

Software

Git Stuff

How to contribute code for a new feature

If you are going to create a new feature, the approach is to fork the repository and create a branch that is for a single feature.

- Create a fork of the project on github. Check under settings to make sure that the name of the main branch is set to main and not master
- Clone fork locally with the following:
`git clone <repo-url>`
- You then want to checkout the branch for the feature as follows. The convention is to name branches after a feature:
`git checkout -b <branch-name>`
Note: The "-b" flag generates a new branch. If you want to switch between branches in the future use
`git checkout <branch-name>`
- Now that you've created your branch, you can set it as the upstream origin, which pushes the change to github:
`git push --set-upstream origin <branch-name>`
- Next, you want to bring in the base repository as a remote, to do this you do the following. Here by convention we set the local name for the name branch as "base":
`git remote add base <original-repo-url>`
- Now if you need to update your branch with changes on the base repository you can type:
`git fetch base`
`git rebase base/main`

Now you want to bring a feature to main

- If you have not already, install github CLI: <https://cli.github.com/manual/installation>
- Create a pull request by typing: `GH PR Create`
- You can also use `GH PR Create -d` to share your code as a draft pull request (PR) with other people so they can review.

Potential Issues

- If you have a conflict between your local branch and the master branch and you just want to reset your local branch to master branch do the following:
`git rebase <local-name-for-main-branch>/main`
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If you get things really messed up type the following:

```
git reset --hard HEAD
```

```
git checkout <your-branch-name>
```

GH Workflows

- Clone the root repository
- Create a fork for yourself
- add root repository as an additional remote
- when you want to work on a feature bring main branch up to date (from upstream) and then create a local branch on that and then type GH PR Create.
- GH PR Create