

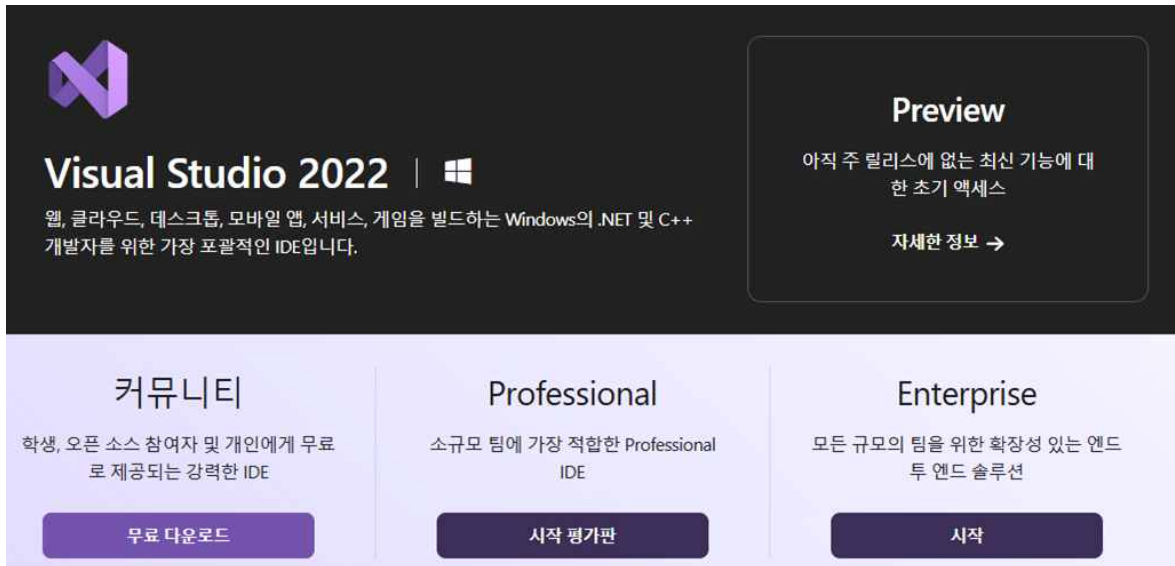
O1_개발환경 구축

1. 환경 설정

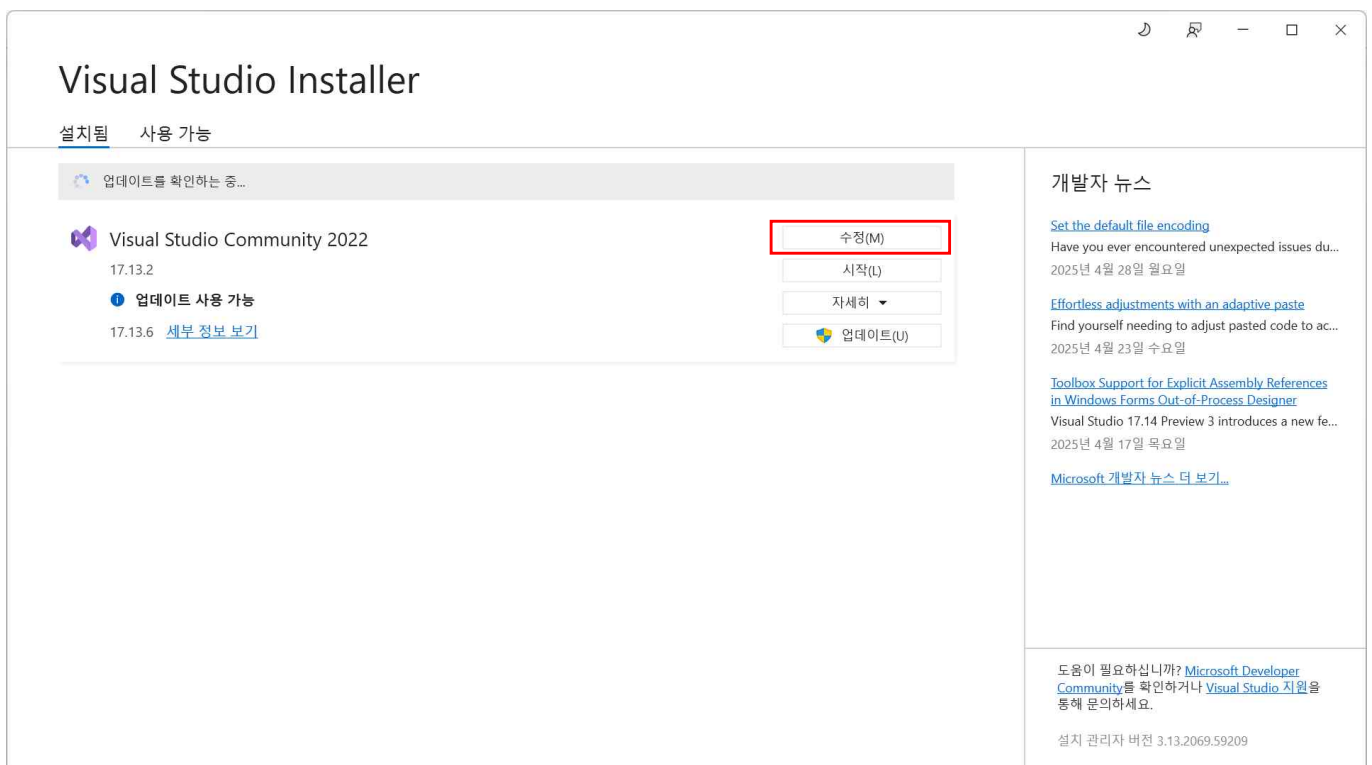
1) Visual Studio 2022 설치하기

- Visual Studio 2022 커뮤니티 버전을 다운로드 받자.

<https://visualstudio.microsoft.com/ko/downloads/>



- 이미 설치되어 있는 사람은 [Visual Studio Installer]를 실행하자.



- Visual Studio 설치 구성요소를 살펴보자.
- 아래의 설치 옵션을 모두 추가해 주어야 한다.

※ 데스크톱 및 모바일

- ① .NET Multi-Platform App UI 개발
- ② .NET 데스크탑 개발
- ③ C++를 사용한 데스크탑 개발
- ④ WinUI 애플리케이션 개발
- ⑤ C++를 사용한 모바일 개발

- 특히, 게임 옵션의 C++를 사용한 게임 개발을 설치하여야 하고, 설치 메뉴의 추가적인 Unreal Engine 옵션을 체크하고 설치해야 한다.

※ 게임

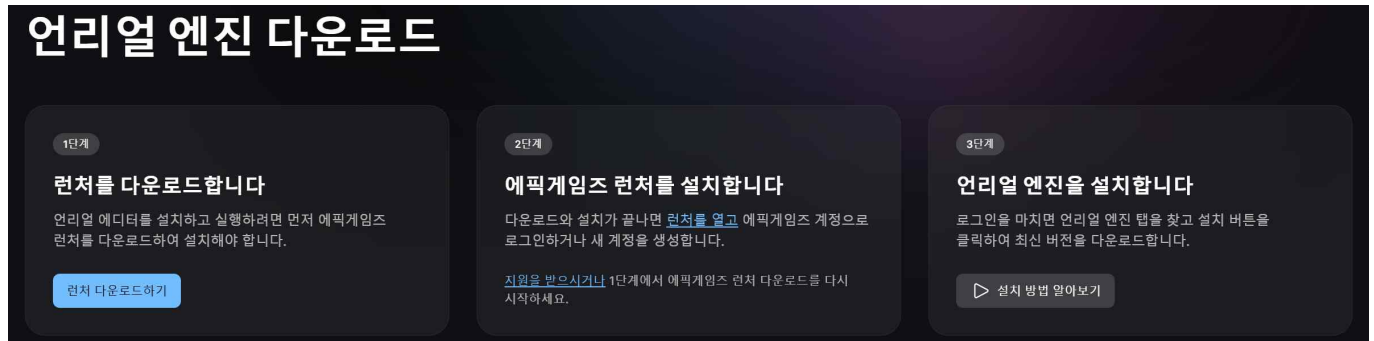
- ① C++를 사용한 게임 개발
 - Unreal Engine 설치 관리자
 - Unreal Engine용 Android Visual Studio To...
 - Unreal Engine 테스트 어댑터



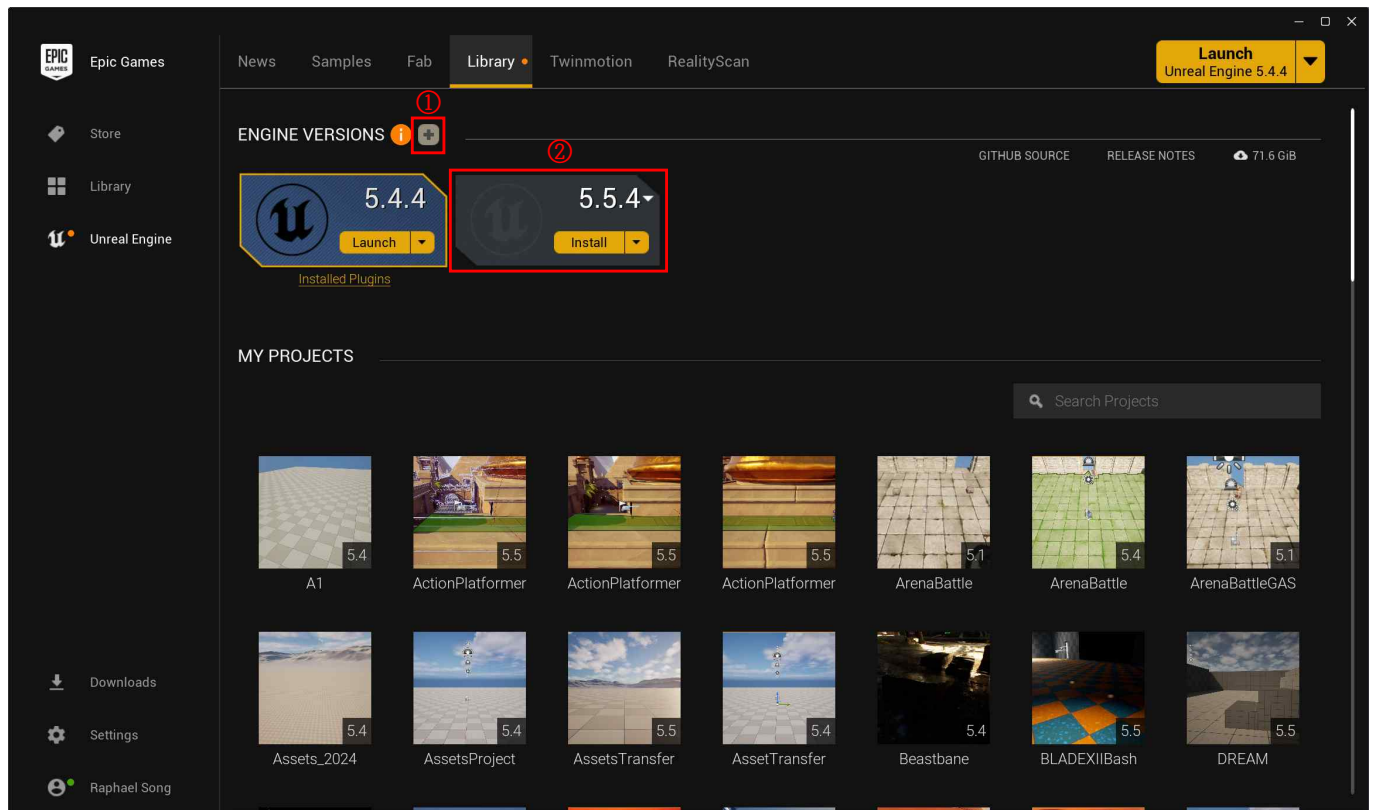
2) 언리얼 엔진 설치하기

- 언리얼 엔진을 사이트로 이동하여 에픽게임즈 런처를 다운로드 하자. (가능하면 영어로 설치)

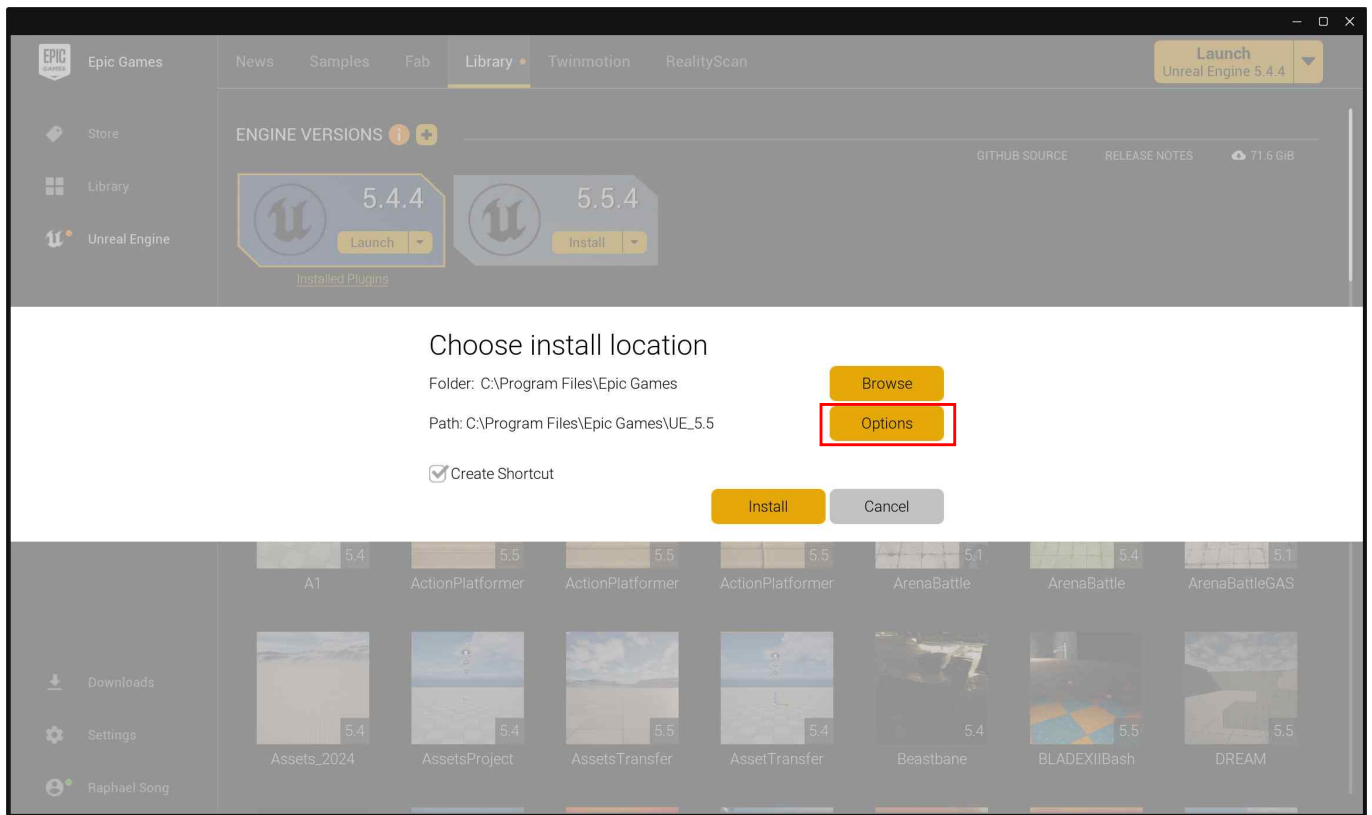
https://www.unrealengine.com/ko/unreal-engine-5?gad_source=1&gclid=EAlalQobChMlt9WV3o7c iwMVExJ7Bx36KT24EAAAYASAAEgK-rvD_BwE



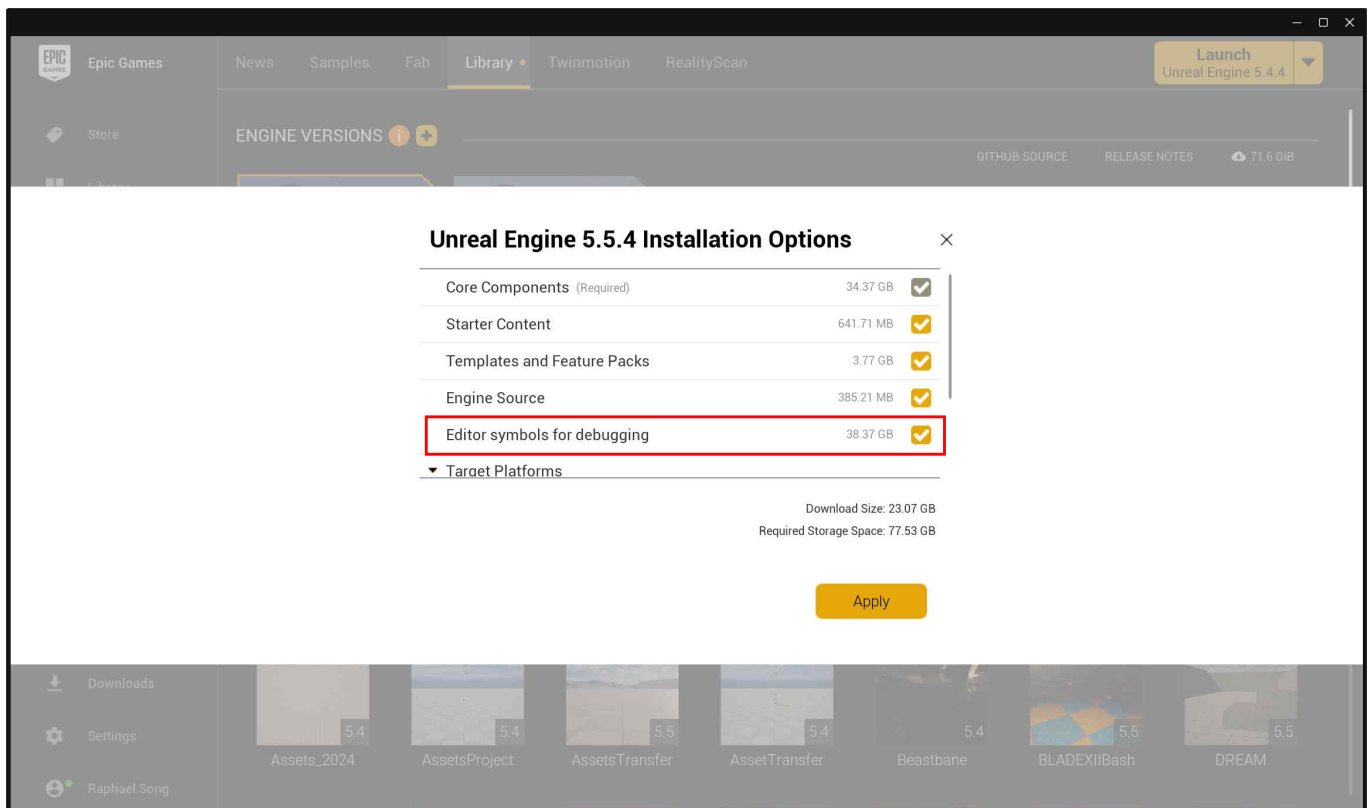
- 에픽게임즈 런처를 실행하여 언리얼 엔진을 설치하도록 하자.
- Unreal Engine 탭에서 Library를 활성화 한 후, Engine Versions의 +버튼을 눌러 언리얼 엔진을 설치하도록 하자.
- 에셋의 대응을 위해 5.5.4를 설치하도록 하자.
- 5.5.4의 Install 버튼을 눌러서 설치를 시작하자.



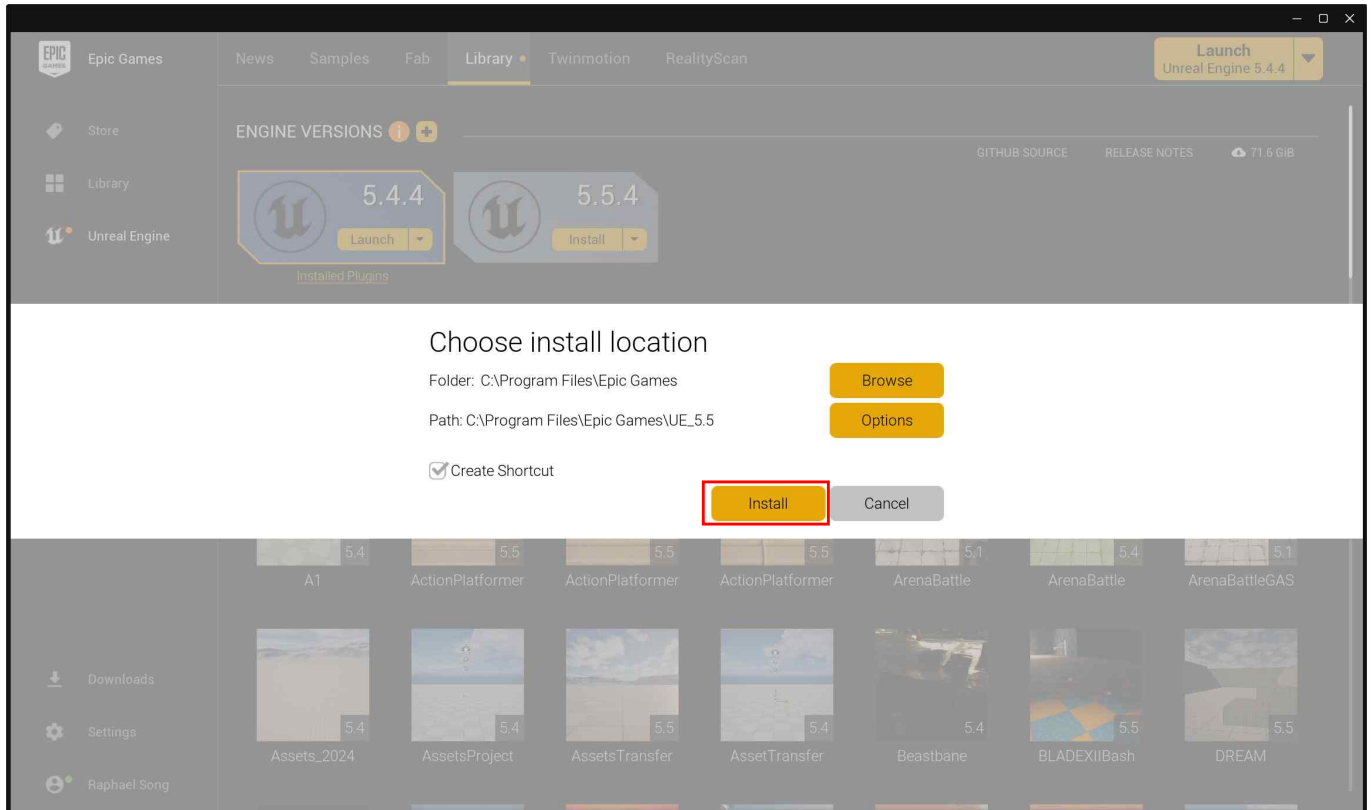
- 설치 메뉴가 나타나면 Options 버튼을 눌러 설치 구성 요소를 확인하자.



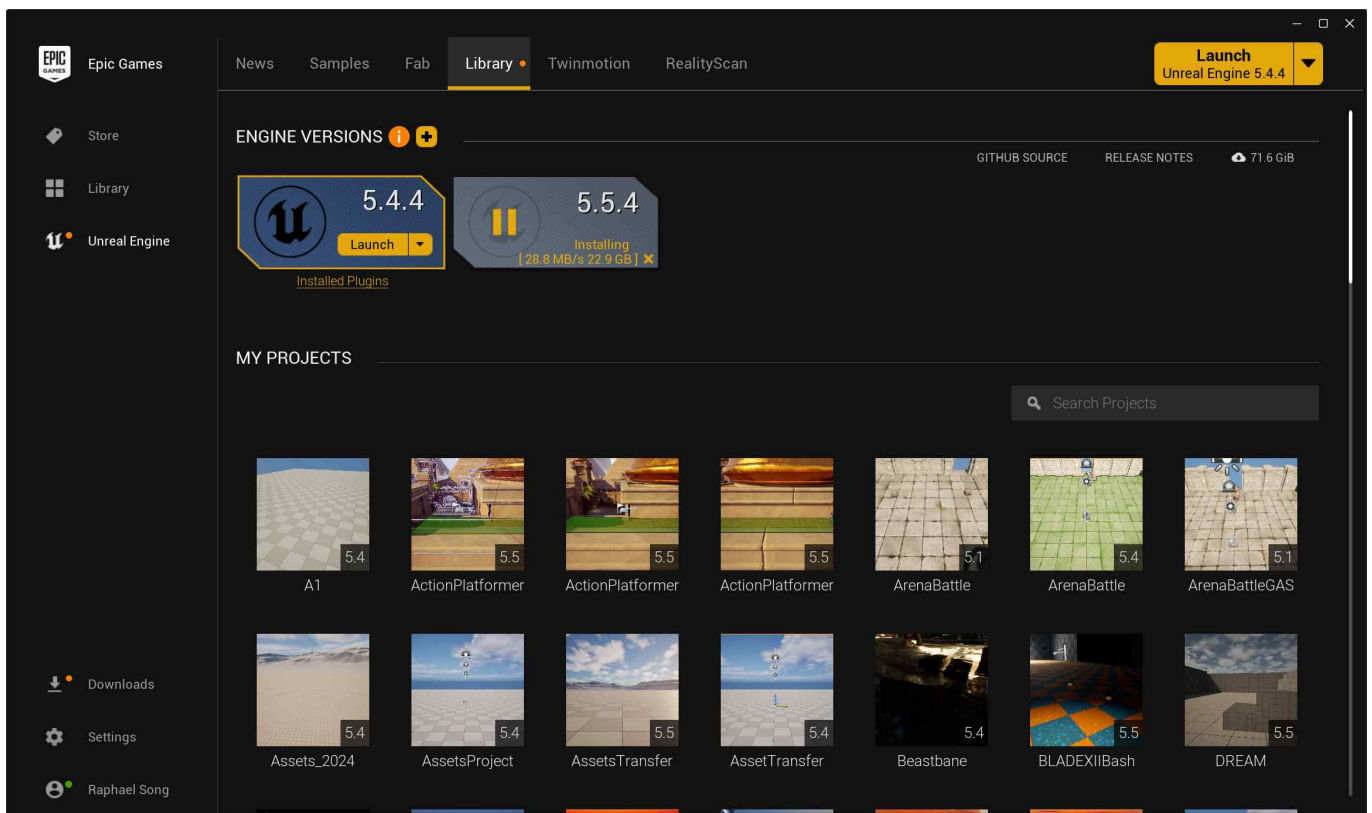
- 설치 구성요소를 확인하자.
- C++ 기반으로 게임을 개발하기 위해 **Editor symbols for debugging** 옵션을 추가로 선택하고 Apply 하도록 하자.



- 폴더와 경로는 아래의 설정으로 그대로 두자. 경로가 변경된 경우 엔진 파일들을 인식하지 못하는 문제가 발생할 수 있다. Install 버튼을 눌러 설치를 시작하자.

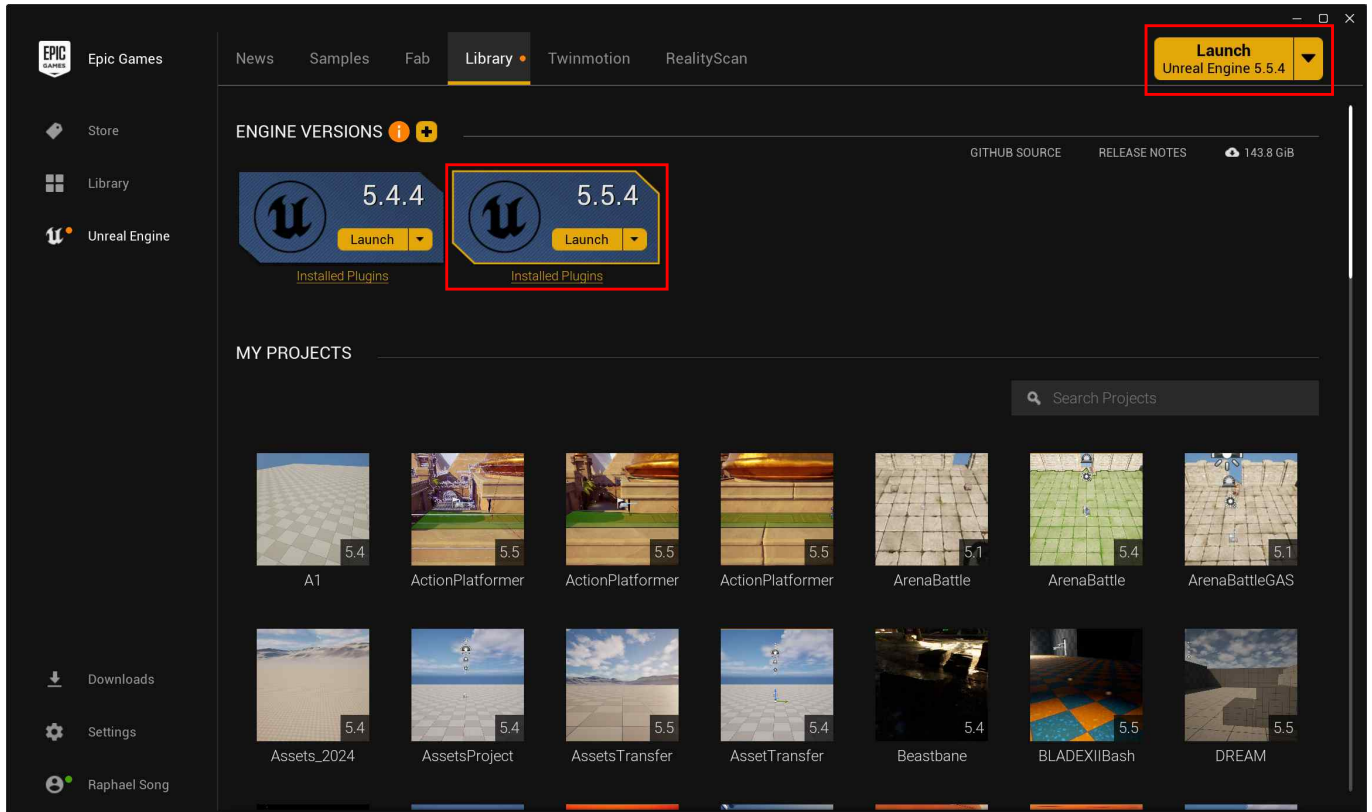


- 언리얼 엔진 5.5.4버전의 설치 과정을 확인할 수 있다.

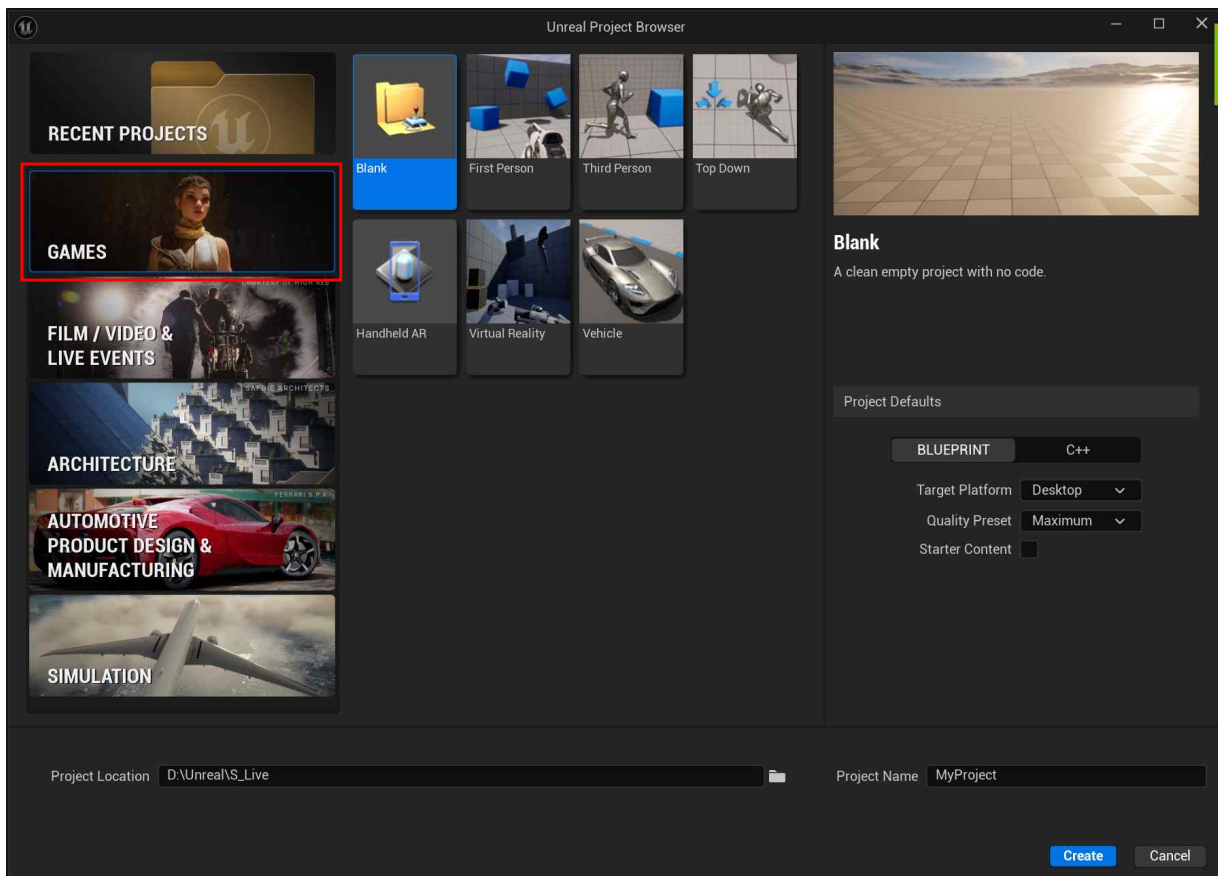


3) 프로젝트 생성 및 실행

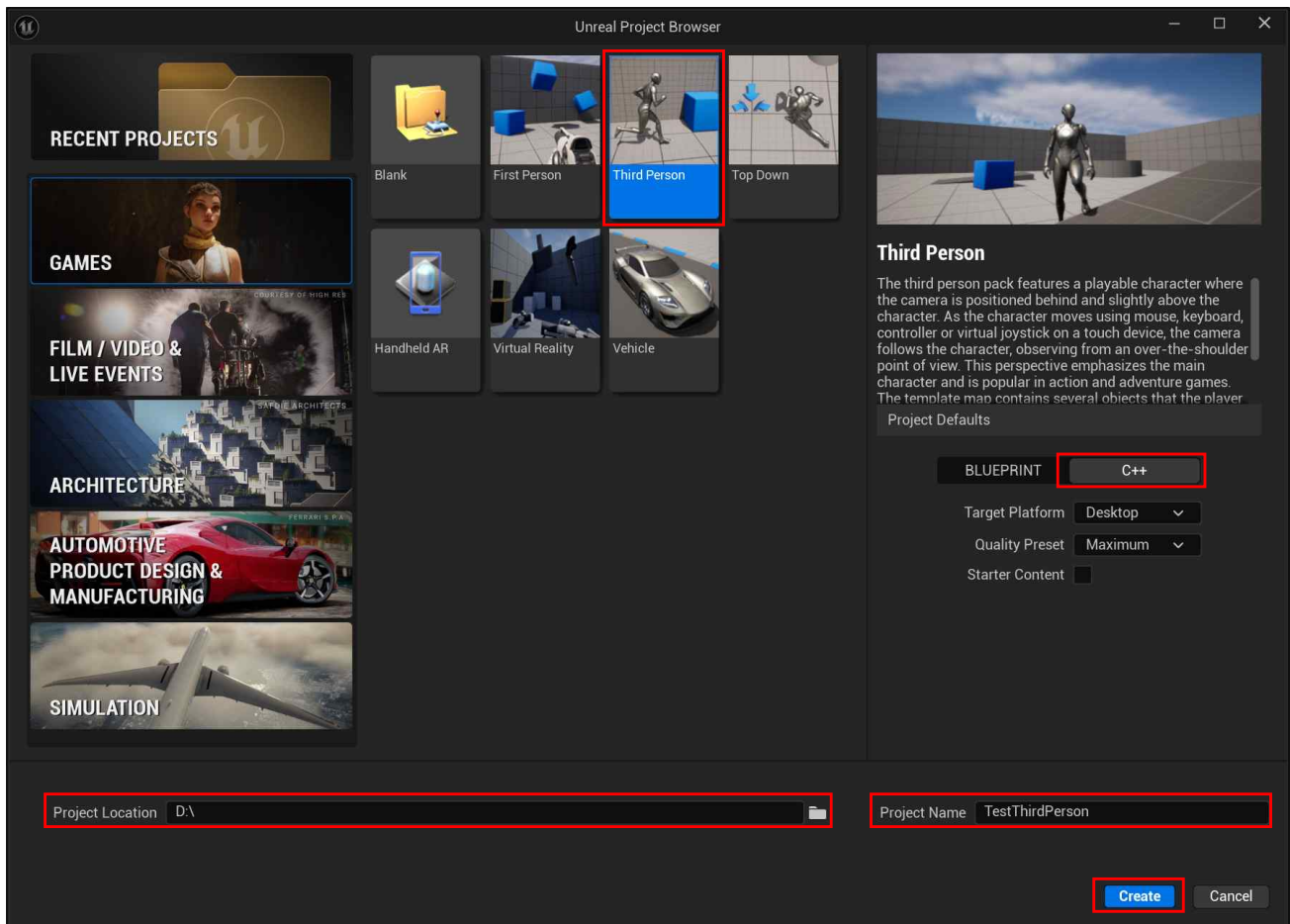
- 언리얼 엔진 설치를 완료 한 후, 5.5.4 버전을 실행(Launch) 하세요.



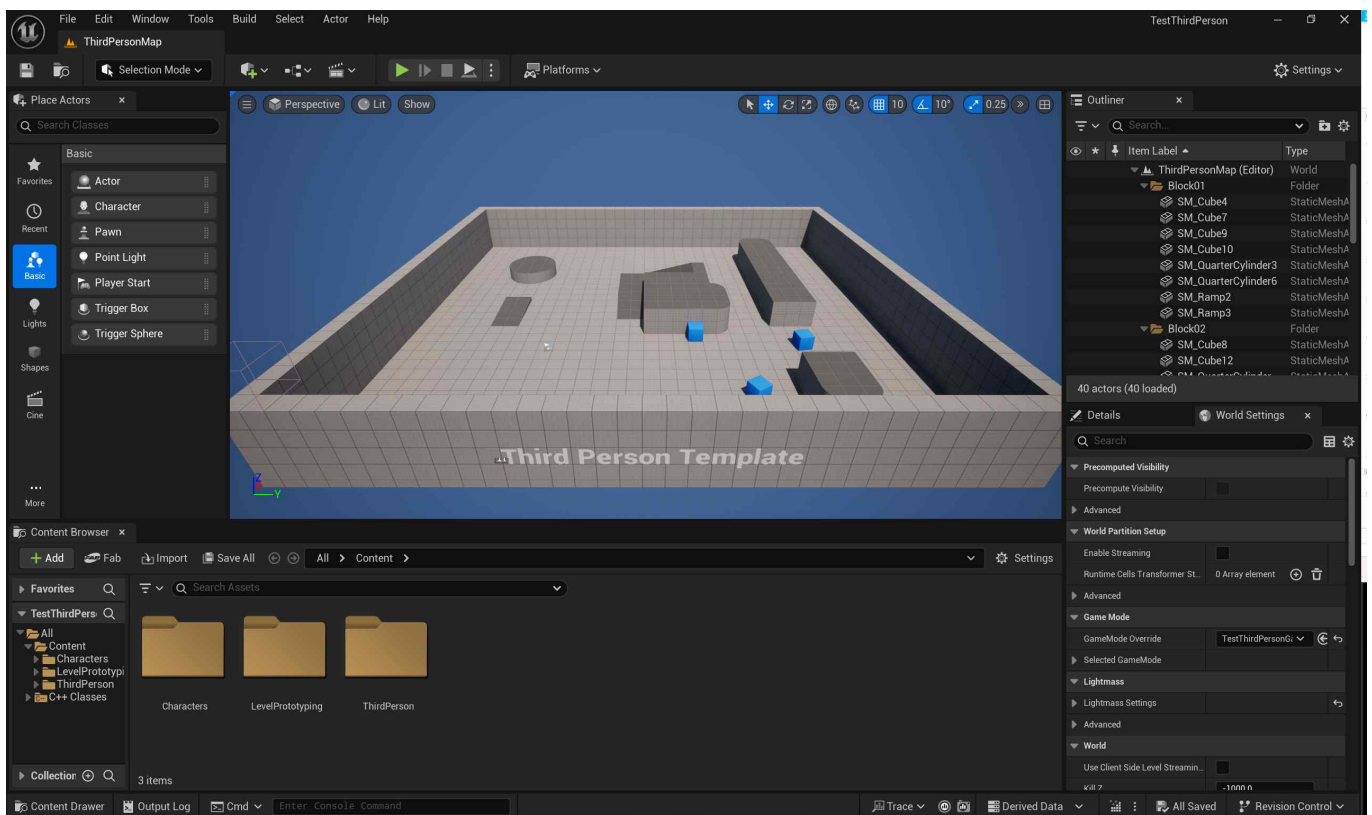
- 새로운 테스트 프로젝트를 하나 생성하도록 합니다.
- Game 카테고리를 선택합니다.



- Third Person 템플릿 프로젝트를 선택하고 C++ 기반의 프로젝트를 생성해 보자.
- 적절한 저장 경로에 TestThirdPerson 프로젝트를 생성하기 위해 Create 버튼을 누르면 된다.



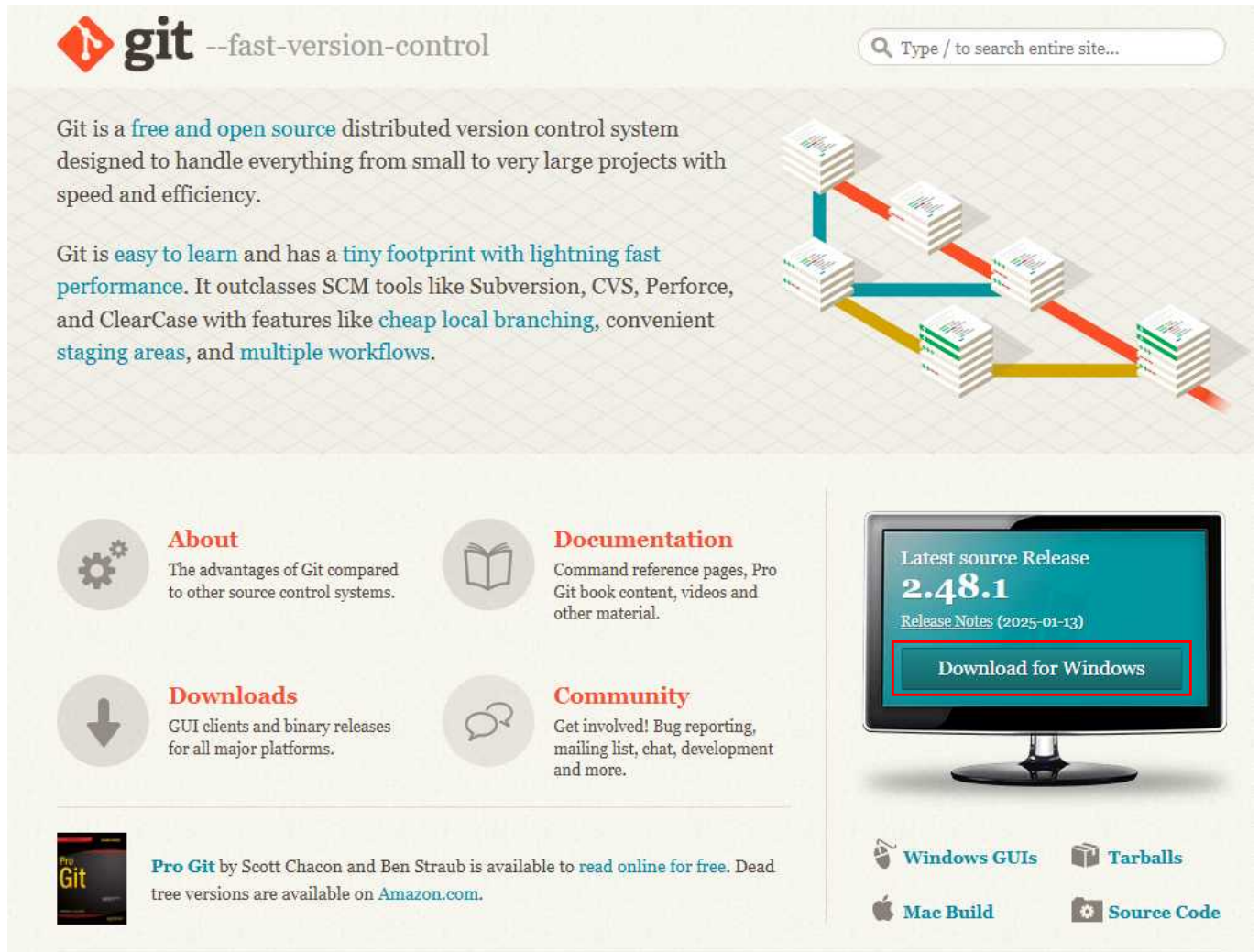
- 프로젝트가 실행되는 것을 확인하자.



4) 소스 컨트롤(Source Control)

- 소프트웨어 개발에서 개발자들이 작성한 코드나 파일 등의 변경 이력을 관리하는 도구이다.
- Git을 소스 컨트롤로 사용하도록 하자.

<https://git-scm.com/>



The image shows the Git website homepage. At the top, there's a logo with the text "git --fast-version-control" and a search bar. Below the logo, there's a description of Git as a free and open source distributed version control system. To the right, there's a diagram illustrating branching and merging with stacks of papers. Below the description, there are four sections: "About", "Documentation", "Downloads", and "Community", each with an icon and a brief description. On the right side, there's a monitor displaying the latest source release "2.48.1" and a button to "Download for Windows". At the bottom, there are links for "Windows GUIs", "Tarballs", "Mac Build", and "Source Code".

git --fast-version-control

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
2.48.1
Release Notes (2025-01-13)
Download 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**

- 64-bit Git for Windows Setup 링크를 선택하여 다운로드 받자.



The image shows the "Download for Windows" page on the Git website. It features a large heading "Download for Windows" and a paragraph explaining that the latest (2.48.1) 64-bit version of Git for Windows is available. Below this, there's a section titled "Other Git for Windows downloads" with links to "Standalone Installer", "32-bit Git for Windows Setup", "64-bit Git for Windows Setup" (highlighted with a box), "Portable ('thumbdrive edition')", "32-bit Git for Windows Portable", and "64-bit Git for Windows Portable".

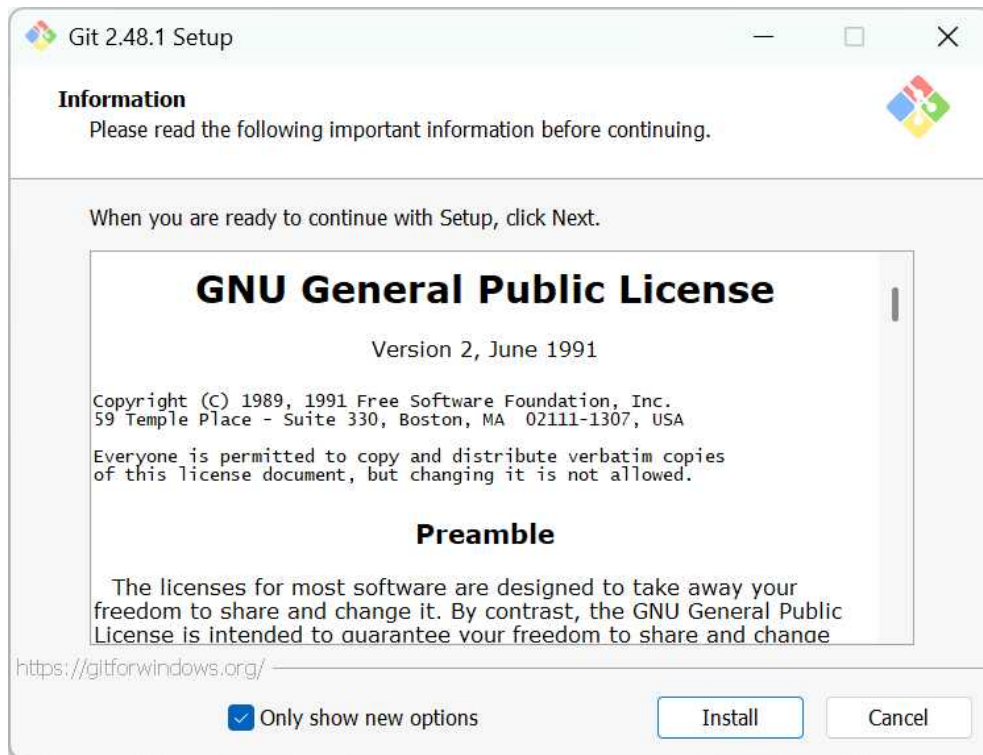
Download for Windows

Click here to download the latest (**2.48.1**) **64-bit** version of **Git for Windows**. This is the most recent **maintained build**. It was released **11 days ago**, on 2025-02-13.

Other Git for Windows downloads

Standalone Installer
32-bit Git for Windows Setup.
64-bit Git for Windows Setup.
Portable ("thumbdrive edition")
32-bit Git for Windows Portable.
64-bit Git for Windows Portable.

- Git 설치를 진행하자.



- 설치가 완료되면 명령 프롬프트(cmd)를 실행해서 git을 검색해 보자.
- git 설치가 완료되면 아래와 같은 git 명령들을 확인할 수 있다.

```

명령 프롬프트
C:\Users\user>git
usage: git [-v | --version] [-h | --help] [-C <path>] [-c <name>=<value>]
          [--exec-path[=<path>]] [--html-path] [--man-path] [--info-path]
          [-p | --paginate | -P | --no-pager] [--no-replace-objects] [--no-lazy-fetch]
          [--no-optional-locks] [--no-advice] [--bare] [--git-dir=<path>]
          [--work-tree=<path>] [--namespace=<name>] [--config-env=<name>=<envvar>]
          <command> [<args>]

These are common Git commands used in various situations:

start a working area (see also: git help tutorial)
  clone      Clone a repository into a new directory
  init       Create an empty Git repository or reinitialize an existing one

work on the current change (see also: git help everyday)
  add        Add file contents to the index
  mv         Move or rename a file, a directory, or a symlink
  restore    Restore working tree files
  rm         Remove files from the working tree and from the index

examine the history and state (see also: git help revisions)
  bisect     Use binary search to find the commit that introduced a bug
  diff       Show changes between commits, commit and working tree, etc
  grep       Print lines matching a pattern
  log        Show commit logs
  show       Show various types of objects
  status     Show the working tree status

grow, mark and tweak your common history
  backfill   Download missing objects in a partial clone
  branch     List, create, or delete branches
  commit     Record changes to the repository
  merge      Join two or more development histories together
  rebase     Reapply commits on top of another base tip
  reset      Reset current HEAD to the specified state
  switch     Switch branches
  tag        Create, list, delete or verify a tag object signed with GPG

collaborate (see also: git help workflows)
  fetch      Download objects and refs from another repository
  pull       Fetch from and integrate with another repository or a local branch
  push       Update remote refs along with associated objects

'git help -a' and 'git help -g' list available subcommands and some
concept guides. See 'git help <command>' or 'git help <concept>'
to read about a specific subcommand or concept.
See 'git help git' for an overview of the system.

```

5) git fork

- Git Client 프로그램인 git fork를 다운로드 받아 설치하도록 하자.

<https://git-fork.com/>



- Download Fork for Windows를 선택하여 다운로드를 진행하자.

Fork is getting better and better day after day and we are happy to share our results with you.

Download Fork for Mac

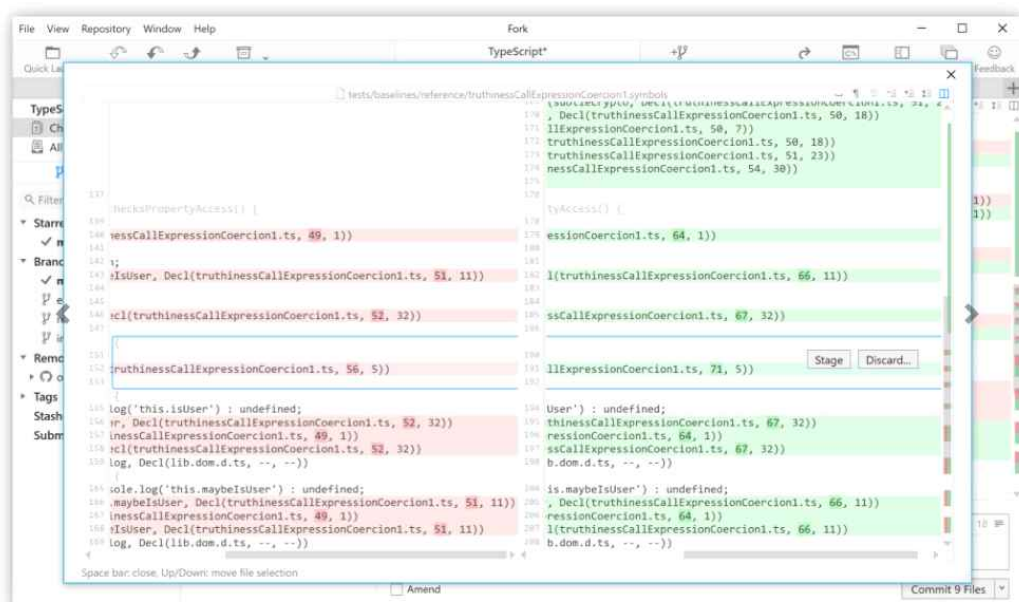
OS X 10.11+

\$59.99, free evaluation

Download Fork for Windows

Windows 7+

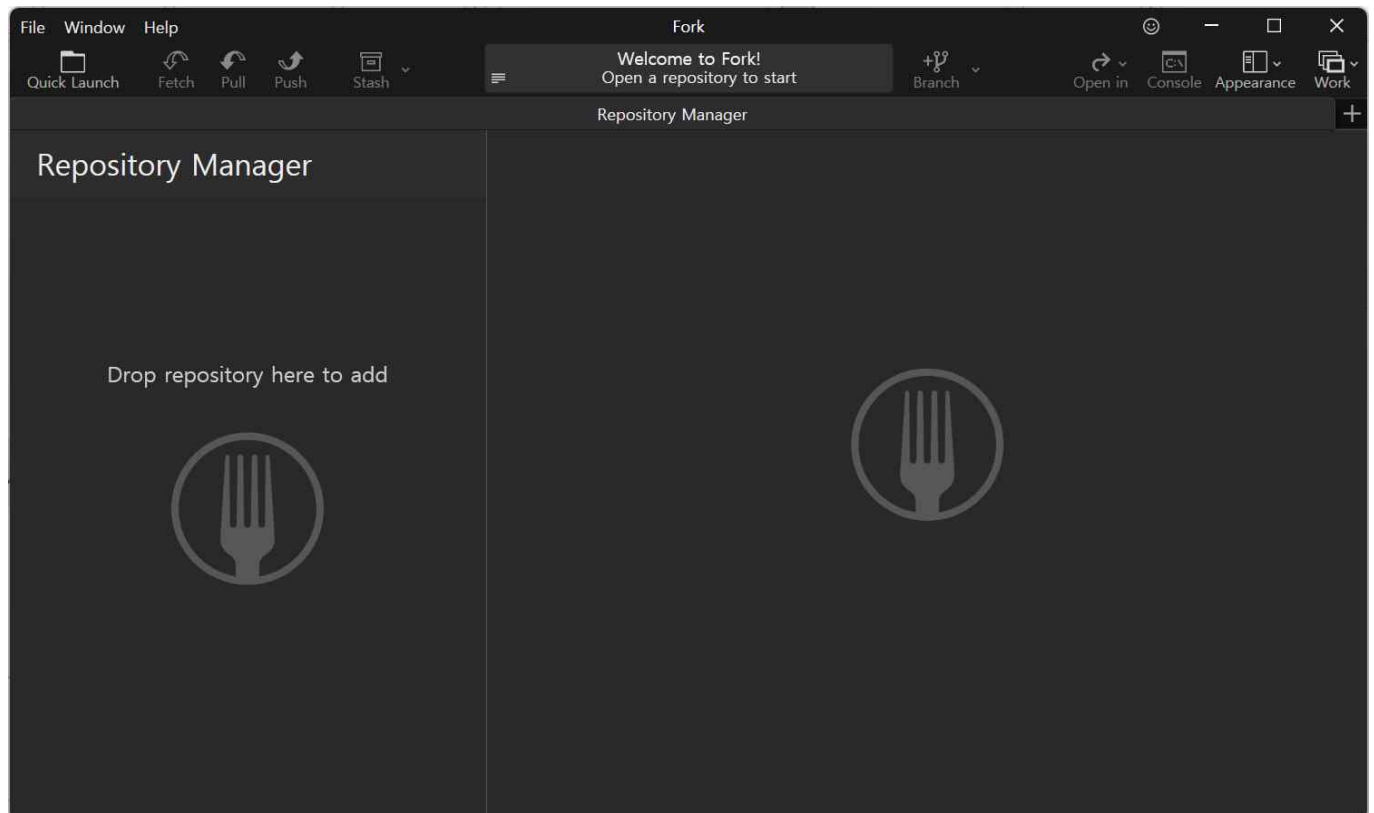
\$59.99, free evaluation



- 다운받은 git fork 설치 파일을 실행하자.



- 설치가 완료된 후, git fork를 실행하자.
- 클라우드 기반의 호스팅 서비스인 github를 사용하도록 하자.



6) git hub

- git hub에 로그인 한 후, 새로운 Repositories를 추가해 보자.

Create a new repository

Repositories contain a project's files and version history. Have a project elsewhere? [Import a repository](#).
Required fields are marked with an asterisk ().*

1

General

Owner *

Repository name *

/ A1_Live

✔ A1_Live is available.

Great repository names are short and memorable. How about **solid-fishstick**?

Description

0 / 350 characters

2

Configuration

Choose visibility *

Choose who can see and commit to this repository

Public

Add README

READMEs can be used as longer descriptions. [About READMEs](#)

Off

Add .gitignore

.gitignore tells git which files not to track. [About ignoring files](#)

UnrealEngine

Add license

Licenses explain how others can use your code. [About licenses](#)

No license

Create repository

- A1_Live URL을 복사하여 Clone을 만들어보자.

A1_Live Public

Pin Watch 0 Fork 0 Star 0

main 1 Branch 0 Tags

Go to file

Add file

Code

raphaelsong Initial commit

.gitignore Initial commit

README

Add a README

Help people interested in this repository understand your project by adding a README.

Add a README

Local Codespaces

Clone

HTTPS SSH GitHub CLI

https://github.com/ /A1_Live.git

Clone using the web URL.

Open with GitHub Desktop

Download ZIP

About

No description, website, or topics provided.

Activity

0 stars

0 watching

0 forks

Releases

No releases published

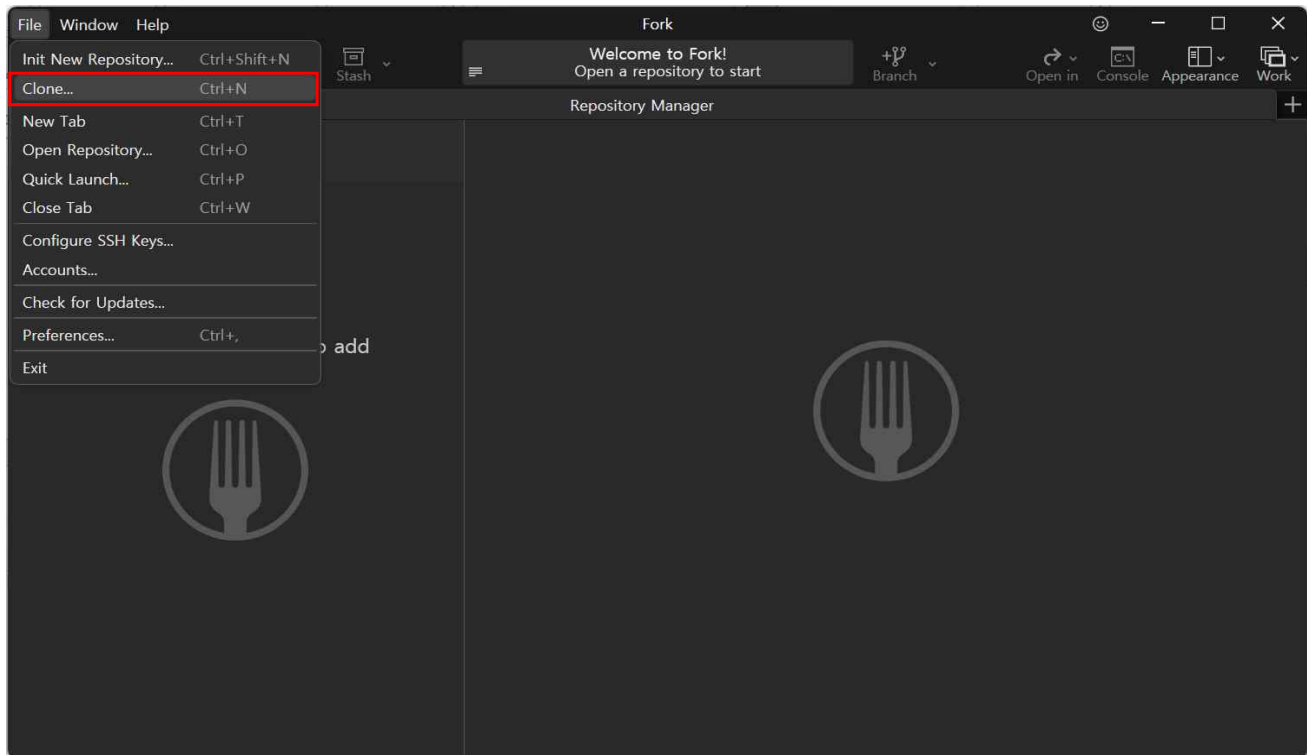
Create a new release

Packages

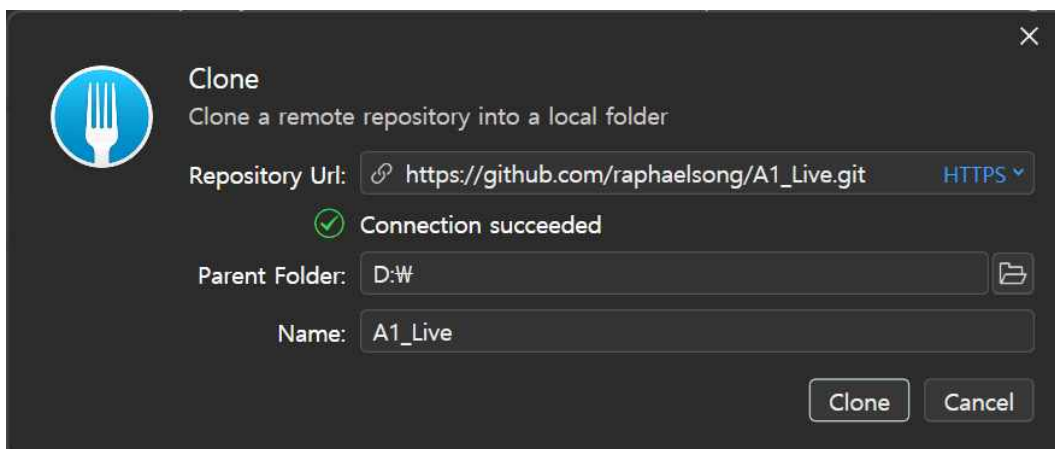
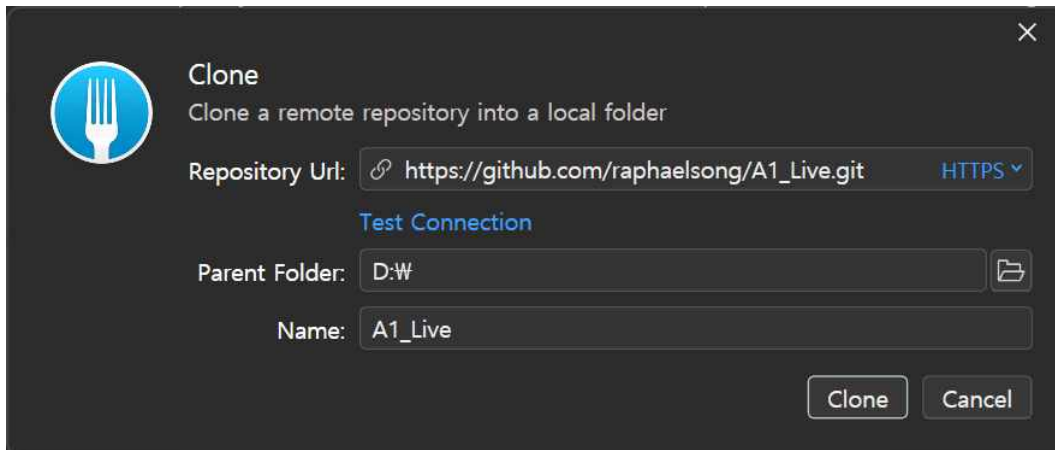
No packages published

Publish your first package

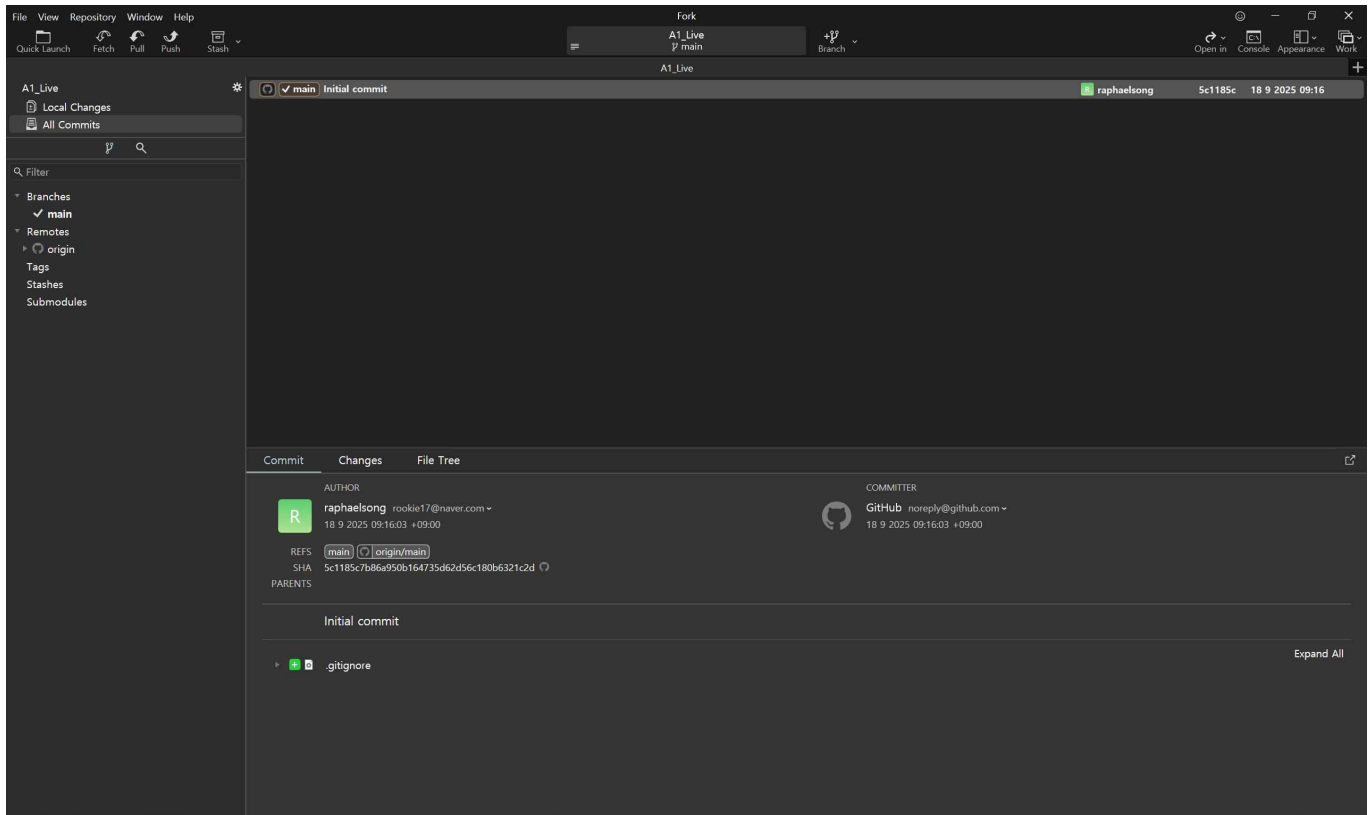
- git fork에 Clone을 해주자.



- 복사한 git hub의 URL을 붙여 놓자.
- Test Connection을 확인한 후 Clone을 하자. (github 로그인이 되어 있어야 한다.)



- Clone이 완료된 것을 확인할 수 있다.



- 윈도우 탐색기를 통해 해당 경로에 만들어진 폴더를 확인하자.
- .git과 .gitignore 파일이 추가되어 있는지 확인하자.

