



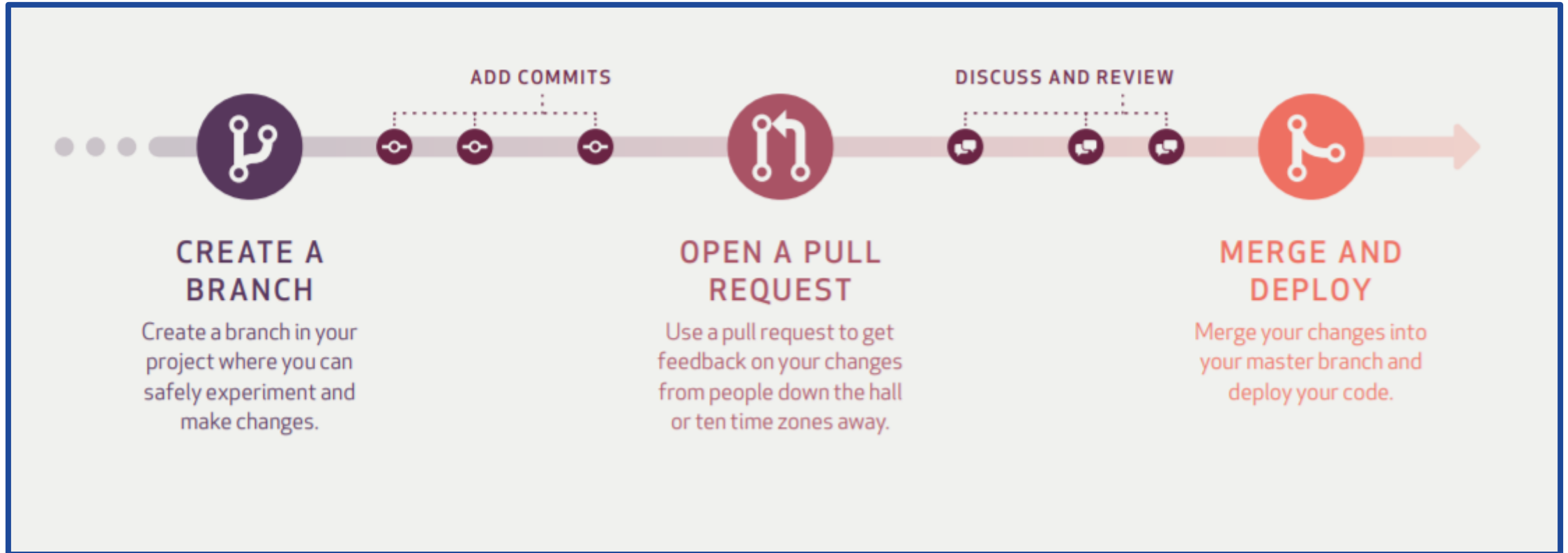
협업을 위한 Pull Request

2020. 5. 28

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송상효



Github Flow

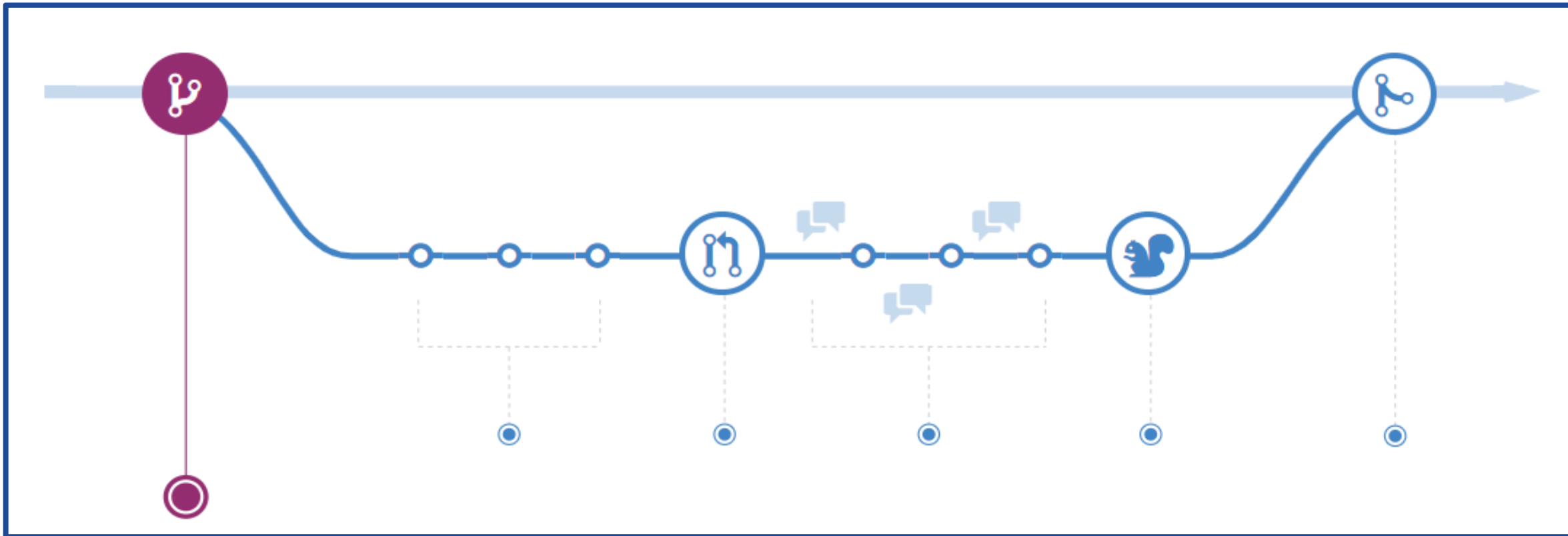


Github Flow 란?

프로젝트를 진행할때 효과적으로 진행하기 위하여 사용하는 Github를 이용한 Workflow



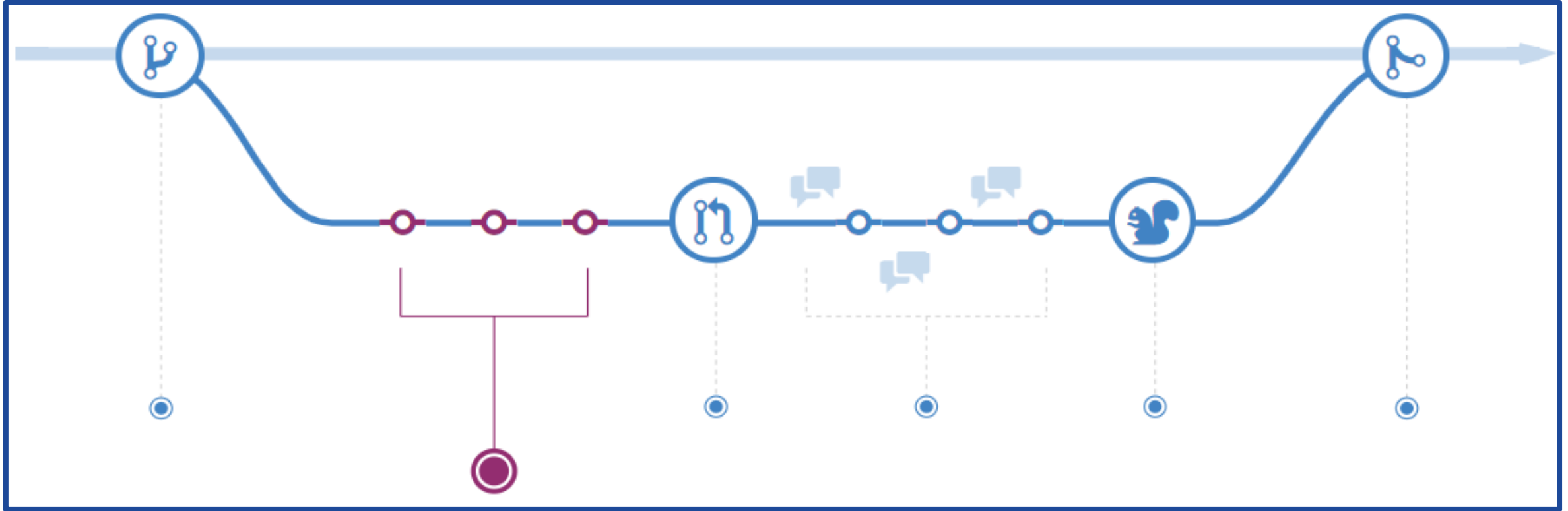
Github Flow



Create a Branch



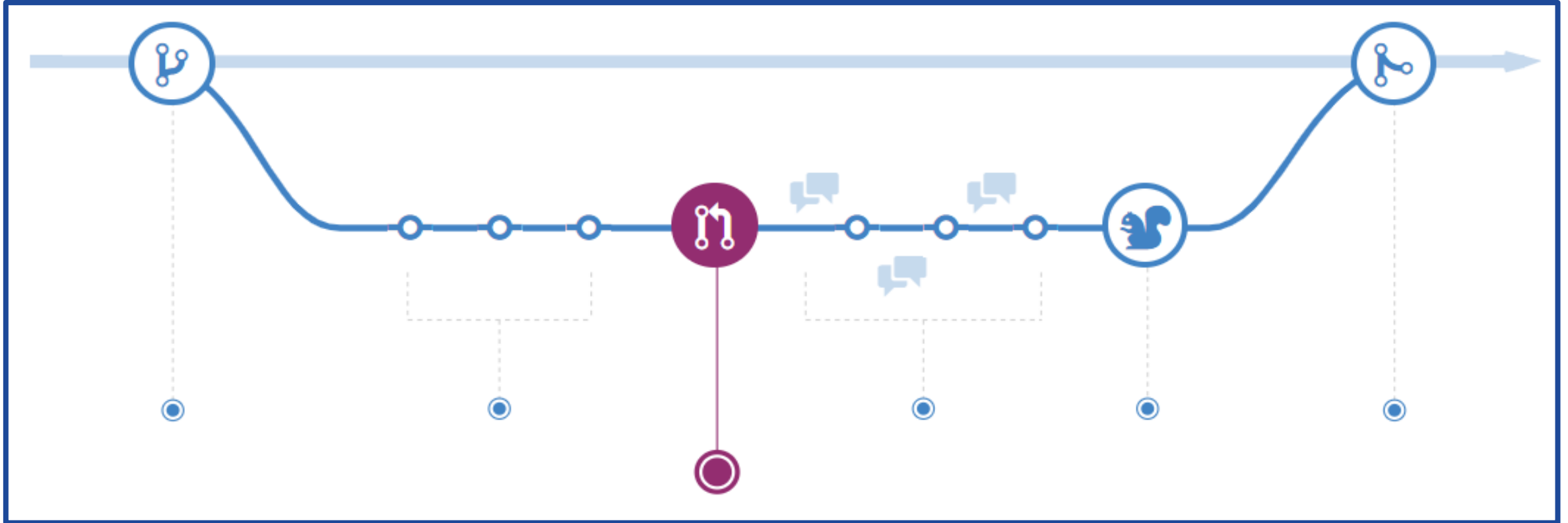
Github Flow



Add Commits



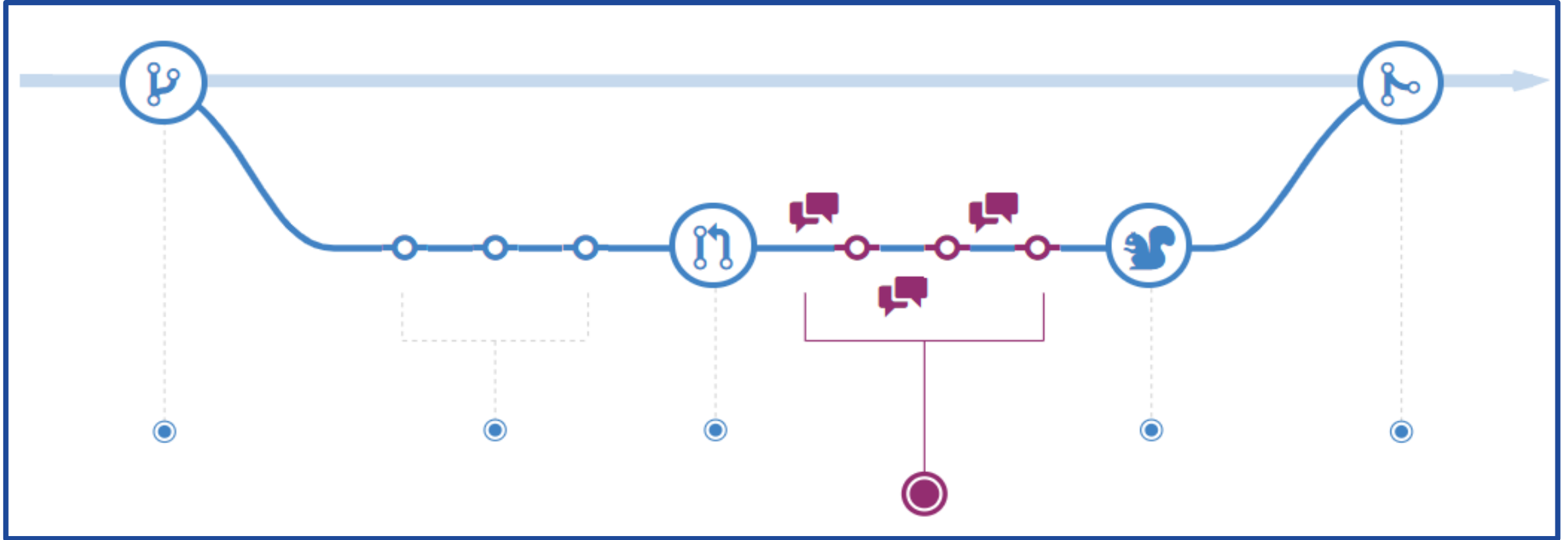
Github Flow



Open a Pull Request



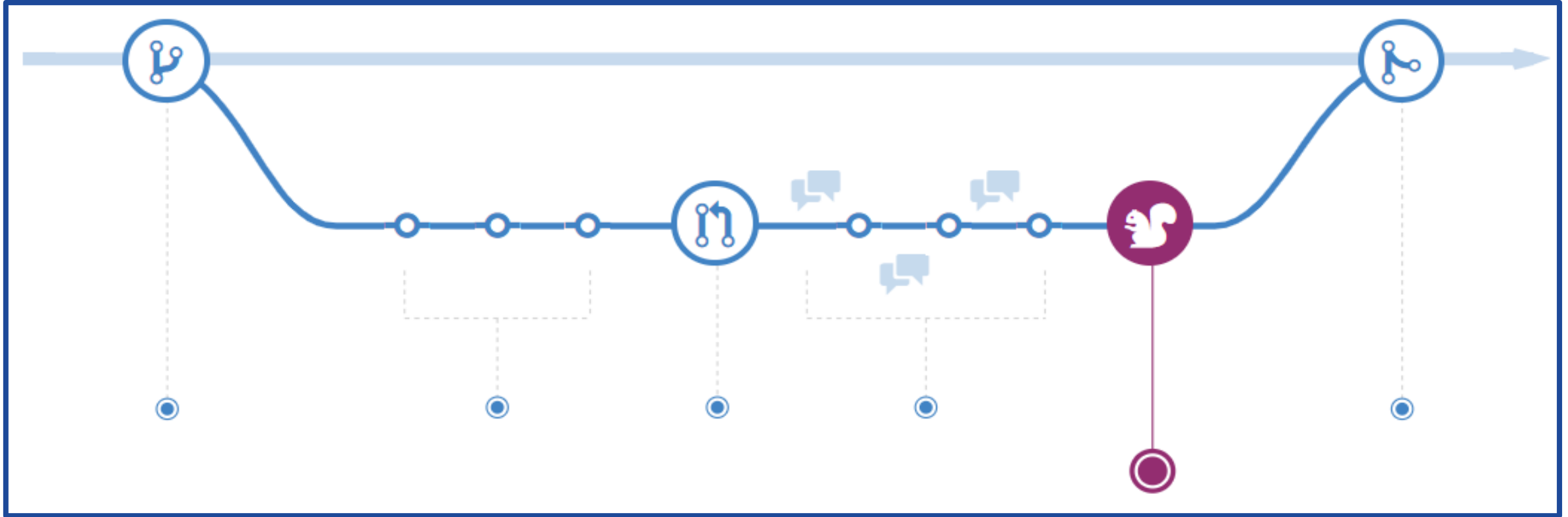
Github Flow



Discuss and Review Code



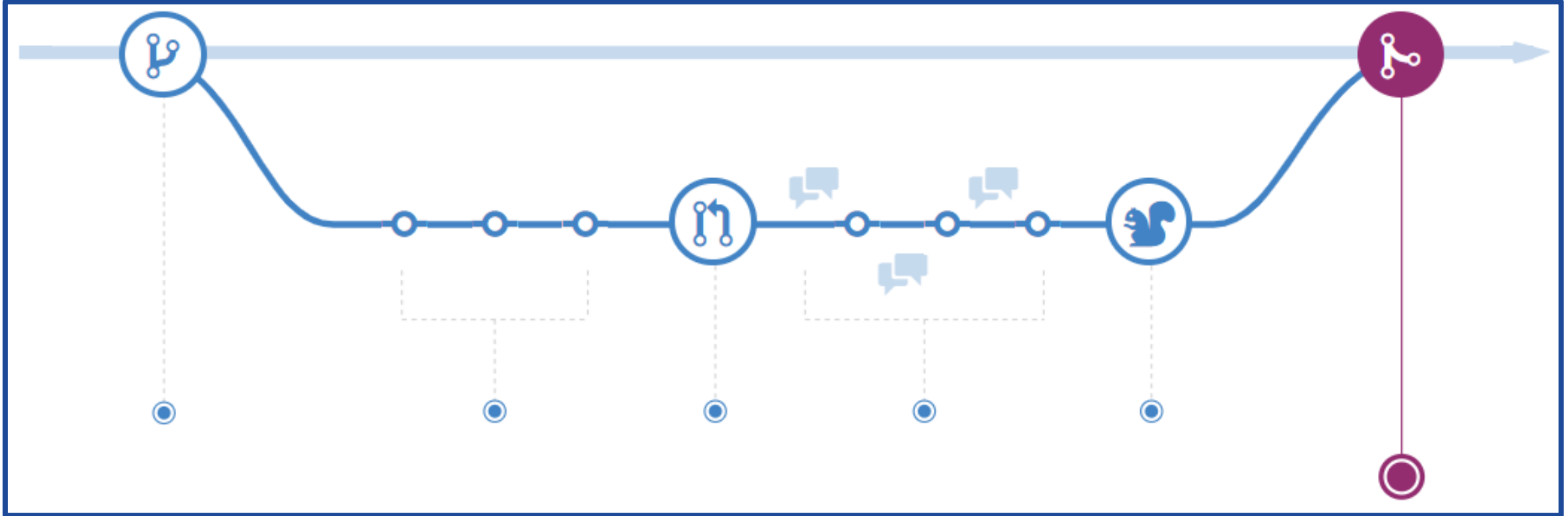
Github Flow



Deploy



Github Flow



Merge



협업을 위한 Pull Request 방법

1. Clone 및 remote 설정
2. Branch 생성
3. 수정 작업 후 add, commit, push
4. Pull Request 생성
5. Merge Pull Request
6. Merge 이후 동기화 및 branch 삭제



1.Clone 및 remote설정

현재 협업 중인 Repository에 **Clone or download** 버튼을 눌러 표시되는 URL을 복사한다.

The screenshot shows the GitHub interface for a repository named 'sala0320 / test'. The repository has 1 watch, 0 stars, and 0 forks. The 'Code' tab is selected, showing options for Issues (0), Pull requests (0), Actions, Projects (0), Wiki, Security, Insights, and Settings. A message states 'No description, website, or topics provided.' Below this, it shows '3 commits', '1 branch', '0 packages', '0 releases', and '1 contributor'. The 'Clone or download' button is highlighted, and a dropdown menu is open, showing the option to 'Clone with HTTPS' (which is selected) and 'Use SSH'. The HTTPS URL 'https://github.com/sala0320/test.git' is displayed, along with buttons for 'Open in Desktop' and 'Download ZIP'. There is also a 'New pull request' button and a 'Merge pull request #1 from sala0320/develop' button.



1.Clone 및 remote설정

- Clone 명령어를 이용하여 로컬 저장소에 원격 저장소 추가

```
$ git clone (복사한 URL)
```

- Clone 했던 원본 저장소가 remote 되어 있는지 확인

```
$ git remote -v
```

- 만약 설정이 안되어 있을경우 복사한 URL을 이용하여 등록

```
$ git remote add origin (복사한 URL)
```



2. Branch 생성

- 자신의 로컬 컴퓨터에서 코드를 추가하는 작업은 branch를 만들어서 진행한다
- Branch 생성 & 전환

```
$ git checkout -b develop
```

- Branch 확인

```
$ git branch
```



3. 수정작업 후 add, commit, push

- 자신이 사용하는 코드 편집 툴을 활용하여 수정 작업을 진행한다.
- 작업이 완료되면, add, commit, push를 통해서 자신의 github repository(origin)에 수정사항을 반영한다.

```
#include<stdio.h>

int main()
{
    int kor, eng, math;
    int sum = 0;

    math = 80;
    eng = 100;
    kor = 90;
    sum = 80 + 100 + 90;

    printf("This program print report card.\n");

    printf("Korean : %d\n", kor);
    printf("English : %d\n", eng);
    printf("Math : %d\n", math);
    printf("Sum : %d\n", sum);
}
```

기존 코드

```
#include<stdio.h>

int main()
{
    int kor, eng, math;
    int sum = 0;

    math = 80;
    eng = 100;
    kor = 90;
    sum = 80 + 100 + 90;

    printf("This program print report card.\n");

    printf("Korean : %d\n", kor);
    printf("English : %d\n", eng);
    printf("Math : %d\n", math);
    printf("Sum : %d\n", sum);

    return 0;
}
```

수정 코드



3. 수정작업 후 add, commit, push

- Add

```
$ git add 수정한 파일명
```

- Commit

```
$ git commit -m "수정한 내용"
```

- Push

```
$ git push origin develop
```

- 주의 사항 : push진행시에 branch이름을 명시해주어야 한다

```
sala0@LAPTOP-C716N148 MINGW64 ~ (develop)
$ git add report_card.c

sala0@LAPTOP-C716N148 MINGW64 ~ (develop)
$ git commit -m "add return"
[develop 8762796] add return
1 file changed, 21 insertions(+)
create mode 100644 report_card.c

sala0@LAPTOP-C716N148 MINGW64 ~ (develop)
$ git push origin develop
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 8 threads
Compressing objects: 100% (7/7), done.
Writing objects: 100% (9/9), 923 bytes | 461.00 KiB/s, done.
Total 9 (delta 0), reused 0 (delta 0)
remote:
remote: Create a pull request for 'develop' on GitHub by visiting:
remote:   https://github.com/sala0320/test/pull/new/develop
remote:
To https://github.com/sala0320/test.git
 * [new branch]      develop -> develop
```



4. Pull Request 생성

- Push 작업 완료 후 협업 중인 github 저장소에서 compare & pull request 버튼 확인

sala0320 / test

Unwatch 1 Star 0 Fork 0

<> Code Issues 0 Pull requests 0 Actions Projects 0 Wiki Security Insights Settings

No description, website, or topics provided. Edit

Manage topics

2 commits 1 branch 0 packages 0 releases 1 contributor

Your recently pushed branches:

develop (less than a minute ago) Compare & pull request

Branch: master New pull request Create new file Upload files Find file Clone or download

sala0320 Delete test.c Latest commit 2c654dd 37 minutes ago

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






4. Pull Request 생성

- Compare & pull request 버튼 클릭 후 요청 또는 주의사항을 적어서 pull request를 생성

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: master  compare: develop ✓ Able to merge. These branches can be automatically merged.




add return


Write

Preview

return을 추가했어요 코드 리뷰 후 merge해주세요.
Signed-off-by: Haewon <sala0320@naver.com>

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

Create pull request



Reviewers

No reviews

Assignees

No one—assign yourself

Labels

None yet

Projects

None yet

Milestone

No milestone

성균관대학교
소프트웨어대학



5. Merge Pull Request

- (Contributer 시점) pull request 요청을 확인 후 Merge할지 추가의견을 줄지 결정

add return 8762796

Add more commits by pushing to the `develop` branch on sala0320/test.

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](#).

Write Preview AA B i “ <> 🔗 ☰ ☷ ✓ @ 🚩 ↶

Leave a comment

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


Close pull request Comment




5. Merge Pull Request

- (Contributer 시점) pull request 요청을 확인 후 Merge할지 추가의견을 줄지 결정

Add more commits by pushing to the **deve1op** branch on **sala0320/test**.




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](#).




Write Preview **AA** **B** *i* “ <> 🔗 ☰ ☷ ↶ @ 📌 ↶

확인 후 의견드리도록 하겠습니다.

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


 Close and comment **Comment**



sala0320 commented now Author Owner +😊 ...

확인 후 의견드리도록 하겠습니다.

Add more commits by pushing to the **deve1op** branch on **sala0320/test**.



Merge pull request #1 from sala0320/develop

add return

Confirm merge Cancel



6. Merge 이후 동기화 및 branch삭제

- 변경 사항 확인

sala0320 / test

Unwatch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Actions Projects 0 Wiki Security Insights Settings

Merge pull request #1 from sala0320/develop

add return

master (#1)

sala0320 committed 1 minute ago Verified 2 parents f01bdd1 + ee11f61 commit f03c6824d03edc0c1f6d98f4c5ec627f4c813199

Showing 1 changed file with 1 addition and 0 deletions. Unified Split

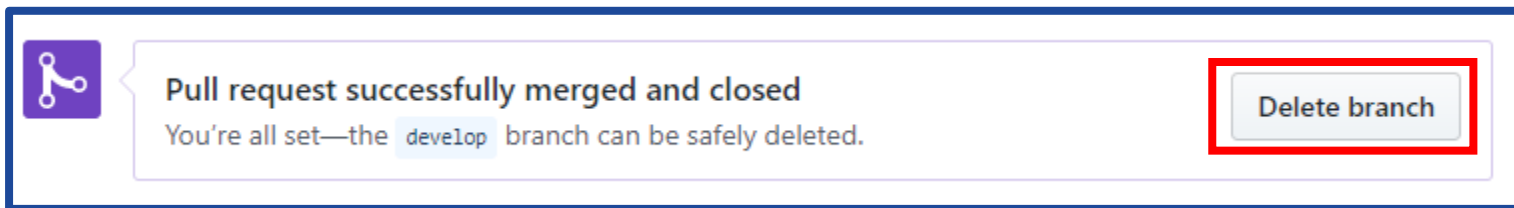
1 report_card.c

@@ -16,5 +16,6 @@	int main()
16	16 printf("English : %d\n", eng);
17	17 printf("Math : %d\n", math);
18	18 printf("Sum : %d\n", sum);
19	19 + return 0;
19	20
20	21



6. Merge 이후 동기화 및 branch삭제

- Branch 삭제(1)



- Branch 삭제(2)

```
sala0@LAPTOP-C716N148 MINGW64 ~/Git (master)
$ git branch
develop
* master

sala0@LAPTOP-C716N148 MINGW64 ~/Git (master)
$ git branch -d develop
error: The branch 'develop' is not fully merged.
If you are sure you want to delete it, run 'git branch -D develop'.

sala0@LAPTOP-C716N148 MINGW64 ~/Git (master)
$ git branch -D develop
Deleted branch develop (was 5acb567).
```



직접 해보기

- 실습과제
- 팀원들과 함께 실습 진행
- 20-1-SKKU-OSS Organization 내부의 repository 로 쓰지 말것 (따로 만들기)
- Pull request 생성자 – Pull Request 처리자를 실습해보기
- Repository 내에서 Pull Request를 보내고 Merge하는 과정 실습
- 순서가 꼬이지 않도록 조심
- Github을 잘 활용 할 수 있으면 상관없으나 완벽하지 않을 경우 pull request 보내고 merge하는 시간을 정해 놓는 것을 추천
- Repository 코드가 많이 꼬여 해결이 힘들면, 해당 Repository를 지우고 다시 생성하여 진행 할 것
- 개인 과제 란에 Repository 주소를 텍스트 (파일x) 로 제출



참고 링크

- Collaborating with issues and pull requests
 - <https://help.github.com/en/github/collaborating-with-issues-and-pull-requests>
 - 해당 링크를 통해 Pull Request와 관련된 모든 정보를 습득 할 수 있음.