

Using Git

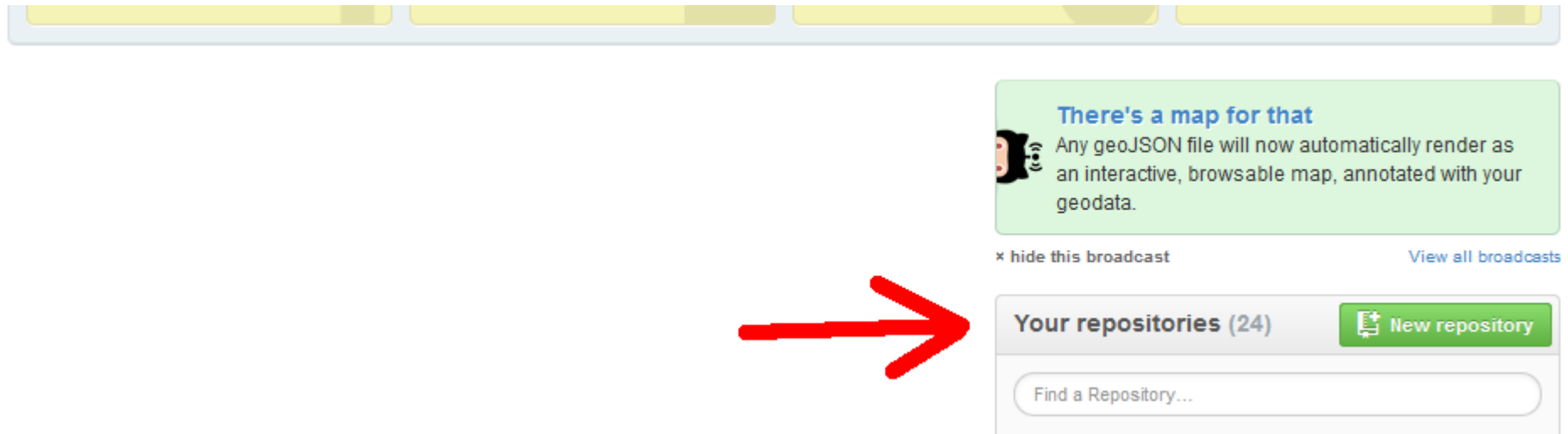
With GitHub for Windows or Mac

(This is for if you're not using the lab machines)

- Creating a new Project Repository
- Sharing the Repository with the instructor(s)
- Downloading Repository from server to harddrive
- Adding new files
- Creating a commit
- Pushing to/Syncing with the server
- Pulling new changes

1. Creating a new Project Repository




- From <https://github.com/>, scroll down until you see the green New repository button under the Your repositories section. Click the button.



1. Creating a new Project Repository

- On the Create a New Repository page, fill out the following:
 - Repository Name: CS201
 - Description: Optional
 - **Select Private** radio button
 - If it asks for a credit card, you haven't been activated as a student account yet. See week 1 slides
 - **Check** Initialize this repository with a README
 - From the dropdown box, select C++ as the language


1. Creating a new Project Repository

 Owner:  rjmfff / Repository name: CS201L 


Great repository names are short and memorable. Need inspiration? How about **hairy-octo-tribble**.

Description (optional)

☐  **Public**
Anyone can see this repository. You choose who can commit.

☒  **Private**
You choose who can see and commit to this repository.

☒ **Initialize this repository with a README**
This will allow you to `git clone` the repository immediately.

Add .gitignore: C++ 

Create repository

1. Creating a new Project Repository

- You will need to create an additional repository if you're in the CS 201 Lab.
 - CS 201
 - CS 201 L

2. Sharing your Repositories

- For CS 201, you will need to share your repository with Rachel.
- For CS 201 L, you will need to share your repository with Imrul and Rachel.

2. Sharing your Repositories

- From your Repository website,
https://github.com/YOUR_USERNAME/CS201
Click on the Settings button.

2. Sharing your Repositories

The screenshot shows a GitHub repository page for 'rjmfff / CS201'. The repository is marked as 'PRIVATE'. At the top, there are buttons for 'Pull Request', 'Unwatch', 'Star' (0), and 'Fork' (0). Below these are tabs for 'Code', 'Network', 'Pull Requests' (0), 'Issues' (0), 'Wiki', 'Graphs', and 'Settings'. A red arrow points to the 'Settings' tab. The 'Code' tab is active, showing a 'No description or homepage.' message. Below this are buttons for 'Clone in Windows', 'ZIP', and 'HTTP/SSH' links. The SSH link is 'https://github.com/rjmfff/CS201.git'. To the right of the links is a 'Read+Write access' button. Below the links are tabs for 'branch: master', 'Files', 'Commits', 'Branches' (1), and 'Tags'. The 'Files' tab is active, showing a list of files: '.gitignore' and 'README.md', both committed 'a minute ago'. The commit is labeled 'Initial commit [rjmfff]'. The top right of the file list shows '1 commit'.

PRIVATE rjmfff / CS201

Pull Request Unwatch Star 0 Fork 0

Code Network Pull Requests 0 Issues 0 Wiki Graphs Settings

No description or homepage.

Clone in Windows ZIP HTTP SSH https://github.com/rjmfff/CS201.git Read+Write access

branch: master Files Commits Branches 1 Tags

CS201 / 1 commit

Initial commit

rjmfff authored a minute ago latest commit ed48ed41ae

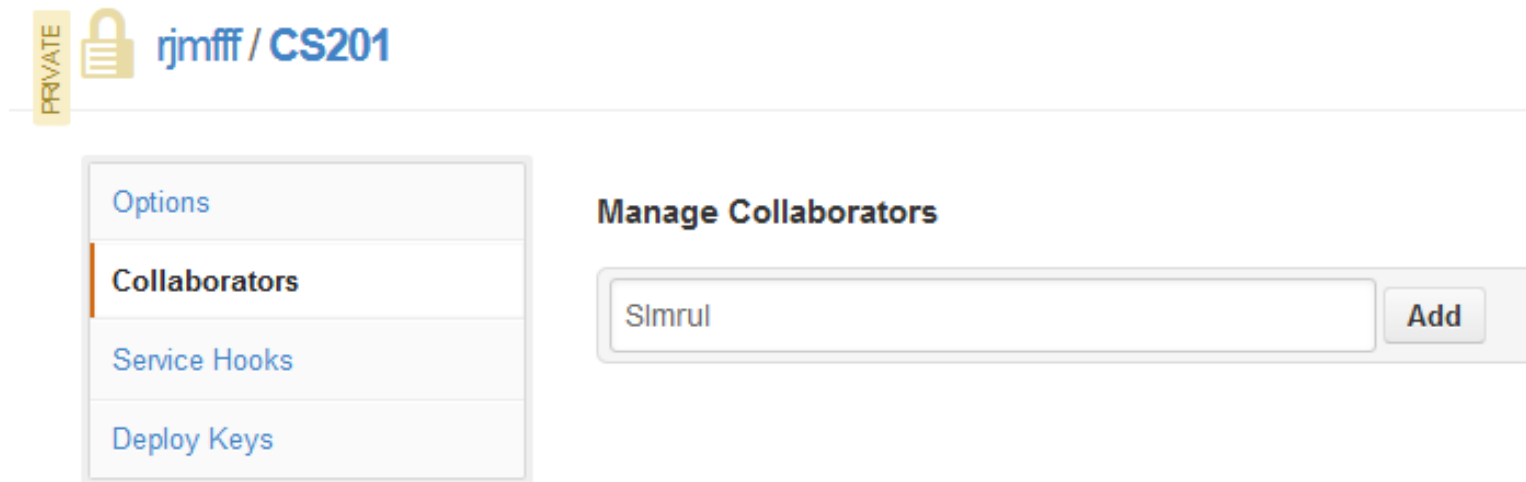
.gitignore	a minute ago	Initial commit [rjmfff]
README.md	a minute ago	Initial commit [rjmfff]

README.md

2. Sharing your Repositories

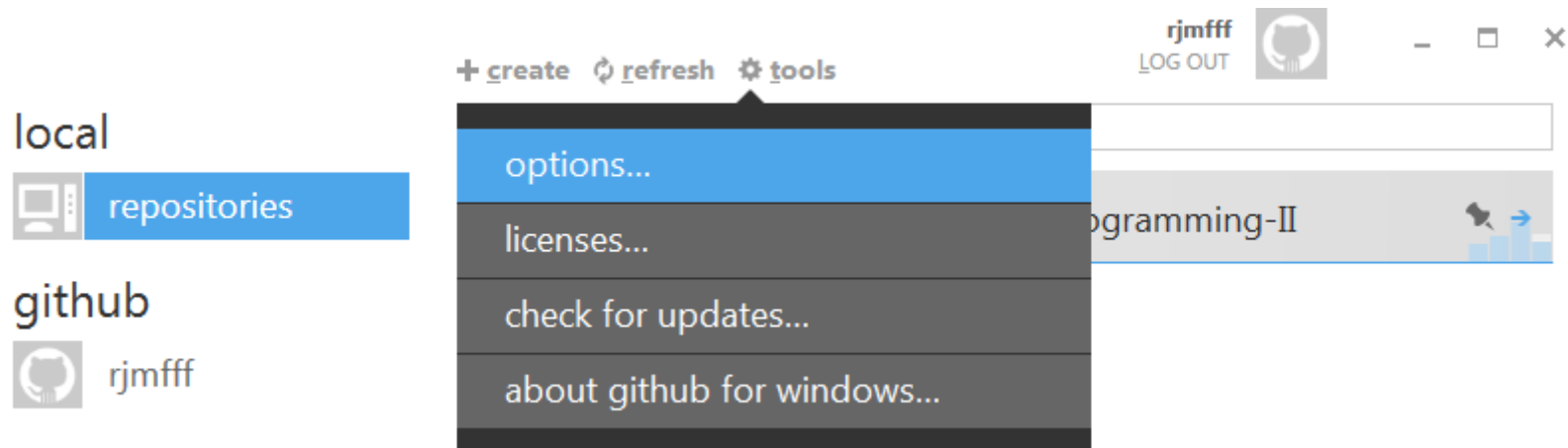
- From the Settings page, click on the Collaborators tab.
- In the Collaborators tab, enter our IDs:
 - RJMFFF for Rachel (CS 201 and CS 201 L)
 - Simrul for Imrul
 - Usernames are not case-sensitive
- Click on the Add button.

2. Sharing your Repositories



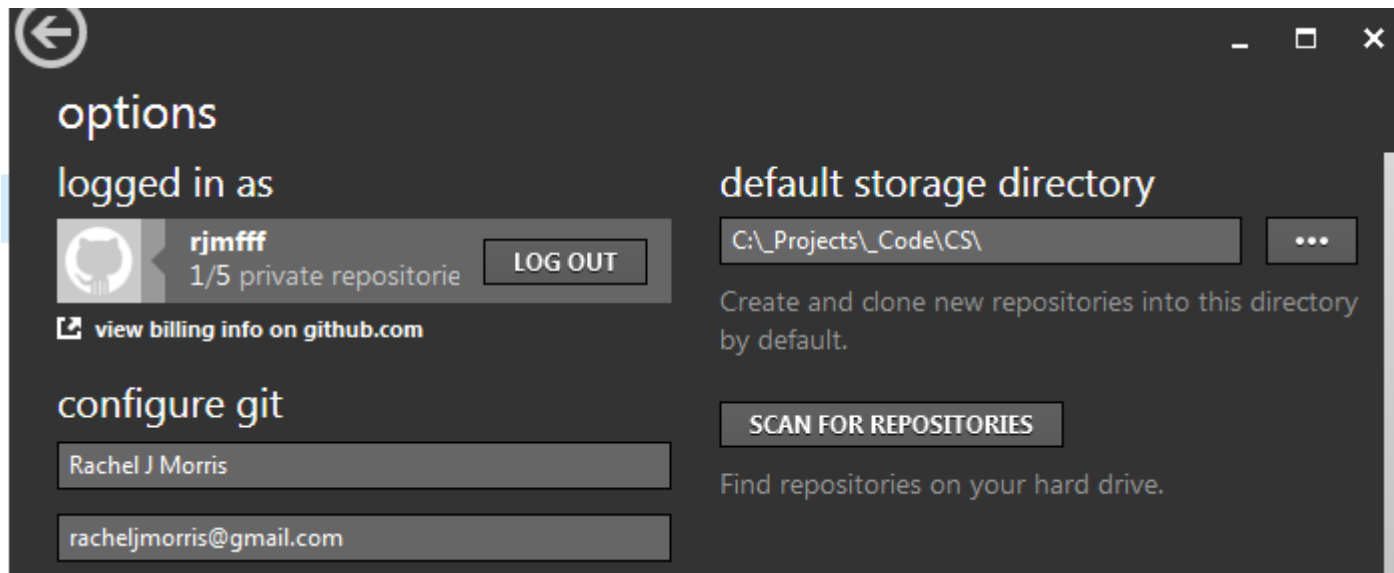
3. Setting up GitHub for Windows/Mac

- Install GitHub for Windows/Mac and log into the client.
- From the main page, click on the tools button and select options....



3. Setting up GitHub for Windows/Mac

- Set the default storage directory to the location you prefer. This will also be the folder we create our C++ projects within.
- Click update when done.



4. Downloading your Repository

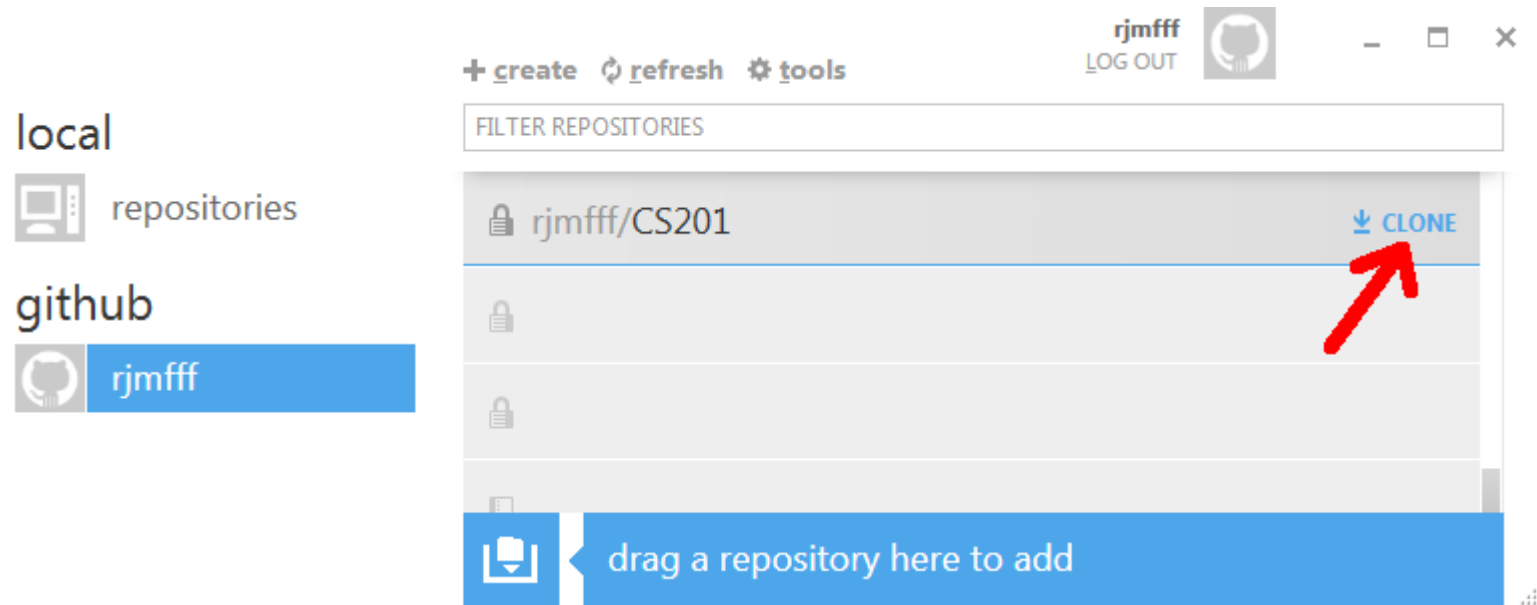
- The repository is currently only on the web server. To add and change files, you need to pull it down to your local machine.
- You will modify files on your harddrive, and when you're done with a change, push them back to the server.

4. Downloading your Repository

- Log into GitHub for Windows (or Mac) on your computer.
- Select your username under the github section on the left.

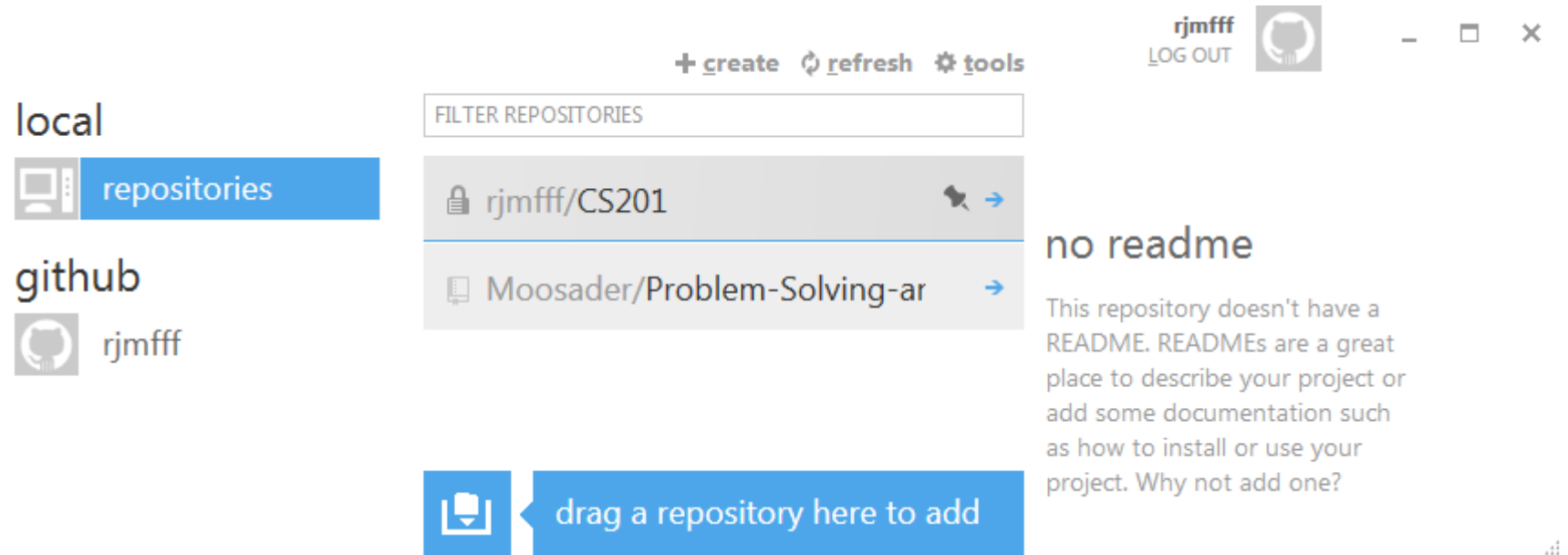
4. Downloading your Repository

- Click on the Clone button next to your repositories.



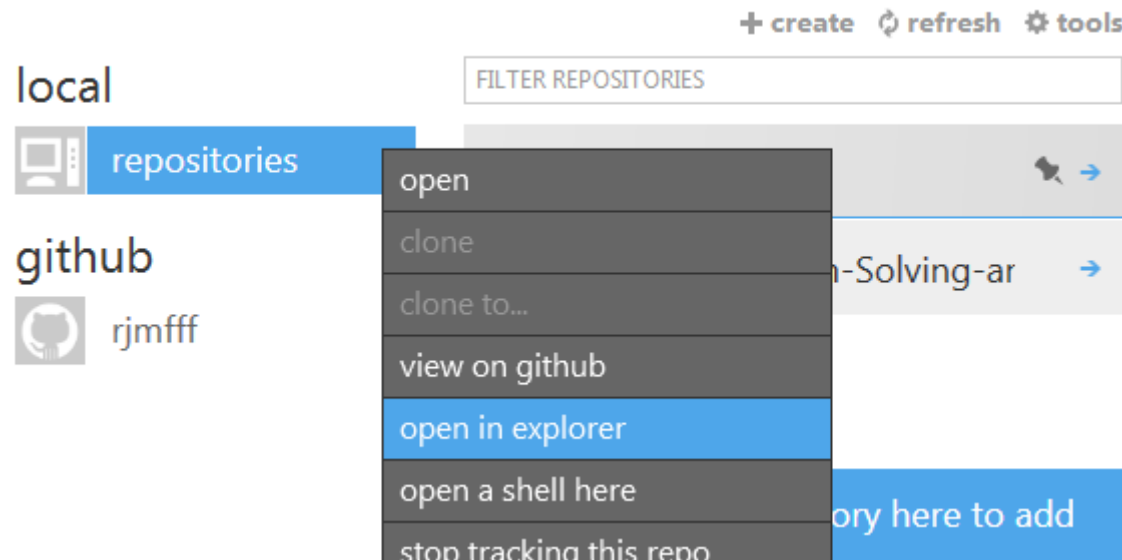
4. Downloading your Repository

- Your repository will now show up under the local section when you click repositories.



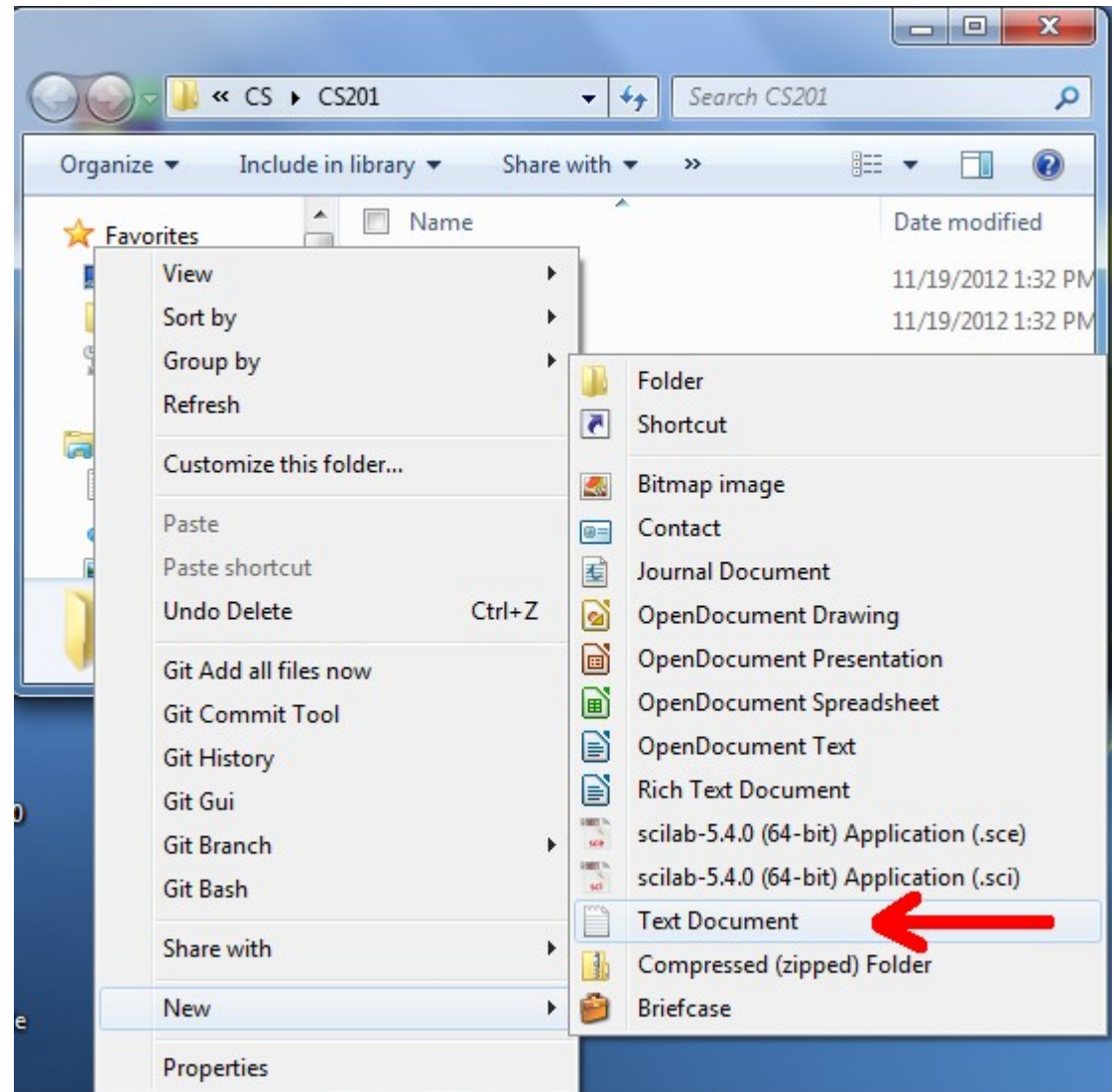
5. Adding a test file

- Right-click on your CS201 Repository and select open in explorer.



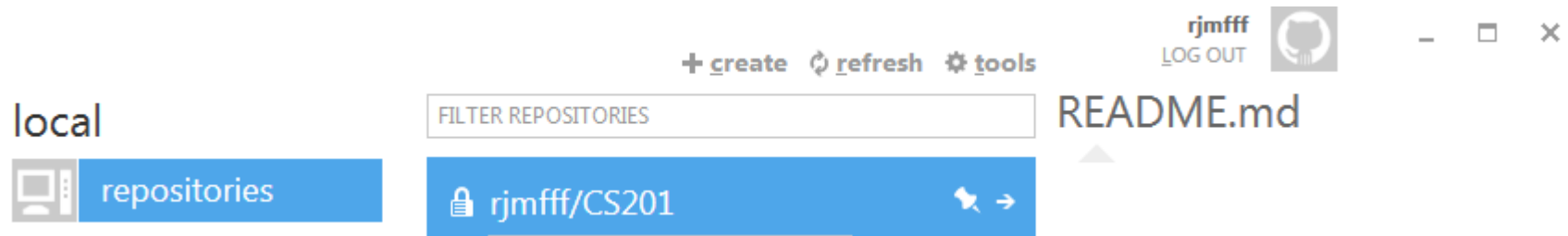
5. Adding a test file

- Add a new text document.



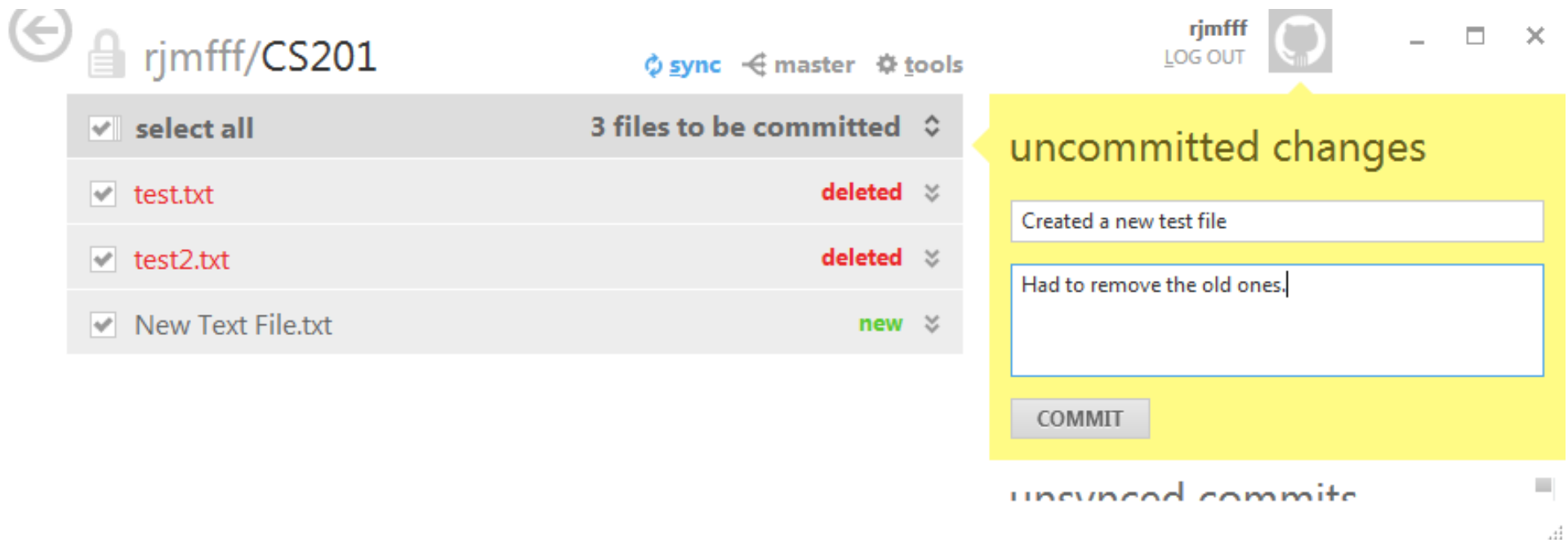
5. Adding a test file

- Go back to your GitHub client and double-click on the Repository name.



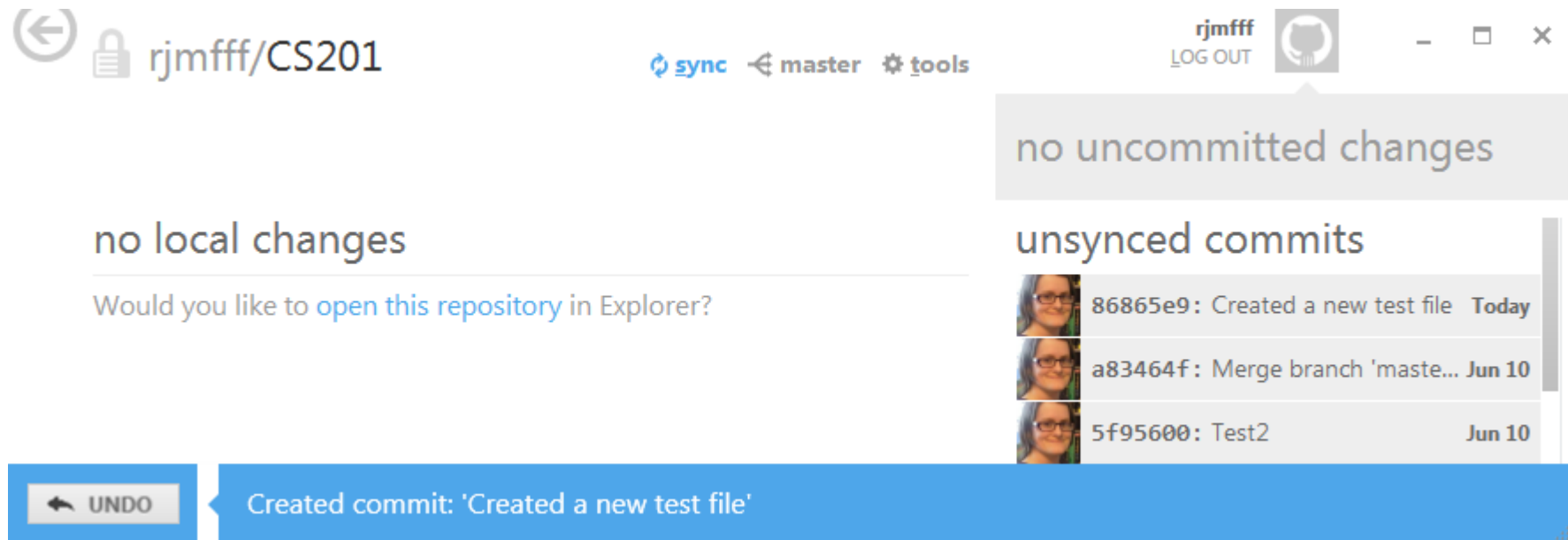
5. Adding a test file

- The client will automatically detect any file changes. In the yellow region, enter a COMMIT MESSAGE, and an optional description if you want.



5. Adding a test file



- Click commit and the left section will clear out.
- On the right, you will see “unsynced commits”. These are changes you have *committed*, but are not on the server yet.









6. Viewing changes




- You can click on a specific commit to see any changes that were made.


6. Viewing changes

  rjmfff/CS201


 sync  master  tools

 **Rachel J Morris**
86865e93d0c5d5d72dc7bae9...  revert commit  roll back this commit


Created a new test file   github 
Had to remove the old ones.

New Text File.txt new 

old	new
...	... @@ -0,0 +1 @@
	1 +whee
1	2 \ No newline at end of file

test.txt deleted 





old	new
...	... @@ -1 +0,0 @@
1	-Hi there
2	1 \ No newline at end of file

test2.txt deleted 

old	new
-----	-----

no uncommitted changes

unsynced commits

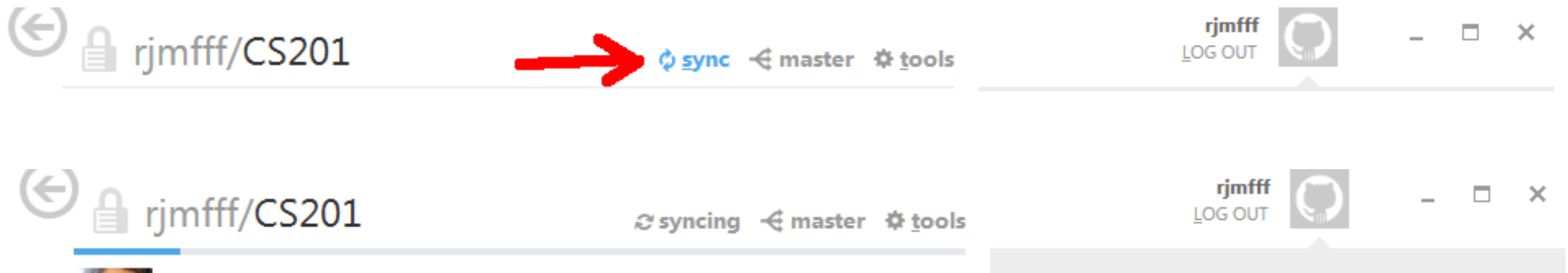
	86865e9: Created a new test file	Today
	a83464f: Merge branch 'master' of...	Jun 10
	5f95600: Test2	Jun 10
	3bd1520: Test Commit	Jun 10

history

no commits

7. Pushing your changes to the server

- Click on the sync button to push your changes to the server.



7. Pushing your changes to the server

- Your changes will now be visible on the webpage.

The screenshot shows a GitHub repository page for 'rjmfff / CS201'. The repository is marked as 'PRIVATE'. At the top, there are buttons for 'Pull Request', 'Unwatch', 'Star' (0), and 'Fork' (0). Below these are tabs for 'Code', 'Network', 'Pull Requests' (0), 'Issues' (0), 'Wiki', 'Graphs', and 'Settings'. The 'Code' tab is selected, showing a message 'No description or homepage.' and options to 'Clone in Windows', 'ZIP', 'HTTP', and 'SSH' with the URL 'https://github.com/rjmfff/CS201.git'. There is also a 'Read+Write access' button. Below the clone options, there is a 'branch: master' dropdown and tabs for 'Files', 'Commits', 'Branches' (1), and 'Tags'. The 'Files' tab is selected, showing a list of files: '.gitattributes' (4 days ago, Test Commit [Moosader]), '.gitignore' (just now, Merge? [Moosader]), 'New Text File.txt' (6 minutes ago, Created a new test file [Moosader]), and 'README.md' (27 minutes ago, Initial commit [rjmfff]). The repository has 6 commits.

PRIVATE **rjmfff / CS201** Pull Request Unwatch Star 0 Fork 0

Code Network Pull Requests 0 Issues 0 Wiki Graphs Settings

No description or homepage.

Clone in Windows ZIP HTTP SSH `https://github.com/rjmfff/CS201.git` Read+Write access

branch: master Files Commits Branches 1 Tags

CS201 / 6 commits

Merge?		
Moosader authored just now		latest commit 30ef2d15fd
.gitattributes	4 days ago	Test Commit [Moosader]
.gitignore	just now	Merge? [Moosader]
New Text File.txt	6 minutes ago	Created a new test file [Moosader]
README.md	27 minutes ago	Initial commit [rjmfff]