MADE BY @TAPAJYOTI

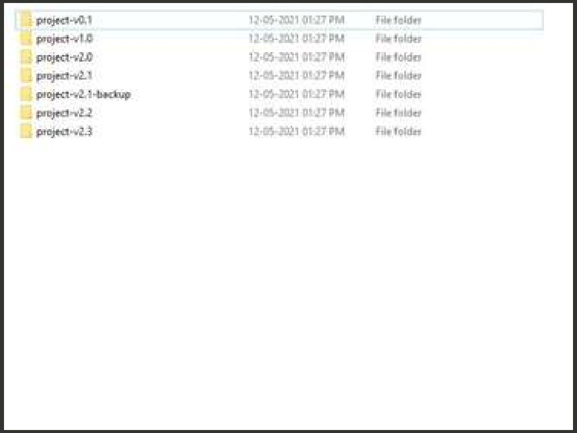
Git

EVERYTHING YOU NEED TO KNOW AS A BEGINNER

What is Git?

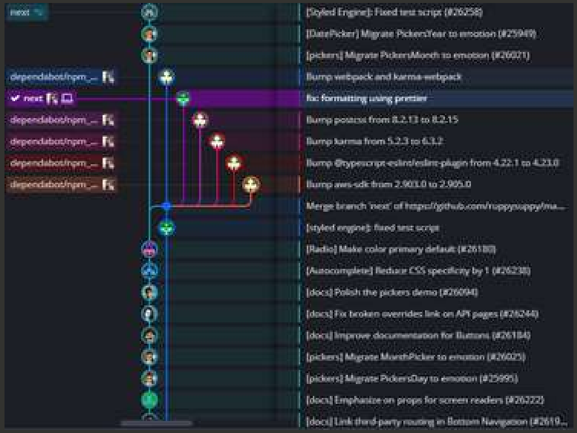
Git helps to keep track of different versions of a single code base by tracking all changes and making it very easy to collaborate of humongous projects with ease

Before



project-v0.1	12-05-2021 01:27 PM	File folder
project-v1.0	12-05-2021 01:27 PM	File folder
project-v2.0	12-05-2021 01:27 PM	File folder
project-v2.1	12-05-2021 01:27 PM	File folder
project-v2.1-backup	12-05-2021 01:27 PM	File folder
project-v2.2	12-05-2021 01:27 PM	File folder
project-v2.3	12-05-2021 01:27 PM	File folder

After



[Styled Engine]: Fixed test script (#26258)
[DatePicker] Migrate PickersYear to emotion (#25949)
[pickers] Migrate PickersMonth to emotion (#26021)
Bump webpack and karma-webpack
fix: formatting using prettier
Bump postcss from 8.2.13 to 8.2.15
Bump karma from 5.2.3 to 6.3.2
Bump @typescript-eslint/eslint-plugin from 4.22.1 to 4.23.0
Bump aws-sdk from 2.903.0 to 2.905.0
Merge branch 'next' of https://github.com/ruppysuppy/ma...
[styled engine]: fixed test script
[Radio] Make color primary default (#26180)
[Autocomplete] Reduce CSS specificity by 1 (#26238)
[docs] Polish the pickers demo (#26094)
[docs] Fix broken overrides link on API pages (#26244)
[docs] Improve documentation for Buttons (#26184)
[pickers] Migrate MonthPicker to emotion (#26025)
[pickers] Migrate PickersDay to emotion (#25995)
[docs] Emphasize on props for screen readers (#26222)
[docs] Link third-party routing in Bottom Navigation (#2619...

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Installing Git

If you are on using Window, visit:
https://git-scm.com/download/win

If you are using a Linux-based system, run the following command:

```
> sudo apt-get install git
```

To verify if git was properly installed, use:

```
> git --version
```

Initializing a Repo

Before using Git in your project, you need to initialize a Repository.

To initialize one, use the following command:

```
> git init
```

Git creates a hidden directory called .git, which stores all of the objects and refs that Git uses and creates as a part of your project's history.

Staging

To commit, you need to specify the files whose changes you want to save. This is done by staging the changes. It is **NOT** required to stage all files you modified, you can stage only the files whose changes you want to commit

To stage changes, use:

```
> git add <file 01 path> <file 02 path> <...>
```

or,

```
> git add .
```

Commiting

Finally, we come to committing changes.

To save the changes you have staged, use:

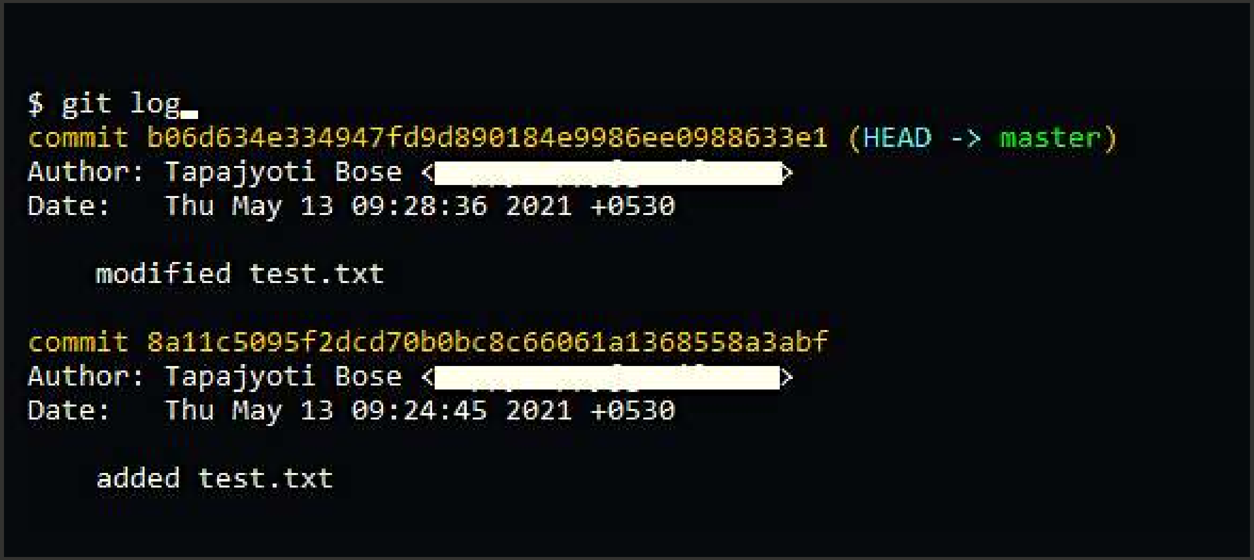
```
> git commit -m "<message>"
```

The commit command captures and saves a snapshot of the project's currently staged changes

Logs

Git log is a utility tool to review and read a history of everything that happens to a repository.

```
> git log
```



```
$ git log
commit b06d634e334947fd9d890184e9986ee0988633e1 (HEAD -> master)
Author: Tapajyoti Bose <[redacted]>
Date:   Thu May 13 09:28:36 2021 +0530

    modified test.txt

commit 8a11c5095f2dcd70b0bc8c66061a1368558a3abf
Author: Tapajyoti Bose <[redacted]>
Date:   Thu May 13 09:24:45 2021 +0530

    added test.txt
```

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Undoing Changes

To err is man

It is quite possible that you might make some mistake while working on a project. Wondering how to fix them?

Git has two commands to undo changes you made

1. **Reset**
2. **Revert**

Reset

Reset enables you to reset recent changes you made. The command is:

```
> git reset --soft HEAD~1
```

Let's break down the command

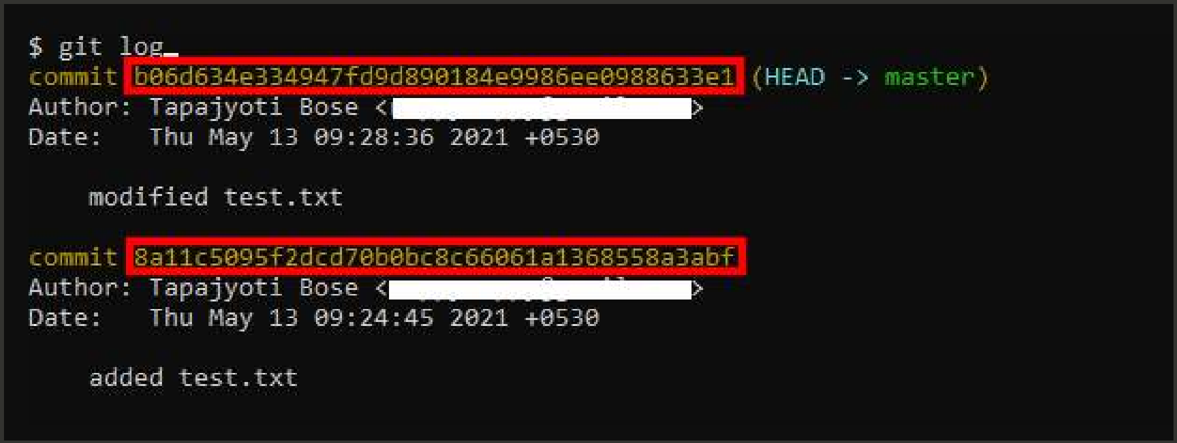
git reset <reset type> HEAD~<number of commits to undo>

The types field allows the following:

1. soft: uncommit and keep (staged) changes
2. hard: uncommit and delete changes

Revert

Every commit is associated with a hash.



```
$ git log
commit b06d634e334947fd9d890184e9986ee0988633e1 (HEAD -> master)
Author: Tapajyoti Bose <[redacted]>
Date:   Thu May 13 09:28:36 2021 +0530

    modified test.txt

commit 8a11c5095f2dcd70b0bc8c66061a1368558a3abf
Author: Tapajyoti Bose <[redacted]>
Date:   Thu May 13 09:24:45 2021 +0530

    added test.txt
```

You can undo a specific commit using the revert command and its hash

```
> git revert 8a11c5095f2dcd70b0bc8c66061a1368558a3abf
```

NOTE: An additional commit is added on reverting modifications

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Branch

Git branches are effectively a pointer to a snapshot of your changes. When you want to make some modifications, like feature additions, bug fixes, or documentation, no matter how big or how small, you spawn a new branch to encapsulate your changes.

The former convention was to call the base branch master, but recently the name has been changed to main. You can change the name or the base branch as per your requirement though.

Branch (continued)

To create a new branch use:

```
> git checkout -b <new branch name>
```

To switch to an existing branch use:

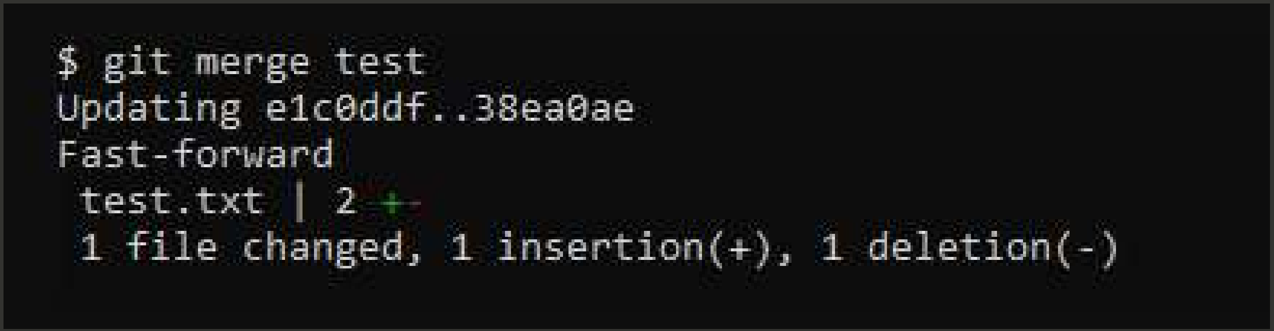
```
> git checkout <branch name>
```

Merge

After working on a branch, you may need to updating another branch with the code from the current branch.

To merge changes from another branch, first, move to the branch you want to update and use:

```
> git merge <update source branch name>
```

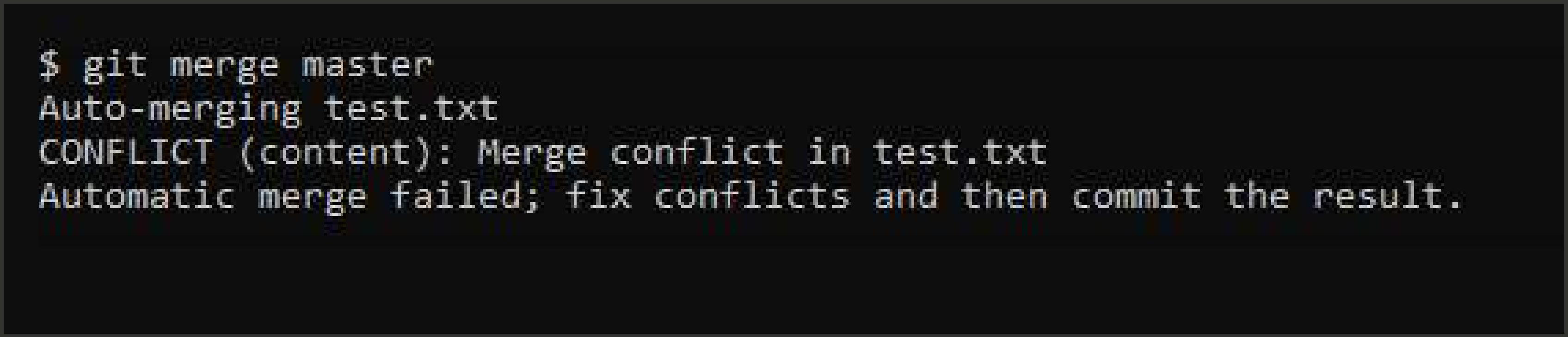


```
$ git merge test
Updating e1c0ddf..38ea0ae
Fast-forward
 test.txt | 2 +-
 1 file changed, 1 insertion(+), 1 deletion(-)
```

Conflict

After merging branches if in both of the branches, the same part of the same file was updated, git doesn't know which change to keep and which to discard.

So git creates a conflict message for manual review.



```
$ git merge master
Auto-merging test.txt
CONFLICT (content): Merge conflict in test.txt
Automatic merge failed; fix conflicts and then commit the result.
```

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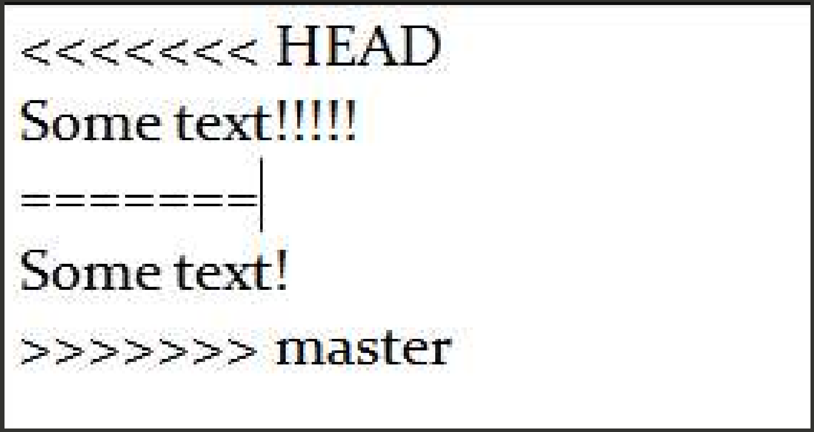
Conflict (continued)

The conflict message outlines where the conflict occurred as well as the current (available in the branch) and incoming changes (merging from another branch).

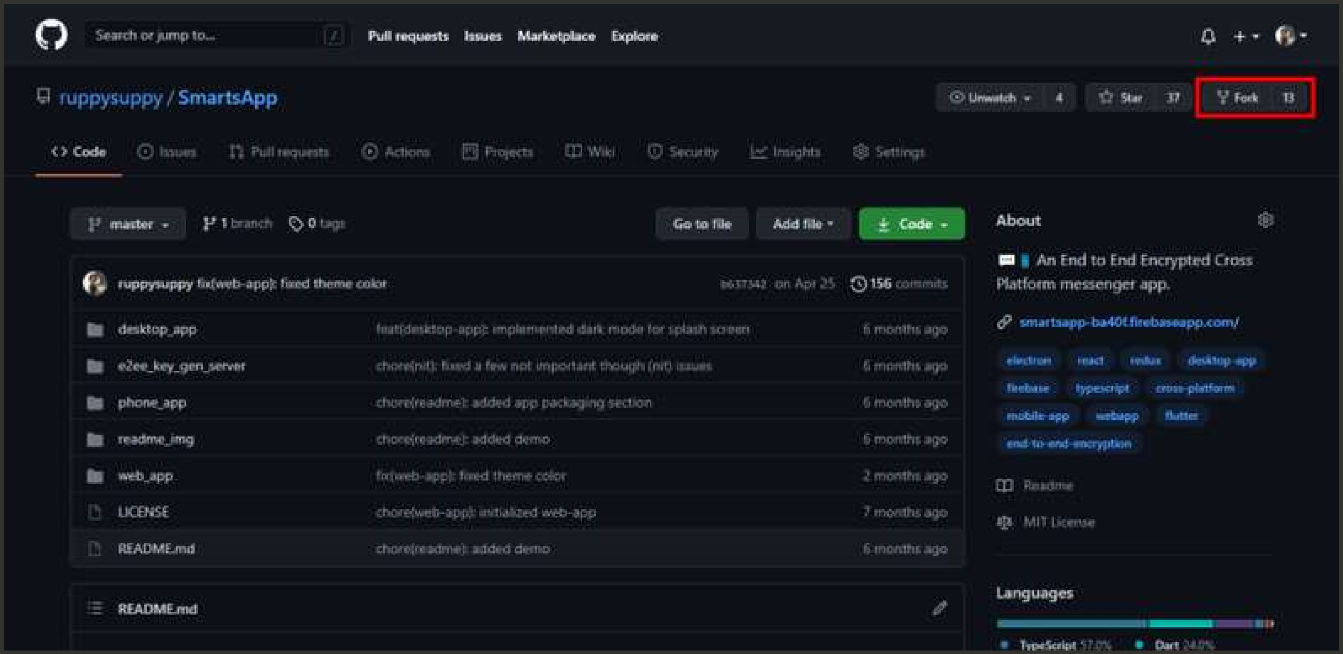


```
<<<<<<< HEAD
Some text!!!!!
=======
Some text!
>>>>>>> master
```

After resolving the conflict, you need to commit to save the resolved merge.

Fork

If you are contributing to a repository you don't have write access to, you must Fork the repository as the first step.



ruppysuppy fix(web-app): fixed theme color b637342 on Apr 25 156 commits

desktop_app	feat(desktop-app): implemented dark mode for splash screen	6 months ago
e2ee_key_gen_server	chore(nit): fixed a few not important though (nit) issues	6 months ago
phone_app	chore(readme): added app packaging section	6 months ago
readme_img	chore(readme): added demo	6 months ago
web_app	fix(web-app): fixed theme color	2 months ago
LICENSE	chore(web-app): initialized web-app	7 months ago
README.md	chore(readme): added demo	6 months ago

README.md

An End to End Encrypted Cross Platform messenger app.

smartsapp-ba40f.firebaseapp.com/

electron react redux desktop-app firebase typescript cross-platform mobile-app webapp flutter end-to-end-encryption

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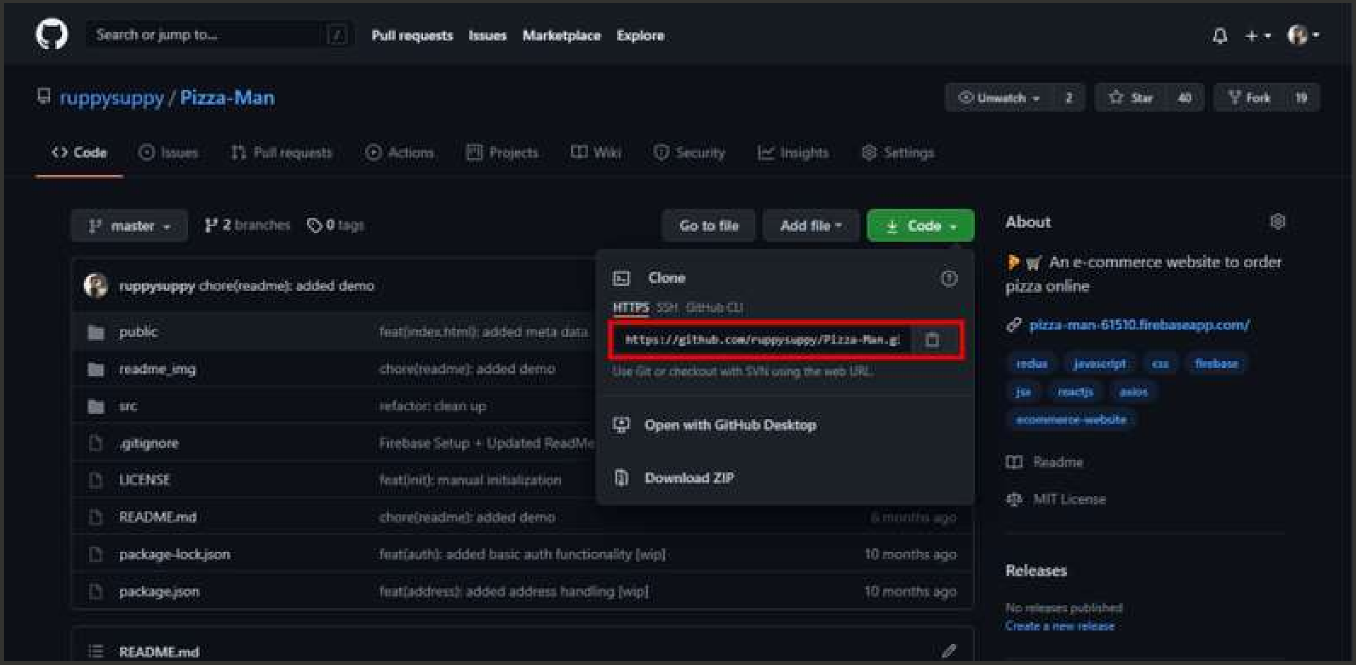
Clone

Now you have a personal copy of the repository. Clone the repository using the command:

```
> git clone <clone link>
```



ruppysuppy / Pizza-Man

ruppysuppy chore(readme): added demo

public	feat(index.html): added meta data	
readme_img	chore(readme): added demo	
src	refactor: clean up	
.gitignore	Firebase Setup + Updated ReadMe	
LICENSE	feat(init): manual initialization	
README.md	chore(readme): added demo	6 months ago
package-lock.json	feat(auth): added basic auth functionality [wip]	10 months ago
package.json	feat(address): added address handling [wip]	10 months ago

README.md

```
https://github.com/ruppysuppy/Pizza-Man.g
```

Use Git or checkout with SVN using the web URL.

An e-commerce website to order pizza online

pizza-man-61510.firebaseapp.com/

No releases published
Create a new release

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Push Directly

After making the required changes, you would like to push the changes to the remote repository for others to access it.

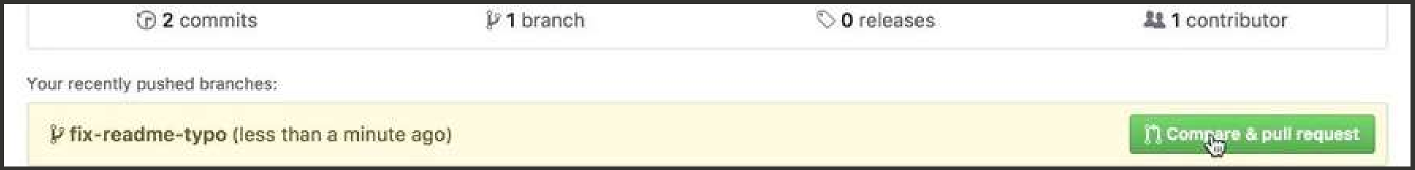
To push the changes to the remote repository use:

```
> git push <remote> <branch name>
```

The remote is just a fancy term for the repository alias. For the repo you clone from, it is set to origin

Pull Request

If you don't have write access, you will need to create a Pull Request in the source repository where your changes will be reviewed and merged by the owners or collaborators of the repository.


2 commits
1 branch
0 releases
1 contributor
Your recently pushed branches:
fix-readme-typo (less than a minute ago)
Compare & pull request

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That's all folks!

HAPPY DEVELOPING!

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