

Open-Source Software Practice

11. Collaboration

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Final Exam

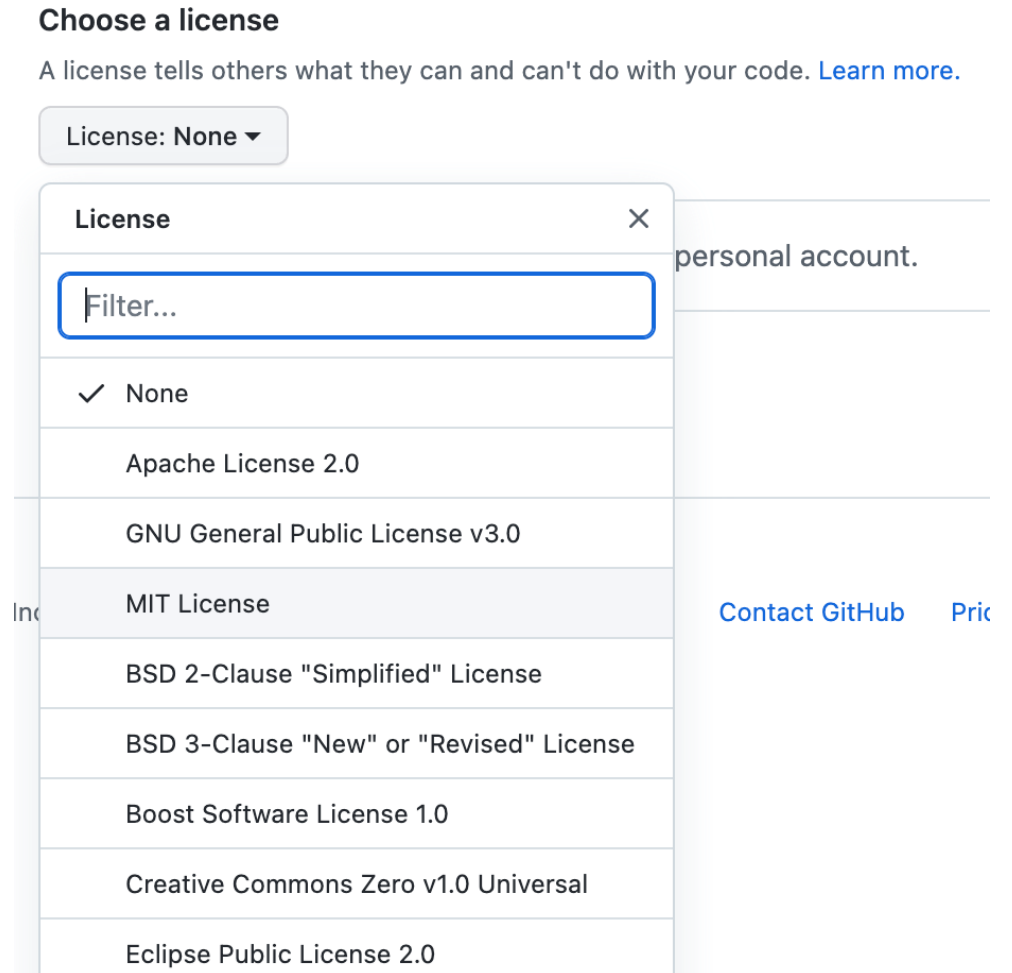
- Nov 22nd (Tuesday) @ classroom (85718)
- ~ 30 minutes
- Bring your laptop or tablet.

Goals

1. License
2. Markdown
3. Issue
4. Fork
5. Pull request
6. Code review

Let's Practice – 1 (license)

1. Create an empty Git repository with an **MIT** license and **README.md** included.
2. Go to LICENSE on GitHub and see what it looks like.
3. Visit <https://choosealicense.com/licenses/mit/> to see more!



Let's Practice – 2 (markdown)

1. Read <https://www.markdownguide.org/basic-syntax/>
2. Read <https://github.com/adam-p/markdown-here/wiki/Markdown-Cheatsheet>
 - What is the difference between the original and the GitHub-flavored?
3. Go to README.md on GitHub and add some contents.

Let's Practice – 2 (markdown)

- See a preview

skku-stat / README.md in main

<> Edit file Preview

```
1 # skku-stat
2
3 ## Hey,
4
5 - This is the link you asked for: [link](google.com)|
```

Let's Practice – 3 (issue)

1. Let's do teamwork. Suppose there are three members: A, B, and C.
2. A: Make their repository public.
3. A: Make an issue template for a bug report
 - Setting -> General -> Features -> Set up templates
4. B and C: Leave an issue by filling in the template.
5. A, B, and C: Add labels to the issue.
6. A, B, and C: Add replies to the issue. You can mention each other using @.

Let's Practice – 4 (fork)







1. B and C: Fork A's repository (from A/skku-stat to B/skku-stat).
 - A/skku-stat becomes an upstream repository.
 - A's: 1.0.0, B's: 1.0.0, C's: 1.0.0
2. B: Make changes to README.md of B/skku-stat
 - Use the Web interface for convenience.
 - A's: 1.0.0, B's: **1.0.1**, C's: 1.0.0
3. B: Leave a pull request on A/skku-stat.
4. A: Merge the pull request.
 - A's: **1.0.1**, B's: 1.0.1, C's: 1.0.0


Let's Practice – 4 (fork)

5. C: Try to make changes to README.md of C/skku-stat
 - Warning! C's version is outdated: A's: 1.0.1, B's: 1.0.1, C's: 1.0.0
6. C: Sync the branch first.
 - A's: 1.0.0, B's: 1.0.1, C's: **1.0.1**

This branch is [1 commit ahead](#), [9 commits behind](#) e::main.

[Contribute](#) [Sync fork](#)

	jaeminjo Update main.js
	.github/workflows Create node.js.yml
	.editorconfig init commit
	.gitignore Initial commit
	README.md Update README.md
	lib.js init commit

**This branch is out-of-date**

Update branch to merge the latest changes from the upstream repository into this branch.

Discard 1 commit to make this branch match the upstream repository. 1 commit will be removed from this branch.

[Learn more](#)

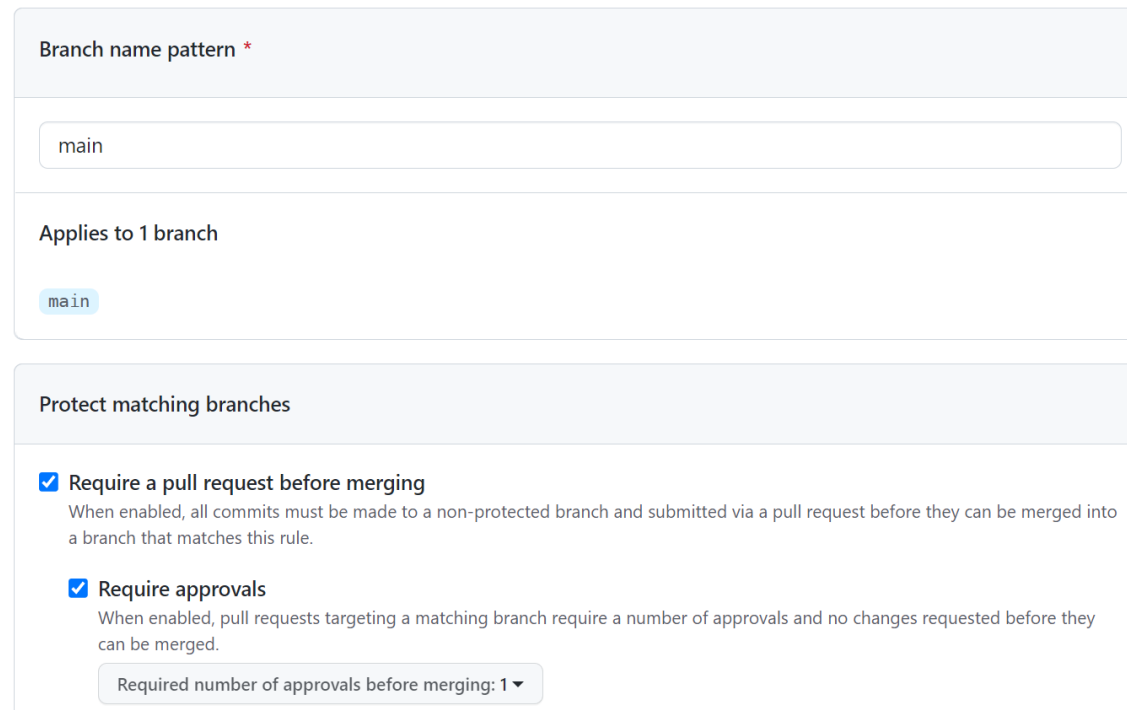
[Discard 1 commit](#) [Update branch](#)

Let's Practice – 4 (fork)

7. C: Make changes to README.md of C/skku-stat
 - A's: 1.0.0, B's: 1.0.1, C's: **1.0.2**
 8. C: Make a pull request
 9. A: Accept the pull request
 - A's: 1.0.2, B's: 1.0.1, C's: 1.0.2
- Lesson learned: Avoid a situation where multiple developers are making pull requests to the same branch. Split the branch to smaller, focused branches!

Let's Practice – 5 (review)

1. A: Make code review necessary. Settings -> Branches -> Branch protection rule.



The screenshot displays the GitHub interface for configuring a branch protection rule. It is divided into two main sections: 'Branch name pattern' and 'Protect matching branches'.

Branch name pattern *

The input field contains the text 'main'.

Applies to 1 branch

A single tag labeled 'main' is shown, indicating the rule applies to that specific branch.

Protect matching branches

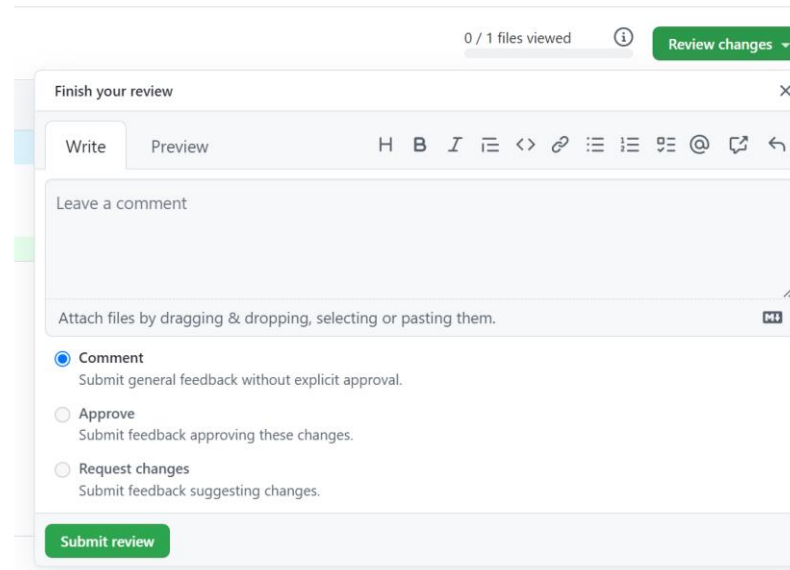
This section contains two checked checkboxes with their respective descriptions:

- ☒ **Require a pull request before merging**
When enabled, all commits must be made to a non-protected branch and submitted via a pull request before they can be merged into a branch that matches this rule.
- ☒ **Require approvals**
When enabled, pull requests targeting a matching branch require a number of approvals and no changes requested before they can be merged.

Below the 'Require approvals' checkbox, there is a dropdown menu showing 'Required number of approvals before merging: 1'.

Let's Practice – 5 (review)

2. B: Make a small change to B/skku-stat and leave a pull request.
3. C: Go to the “Files changed” tab of the pull request, and then approve the change.
4. A: merge the pull request



Let's Practice – 6 (repeat)

- Change the role of A, B, and C. Repeat.