

How to set up a git environment

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Step 1: Download git for windows

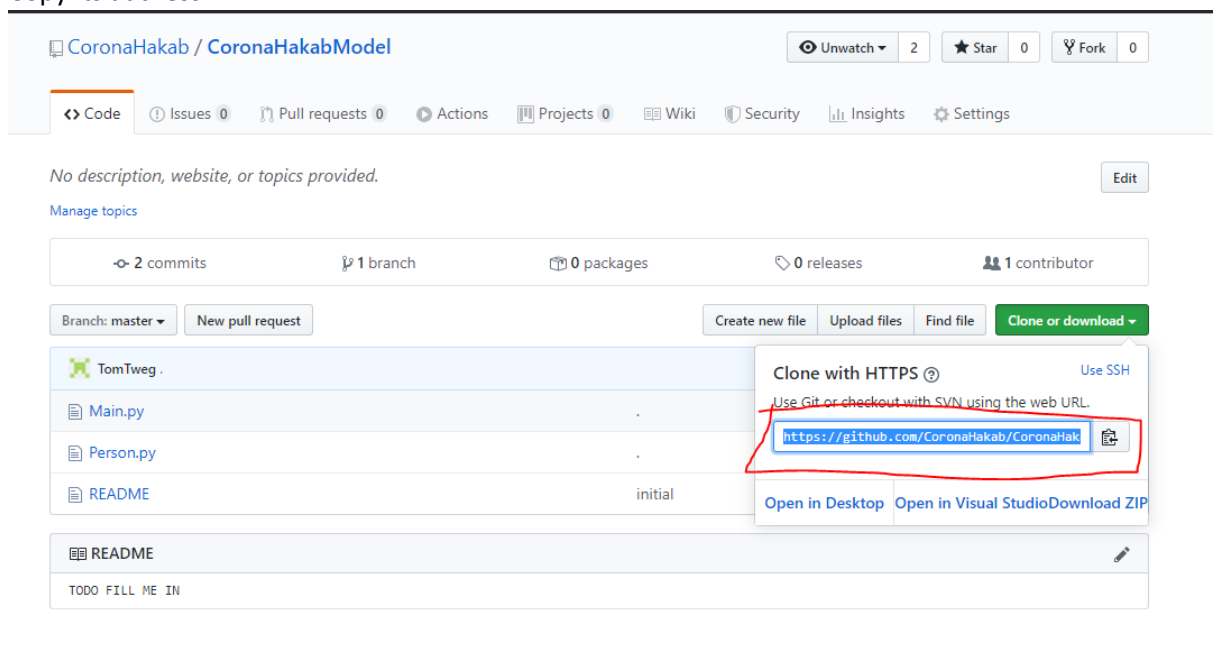
1. Download the git for windows from here: <https://gitforwindows.org/>
2. Install it (use the default settings if you're not sure about anything)

Step 2: Download TortoiseGit

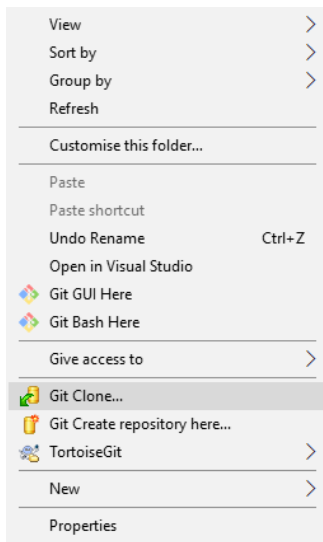
3. Download from here: <https://tortoisegit.org/>
4. Install using default settings
5. If it asks you for name and email, you don't have to enter any values that actually exist, they are never checked.

Step 3: Clone a repository

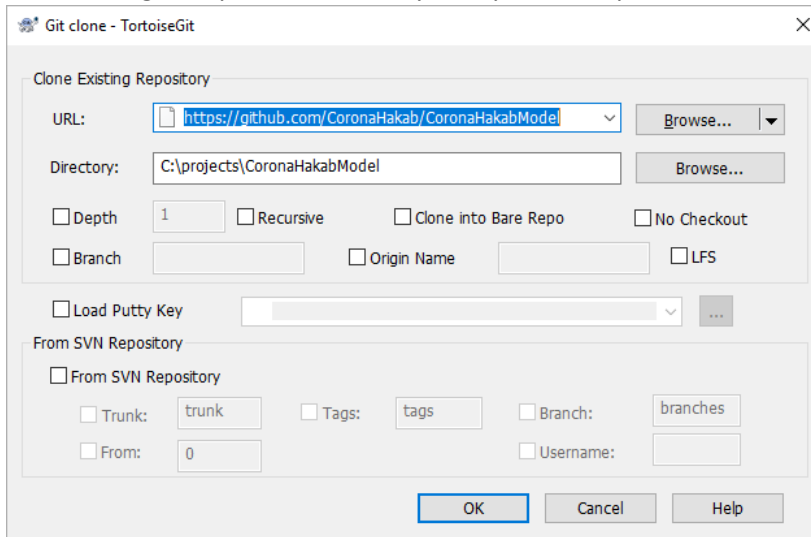
6. Pick a Git repository (like, for example CoronaHakabModel at <https://github.com/CoronaHakab/CoronaHakabModel>)
7. Copy its address:



8. Pick or create a folder on your computer where to download the project.
9. Right click on an **empty space** in your folder and click on "Git Clone"



10. In the dialog box, paste in the link you copied in step 7, and click OK.



11. All the project's files are now in that folder!

12. If you just want to run & read, you're done. Otherwise read on.

Step 4: Set up a Github profile

13. Go to <https://github.com/join?source=header-home>

14. Fill out the data to create an account

15. You can now join teams and contribute to projects

Step 5: Contribute

16. In order to contribute, you need to either be registered as a contributor to the repository, or fork the repository

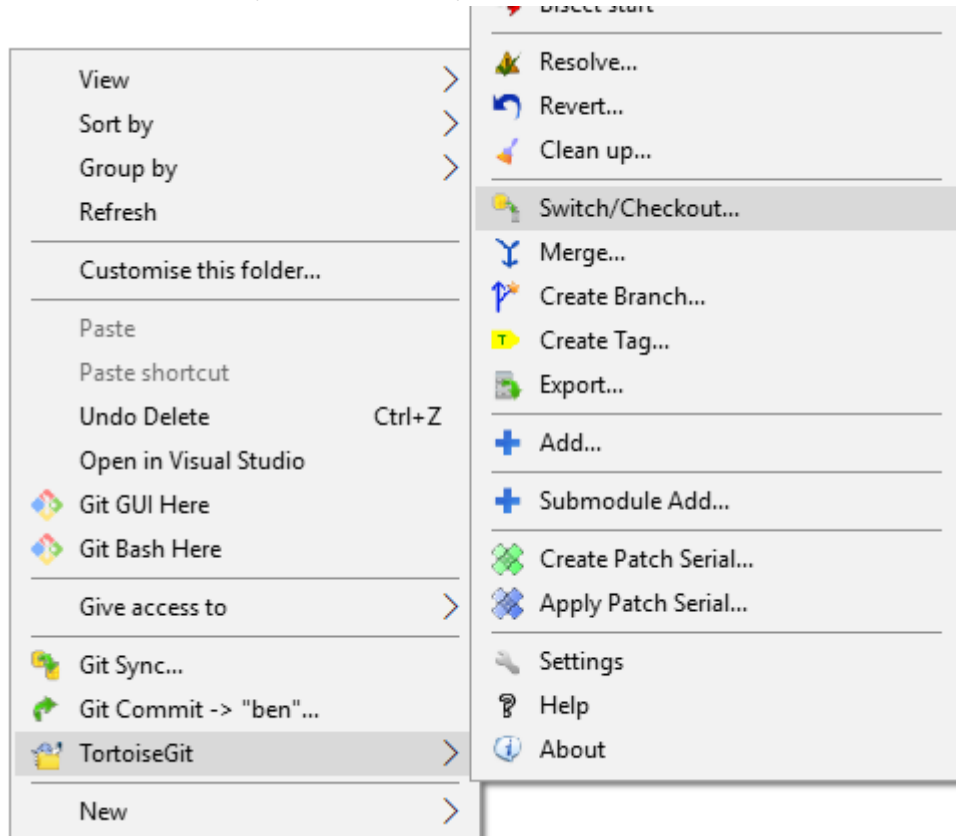
Option A: Get write permissions for the repo and create your own branch

17. If you want to directly contribute to the repository, you must request permissions from the owner of the repository. Contact the owners and ask for them to add you as a writer.

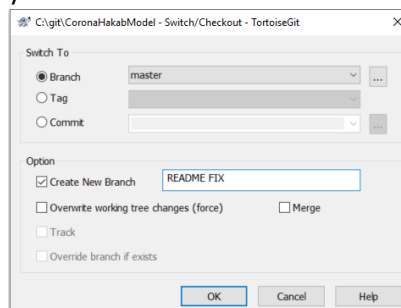
18. Once they agree and send you an invitation, check your email and accept it.

19. You can now create your own branch to work in. Branches are like local copies of the project you can write in without disturbing (or being disturbed by) other users.

20. In the TortoiseGit menu, click on “Switch/Checkout”



21. Check “Create New Branch”, and enter a name for your new branch (it’s recommended that you name the branch after the feature that you plan to add). Click OK.

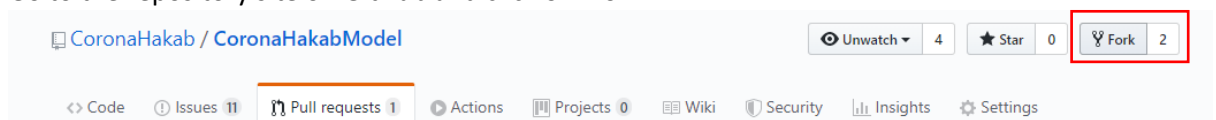


22. You are now in your very own branch!

Option B: Fork the repository

23. When forking a repository, you essentially copy it, along with all its history, into your own github account.

24. Go to the repository site on GitHub and click on “fork”



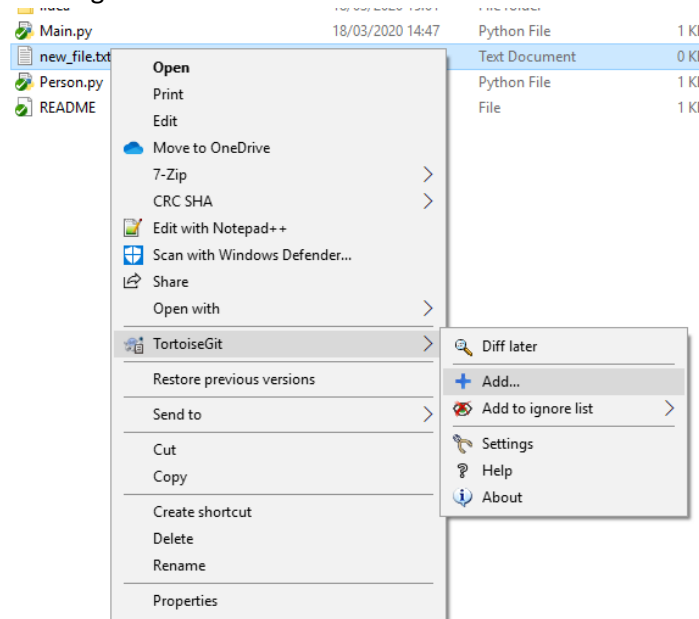
25. You now have your very own copy of the repository. Delete the local clone of the original repository, and re-clone the new repository just as you did in step 3.

Step 6: Add your contribution

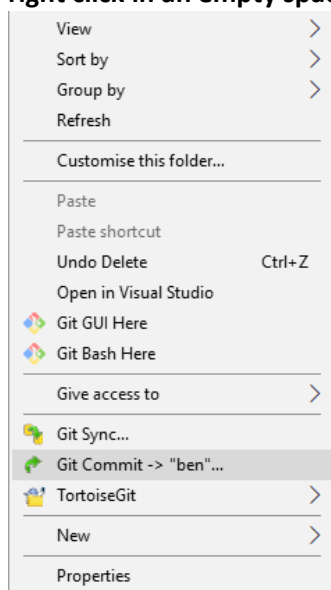
26. In your local files, you can now add your contribution to the code. Work in your local files that you cloned.

Step 7: Commit and push your contribution

27. Now that you have something to contribute, you need to mark your changes (commit) and upload them (push). Make sure to Git Add all the new files you created:
- Git Add: by default, git will ignore all new files it encounters in a folder, to add the file to the next commit and prepare it for uploading, right click it and click on `tortoisegit->add`.

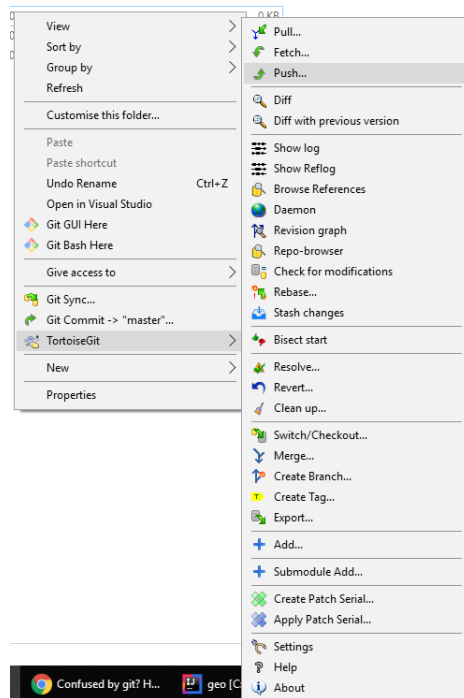


28. Now, you will have to commit the changes locally before you can upload them. To do this, **right click in an empty space at the root directory** and click on git commit

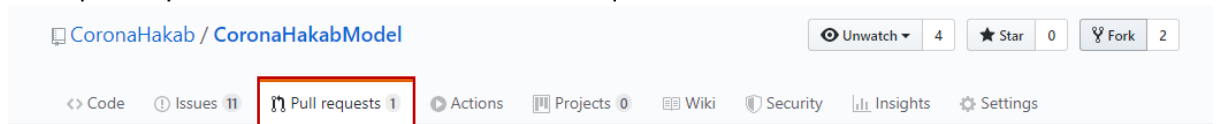


In the window that opens, you can review the changes you've performed and will have to set a commit message, to document what you've changed. It's good practice to commit after every new feature or change. Click on "commit"

- a. If you see a “Commit & Push” or a “ReCommit”, click on the little arrow next to them and choose “Commit”
29. Now you will have to push your changes to the remote repository and upload it. To do this, click on tortoisegit->push.



30. Now that you pushed your changes to your branch/fork, you need to open a pull request. A pull request is you asking the repository’s master branch to “pull” your branch/fork. Go to the repository site on GitHub and click on “Pull Requests”



31. Click on “New pull request”
32. Depending on step 5:
 - a. If you have a branch in the local repository, set the comparison branch to be your branch.
 - b. If you forked the repository, click on “compare across forks”, and set the head repository to be your fork.
33. Click on “Create pull request”. In the next page you can write some comments on your pull request such as what you added.
34. In general, someone should look at the features you want to add before they are pushed into the master branch. Click on the gear icon next to “Reviewers” on the right-hand side of the page and choose some contributors to request they look over your commits.
 - a. This step is optional, but you should contact contributors to review your commit and never, ever, accept your own pull request without someone else looking it over.
35. Click on “Create pull request”
36. A reviewer will check your commit, ensure that it works and is valid, and will merge it.