

풀 리퀘스트 기초

Git & Github
for pull request

강환수 교수



AI Experts
Who Lead
The Future

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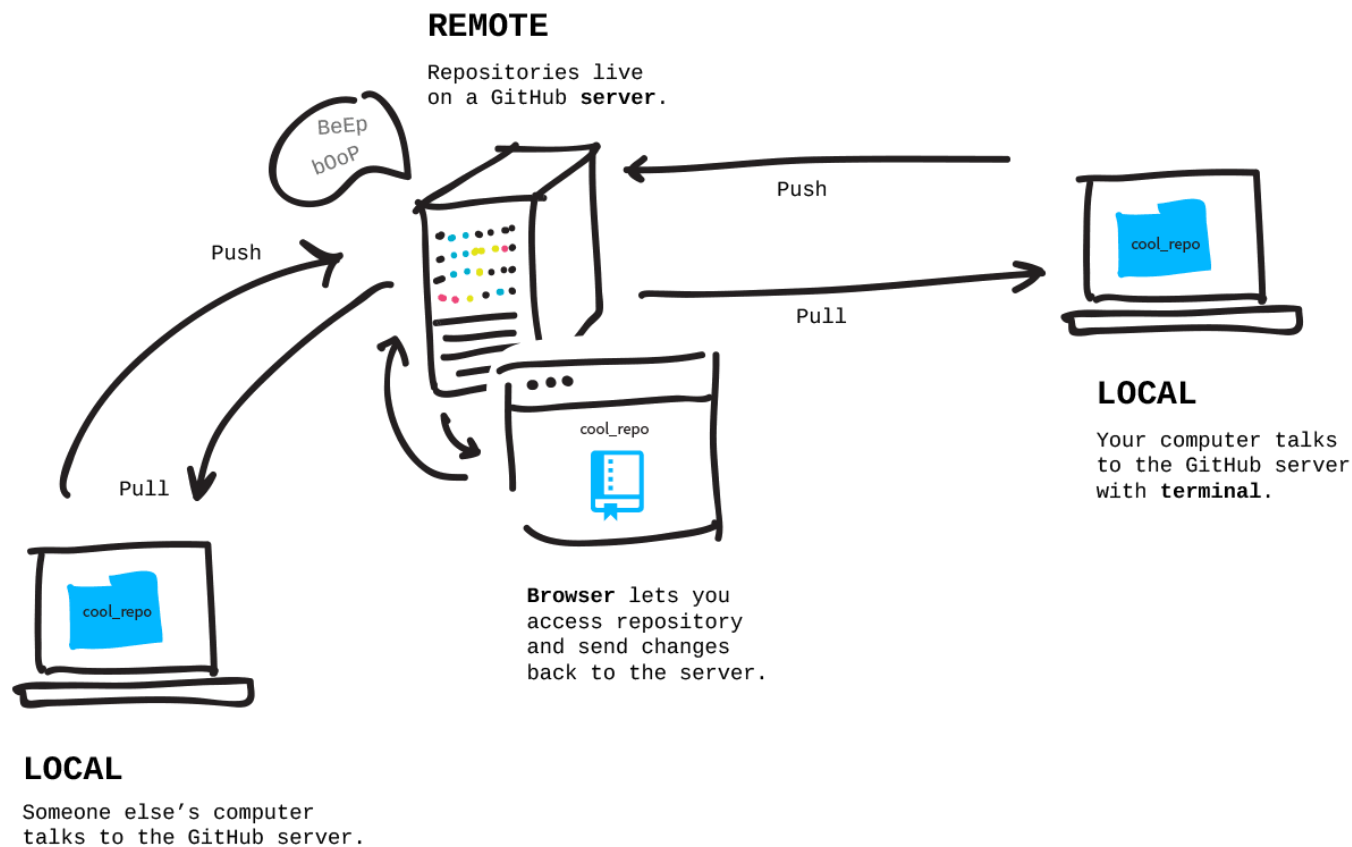
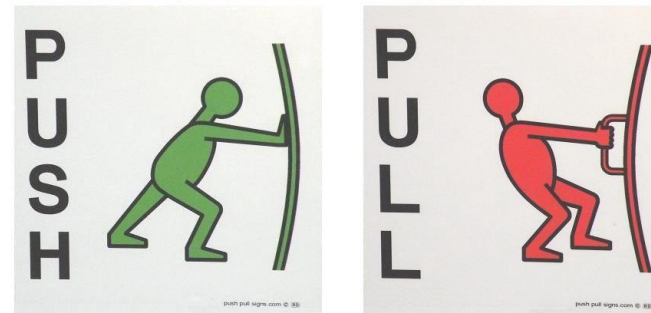
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- 02 | 깃허브의 pull request
- 03 | 깃과 깃허브로 PR 기초

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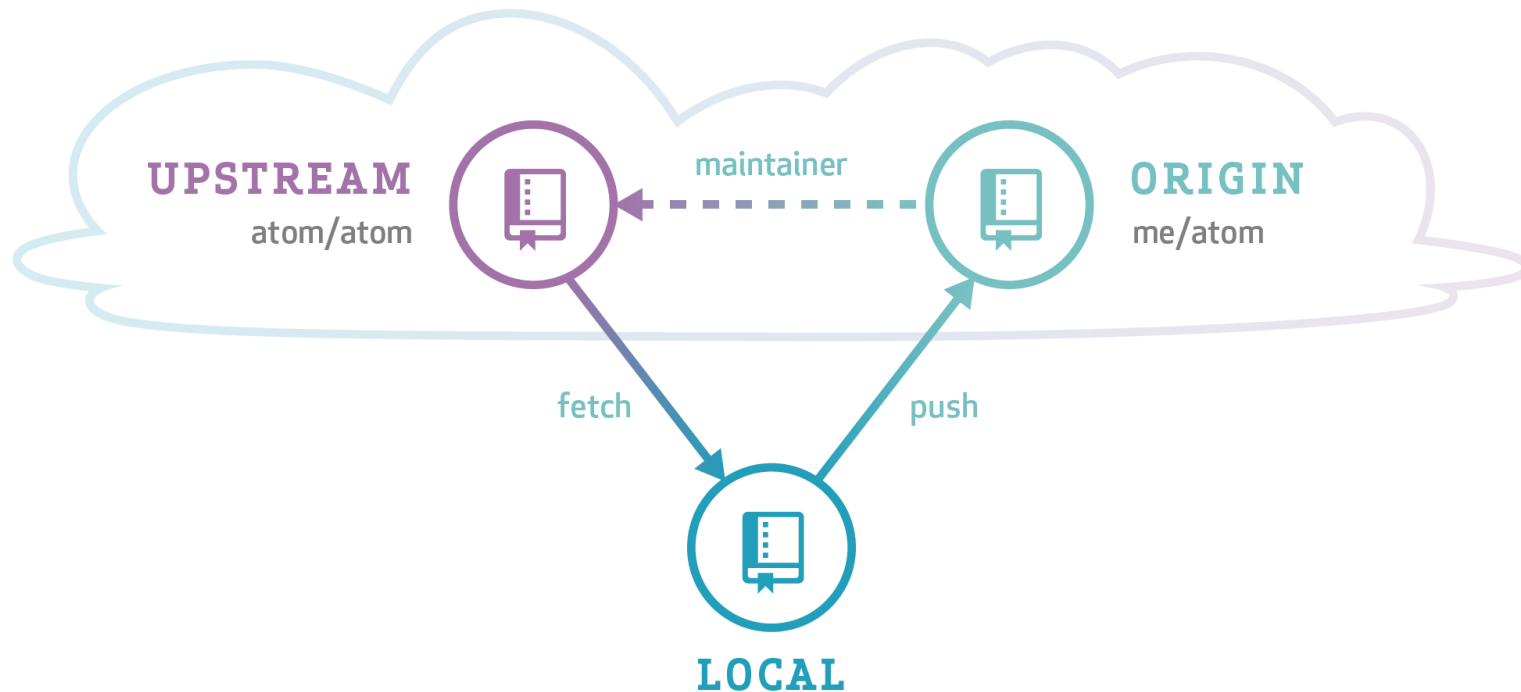
01

Pull과 Push, Pull Request 이해

- 지역 저장소(local repo) 관점에서
 - Push
 - 원격 저장소(remote)로 올리기
 - Pull
 - 지역 저장소(local)로 내리기



- 원격 서버(remote)가 2개
 - Upstream
 - 오픈소스 또는 타인의 저장소
 - Origin
 - Upstream을 네 계정으로 Fork된 자신의 저장소



- 기여(contribution)의 종류

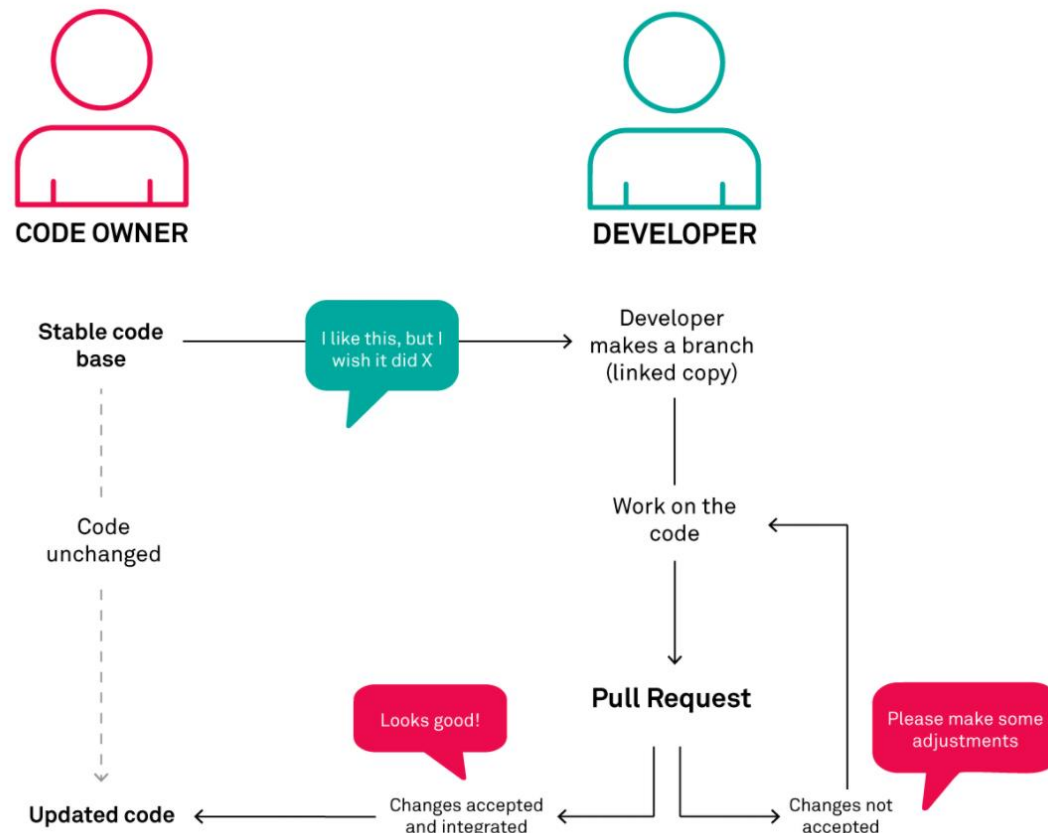
- 저장소(오픈 소스)에 도움이 될 만한 모든 활동
 - 기능 제안 및 추가
 - 기존 소스의 버그를 수정
 - 여러 다양한 방법의 기여

- 기여 사례

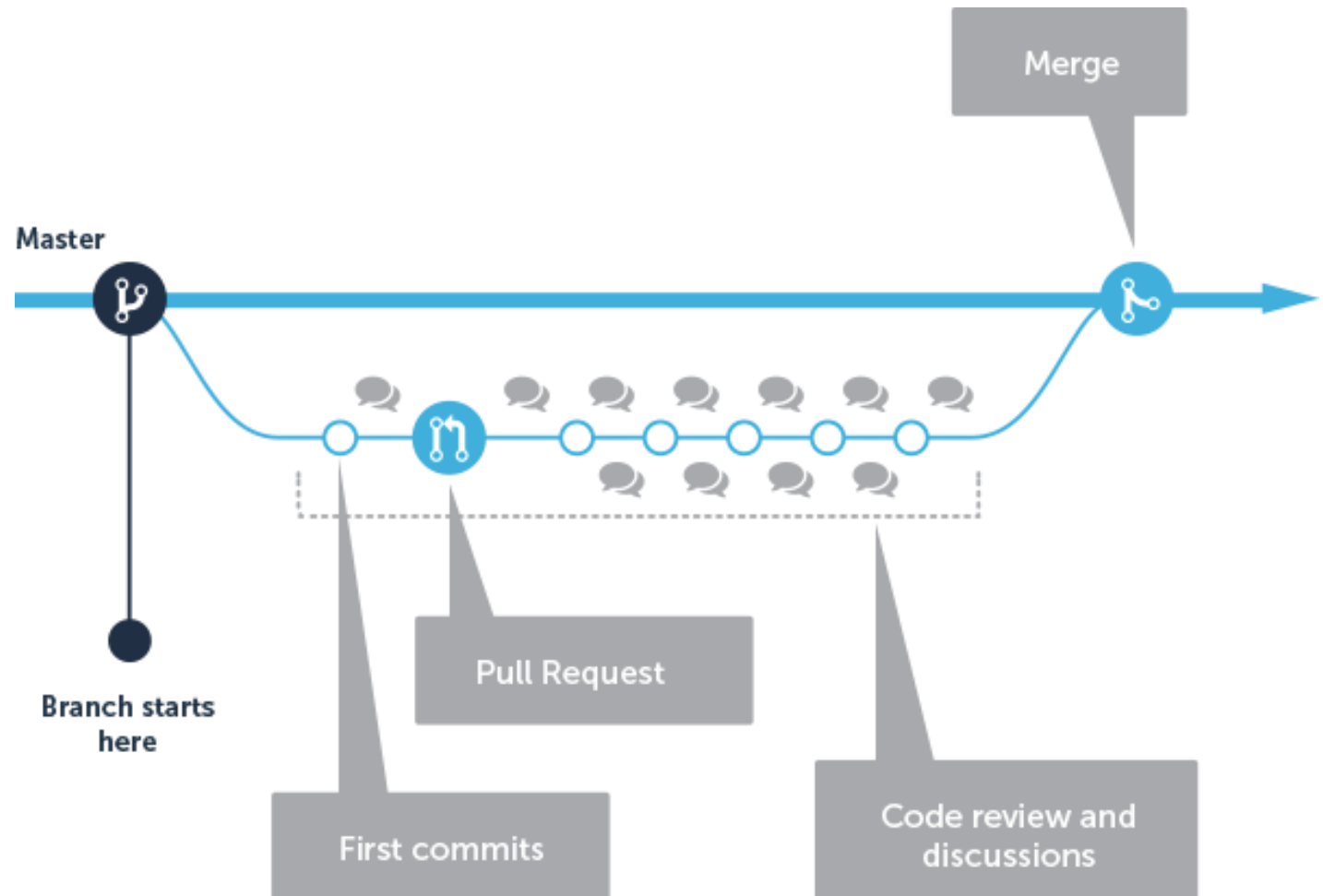
- 초기, 특정 오픈 소스에 대해 공부하기 시작했을 경우
 - 오픈 소스에서 영문으로 작성된 README 파일의 한국어 번역에 기여
- 해당 오픈 소스 프로젝트를 어느 정도 이해하고 있는 경우
 - 문서화 작업에 기여
 - 소스나 문서의 오타 수정
 - 잘못 번역된 한글 수정
- 오픈 소스를 알고 있는 경우
 - 기능과 버그 수정에 기여
 - 소스 코드 수정에 기여
 - 오픈 소스의 버그를 찾고 수정
 - 추가 기능 제안과 코드 제안 및 추가

- Pull request, 간단히 PR

- 수정 권한이 없는 타인의 오픈소스(저장소)에 저장소 수정 등의 기여 요청을 하는 알림
 - 프로젝트 수행 시 개발자로서 코드 수정을 알림
- 저장소 소유자(또는 관리자) 관점에서 “수정 내용의 pull 요청”하는 작업
 - 기여자의 수정 내용을 가져와(pull) 소유자의 저장소에 합병(merge)하는 작업을 요청
- PR 작성자
 - 개발자
 - developer
- 제안된 PR 검토와 병합
 - 관리자
 - Code owner

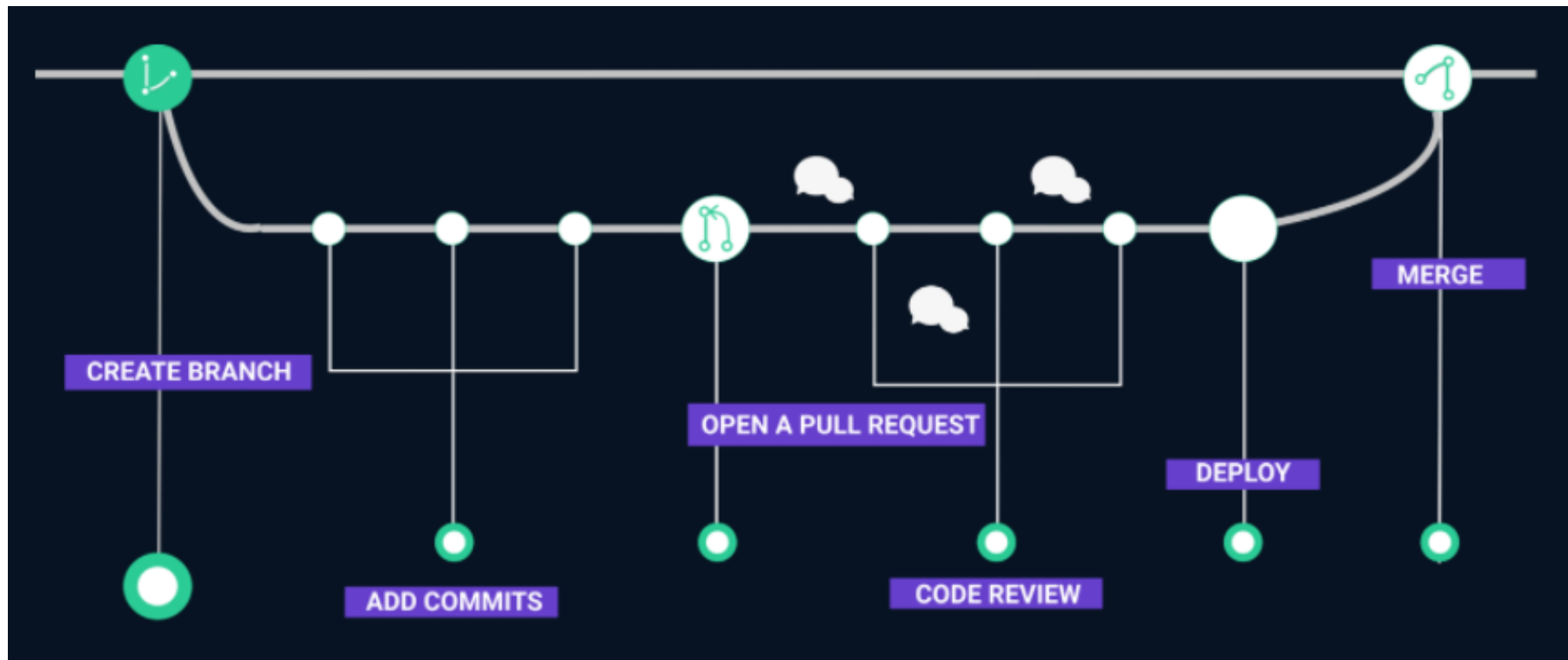


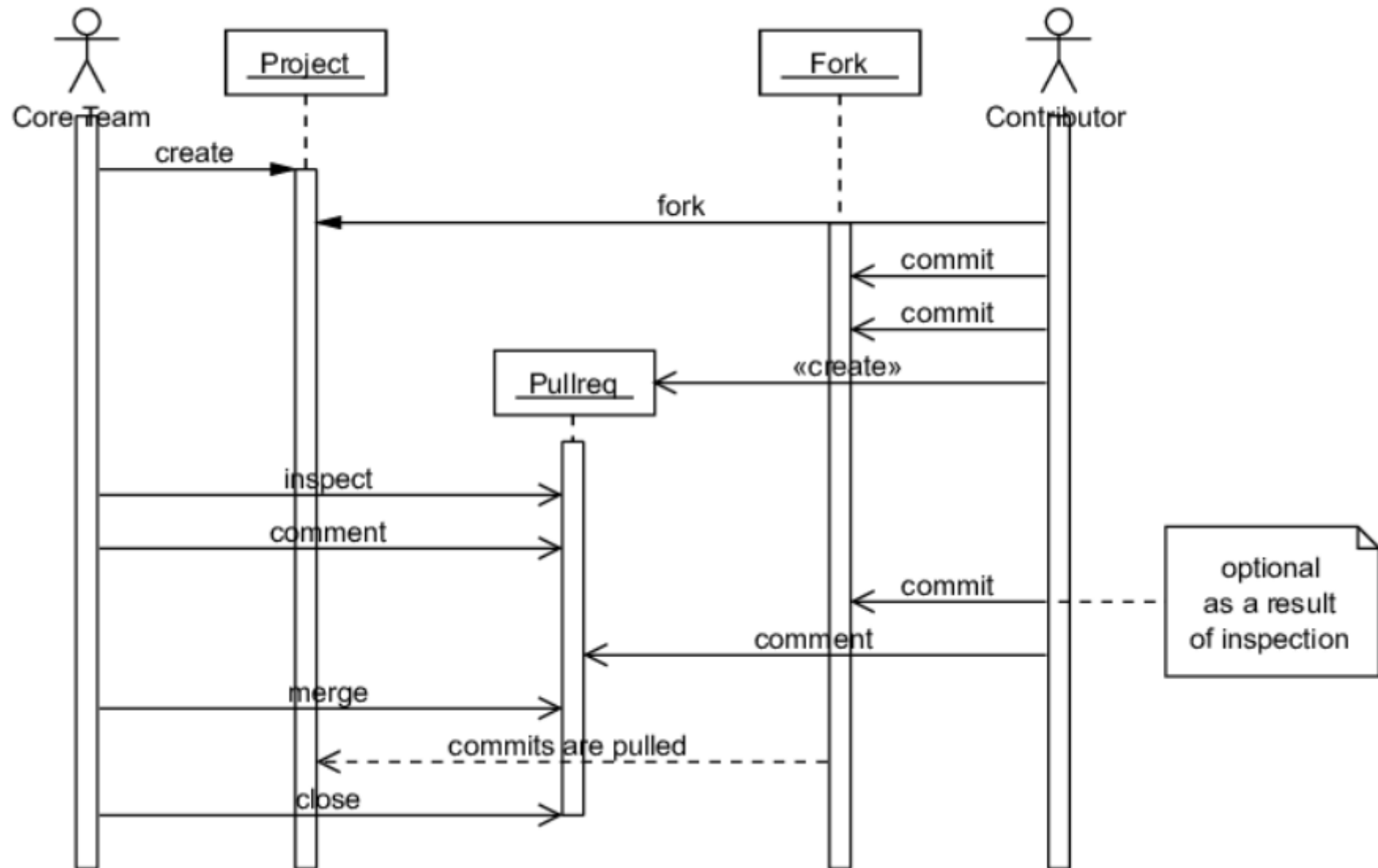
- 기여자 관점
 - New Branch
 - Commit
 - Pull request
 - Discussion
 - Commit
- 관리자 관점
 - Request review
 - discussion
 - Accept PR
 - Merge



pull request 처리 흐름

오픈소스 소프트웨어를 위한 깃과 깃허브 Python language





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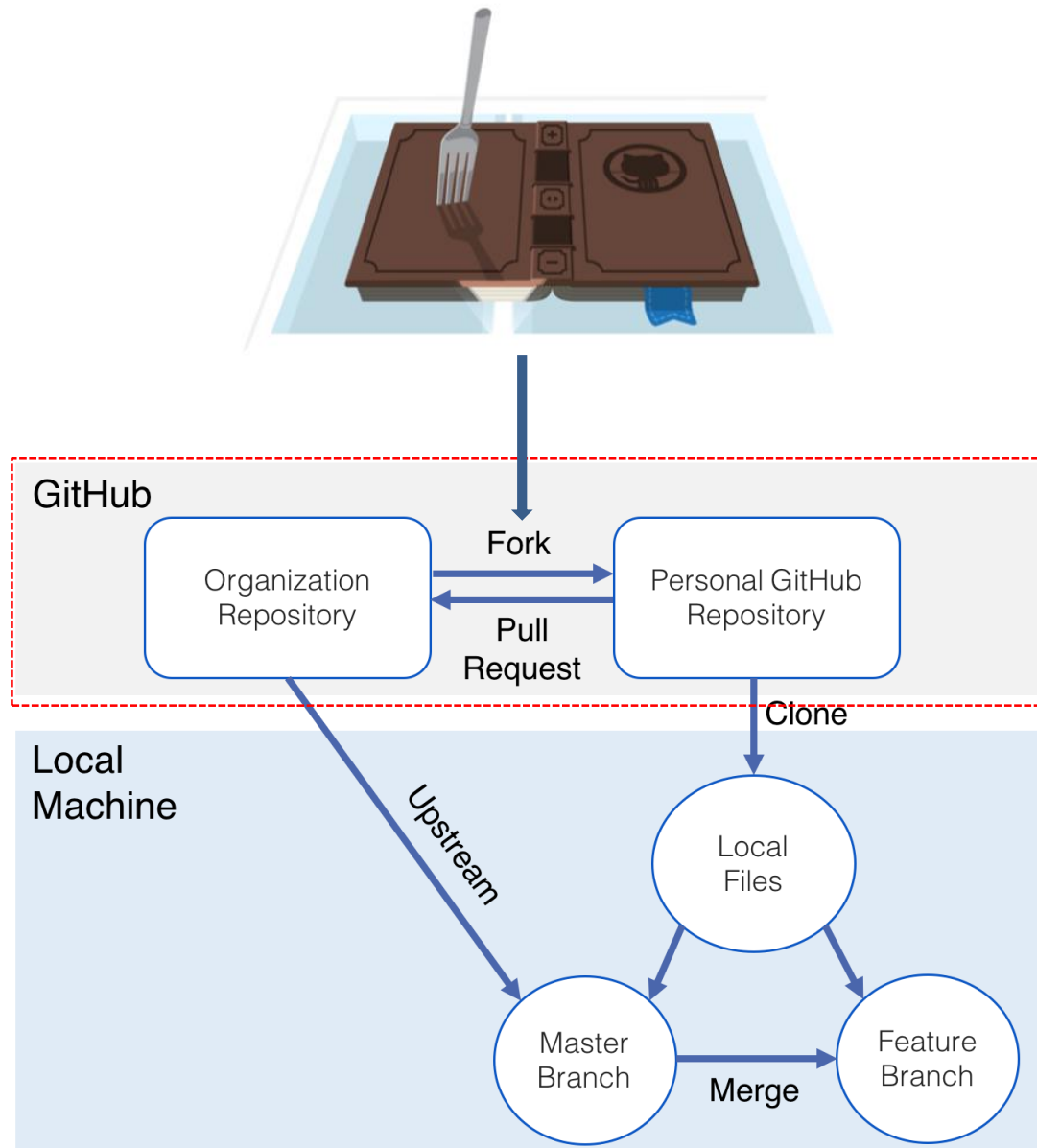
02

깃허브의 pull request 실습

GUI 깃허브로만 pull request 실습

오픈소스 소프트웨어를 위한 깃과 깃허브 Python language

- 두 개의 id로 실습
 - 기여자: Fork
 - 기여자: 파일 수정
 - 기여자: Pull request
 - 관리자: review 또는 merge
- Github에서만 Pull Request



Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere?
[Import a repository.](#)


Required fields are marked with an asterisk (*).

Repository template

No template ▾

Start your repository with a template repository's contents.

Owner *

 ai7dnn ▾

Repository name *

PR-train

✓ PR-train is available.

Great repository names are short and memorable. Need inspiration? How about [friendly-octo-adventure](#) ?

Description (optional)

PR 연습 저장소



Public

Anyone on the internet can see this repository. You choose who can commit.



Private

You choose who can see and commit to this repository.

Initialize this repository with:



Add a README file

This is where you can write a long description for your project. [Learn more about READMEs.](#)

Add .gitignore

.gitignore template: Python ▾

Choose which files not to track from a list of templates. [Learn more about ignoring files.](#)

Choose a license

License: MIT License ▾

Remote: 저장소 fork

오픈소스 소프트웨어를 위한 깃과 깃허브 Python language

The screenshot shows a web browser window with two tabs. The active tab is titled 'ai7dnn/PR-train: PR 연습 저장소' and the address bar shows 'github.com/ai7dnn/PR-train'. The repository page for 'ai7dnn / PR-train' is displayed. The repository is public and has 1 watch, 0 forks, and 0 stars. The 'Fork' button is highlighted with a red dashed box. The repository contains a single commit 'ai7dnn Initial commit' with the hash 'dbd44e1'. The commit details show three files: '.gitignore', 'LICENSE', and 'README.md', all marked as 'Initial commit' and 'now'. The README.md content is visible, showing the title 'PR-train' and the subtitle 'PR 연습 저장소'. The right sidebar contains sections for 'About', 'Releases', and 'Packages', all of which are currently empty.

chatkang x ai7dnn/PR-train: PR 연습 저장소 x +

github.com/ai7dnn/PR-train

ai7dnn / PR-train

Type to search

< Code Issues Pull requests Actions Projects Security Insights

PR-train Public

Watch 1 Fork 0 Star 0

main 1 branch 0 tags

Go to file Add file <> Code

ai7dnn Initial commit dbd44e1 now 1 commit

File	Commit	Time
.gitignore	Initial commit	now
LICENSE	Initial commit	now
README.md	Initial commit	now

README.md

PR-train

PR 연습 저장소

About

PR 연습 저장소

- Readme
- MIT license
- Activity
- 0 stars
- 1 watching
- 0 forks

Report repository

Releases

No releases published

Packages


No packages published

Create a new fork

A *fork* is a copy of a repository. Forking a repository allows you to freely experiment with changes without affecting the original project.

Required fields are marked with an asterisk (*).

Owner *

 chatkang ▾

Repository name *

PR-train

✓ PR-train is available.


By default, forks are named the same as their upstream repository. You can customize the name to distinguish it further.

Description (optional)

PR 연습 저장소

☒ Copy the **main** branch only

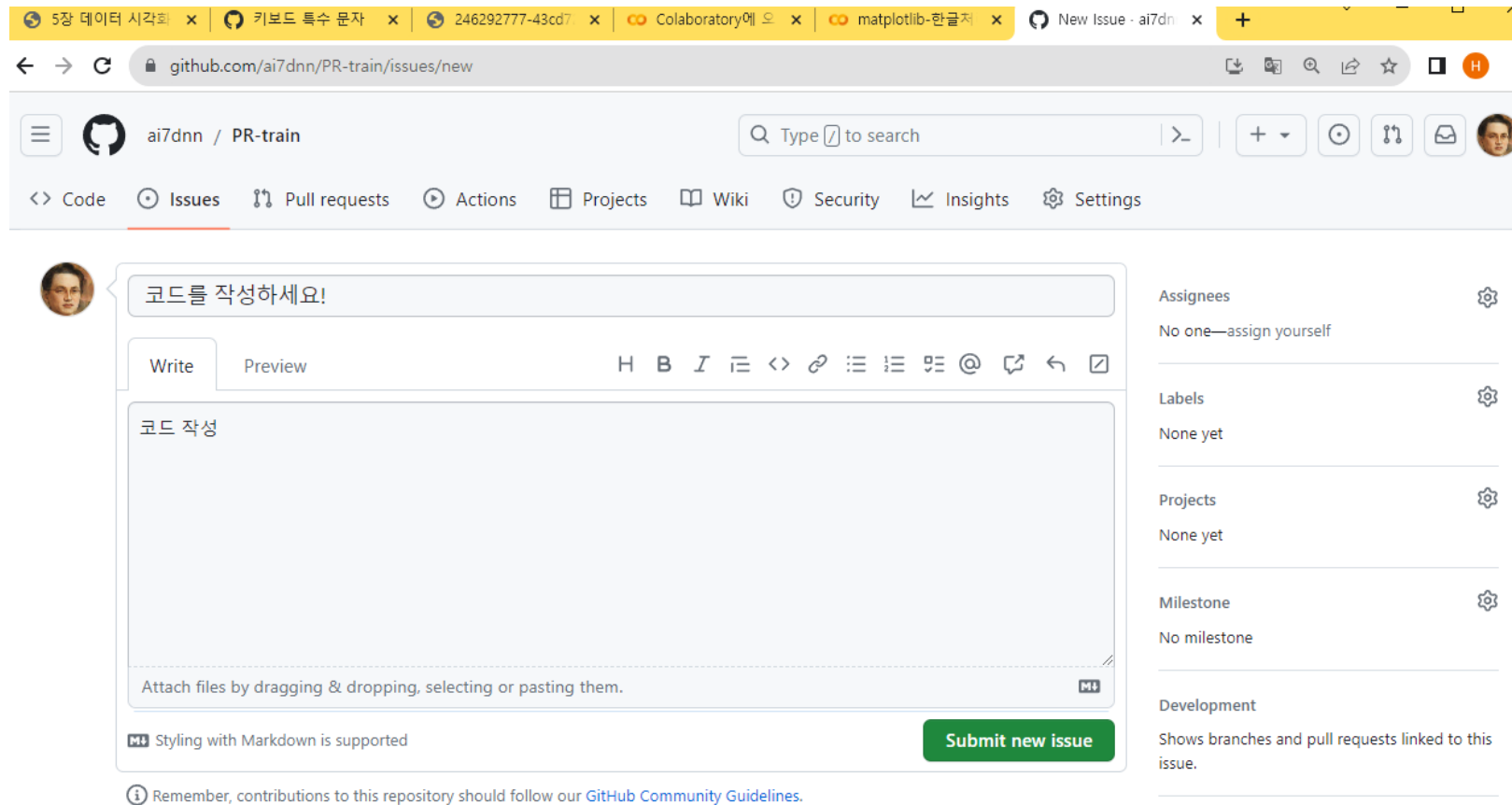
Contribute back to ai7dnn/PR-train by adding your own branch. [Learn more.](#)

 You are creating a fork in your personal account.

Create fork

Upstream: 이슈 생성

오픈소스 소프트웨어를 위한 깃과 깃허브 Python language



5장 데이터 시각화 x 키보드 특수 문자 x 246292777-43cd7 x Colaboratory에 오 x matplotlib-한글처 x New Issue - ai7dnn x

github.com/ai7dnn/PR-train/issues/new










ai7dnn / PR-train

Type to search

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

코드를 작성하세요!

Write Preview

H B I         

코드 작성

Attach files by dragging & dropping, selecting or pasting them.

Styling with Markdown is supported

Submit new issue

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

Assignees

No one—assign yourself

Labels

None yet

Projects

None yet

Milestone

No milestone

Development

Shows branches and pull requests linked to this issue.

Helpful resources

[GitHub Community Guidelines](#)

Remote: Upstream의 이슈 확인

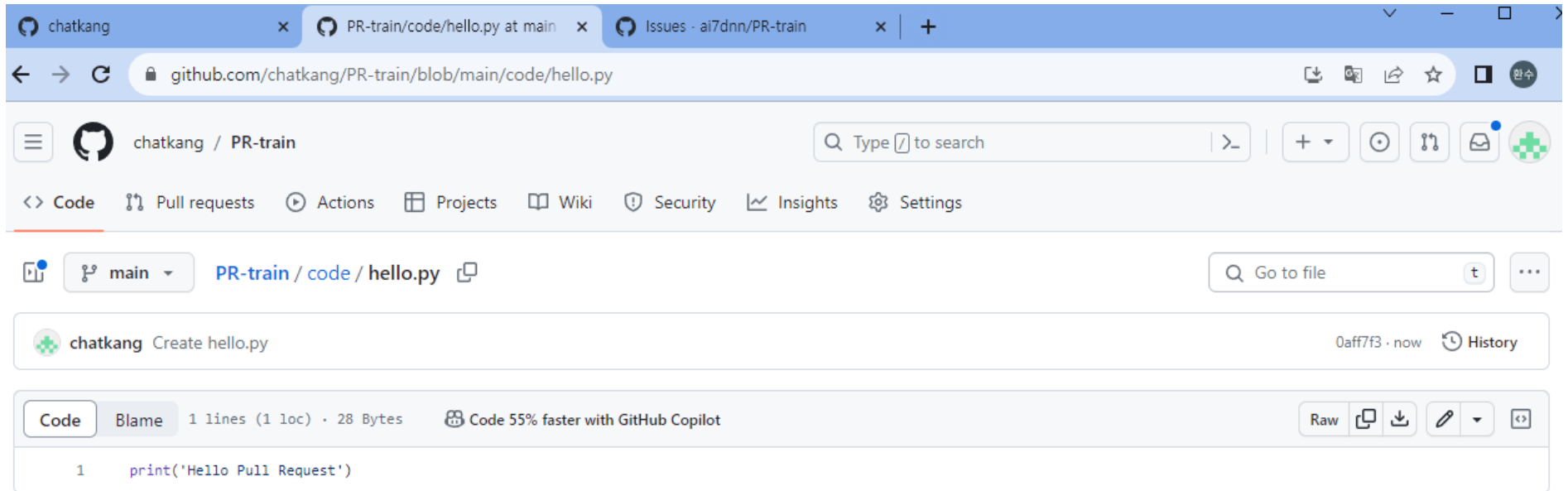
오픈소스 소프트웨어를 위한 깃과 깃허브 Python language

The screenshot shows a web browser with three tabs: 'chatkang', 'chatkang/PR-train: PR 연습 저장', and 'Issues - ai7dnn/PR-train'. The address bar shows 'github.com/ai7dnn/PR-train/issues'. The repository name 'ai7dnn / PR-train' is displayed at the top. Below the repository name is a search bar and navigation tabs for 'Code', 'Issues' (selected with a count of 1), 'Pull requests', 'Actions', 'Projects', 'Security', and 'Insights'. A notification banner asks 'Want to contribute to ai7dnn/PR-train?' with a 'Dismiss' button. Below this is a filter bar with 'Filters' and a search input 'is:issue is:open'. To the right are 'Labels 9' and 'Milestones 0' buttons, and a green 'New issue' button. The issue list shows '1 Open' and '0 Closed' issues. The first issue is '코드를 작성하세요!' (Write the code!) with the text '#1 opened 1 minute ago by ai7dnn'. At the bottom, a 'ProTip!' suggests using mentions like '@chatkang' to notify someone.

Remote: Forked 된 자신의 저장소에서 코드 작성

요즘은 AI 소프트웨어를 위한 깃과 깃허브 Python language

- 파일 작성 후 커밋



Remote: 자신의 저장소 확인

오픈소스 소프트웨어를 위한 깃과 깃허브 Python language

The screenshot shows a web browser with three tabs: 'chatkang', 'chatkang/PR-train: PR 연습 저장소', and 'Issues - ai7dnn/PR-train'. The address bar shows 'github.com/chatkang/PR-train/'. The repository page for 'chatkang / PR-train' is displayed, indicating it is a public repository forked from 'ai7dnn/PR-train'. The page shows the 'main' branch is 1 commit ahead of 'ai7dnn:main'. A dropdown menu for 'Contribute' is open, showing an 'Open pull request' button. The file list includes 'code' (Create hello.py), '.gitignore' (Initial commit), 'LICENSE' (Initial commit), and 'README.md' (Initial commit). The README content shows 'PR-train' and 'PR 연습 저장소'. The right sidebar contains sections for 'About', 'Releases', 'Packages', and 'Languages'.

chatkang / PR-train

PR-train Public

forked from ai7dnn/PR-train

main 1 branch 0 tags

This branch is 1 commit ahead of ai7dnn:main.

Contribute Sync fork

This branch is 1 commit ahead of ai7dnn:main. Open a pull request to contribute your changes upstream.

Open pull request

chatkang Create hello.py

File	Commit	Time
code	Create hello.py	1 minute ago
.gitignore	Initial commit	8 minutes ago
LICENSE	Initial commit	8 minutes ago
README.md	Initial commit	8 minutes ago

README.md

PR-train

PR 연습 저장소

About

PR 연습 저장소

- Readme
- MIT license
- Activity
- 0 stars
- 0 watching
- 1 fork

Releases

No releases published

Create a new release

Packages

No packages published

Publish your first package

Languages

Remote: Open a PR

오픈소스 소프트웨어를 위한 깃과 깃허브 Python language

- Create PR

chatkang

github.com/ai7dnn/PR-train/compare/main...chatkang:PR-train:main?expand=1

ai7dnn / PR-train

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](#).

base repository: ai7dnn/PR-train base: main head repository: chatkang/PR-train compare: main ✓ Able to merge. These branches can be automatically merged.

Create hello.py #1

Write Preview

create hello.py

Attach files by dragging & dropping, selecting or pasting them.

☒ Allow edits by maintainers

Create pull request

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

1 commit 1 file changed 1 contributor

Commits on Oct 3, 2023

Create hello.py
chatkang committed 4 minutes ago

Showing 1 changed file with 1 addition and 0 deletions.

code/hello.py

```
... @@ -0,0 +1 @@  
1 + print('Hello Pull Request')
```

Remote: PR 작성 성공 확인

오픈소스 소프트웨어를 위한 깃과 깃허브 Python language

The screenshot shows a GitHub Pull Request (PR) titled "Create hello.py #1 #2" in the repository "ai7dnn / PR-train". The PR is created by "chatkang" and targets the "main" branch. The status bar indicates "chatkang wants to merge 1 commit into ai7dnn:main from chatkang:main". The PR is currently open and has no reviews or assignees. The commit message is "create hello.py" and the commit hash is "0aff7f3". A green checkmark indicates that the branch has no conflicts with the base branch. The PR description area is empty, with a "Write" tab selected. The right sidebar shows the "Reviewers" section with "No reviews" and a "Still in progress? Convert to draft" button. The "Assignees" section shows "No one assigned". The "Labels" section shows "None yet". The "Projects" section shows "None yet". The "Milestone" section shows "No milestone". The "Development" section shows "Successfully merging this pull request may close these issues." and "None yet". The "Notifications" section shows "You're receiving notifications because you authored the thread." and a "Customize" button. The "1 participant" section shows the user "chatkang". The "Allow edits by maintainers" checkbox is checked.

chatkang commented now

create hello.py

Verified 0aff7f3

Add more commits by pushing to the `main` branch on `chatkang/PR-train`.

This branch has no conflicts with the base branch
Only those with [write access](#) to this repository can merge pull requests.

Write Preview

Leave a comment

Attach files by dragging & dropping, selecting or pasting them.

Close pull request Comment

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

ProTip! Add `.patch` or `.diff` to the end of URLs for Git's plaintext views.

Reviewers
No reviews
Still in progress? Convert to draft

Assignees
No one assigned

Labels
None yet

Projects
None yet

Milestone
No milestone

Development
Successfully merging this pull request may close these issues.
None yet

Notifications
Customize
 Unsubscribe
You're receiving notifications because you authored the thread.

1 participant

☒ Allow edits by maintainers

Upstream: Upstream에서 PR 확인

오픈소스 소프트웨어를 위한 깃과 깃허브 Python language

The screenshot shows a web browser window with multiple tabs. The active tab is 'ai7dnn/PR-train: P'. The browser address bar shows 'github.com/ai7dnn/PR-train'. The GitHub repository page for 'ai7dnn / PR-train' is displayed. The 'Pull requests' tab is highlighted with a red dashed box. The repository is public and has 1 branch (main) and 0 tags. The commit history shows 'ai7dnn Initial commit' with a hash of 'dbd44e1' and a timestamp of '15 minutes ago'. The commit details show three files: '.gitignore', 'LICENSE', and 'README.md', all from the 'Initial commit' 15 minutes ago. The README.md content is visible, showing the title 'PR-train' and the subtitle 'PR 연습 저장소'. The right sidebar shows the repository's 'About' section, including 'PR 연습 저장소', 'Readme', 'MIT license', 'Activity', '0 stars', '1 watching', and '1 fork'. The 'Releases' section shows 'No releases published' and a link to 'Create a new release'. The 'Packages' section shows 'No packages published' and a link to 'Publish your first package'.

The screenshot displays a GitHub pull request interface. At the top, the repository name 'ai7dnn / PR-train' is visible. The pull request title is 'Create hello.py #1 #2'. Below the title, it indicates that 'chatkang' wants to merge 1 commit into 'ai7dnn:main' from 'chatkang:main'. The main content area shows a commit titled 'create hello.py' with a 'Verified' status. The right sidebar contains sections for Reviewers, Assignees, Labels, Projects, Milestone, Development, and Notifications. The bottom section shows a comment area with a 'Merge pull request' button highlighted by a red dashed box.

Upstream: PR로 병합 확인

오픈소스 소프트웨어를 위한 깃과 깃허브 Python language

The screenshot shows a web browser with multiple tabs open, including '5장 데이터 시각화', '키보드 특수 문자', '246292777-43cd7', 'Colaboratory에 오', 'matplotlib-한글처', and 'PR-train/code/hell'. The browser address bar shows 'github.com/ai7dnn/PR-train/blob/main/code/hello.py'. The GitHub repository page for 'ai7dnn / PR-train' is displayed. The 'Code' tab is selected, showing the file structure. The 'code' directory is expanded, and 'hello.py' is selected. The file content is shown as '1 print('Hello Pull Request')'. The commit history shows a commit by 'chatkang' titled 'Create hello.py' with the hash '0aff7f3' and a timestamp of '11 minutes ago'. The file size is '28 Bytes' and it contains '1 lines (1 loc)'. A note indicates 'Code 55% faster with GitHub Copilot'. The file path 'PR-train / code / hello.py' is shown at the top of the file content area. The file name 'hello.py' is also shown in the file list on the left. The file content area has tabs for 'Code' and 'Blame', and buttons for 'Raw', 'Copy', 'Download', 'Edit', and 'Diff'.

Remote: Remote에서도 PR 병합 확인

오픈소스 소프트웨어를 위한 깃과 깃허브 Python language

The screenshot shows a web browser with three tabs: 'chatkang', 'chatkang/PR-train: PR 연습 저장소', and 'Issues · ai7dnn/PR-train'. The address bar shows 'github.com/chatkang/PR-train/'. The repository page for 'chatkang / PR-train' is displayed, which is a public repository forked from 'ai7dnn/PR-train'. The repository has 0 stars and 1 fork. The main branch is 'main', and there is 1 branch and 0 tags. A message indicates 'This branch is 1 commit behind ai7dnn:main.' and a 'Sync fork' button is available. The commit history shows a commit 'chatkang Create hello.py' at '0aff7f3' 14 minutes ago, with 2 commits in total. The file list includes 'code', '.gitignore', 'LICENSE', and 'README.md', all with initial commits 22 minutes ago. The README.md content shows the title 'PR-train' and the subtitle 'PR 연습 저장소'. The right sidebar contains sections for 'About' (PR 연습 저장소), 'Releases' (No releases published), 'Packages' (No packages published), and 'Languages' (Python 100.0%).

chatkang / PR-train

PR-train Public
forked from ai7dnn/PR-train

main 1 branch 0 tags

This branch is 1 commit behind ai7dnn:main. Contribute Sync fork

chatkang Create hello.py 0aff7f3 14 minutes ago 2 commits

code	Create hello.py	14 minutes ago
.gitignore	Initial commit	22 minutes ago
LICENSE	Initial commit	22 minutes ago
README.md	Initial commit	22 minutes ago

README.md

PR-train

PR 연습 저장소

About
PR 연습 저장소

- Readme
- MIT license
- Activity
- 0 stars
- 0 watching
- 1 fork

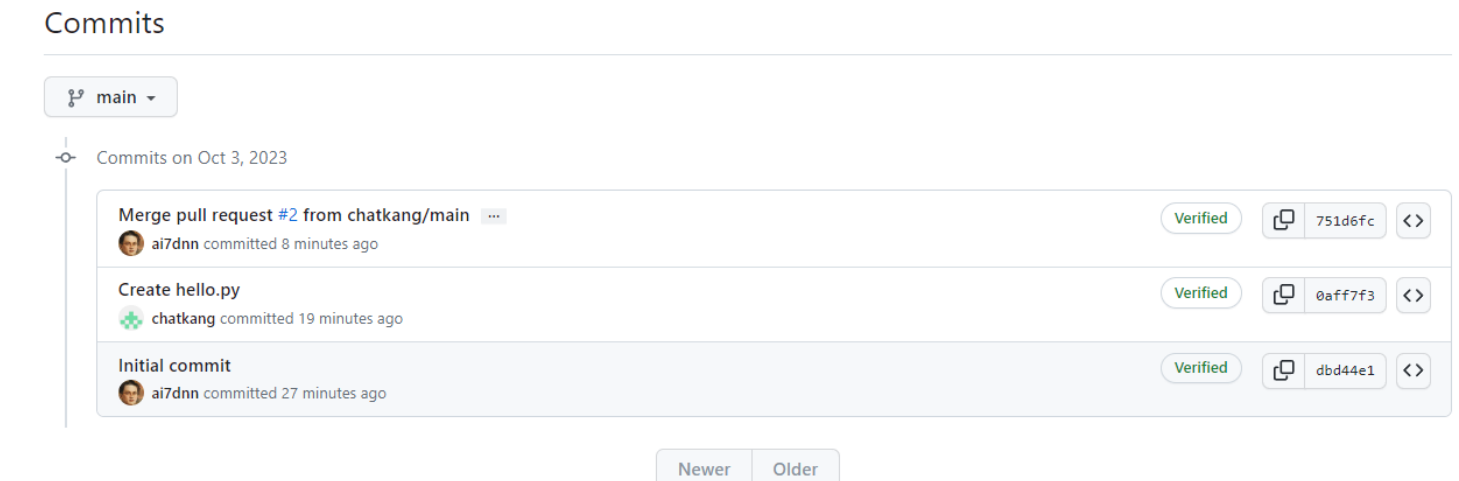
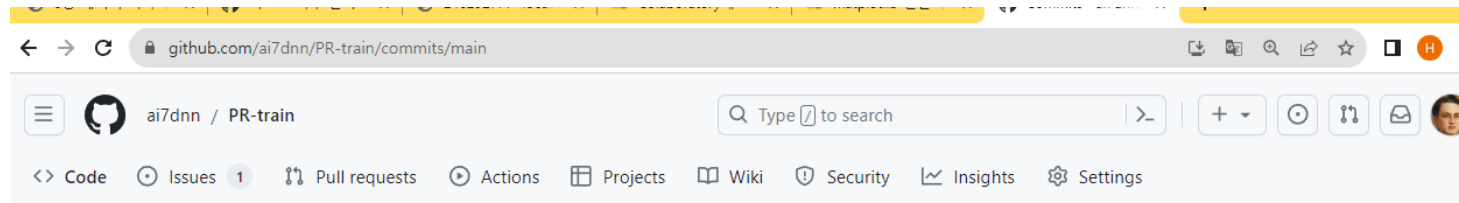
Releases
No releases published
[Create a new release](#)

Packages
No packages published
[Publish your first package](#)

Languages
Python 100.0%

Upstream과 Remote commit 비교

오픈소스 소프트웨어를 위한 깃과 깃허브 Python language



Remote: 다시 sync fork

오픈소스 소프트웨어를 위한 깃과 깃허브 Python language

The screenshot shows a web browser with three tabs: 'chatkang', 'chatkang/PR-train: PR 연습 저장소', and 'Issues · ai7dnn/PR-train'. The address bar shows 'github.com/chatkang/PR-train'. The repository page for 'chatkang / PR-train' is displayed, indicating it is a public repository forked from 'ai7dnn/PR-train'. The interface includes navigation links for Code, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. Repository statistics show 0 watches, 1 fork, and 0 stars. A notification box states 'This branch is out-of-date' and suggests updating by syncing 1 commit from the upstream repository. The 'Update branch' button is highlighted with a red dashed box. The file list includes 'code' (Create hello.py), '.gitignore' (Initial commit), 'LICENSE' (Initial commit), and 'README.md' (Initial commit). The README content shows 'PR-train' and 'PR 연습 저장소'.

Upstream: 이슈 연결 확인

오픈소스 소프트웨어를 위한 깃과 깃허브 Python language

The screenshot shows a web browser window with multiple tabs. The active tab is 'github.com/ai7dnn/PR-train/issues/1'. The page header shows the repository name 'ai7dnn / PR-train' and a search bar. Below the header, there are tabs for 'Code', 'Issues' (selected), 'Pull requests', 'Actions', 'Projects', 'Wiki', 'Security', 'Insights', and 'Settings'. The main content area displays the title '코드를 작성하세요! #1' with an 'Open' status and a note that 'ai7dnn opened this issue 27 minutes ago · 0 comments'. A comment by 'ai7dnn' is shown, stating '코드 작성' (Code writing). Below the comment, a commit is listed: 'ai7dnn added a commit that referenced this issue 12 minutes ago'. The commit message is 'Merge pull request #2 from chatkang/main', which is highlighted with a red dashed box. To the right of the commit, there is a 'Verified' badge and the commit hash '751d6fc'. At the bottom of the page, there is a reminder: 'Remember, contributions to this repository should follow our GitHub Community Guidelines.'