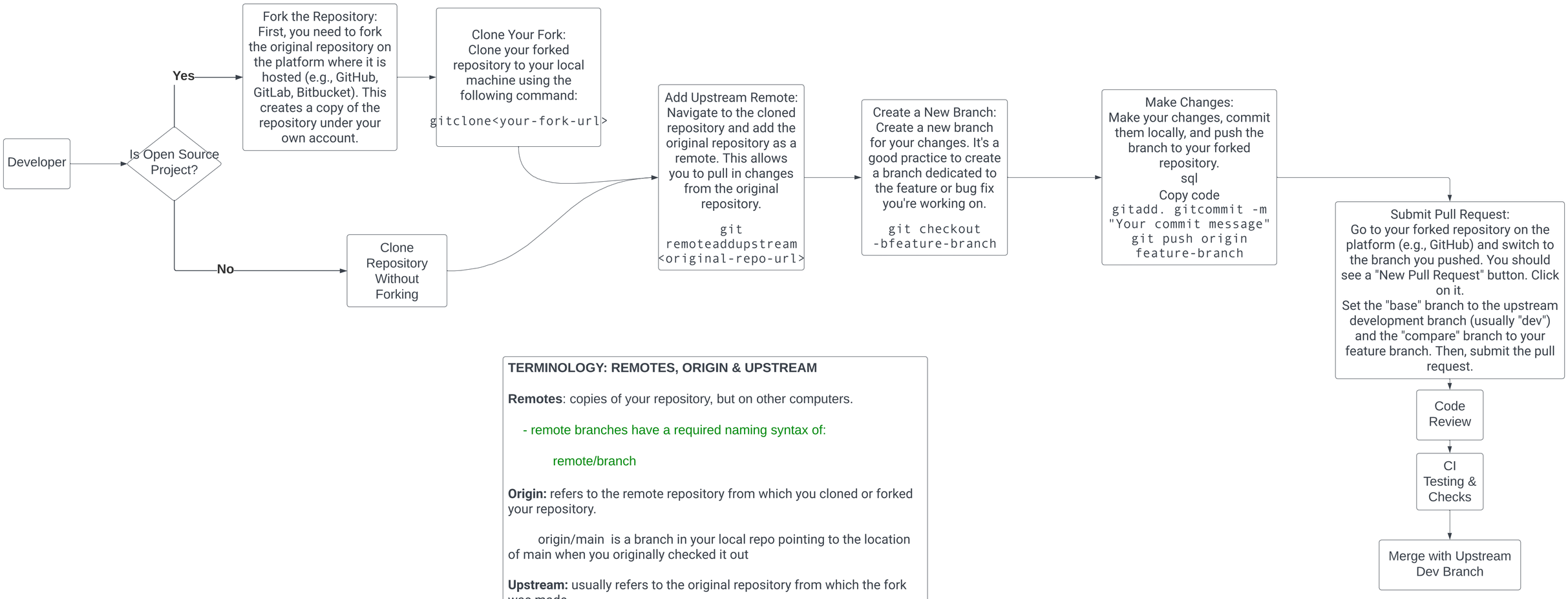
## CI/CD TYPICAL FEATURE BRANCH PULL REQUEST WORKFLOW - Sean Corzo 8/14/2023




**TERMINOLOGY: REMOTES, ORIGIN & UPSTREAM**

**Remotes**: copies of your repository, but on other computers.

- remote branches have a required naming syntax of:

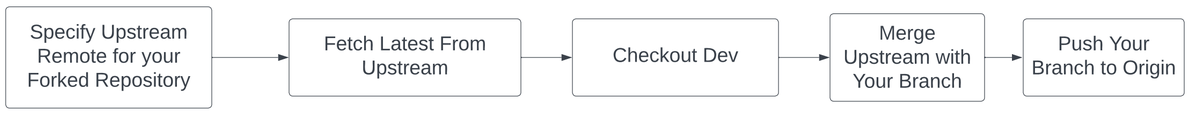
  remote/branch

**Origin:** refers to the remote repository from which you cloned or forked your repository.

origin/main is a branch in your local repo pointing to the location of main when you originally checked it out

**Upstream:** usually refers to the original repository from which the fork was made.

## SYNC FORK WITH UPSTREAM REPOSITORY (AKA UPSTREAM SYNCING)




**SYNC FORK WITH UPSTREAM REPOSITORY (AKA UPSTREAM SYNCING)**

This process involves fetching the latest changes from the main repository's "dev" branch and merging them into your fork's "dev" branch. Here's how you can do it:

Configure Upstream Remote (One-Time Setup): If you haven't already, you need to set up a remote reference to the main repository. This remote reference is typically named "upstream." Run the following command in your forked repository's directory:

```
git remote add upstream [main_repository_url]
```

Replace `[main_repository_url]` with the URL of the main repository (e.g., https://github.com/main_organization/main_repository.git).

Fetch Upstream Changes: Fetch the latest changes from the main repositor using the following commands:

```
git fetch upstream
```

Switch to Your Fork's Dev Branch: Make sure you're on your forked repository's "dev" branch:

```
git checkout dev
```

Merge Upstream Changes into Your Dev Branch: Merge the fetched changes from the main repository's "dev" branch into your fork's "dev" branch:

```
git merge upstream/dev
```

This command will incorporate the changes from the main repository's "dev" branch into your local "dev" branch.
Resolve Conflicts (If Any): If there are any merge conflicts, resolve them as you would with any other merge operation. After resolving conflicts, commit the changes.
Push Changes to Your Fork: Once you've merged the changes and resolved conflicts, push the updated "dev" branch to your forked repository on GitHub:

```
git push origin dev
```