



JAVA 웹 개발자 양성과정

Git과 GitHub

1강 - git 시작하기

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1. What is Git?

* 친구랑 같이 두 명에서 개발중인 상황

1. 각자 개인 폴더를 만들고 카톡으로 각자 맡은 기능을 개발한 후 밤 9시마다 이메일로 서로의 코드를 보내서 합친다.
2. 혹시 합치다 에러날 수도 있으니까 백업본을 만들어 USB에 저장했다.
3. A가 B에게 9시에 코드를 보냈는데 B의 코드로 인해 충돌이 나서 A가 B의 코드를 수정한 후 B에게 알려주었다.
4. B는 개인 작업물을 열어 A가 수정한 코드를 수동으로 반영하였다.

- 어찌저찌 개발은 했는데 빈번한 코드 수정이나 백업이 너무 불편한데... 그리고 회사에서 **수십명이** 같이 개발할 때는 어떡하지?? => **버전관리도구**가 필요해요!!

* 버전 관리를 해야하는 이유

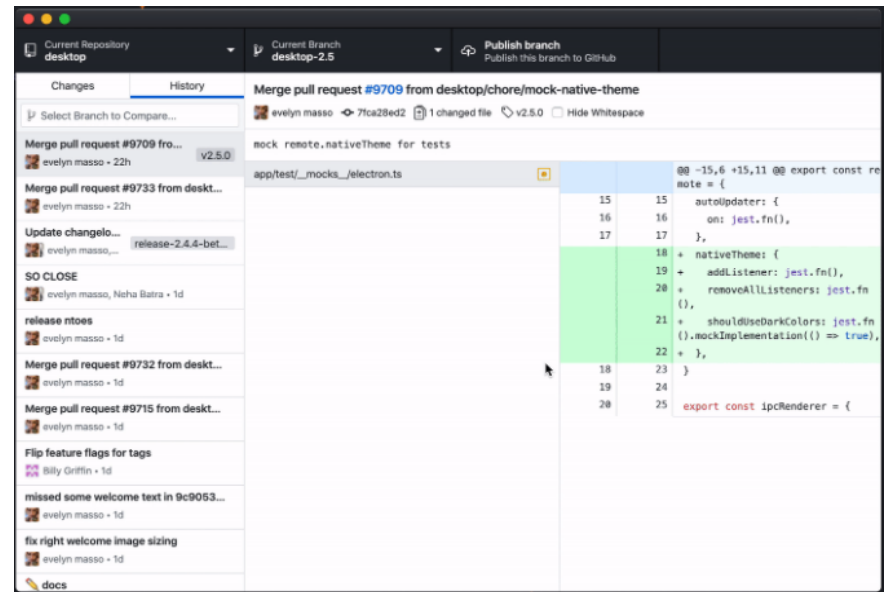
- 무언가 잘못되었을 때 복구를 돕기 위하여
- 프로젝트 진행 중 과거의 어떤 시점으로 돌아갈 수 있게 하기 위하여
- 여러사람이 같은 프로젝트에 참여할 경우, 각자가 수정한 부분을 팀원 전체가 동기화하는 과정을 자동화하기 위하여
- 소스 코드의 변경 사항을 추적하기 위하여
- 소스 코드에서 누가 수정했는지 추적하기 위하여
- 대규모 수정 작업을 더욱 안전하게 진행하기 위하여
- 가지내기(Branch)로 프로젝트에 영향을 최소화 하면서 새로운 부분을 개발하기 위하여
- 접붙이기(Merge)로 검증이 끝난 후 새로이 개발된 부분을 본류(trunk)에 합치기 위하여
- 많은 오픈 소스 프로젝트에서 어떠한 형태로든 버전 관리를 사용하고 있으므로
- 코드의 특정 부분이 왜 그렇게 쓰여 졌는지 의미를 추적하기 위하여

출처: [버전관리\(wikipedia\)](https://ko.wikipedia.org/wiki/%EB%B2%A8%EA%B3%B9%EC%A0%9C%BC%20%EA%B3%B9%EC%A0%9C%BC%20%EA%B3%B9%EC%A0%9C%BC)

* Git을 사용하는 방법

```
$ git init
Initialized empty Git repository in /tmp/tmp.IMBYSY7R8Y/.git/
$ cat > README << 'EOF'
> Git is a distributed revision control system.
> EOF
$ git add README
$ git commit
[master (root-commit) e4dcc69] You can edit locally and push
to any remote.
 1 file changed, 1 insertion(+)
 create mode 100644 README
$ git remote add origin git@github.com:cdown/thats.git
$ git push -u origin master
```

< CLI >



< GUI >



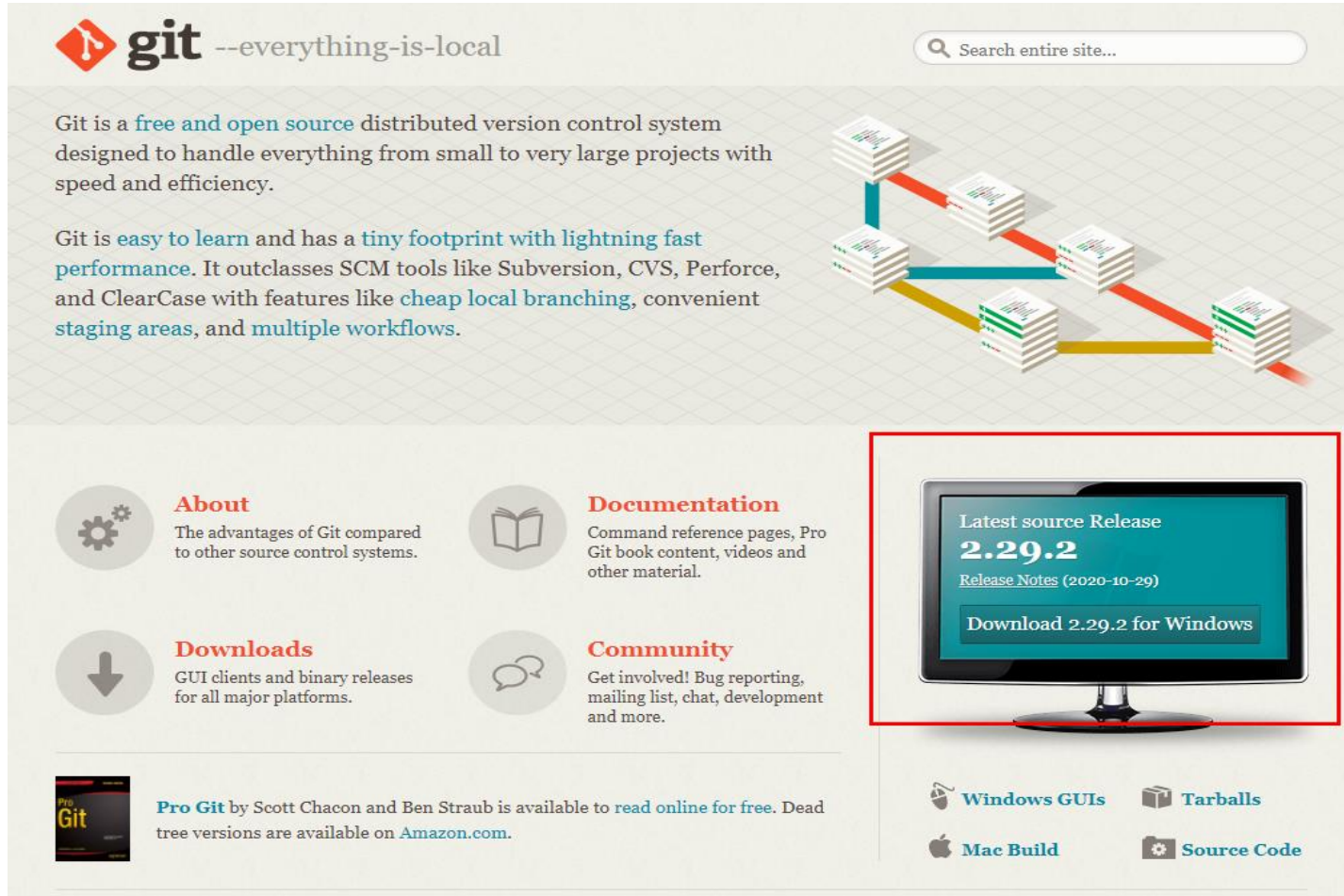
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2. Git CLI 설치하기

* Git 설치

- git-scm.com 에 접속



The screenshot shows the Git website homepage. At the top, the Git logo is followed by the tagline "--everything-is-local". A search bar is located in the top right corner. The main content area features a paragraph describing Git as a free and open source distributed version control system, followed by another paragraph highlighting its ease of learning and performance. To the right of the text is a diagram illustrating Git's distributed nature with multiple repositories connected by a network. Below the main text are four circular icons with corresponding text: 'About' (gears), 'Documentation' (book), 'Downloads' (downward arrow), and 'Community' (speech bubbles). A red rectangular box highlights a monitor displaying the latest source release '2.29.2' with a 'Download 2.29.2 for Windows' button. At the bottom, there are links for 'Pro Git' book, 'Windows GUIs', 'Mac Build', 'Tarballs', and 'Source Code'.

git --everything-is-local

Git is a **free and open source** distributed version control system designed to handle everything from small to very large projects with speed and efficiency.

Git is **easy to learn** and has a **tiny footprint with lightning fast performance**. It outclasses SCM tools like Subversion, CVS, Perforce, and ClearCase with features like **cheap local branching**, convenient staging areas, and **multiple workflows**.

About
The advantages of Git compared to other source control systems.

Documentation
Command reference pages, Pro Git book content, videos and other material.

Downloads
GUI clients and binary releases for all major platforms.

Community
Get involved! Bug reporting, mailing list, chat, development and more.

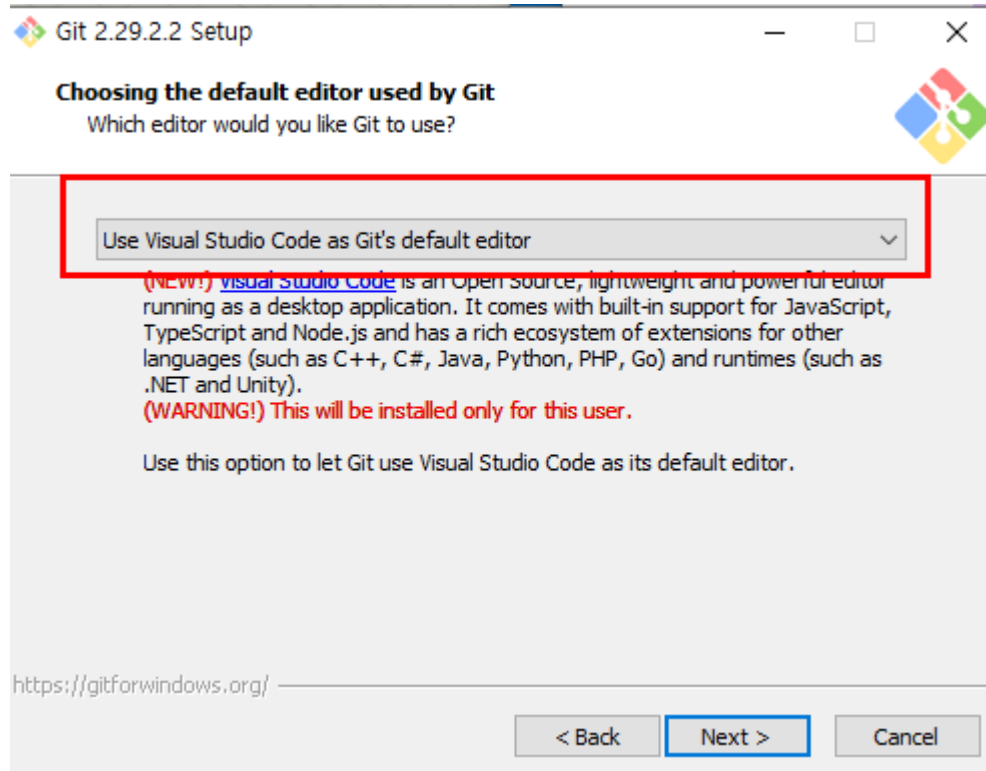
Latest source Release
2.29.2
[Release Notes \(2020-10-29\)](#)
[Download 2.29.2 for Windows](#)

Pro Git by Scott Chacon and Ben Straub is available to [read online for free](#). Dead tree versions are available on [Amazon.com](#).

Windows GUIs **Tarballs**
Mac Build **Source Code**

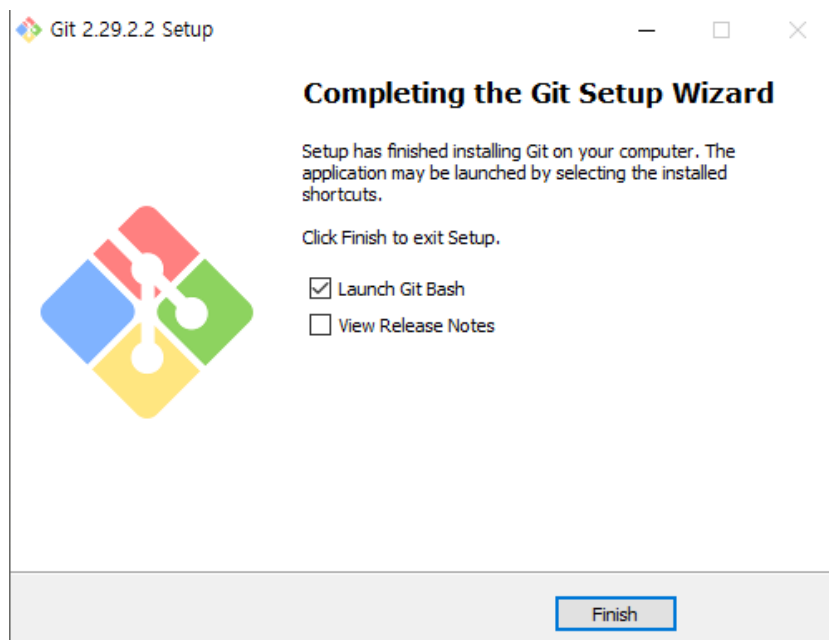
* Git 설치

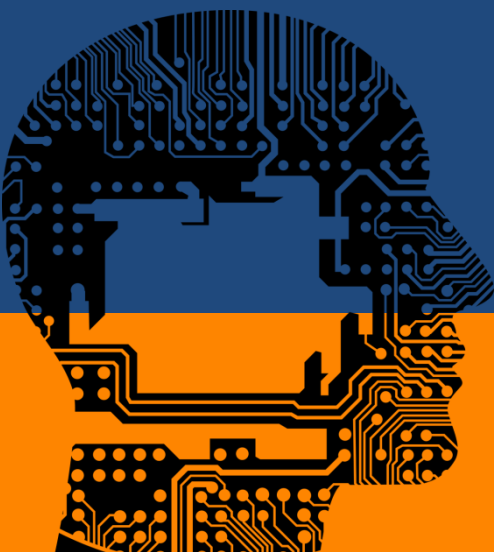
- Next 쪽쪽 누르다가 이 화면에서 Visual Studio Code로 설정 (큰 의미 없음)



* Git 설치

- 나머지부분도 기본 체크로 두고 Next 쪽쪽 클릭~~





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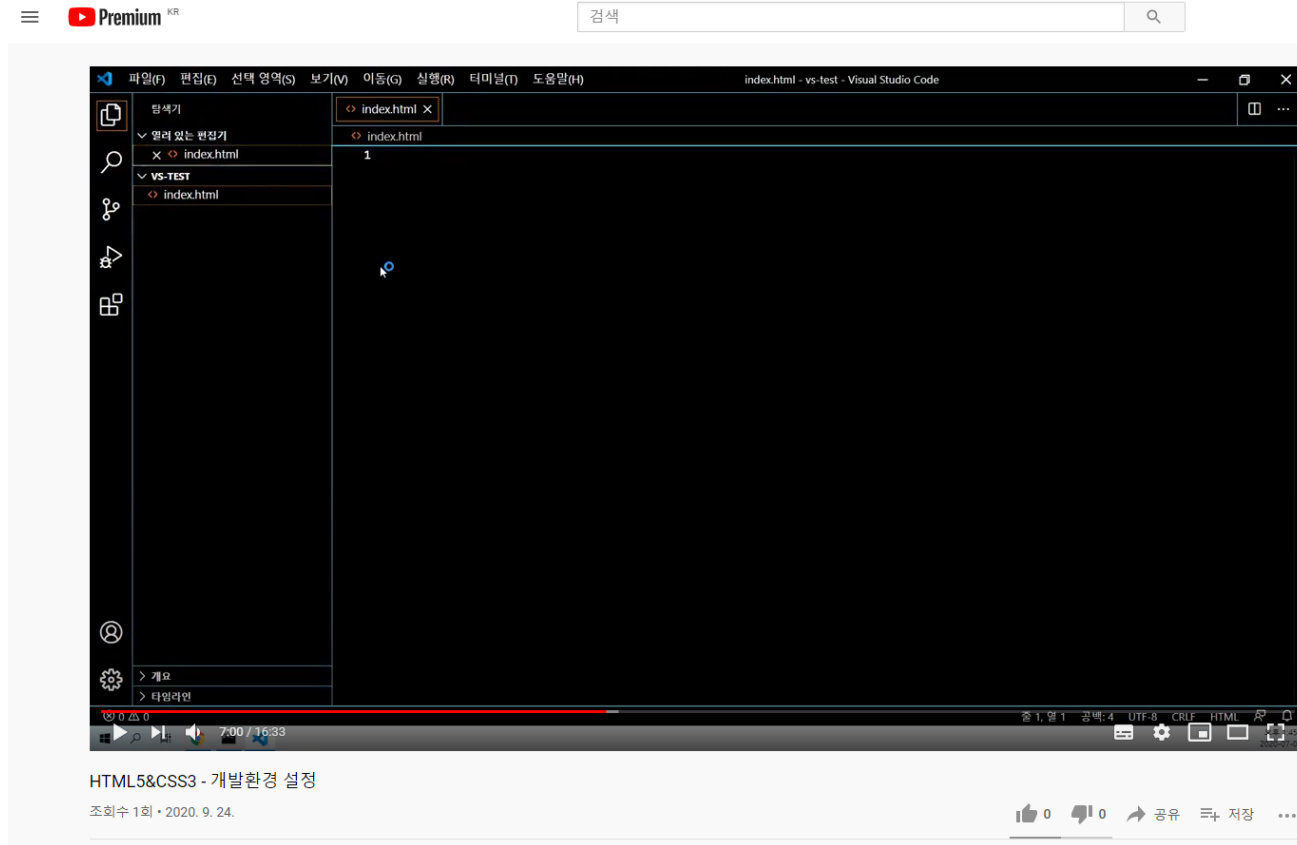
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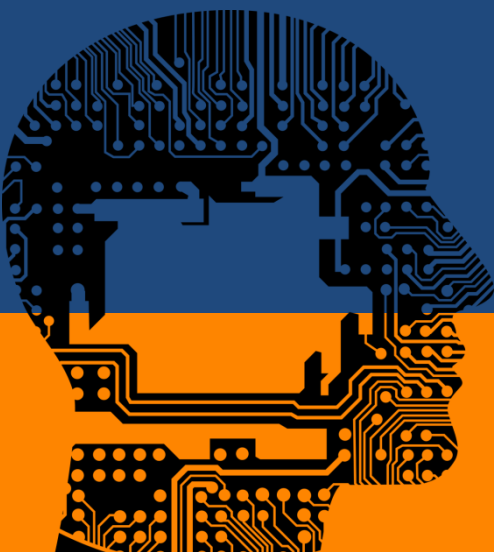
3. 코드 에디터 설치

Visual Studio Code

* VS Code 설치

안내영상 링크참조: <https://www.youtube.com/watch?v=lkwYQgtsYko>





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4. GitHub 가입하기

* GitHub 가입

- GitHub: Git으로 버전관리한 코드를 올릴 수 있는 클라우드 서버
- 깃헙 홈페이지: <https://github.com/>
- 정보 입력 후 Sign up 클릭

Why GitHub? ▾ Team Enterprise Explore ▾ Marketplace Pricing ▾

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Built for developers

GitHub is a development platform inspired by the way you work. From **open source** to **business**, you can host and review code, manage projects, and build software alongside 50 million developers.

Username
kokokaki ✓

Email
hsg9984@kitt.co.kr ✓

Password
..... ✓

Make sure it's at least 15 characters OR at least 8 characters including a number and a lowercase letter. [Learn more.](#)

Sign up for GitHub

By clicking "Sign up for GitHub", you agree to our [Terms of Service](#) and [Privacy Statement](#). We'll occasionally send you account related emails.

* GitHub 가입

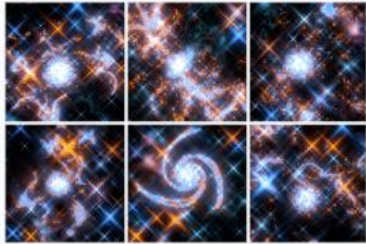
인간 확인 한번 해주시고~

Join GitHub

Create your account

Verify your account

나선은하를 고르십시오



Email preferences

☐ Send me occasional product updates, announcements, and offers.

Join a free plan

Join GitHub

Create your account

Verify your account



Email preferences

☐ Send me occasional product updates, announcements, and offers.

Join a free plan

설문조사 한바탕 해주시고~~

Welcome to GitHub

Woohoo! You've joined millions of developers who are doing their best work on GitHub. Tell us what you're interested in. We'll help you get there.

What kind of work do you do, mainly?










Software Engineer I write code	Student I go to school
Product Manager I write specs	UX & Design I draw interfaces
Data & Analytics I write queries	Marketing & Sales I look at charts
Teacher I educate people	Other I do my own thing

How much programming experience do you have?

None I don't program at all	A little I'm new to programming
A moderate amount I'm somewhat experienced	A lot I'm very experienced

What do you plan to use GitHub for?

(Select up to 3)

 Learn to code	 Learn Git and GitHub	 Host a project (repository)
 Create a website with GitHub Pages	 Collaborating with my team	 Find and contribute to open source
 School work and student projects	 Use the GitHub API	 Other

I am interested in:

하하호호 ×

꾸꾸까깁

We'll connect you with communities and projects that fit your interests.

For example: `open-access` `shell` `neural-network`

Complete setup

이메일 인증 타임~~



Please verify your email address

Before you can contribute on GitHub, we need you to verify your email address.

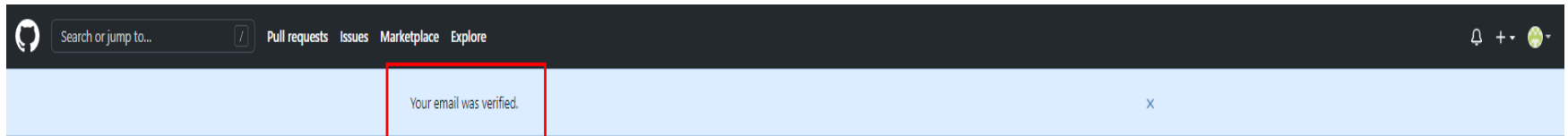
An email containing verification instructions was sent to hsg9984@kitt.co.kr.

[Resend verification email](#)[Change your email settings](#)

Almost done, [@kokokaki](#)! To complete your GitHub sign up, we just need to verify your email address:
hsg9984@kitt.co.kr.

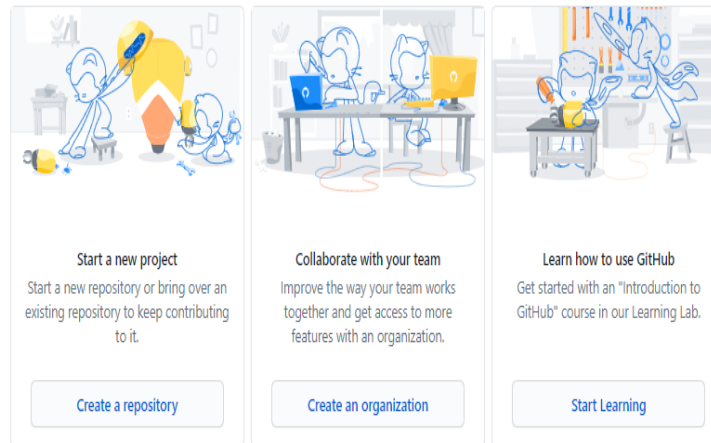
[Verify email address](#)

이메일 인증링크 타고 가면 끝~~ 넘쉽고 ㅋㅋ



What do you want to do first?

Every developer needs to configure their environment, so let's get your GitHub experience optimized for you.



[Skip this for now >](#)

감사합니다
THANK YOU