

SOEN 341

Tutorial 2

Agenda

- Intro to GitHub and Git (continued)

Git WorkFlow

1. Open terminal (i.e. cd)
2. Navigate to root directory of your project (local folder).
3. Initialize the local directory as a Git repository.

```
$ git init -b main
```

4. Add files in your local new repo

```
$ git add . // stages them for the first commit.
```

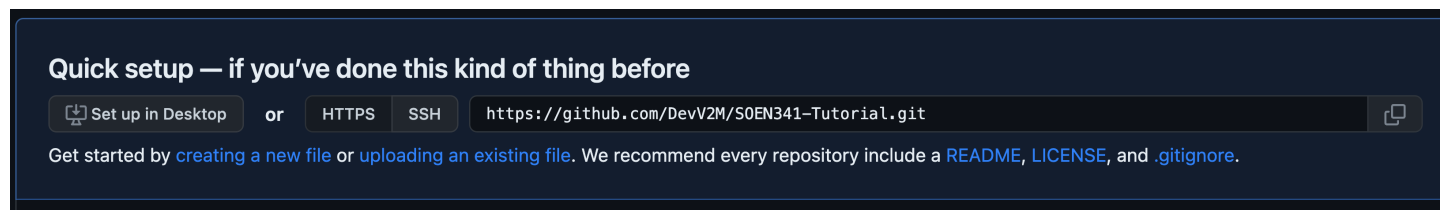
5. Commit the files that you've staged in your local repository.

```
$ git commit -m "First commit"
```

Adding a local repository to GitHub using Git

1. Create a new repository on GitHub.com. To avoid errors, do not initialize the new repository with README, license, or gitignore files. You can add these files after your project has been pushed to GitHub.

2. At the top of your repository on GitHub.com's Quick Setup page, click to copy the remote repository URL.



3. Open terminal

4. Change the current working directory to your local project.

5. Add the URL for the remote repo where your local repository will be pushed.

```
$ git remote add origin <REMOTE_URL> // Sets the new remote
```

```
$ git remote -v // Verifies the new remote URL
```

Push changes in your local repository to GitHub.com.

```
$ git push -u origin main //Pushes the changes in your local repository up to the remote repository you specified as the origin
```

Feature Branch Workflow

1. Create a branch for the new feature (called a “feature branch”:

```
$ git branch new-feature
```

```
$ git checkout new-feature
```

```
// Make some changes to the code...
```

```
$ git add .
```

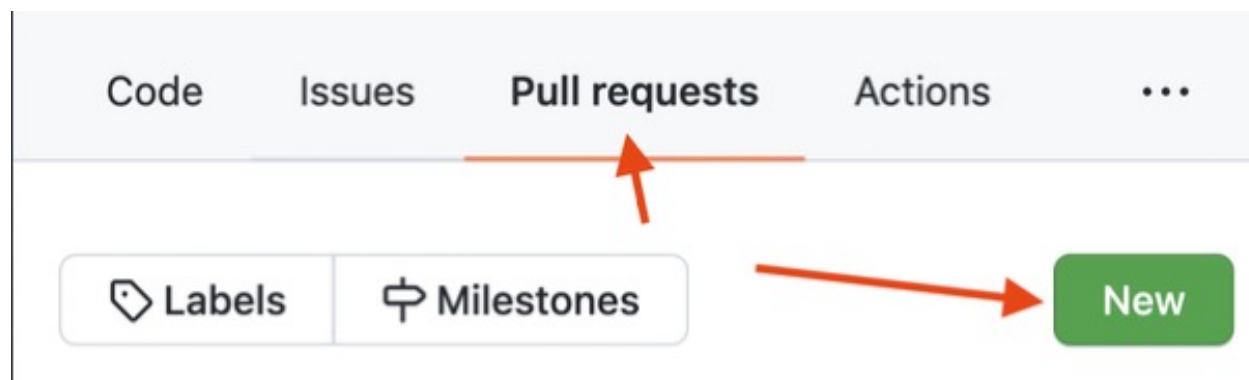
```
$ git commit -m “new feature message”
```

2. Upload the feature branch to GitHub

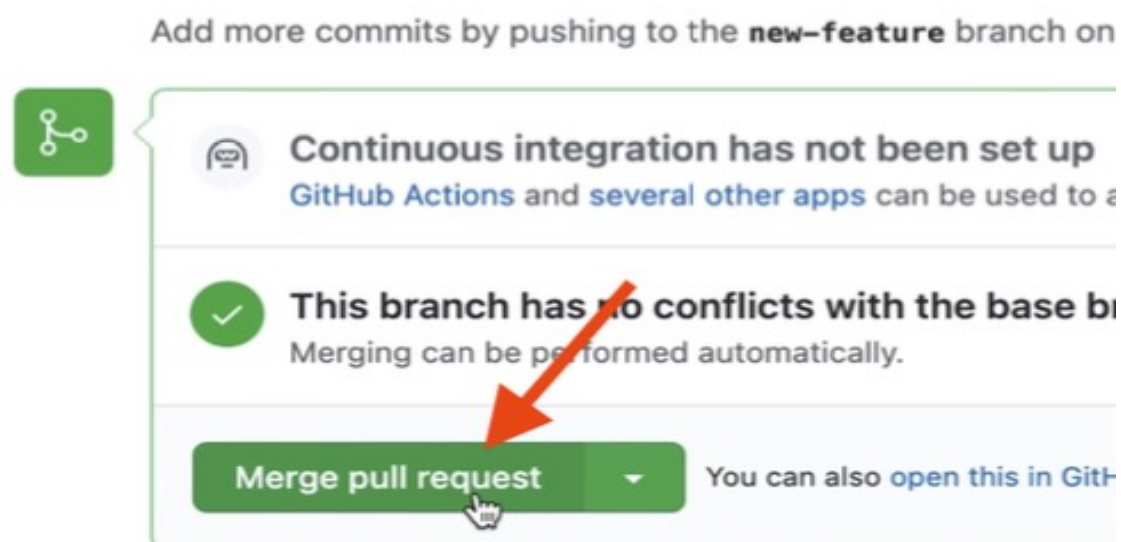
```
$ git push origin new-feature
```

Feature Branch Workflow

3. Create a pull request on GitHub



4. Merge the feature branch into the main branch via GitHub



Feature Branch Workflow

5. After merging, update the local repository (so that it stays in sync with the remote repo on GitHub)

```
$ git checkout main
```

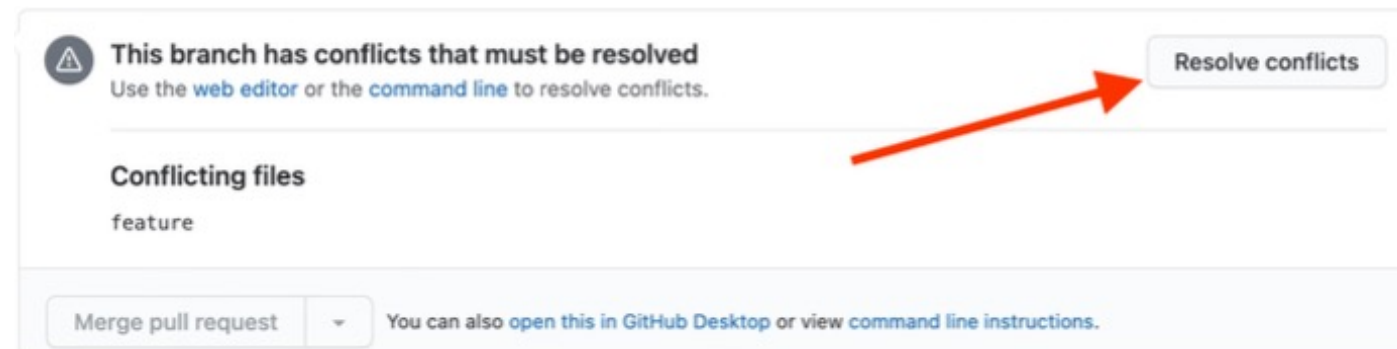
```
$ git pull origin main
```

Feature Branch Workflow

Merge Conflicts in the Feature Branch Workflow

We can either:

I. Resolve the merge conflict on GitHub.



Feature Branch Workflow

2. Resolve the merge conflict on our computer

Get the latest updates from (i.e. main branch)

```
$ git checkout main
```

```
$ git pull origin main
```

Get the latest updates from the feature branch

```
$ git checkout feature-branch
```

```
$ git pull origin feature-branch
```

Feature Branch Workflow

Merge main into the feature branch. Notice the direction of the merge: we main the merge commit to stay on the feature branch so our teammates can review it.

```
$ git checkout feature-branch
```

```
$ git merge main
```

Push the resolved feature branch to GitHub

```
$ git push origin feature-branch
```

GitHub Issues and Projects



US-01 As a user, I would like to login so that I have access to the system.



Write

Preview

AA B i



[user story or requirement template based on class]



Attach files by dragging & dropping, [selecting them](#), or pasting from the clipboard.

📄 Styling with Markdown is supported

Submit new issue

Assignees



No one—assign yourself

Labels



None yet

Milestone




No milestone


Referencing issue on a commit

[↔ Code](#) [🔔 Issues 2](#) [🔗 Pull requests 0](#) [📁 Projects 0](#) [📖 Wiki](#) [📶 Pulse](#) [📊 Graphs](#) [⚙️ Settings](#)

add experiment text

 guipadua committed 5 days ago 1 parent `0aaaf4f` commit `cb35fd24feed1f66a676b8922d7`


Showing **1 changed file** with **1 addition** and **0 deletions**.

1  experiment.txt

... @@ -0,0 +1 @@

1 +Experimental file.

0 comments on commit `cb35fd2` [🔒 Lock conversation](#)




Write Preview


AA B i “ ↔ 🔗 ☰ ☷ ✓ ↶ @ 📌

fixes #3

#3 Create an experiment



Attach files by dragging & dropping, [selecting them](#), or pasting from the clipboard.

 Styling with Markdown is supported [Comment on this commit](#)

Issue with references

Create an experiment #3

Open

guipadua opened this issue 12 minutes ago · 0 comments



guipadua commented 12 minutes ago

Owner



☐ Add new experiment file



guipadua added this to the **Sprint 1** milestone 11 minutes ago



guipadua referenced this issue just now

add experiment text

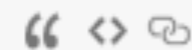
cb35fd2



Write

Preview

AA⁻ B *i*



Leave a comment

Attach files by dragging & dropping, [selecting them](#), or pasting from the clipboard.

Styling with Markdown is supported

Close issue

Comment

pull request

[Code](#) [Issues 0](#) [Pull requests 0](#) [Projects 0](#) [Wiki](#) [Pulse](#) [Graphs](#) [Settings](#)

Filters ▾

is:pr is:open


Labels

Milestones

New pull request

☐ 0 Open ✓ 1 Closed

Author ▾ Labels ▾ Milestones ▾ Assignee ▾ Sort ▾



There aren't any open pull requests.


Use the links above to find what you're looking for, or try [a new search query](#). The Filters menu is also super helpful for quickly finding issues most relevant to you.


master branch (base) will receive changes from experiment (compare) branch

[Code](#) [Issues 0](#) [Pull requests 0](#) [Projects 0](#) [Wiki](#) [Pulse](#) [Graphs](#) [Settings](#)


Comparing changes



Choose two branches to see what's changed or to start a new pull request. If you need to, you can also [compare across forks](#).


 base: master ▾ ... compare: experiment ▾ ✓ Able to merge. These branches can be automatically merged.



[Create pull request](#) Discuss and review the changes in this comparison with others. 

[1 commit](#) [1 file changed](#) [0 commit comments](#) [1 contributor](#)

 Commits on Jan 13, 2017

  [guipadua](#) add experiment text [cb35fd2](#)

 Showing **1 changed file** with **1 addition** and **0 deletions**. Unified Split

1  experiment.txt [View](#) 

... @@ -0,0 +1 @@

1 +Experimental file.

No commit comments for this range

Request a Review

add experiment text #1

[Edit](#)

 **Open** [guipadua](#) wants to merge 1 commit into `master` from `experiment`

 Conversation 0

 Commits 1

 Files changed 1

+1 -0 



guipadua commented just now

Owner



hey, can you check if it's ok and approve?

  add experiment text

cb35fd2

  guipadua requested a review from **moiz28** just now

Reviewers



 **moiz28**



Assignees



No one—assign yourself

Labels



None yet

Projects


None yet

Milestone



No milestone

Notifications

 **Unsubscribe**

You're receiving notifications because you authored the thread.

Add more commits by pushing to the **experiment** branch on [guipadua/soen341_tutorial](#).



Review requested

[Hide all reviewers](#)

Review has been requested on this pull request. It is not required to merge. [Learn more](#).



moiz28 was requested for review



This branch has no conflicts with the base branch

Merging can be performed automatically.

Merge pull request



You can also [open this in GitHub Desktop](#) or view [command line instructions](#).


Reviewer Comment, Approve or Request changes

add experiment text #1

Edit

 **Open** guipadua wants to merge 1 commit into master from experiment

 Conversation 0

 Commits 1

 Files changed 1

Changes from all commits ▾ 1 file ▾ +1 -0 ■■■■■■

1	■■■■■	experiment.txt
...	...	@@ -0,0 +1 @@
1		+Experimental file.

Unified Split

Review changes ▾

Submit your review

×

Review summary

Good job!

- ☒ **Comment**
Submit general feedback without explicit approval.
- ☐ **Approve**
Submit feedback and approve merging these changes.
- ☐ **Request changes**
Submit feedback that must be addressed before merging.

Submit review



Merge executed, pull request closed

add experiment text #1

[Edit](#)

Merged mehranhassani merged 1 commit into master from experiment 5 days ago

Conversation 1

Commits 1

Files changed 1

+1 -0



guipadua commented 5 days ago

Owner



hey, can you check if it's ok and approve?

add experiment text

cb35fd2

guipadua requested a review from moiz28 5 days ago



moiz28 approved these changes 5 days ago

[View changes](#)

Good job!



mehranhassani merged commit 38220f4 into master 5 days ago

[Revert](#)



Avoid bugs by automatically running your tests.

Continuous integration can help catch bugs by running your tests automatically.

Merge your code with confidence using one of our continuous integration providers.

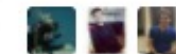
[Learn more](#)



Unsubscribe

You're receiving notifications because you authored the thread.

3 participants



Lock conversation



guipadua commented on cb35fd2 15 minutes ago

Owner



fixes #3



Pull request successfully merged and closed

You're all set—the experiment branch can be safely deleted.

[Delete branch](#)

Stay here if you have any questions