

## Git and Github Workflow:

1- Clone the repo to your computer

2- Make a new branch for your story with the following naming convention

[Name]\_[IssueNumber]\_[DiscriptiveWords].

Example yahia\_12\_add\_comments

```
$ git branch branch_name
```

```
$ git checkout branch_name
```

### Note on branches:

Branches are what naturally happens when you want to work on multiple features at the same time. You wouldn't want to end up with a master branch which has Feature A half done and Feature B half done.

3- Build an awesome feature

4- Check what have changed

```
$ git status
```

```
$ git diff (For what has changed before adding)
```

```
$ git diff --cached (For what has changed after adding and before committing)
```

You can give the `git diff` program filenames as optional arguments (e.g

```
$ git diff file_name1 file_name2)
```

Note on diff: If you prefer using a specific GUI-based diff tool, you can use (more info about difftool [here](#)):

```
$ git difftool
```

Everything is good?

5- Add/Remove affected files.

```
$ git add file_name1 file_name2
```

```
$ git rm --cached file_name1 file_name2
```

6- Commit your changes with **a descriptive and short commit message**

```
$ git commit -m 'Issue #<number> very descriptive and short commit message'
```

The "Issue #issue\_number" is **very important** it hooks the commit to the issue.

Go to the issue in github repo and update it's labels if needed.

Examples of short descriptive messages:

```
$ git commit -m 'Issue #5, Fix duplicate comments bug'
```

Tip: think of your commit message as the following, "Applying this commit will <what it does>" e.g

Applying this commit will `Fix duplicate comments bug`.

Now you need to pull the latest code from master in order to have your code mergeable.

#### 7- Checkout to master

```
$ git checkout master
```

#### 8- Pull the latest code

```
$ git pull origin master
```

#### 9- Back to your feature branch

```
$ git checkout C1_yahia_12_add_comments
```

#### 10- Merge master with your current branch

```
$ git merge master
```

Conflicts may/will happen, don't panic. If there is a conflict, your options are :

a- Decide not to merge: `git reset HEAD`

b- Decide to merge, edit the files (check [here](#)) then use “git add” to add them and then git commit  
OR

b'- use git mergetool.

More info [here](#)

11- As mentioned in the try-git course, use `$ git log` and `$ git log --summary` to get an overview of your history. (Tip: you might be interested in [tig](#))

So far everything you've done is local. It's time to show it to the world and ask for a pull request (to have your code in the master)

#### 12- Make sure you are in the right branch

```
$ git branch
```

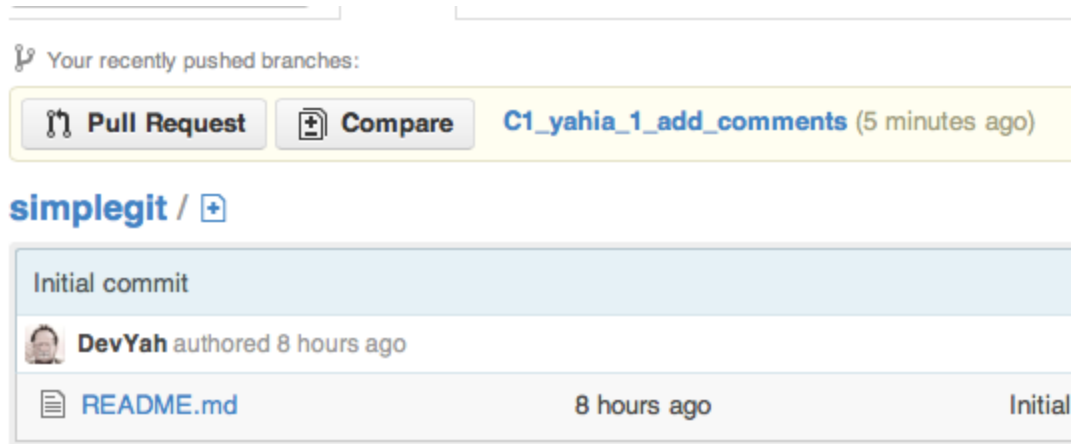
#### 13- Push your branch to the remote repo on github

```
$ git push origin branch_name
```

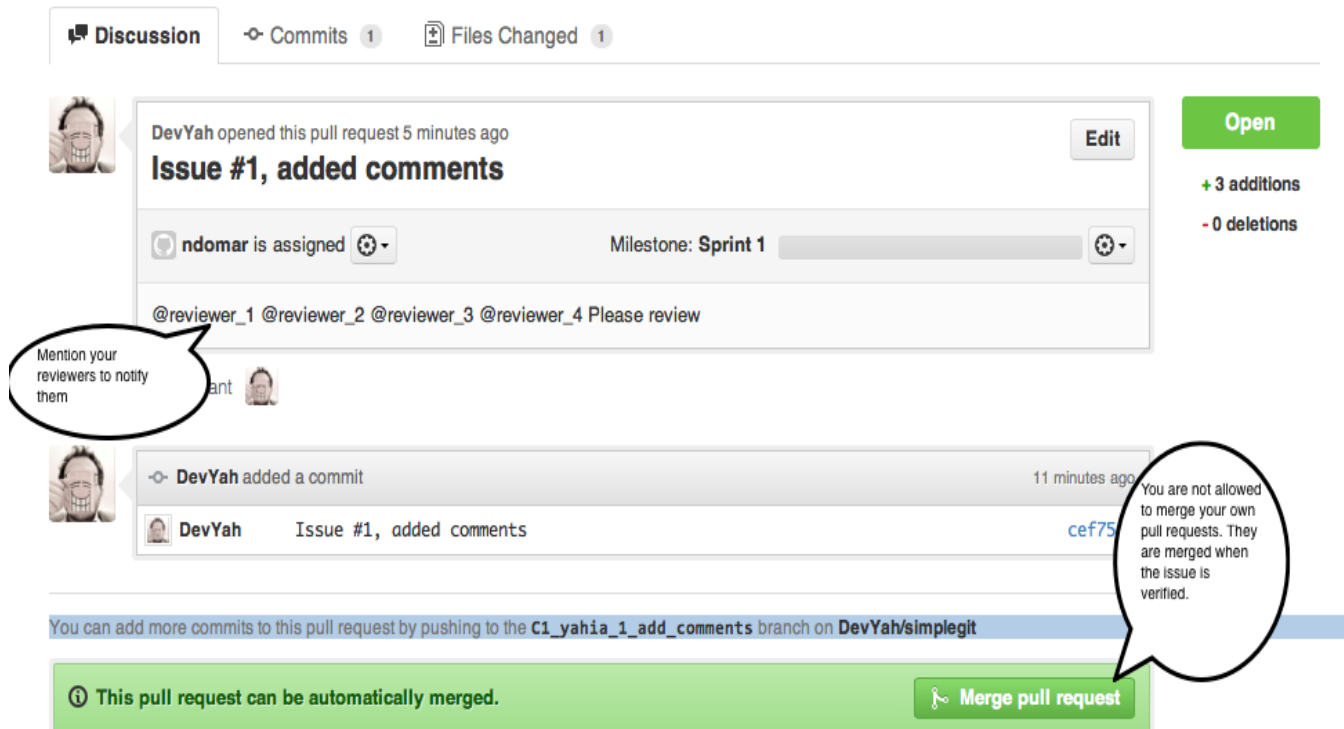
#### 14- Go to github and make a pull request.

There are many ways to make a pull request, the easiest is

- a. go to repo on github and click on pull request
- b. click on `pull_request`.



c. Add some info (issue number, mention reviewers, any notes)



It is your responsibility to have a “This pull request can be automatically merged.” message. If you don’t have it, make sure that you merged master then commit and push the merge.

pull request

<https://help.github.com/articles/using-pull-requests>