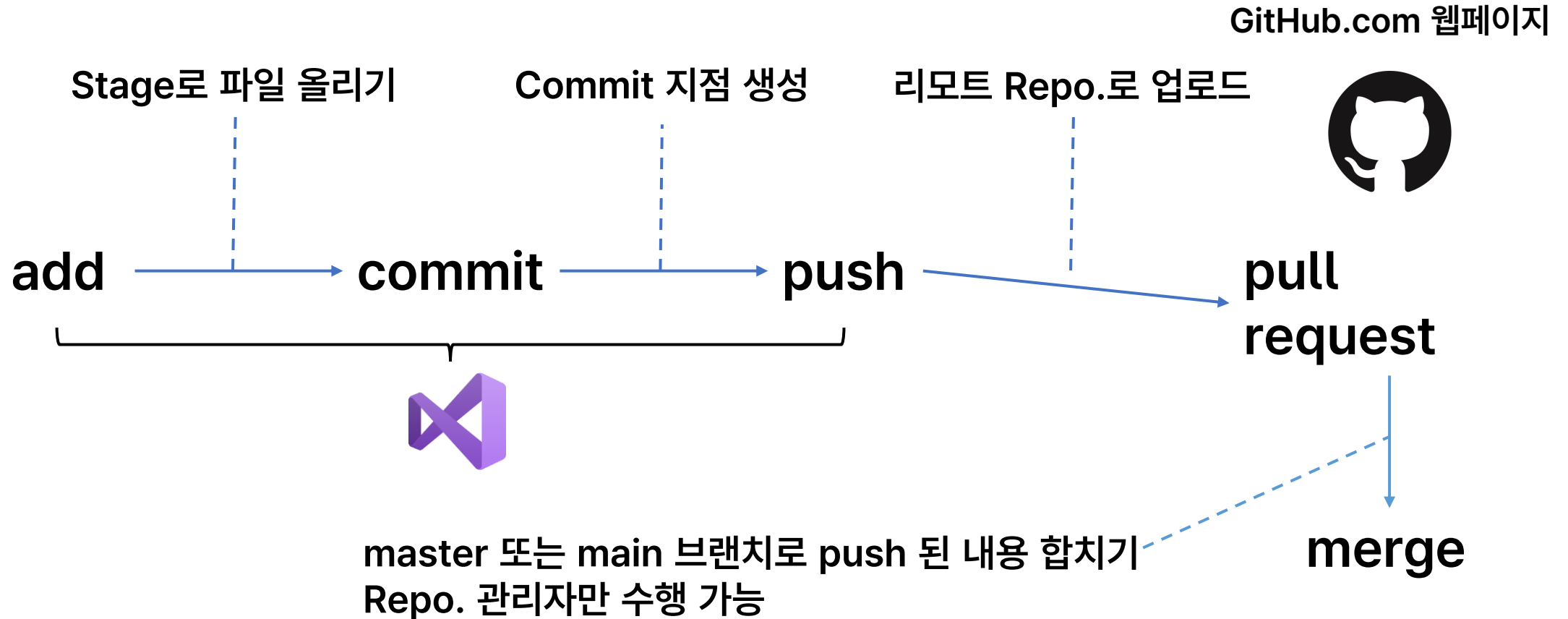
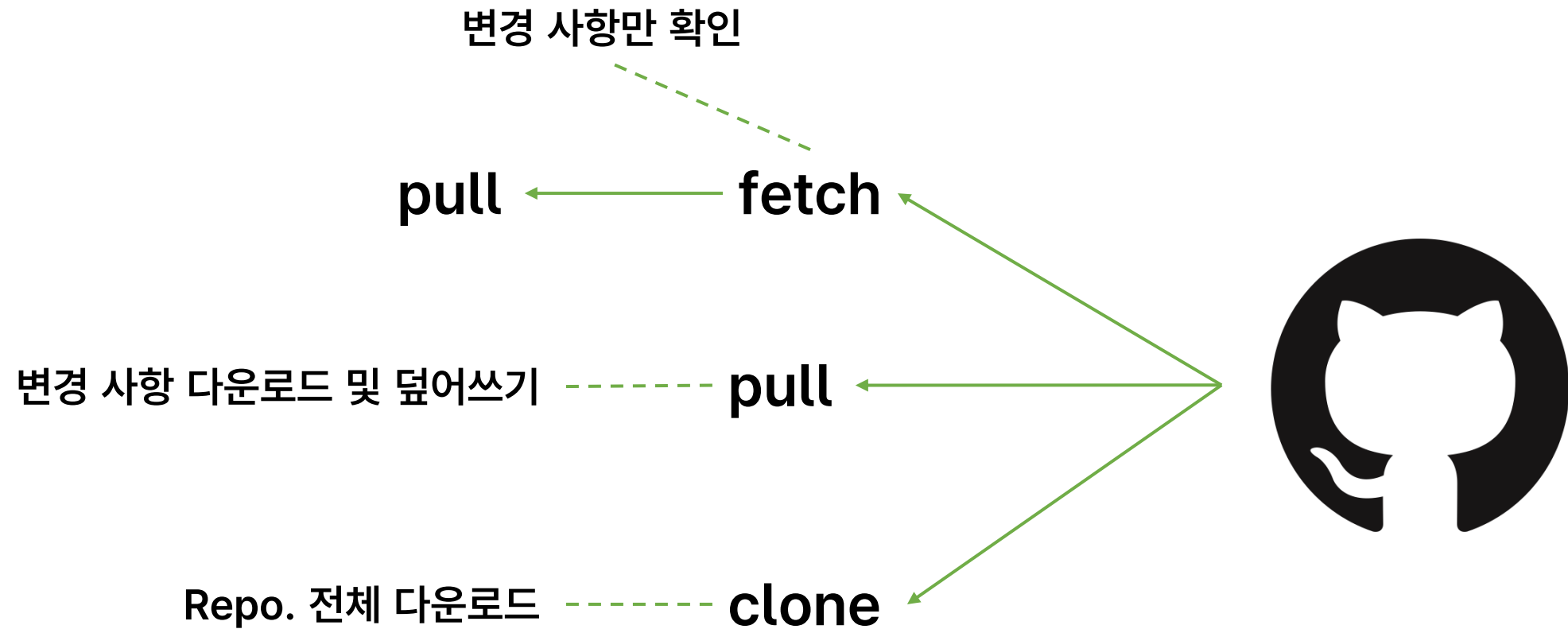


# Visual Studio & Git

# Git & GitHub



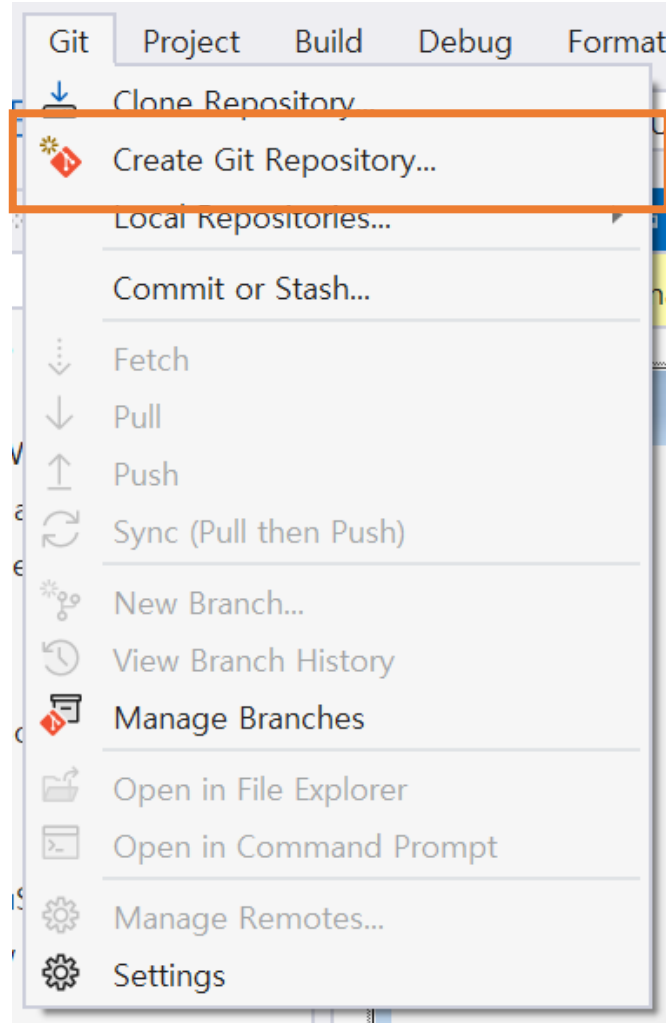
# Git & GitHub



# VS - GitHub 연동 절차

1. 솔루션을 생성
  2. 솔루션 폴더를 Repo.로 만들기
  3. GitHub에 로그인, 솔루션 이름으로 Remote Repo. 생성
- 위 모든 과정이 Visual Studio 안에서 실행

# VS - GitHub 연동



# VS - GitHub 연동

Create a Git repository

Push to a new remote

- GitHub
- Azure DevOps

Other

- Existing remote
- Local only

Initialize a local Git repository

Local path *i* C:\Users\Wposco\source\repos\WindowsFormsApp2 ...

.gitignore template *i* Default (VisualStudio)

License template *i* None

☐ Add a README.md *i*

Create a new GitHub repository

Account *i* ff63gf (GitHub) *⚠ Re-enter your credentials*

Owner ff63gf

Repository name *i* WindowsFormsApp2

Description Enter the description of the GitHub repository <Optional>

☒ Private repository *i*

Push your code to GitHub

https://github.com/ff63gf/WindowsFormsApp2

Authorize Visual Studio

Visual Studio by GitHub wants to access your ff63gf account

- Gists Read and write access
- Organizations and teams Read-only access
- Repositories Public and private
- Personal user data Full access
- Workflow Update GitHub Action Workflow files.
- Public SSH keys Read and write access

Authorize github

Authorizing will redirect to http://localhost:14813

만약 웹브라우저가 아닌  
어색한 로그인 창이 뜬다면?

# VS - GitHub 연동

GitHub 로그인 용 토큰(외부 로그인 전용 비밀번호) 발급 및 로그인

<https://lifefun.tistory.com/161>

Settings / Developer settings

GitHub Apps

OAuth Apps

Personal access tokens

Fine-grained tokens

Beta

Tokens (classic)

## Personal access tokens (classic)

Generate new token

Revoke all

Tokens you have generated that can be used to access the Git

Generate new token Beta

Fine-grained, repo-scoped

Generate new token (classic)

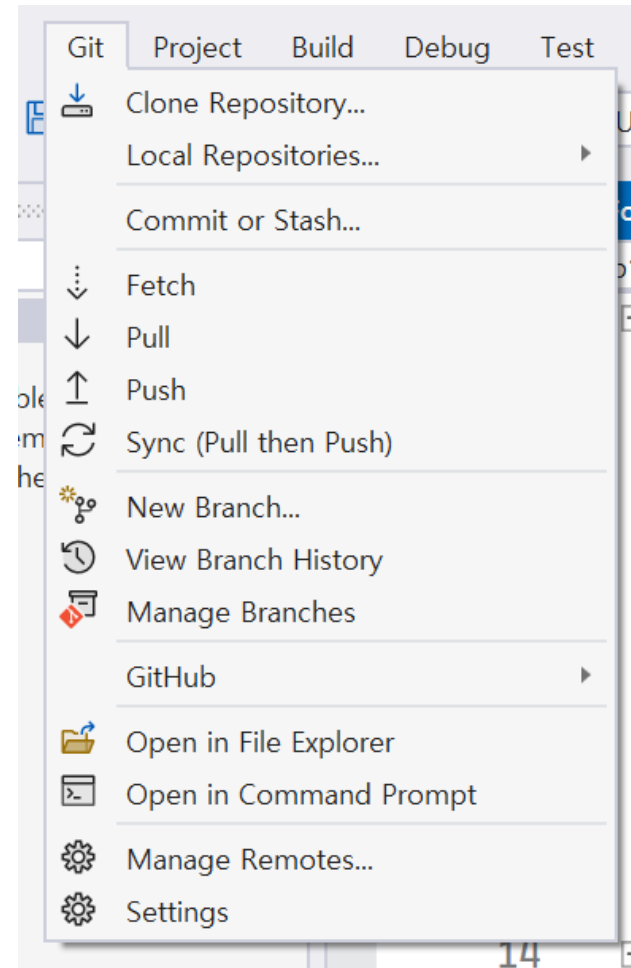
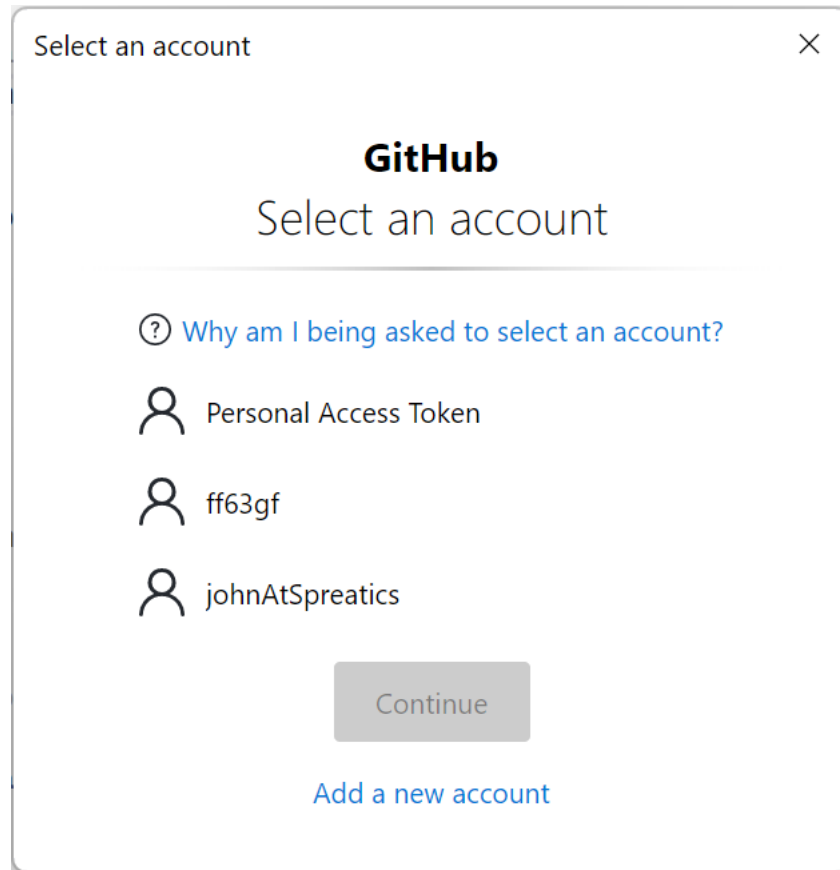
For general use

Delete

juneseok — admin:enterprise, admin:gpg\_key, admin:org, admin:org\_hooks, admin:repo\_hook, admin:ssh\_signing\_key, audit\_log, codespace, delete:packages, delete\_repo, gist:notifications, project\_repo, user:workflow, write:discussion, write:packages  
Expires on Sun, Dec 31 2023.

Personal access tokens (classic) function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to [authenticate to the API over Basic Authentication](#).

# VS - GitHub 연동



계정 연동 성공 시  
모든 기능이 활성화됨



# VS - Git Add

```
--
14  namespace WindowsFormsApp1
15  {
16      3 references
17      public partial class Form1 : Form
18      {
19          1 reference
20          public Form1()
21          {
22              InitializeComponent();
23          }
24          int a = 0;
```

코드에 변동 사항이 생기면

```
20
21
22  InitializeCom
23  Added - Not Saved (Alt+F8) 0;
24
25  0 references
```

Add 할 요소가 표시됨

# VS - Git Add

변경 사항에 대해 Add 실행

Diff - Form1.cs\*

1 change -0 +2 + Stage Lines 21-22 ↶

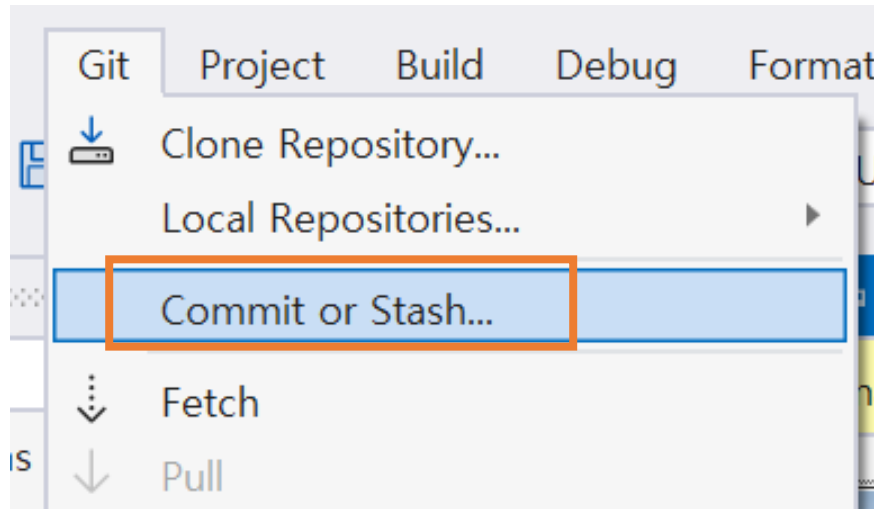
Show staging controls

```
18 public Form1()  
19 {  
20     InitializeComponent();  
21 }  
22  
23 double Calculation(double num1, ...  
24  
25
```

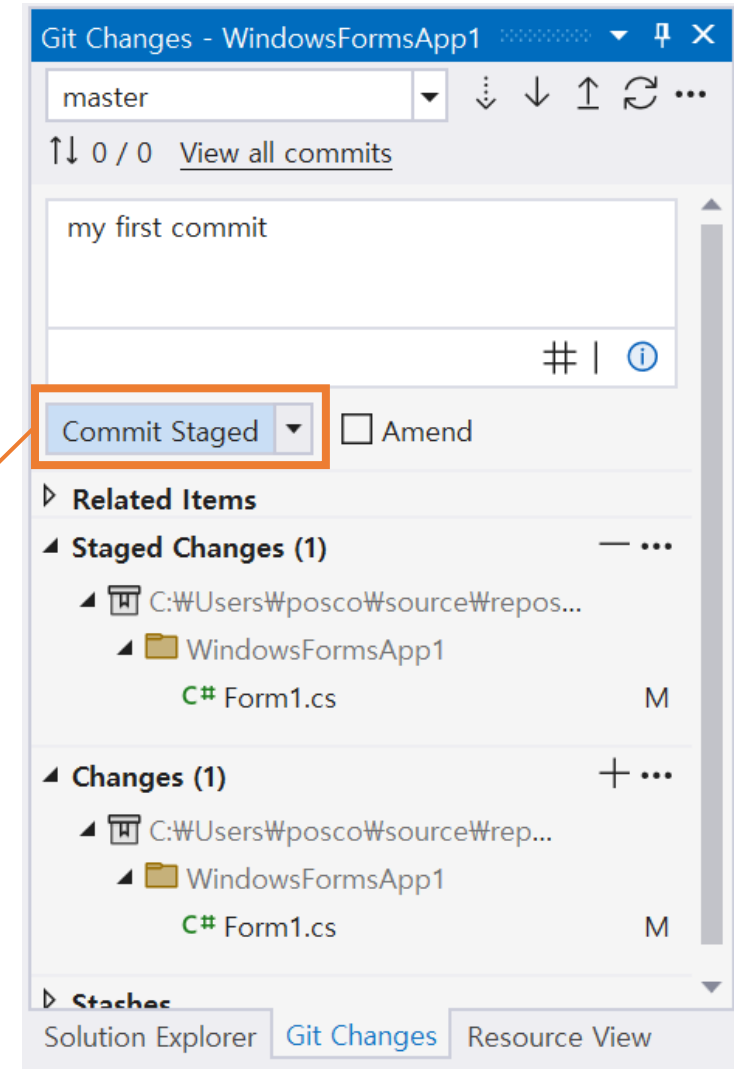
Ln: 21 Ch: 1 SPC CRLF

클릭하여 자세한 변동 사항을 체크 할 수 있음

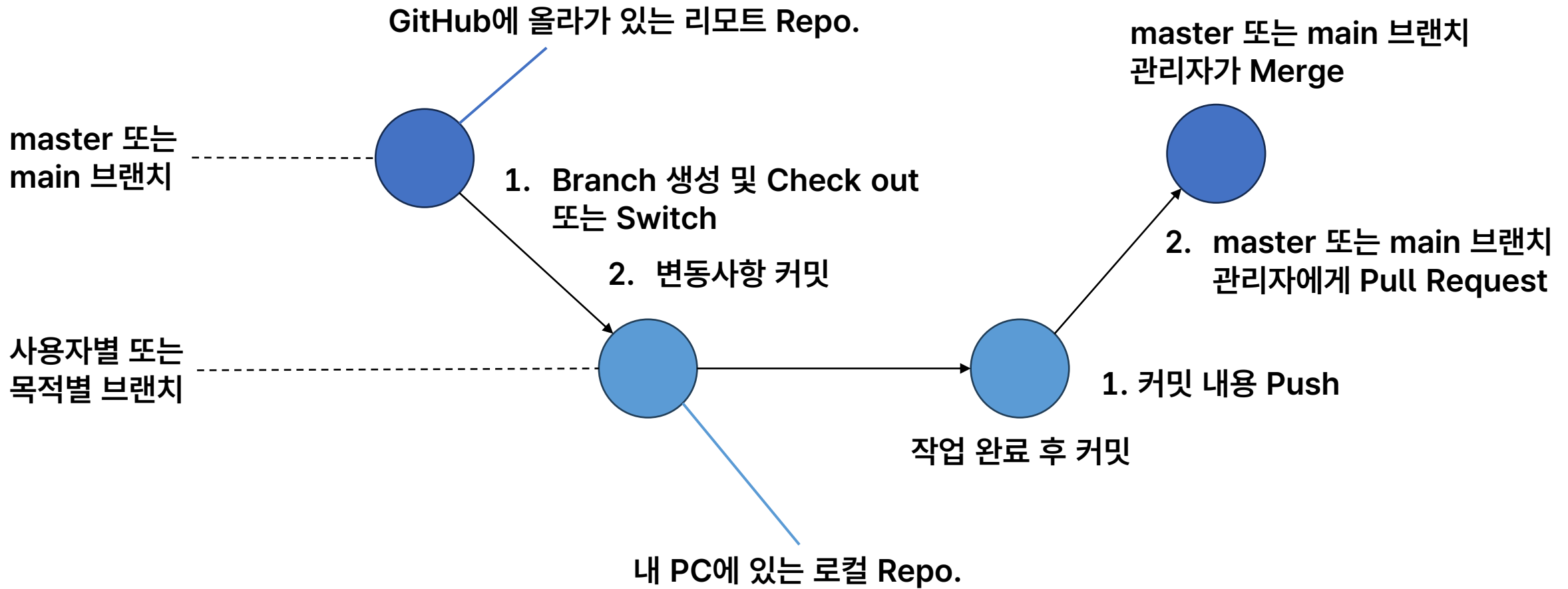
# VS - Git Commit



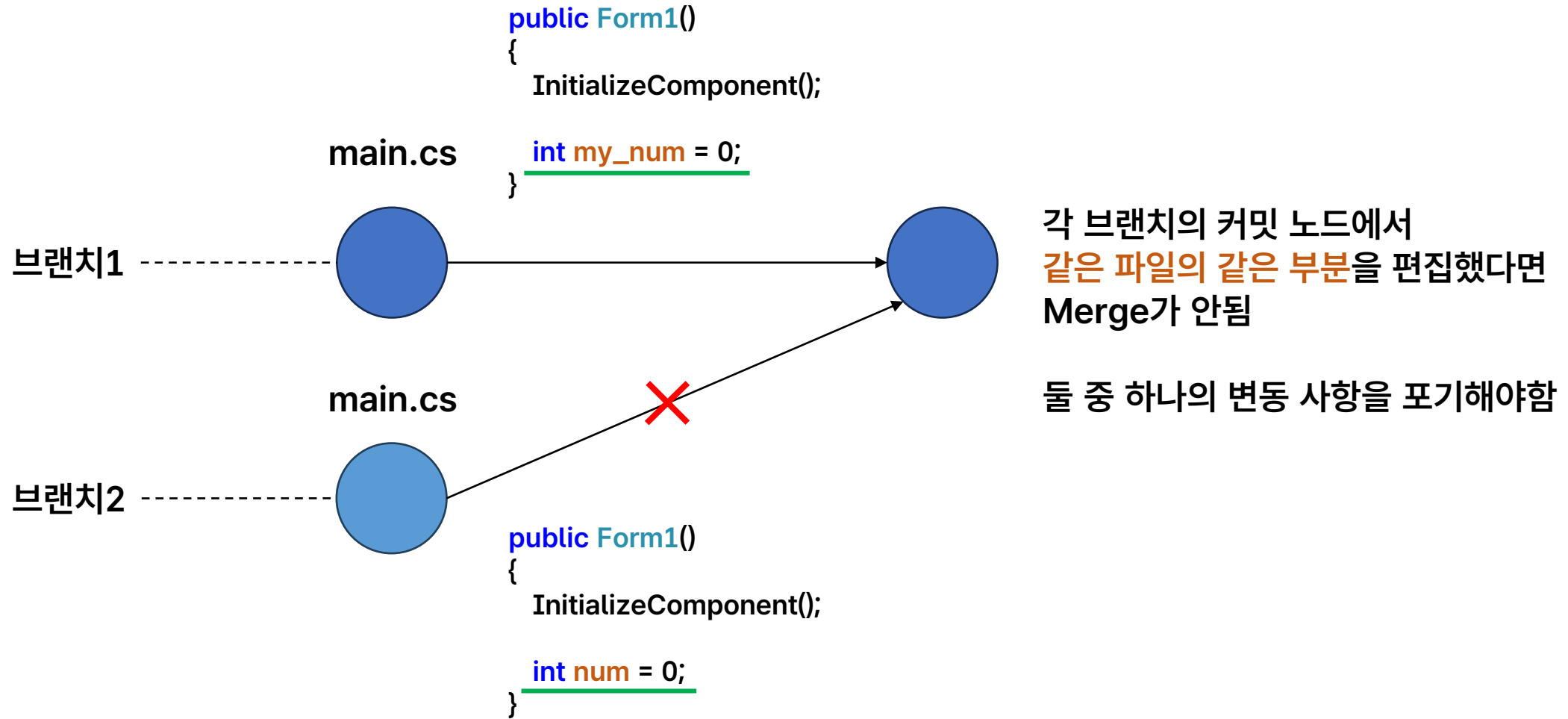
메모 작성 및 Commit 실행



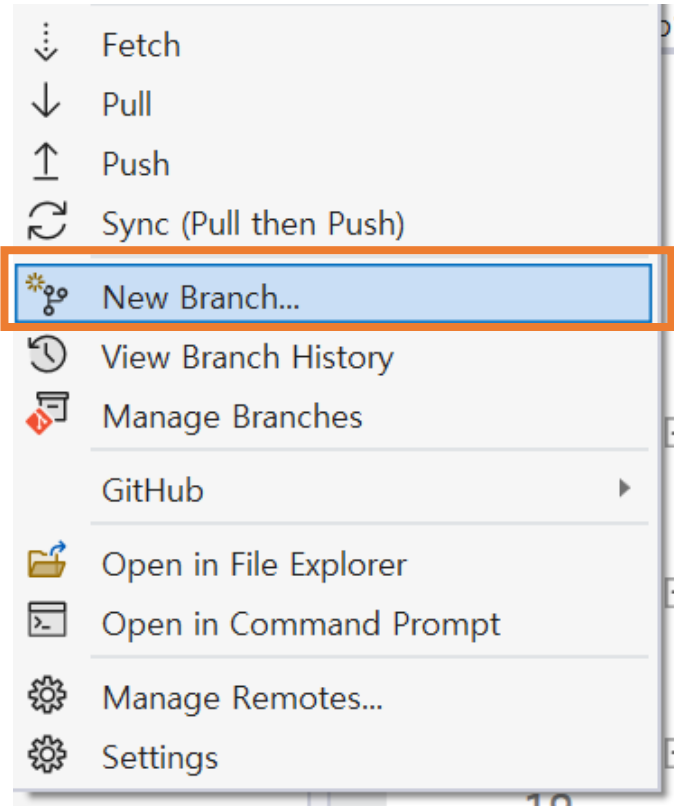
# VS - Git Branch 사용 예시



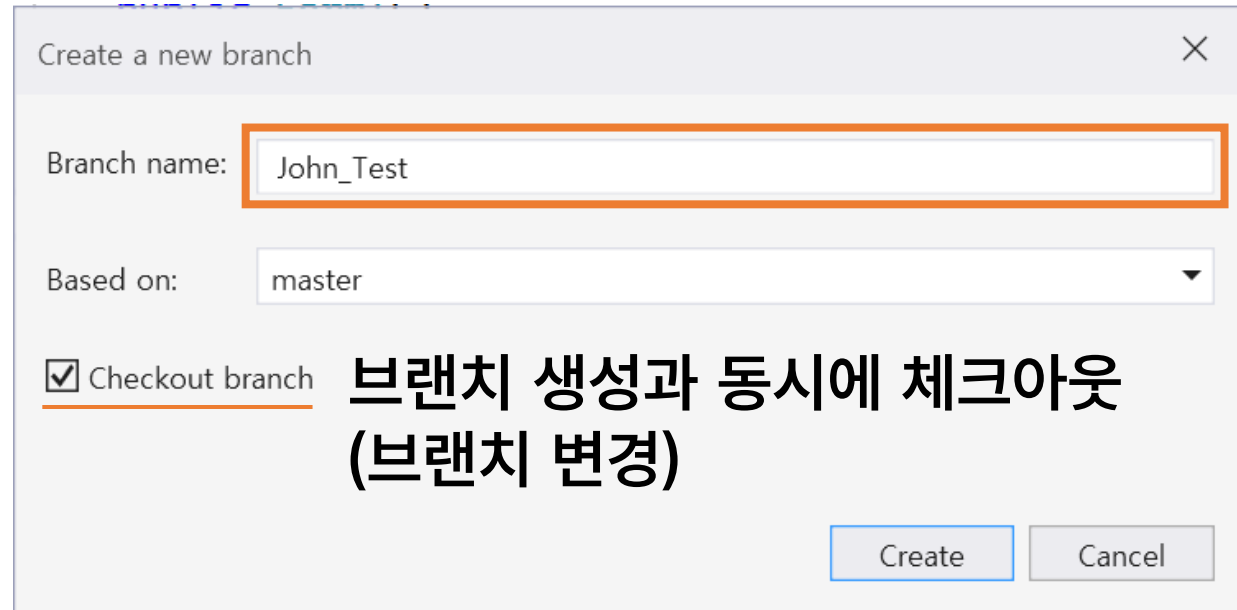
# VS - Git Branch 사용 예시



# VS - Git Branch

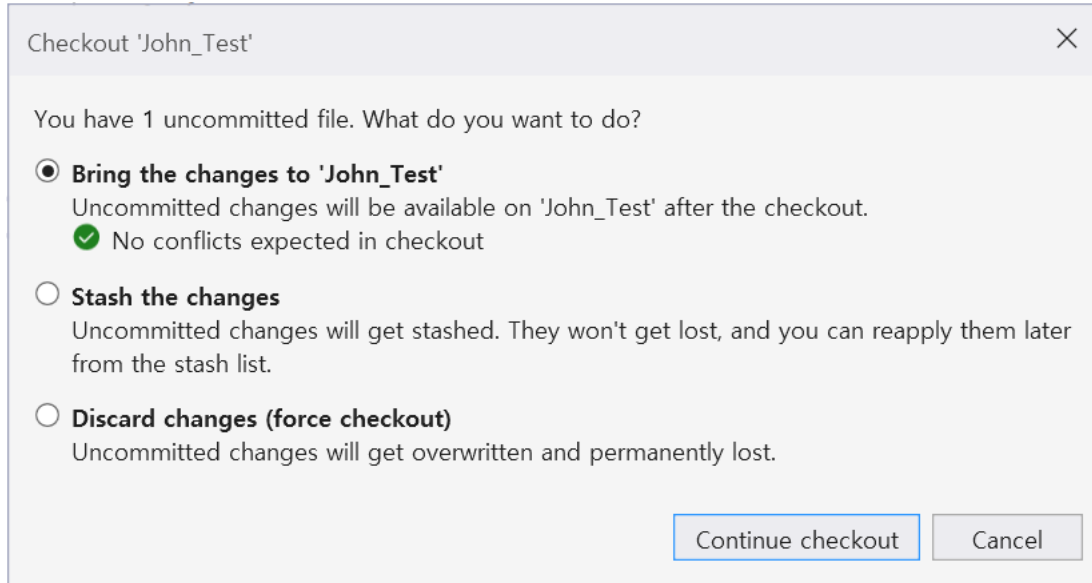


개발에 사용할 브랜치 생성

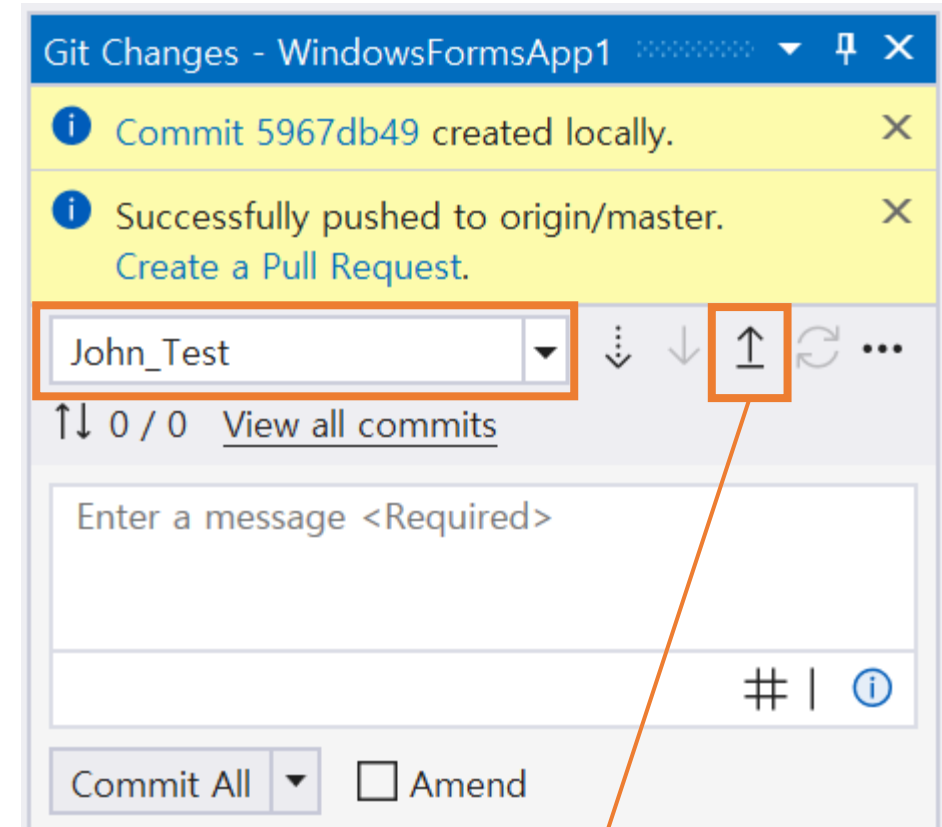


브랜치 이름과 뺀어 나올 원래 브랜치 선택

# VS - Git Branch

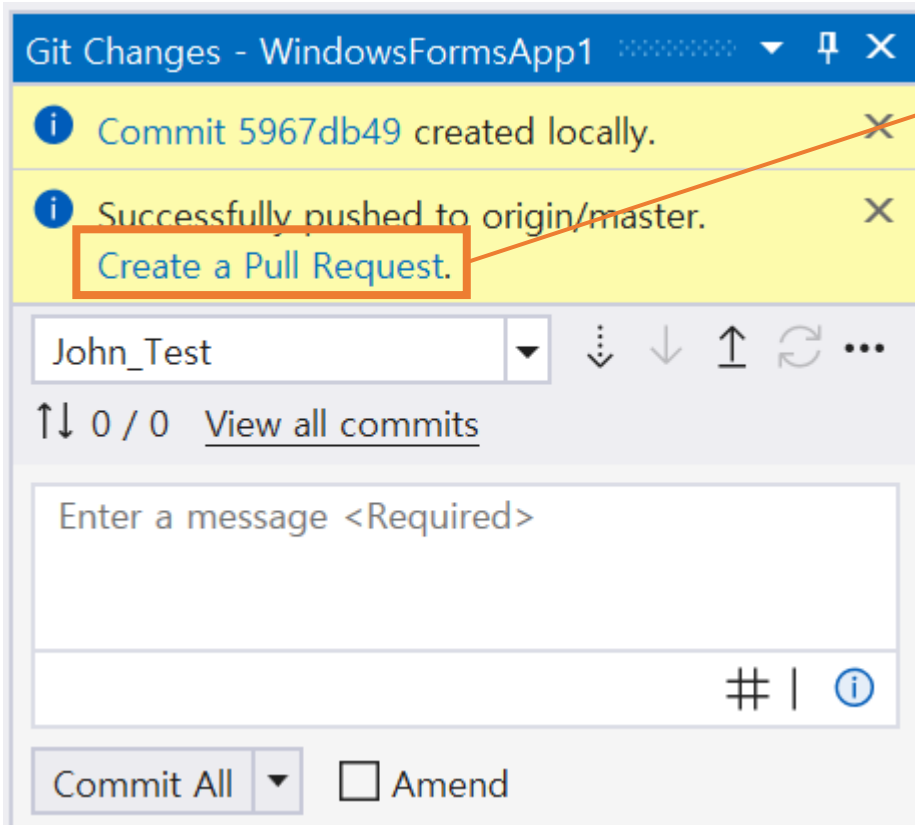


Commit 할 내용이 없어야 체크아웃 가능



개인 브랜치로 Push

# VS - Git Pull Request



Pull Request 만들기

\* Pull Request 란?

master 또는 main 브랜치 관리자에게

개인 브랜치에서 Push 한 내용을

master 또는 main 브랜치와 Merge 해달라는 요청



# VS - Git Pull Request

## Open a pull request

Create a new pull request by comparing changes across two branches. If you need to, you can also [compare across forks](#). [Learn more about diff comparisons here](#).

base: master

compare: John\_Test

✓ Able to merge. These branches can be automatically merged.

Avatar

Add a title

my second commit

Add a description

Write

Preview

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master 브랜치와 합쳐주세요~!

Create pull request

Remember, contributions to this repository should follow our [GitHub Community Guidelines](#).

Reviewers

No reviews

Assignees

No one—[assign yourself](#)

Labels

None yet

Projects

None yet

Milestone

No milestone

Development


Use [Closing keywords](#) in the description to automatically close issues


Helpful resources


## GitHub Pull Request 페이지가 자동으로 열림


# VS - Git Pull Request

Add more commits by pushing to the John\_Test branch on ff63gf/WindowsFormsApp1.



 **Require approval from specific reviewers before merging**  
[Branch protection rules](#) ensure specific people approve pull requests before they're merged. Add rule ×

 **Continuous integration has not been set up**  
[GitHub Actions](#) and [several other apps](#) can be used to automatically catch bugs and enforce style.

 **This branch has no conflicts with the base branch**  
Merging can be performed automatically.

Merge pull request ▼ You can also [open this in GitHub Desktop](#) or view [command line instructions](#).

GitHub Repo. 관리자에게 이렇게 요청이 옴

# VS - Git Pull Request

Add more commits by pushing to the John\_Test branch on ff63gf/WindowsFormsApp1.



Merge pull request #1 from ff63gf/John\_Test

my second commit

This commit will be authored by 56570841+ff63gf@users.noreply.github.com

Confirm merge

Cancel

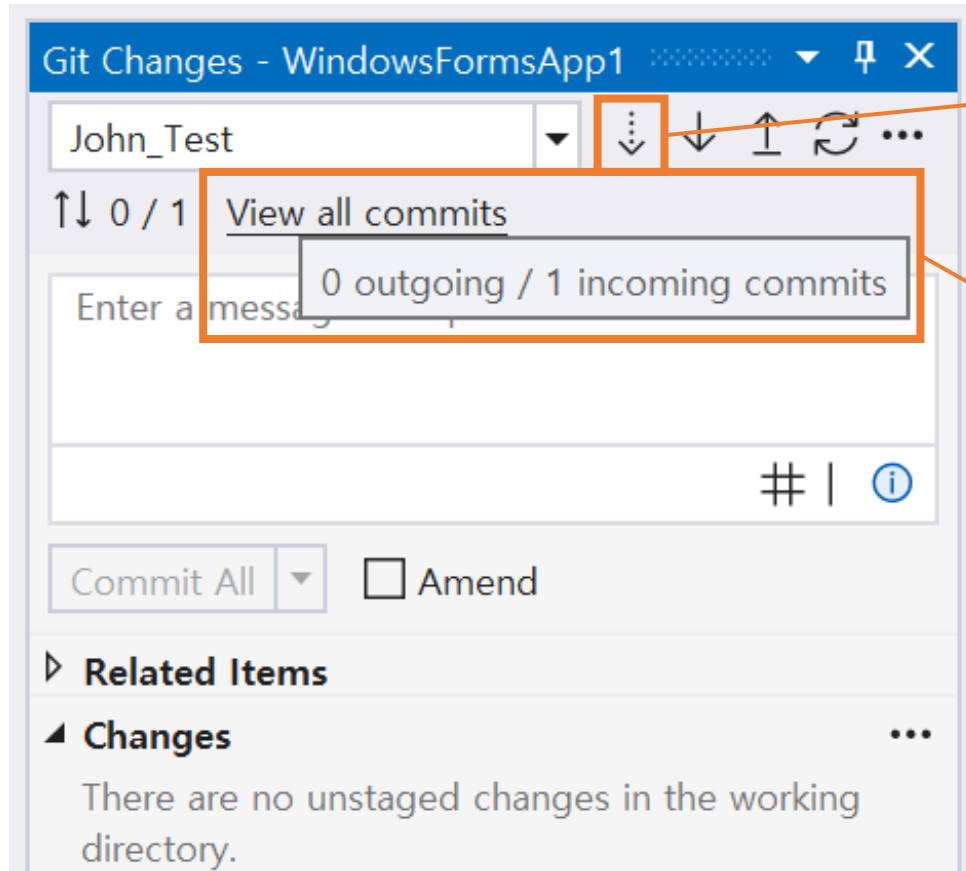


Pull request successfully merged and closed

You're all set—the `John_Test` branch can be safely deleted.

Delete branch

# VS - Git Fetch & Pull



Fetch 버튼

전체 커밋 목록에서 Fetch 내용 확인

# VS - Git Fetch & Pull

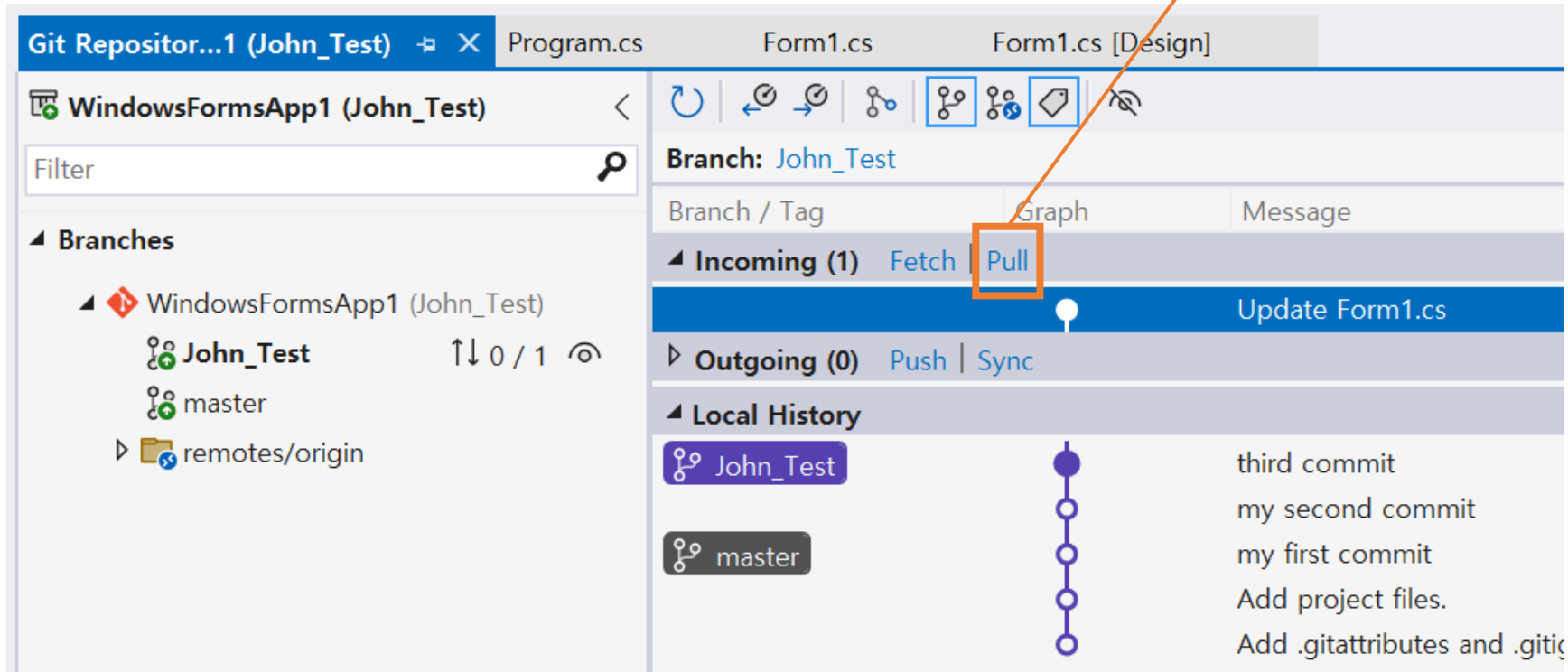
다른 사람이 같은 브랜치에 커밋한 내용

The screenshot shows the Visual Studio Git interface for a repository named 'WindowsFormsApp1 (John\_Test)'. The 'Branch: John\_Test' is selected. The 'Incoming (1)' section is highlighted with an orange box, showing a commit titled 'Update Form1.cs' by user 'ff63gf' on 2023-11-... with commit ID '79fbd2f5'. The 'Local History' section shows the current commit history for the 'John\_Test' branch, including 'third commit', 'my second commit', 'my first commit', 'Add project files.', and 'Add .gitattributes and .gitignore.'.

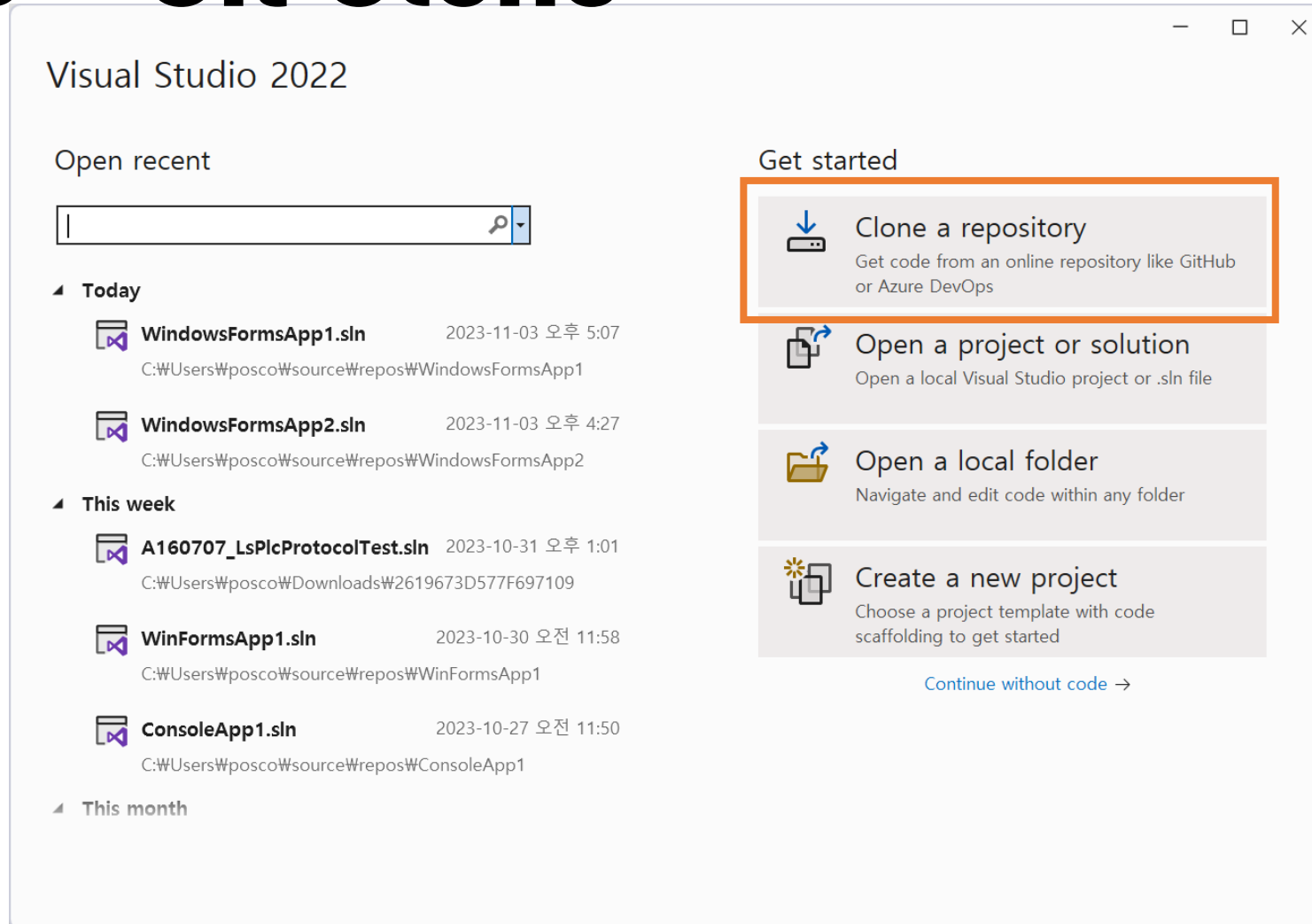
Branch / Tag	Graph	Message	Author	Date	ID
<b>Incoming (1)</b> <a href="#">Fetch</a>   <a href="#">Pull</a>					
		Update Form1.cs	ff63gf	2023-11-...	79fbd2f5
<b>Outgoing (0)</b> <a href="#">Push</a>   <a href="#">Sync</a>					
<b>Local History</b>					
John_Test		third commit	Hungryf	2023-11-...	094bbccd
		my second commit	Hungryf	2023-11-...	c6281556
		my first commit	Hungryf	2023-11-...	5967db49
		Add project files.	Hungryf	2023-11-...	97274a5b
		Add .gitattributes and .gitignore.	Hungryf	2023-11-...	92257042

# VS - Git Fetch & Pull

Pull 하여 변동 사항 적용



# VS - Git Clone



# VS - Git Clone

Clone a repository


Enter a Git repository URL


Repository location

Path

...

Browse a repository

 Azure DevOps

 GitHub

Back

Clone