GitHub, you can back up your personal files, share your code, and collaborate with ease.

You'll learn how to:

- Create and use a repository
- Start and manage a new branch
- Make changes to a file and push them to GitHub as commits
- Open and merge a pull request

Setup an account

- Please visit <u>github.com</u> and sign up in the upper right corner. Use a handle that others will recognize and sounds professional. We will need this for both the web browser and desktop versions of GitHub.
- Can use Git in command line, or GitHub in web browser, or GitHub Desktop. Need an account for all options.
- Pro version (\$4/month) is only need if you require more Unlimited collaborators (with Free you get three collaborators per repo. Collaborators are people that a repository administrator can add to work directly in the repository), GitHub Pages, Wikis, Protected branches, Code owners, Repository insight graphs: Pulse, Contributors, Traffic, Commits, Code frequency, Network, and Forks.
- Documentation is very good (for example): https://docs.github.com/en/desktop/contributing-and-collaborating-using-github-desktop

GitHub Desktop

Once you have your GitHub account set up, you are ready to install GitHub Desktop. This application that enables you to interact with GitHub using a GUI instead of the command line or a web browser. You can use GitHub Desktop to complete most Git commands from your desktop with visual confirmation of changes. You can push to, pull from, and clone remote repositories with GitHub Desktop, and use collaborative tools such as attributing commits and creating pull requests. When you make changes to your local repositories or when other people make changes to the remote repositories, you will need to sync your local copy of the project with the remote repository.

In your browser:

- Open a new browser tab.
- Navigate to desktop.github.com
- Download GitHub Desktop (for Windows, you will require Windows>7.0 and 64-bit

WORK FAST WORK SMART THE GITHUB FLOW

The GitHub Flow is a lightweight, branch-based workflow that's great for teams and projects with regular deployments. Find this and other guides at http://guides.github.com/.





CREATE A BRANCH

Create a branch in your project where you can safely experiment and make changes.

OPEN A PULL REQUEST

Use a pull request to get feedback on your changes from people down the hall or tentime zones away.

MERGE AND DEPLOY

Merge your changes into your master branch and deploy your code.



GitHub is the best way to build software together.

GitHub provides tools for easier collaboration and code sharing from any device. Start collaborating with millions of developers today!