Git and GitHub
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Learning Outcomes
- Understand the concept of version control system (VCS)
- Create GitHub account
- Create GitHub repository
- Use Git, GitHub
- Do 1 add, commit and push git operation

Before you start
Version control system (VCS) is created to makes it easy to store different versions of the project you are working at any time (without any fixed rules, time or rules). You can easily restore an earlier record and compare the content with the current data to find the differences. In addition, it also an effective tool to cooperate with many other people in the same project. In this module, we will learn about one of the most popular VCS which is Git and GitHub.

First of all, Git and GitHub are not the same thing. Git is a VCS while GitHub is a hosting server for software development version control. The way Git works is that it creates a **repository** to store each version of the project every time developers modify or add some features into the project. Developers use Git through terminal or command line.

However, Git only allows you to control your project version on your local machine. Therefore, if there are 2 or more people working on a same project, how do we connect the works of all the members? That is why we need a hosting server GitHub.
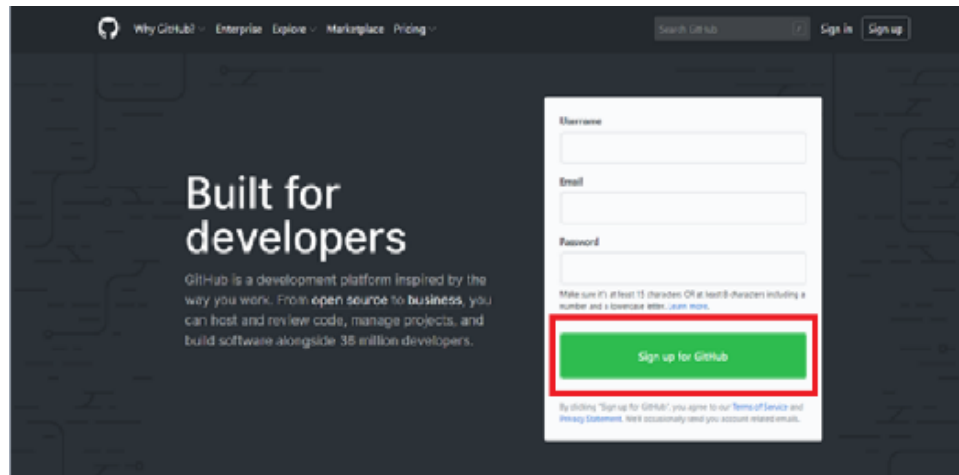
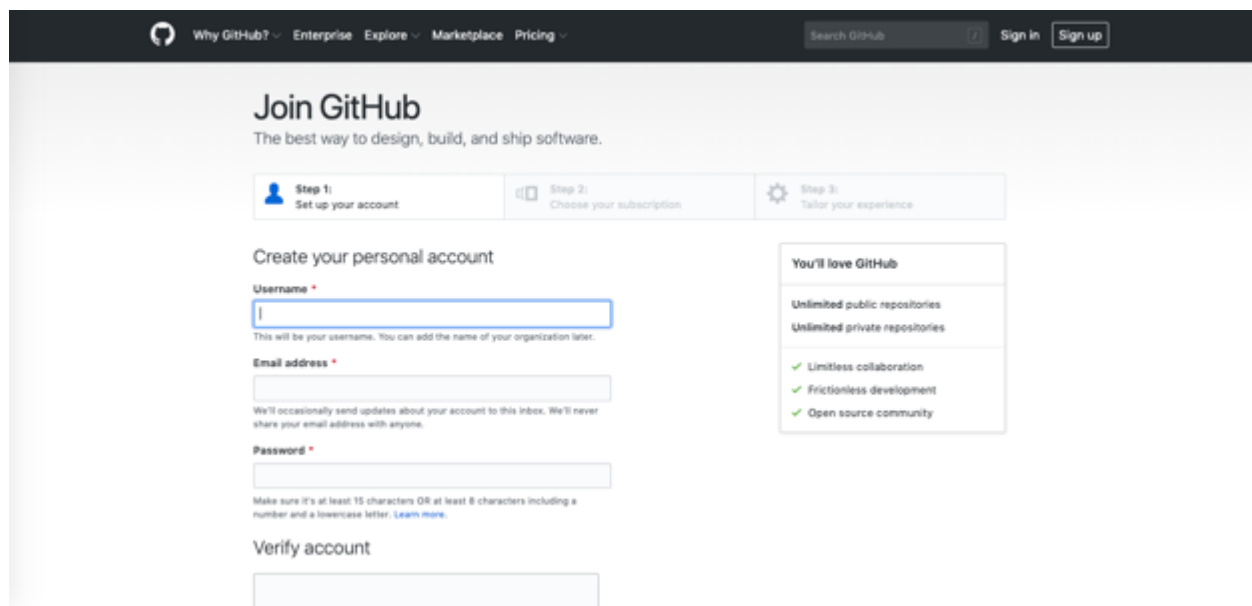To learn more about Git and GitHub visit:
https://codeburst.io/git-and-github-in-a-nutshell-b0a3cc06458f
https://git-scm.com/book/en/v1/Getting-Started-Git-Basics

Registering a GitHub account and GitHub repository (If you already have a GitHub account, skip to step 7)

1. Visit https://github.com/ and click on "Sign up for GitHub"

2. Filling in the form with Username, Email Address, Password and etc. It is very straightforward.

3. Click "Create Account" to proceed to next page
4. On Step 2, Choose your subscription as "Free" and click "Continue"

Choose your subscription

With tools developers love and the world's largest open source community, there's no wrong choice.

Free

The basics of GitHub for every developer

$0

per month

Includes:
- ∞ Unlimited public and private repositories
- ✓ 3 collaborators for private repositories
- ✓ Issues and bug tracking
- ✓ Project management

Pro

Pro tools for developers with advanced requirements

$7

per month

Includes:
- ∞ Unlimited public and private repositories
- ∞ Unlimited collaborators
- ✓ Issues and bug tracking
- ✓ Project management
- ✓ Advanced tools and insights

Are you a student? Get access to the best developer tools for free with the GitHub Student Developer Pack.

☐ **Help me set up an organization next**
Organizations are separate from personal accounts and are best suited for businesses who need to manage permissions for many employees.
Learn more about organizations

☑ **Send me updates on GitHub news, offers, and events**
Unsubscribe anytime in your email preferences. Learn more

Continue

5. On Step 3, just be honest and choose your options then click "Submit" or you can just click on 'skip this step'

Welcome to GitHub

You'll find endless opportunities to learn, code, and create, **@asdasdsadasdsdaas**.

✓ **Completed**	⫿▢ **Step 2:**	⚙ **Step 3:**
Set up a personal account	Choose your subscription	Tailor your experience

What is your level of programming experience?

○ None—I don't program at all

○ New to programming

○ Somewhat experienced

○ Very experienced

What do you plan to use GitHub for? (Select up to 3)

☐ Learning to code

☐ Learning Git and GitHub

☐ Host a project (repository)

☐ Creating a website with GitHub Pages

☐ Collaborating with my team

☐ Finding a project to contribute to

☐ School work / School-related project

☐ The GitHub API

☐ I don't know yet

☐ Other (please specify)

What are you interested in?

|

What languages, frameworks, industries, or disciplines are you interested in?

e.g. frontend, web-assembly, spacevim

Submit   skip this step

6. After that, you will be asked to check your email and verify your GitHub account

7. Go to github.com and login to your GitHub account.

Complete Hands-on Practice

Now you can go ahead and begin the Hands-on Practice. Click the URL provided in your course shell, accept the assignment, you will be redirected to Github Classroom, you can find instructions on how to complete Hands-on Practices there.