Program Startup Guide

Whenever you have a problem, ***Google*** *it First.*

Lecturer: Huiyu Weng

Presented by TA Group 2015

Regulations

Attendance

Wednesday 18:00 to 20:00 p.m. @ SEIEE Building 4-311
Every one will fill in a seat table. Your seat cannot be changed once selected. We are going to check your attendance by checking the seat table every week. Your attendance may or may not lead to the punishment, which depends on your performance in the Program Test. Full attendance will grant you extra credit if you screw up the Program Test. We do not force students with good programming background to show up every week. But you must hand in your homework before DDLs and perform well enough in the Program Test.

Team

You will team up to review code and discuss issues among your team. Normally a team with no more than 7 students is fine. Each team will have a team leader whose responsibility includes but not limited to disseminating notifications, collecting homework and reporting issues to TA. Team leader can get extra credit for good service to the team.

Dev Environment

C++ IDE

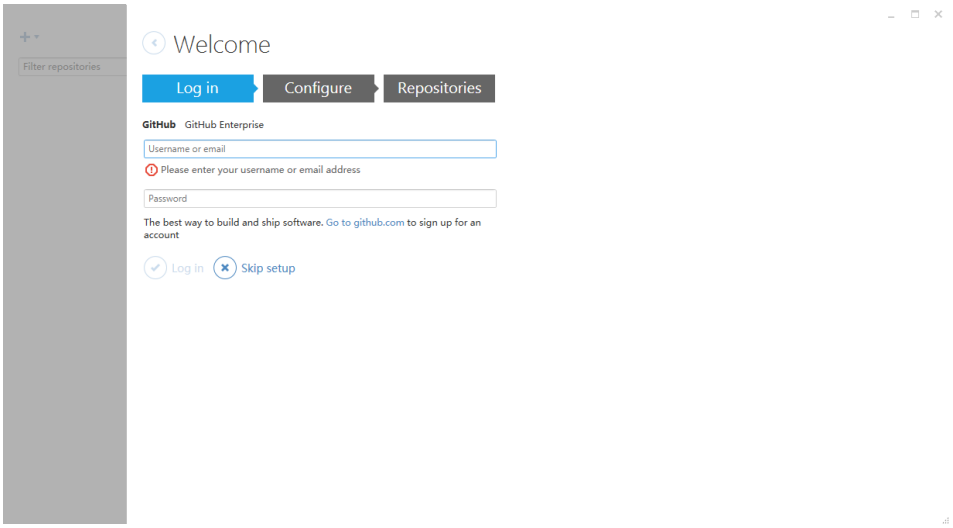
We recommend devc++ as your C++ IDE for short code on Windows systems. Other IDEs like Codeblocks and Visual Studio are also good, but be sure not to use any library not included in standard C++ (http://www.cplusplus.com/reference/). If you work on Visual Studio, please create the project with "create empty project" option to avoid including Windows specified libraries.
For Mac users, Xcode is fine.

Github

In this course, we will use Github to cross-review your code among team members. If you have no idea about it, please go to wiki http://en.wikipedia.org/wiki/GitHub. It is very likely that you still don't know what Github can do after you read this but it's OK. Please follow the instruction to setup your Github account. You can refer to https://help.github.com/ if you have any problem.

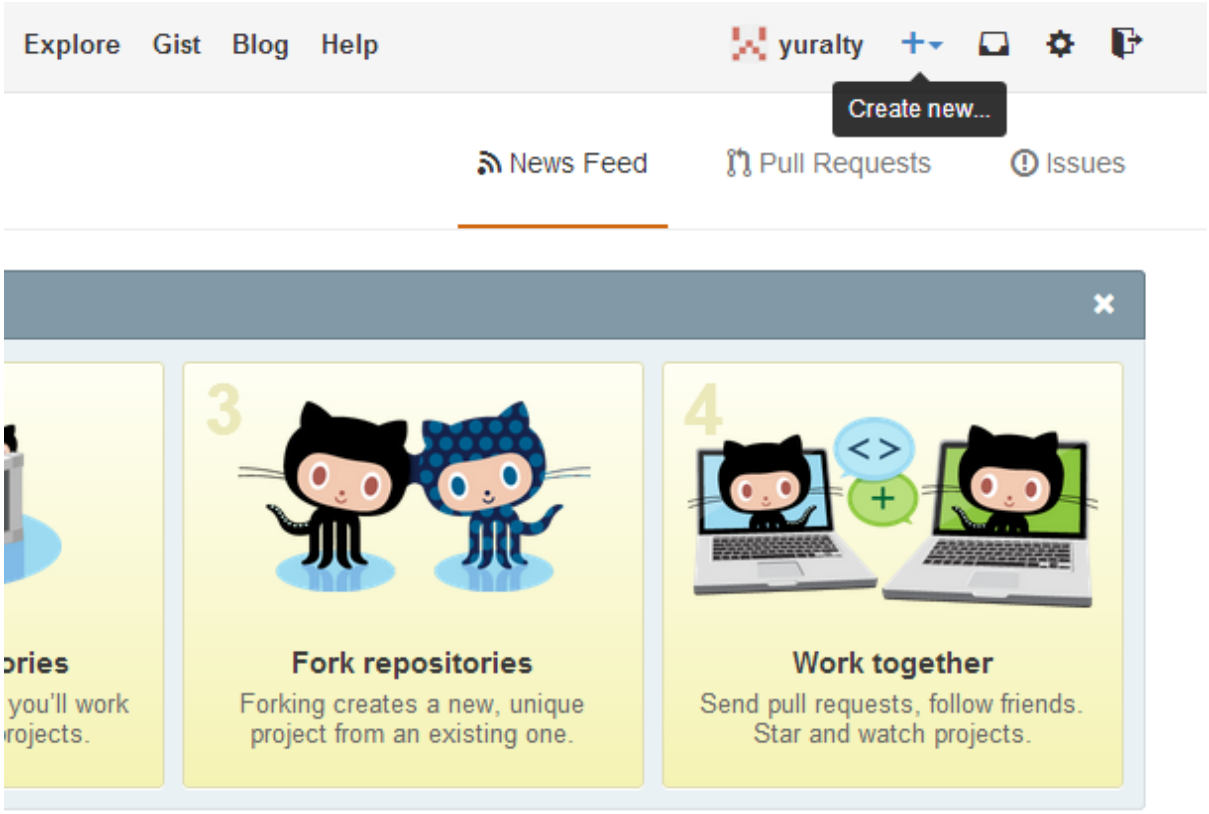
Setup Git

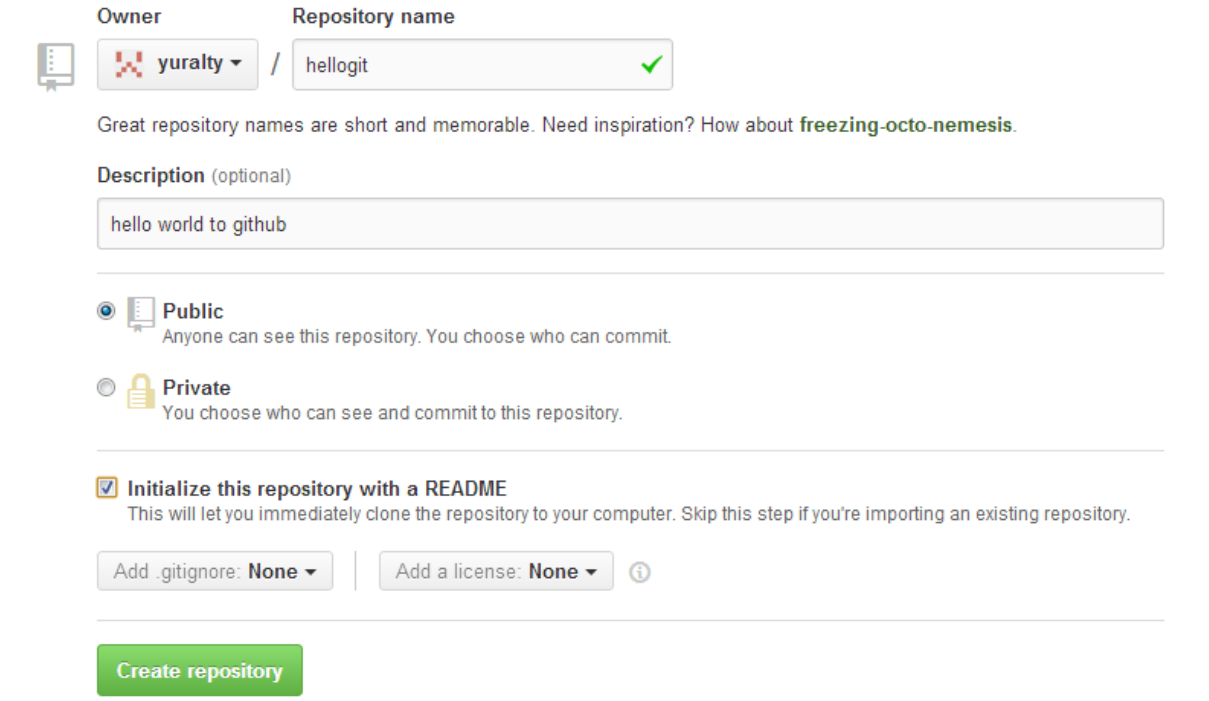
- Download Github client for Windows: https://windows.github.com/
- Install it (This will take some time. Go ahead to sign up or read the wiki.)
- Sign up https://github.com/
- After installation is complete, login with your account. (*Important: this will generate an SSH key, which is necessary to access your Github from your desktop client. For Linux users, you need to manually generate an SSH key)



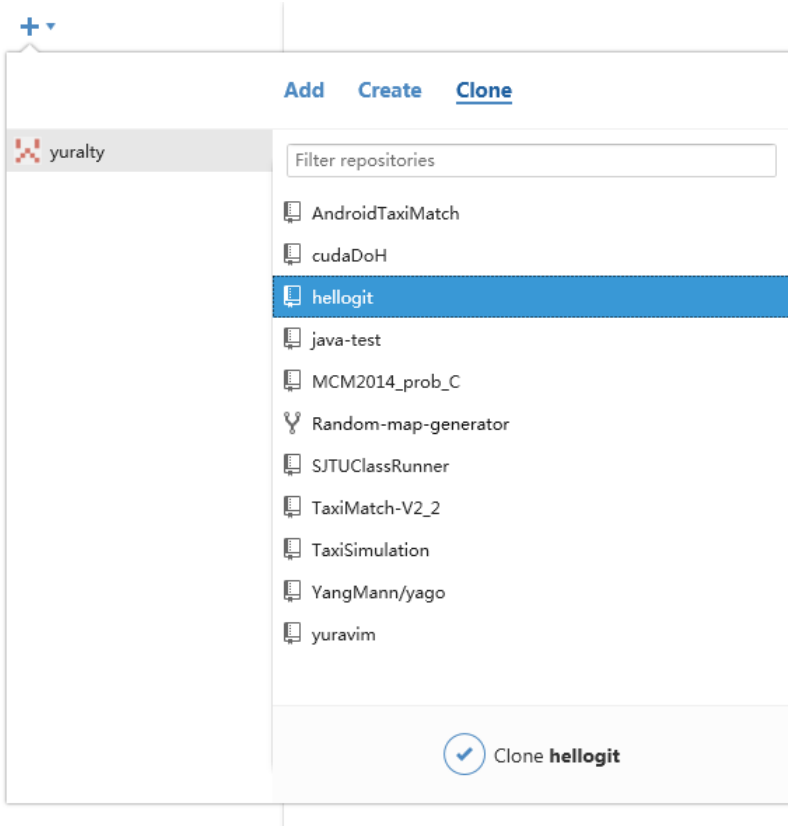
Create your first repository

- Create a repo on Github website



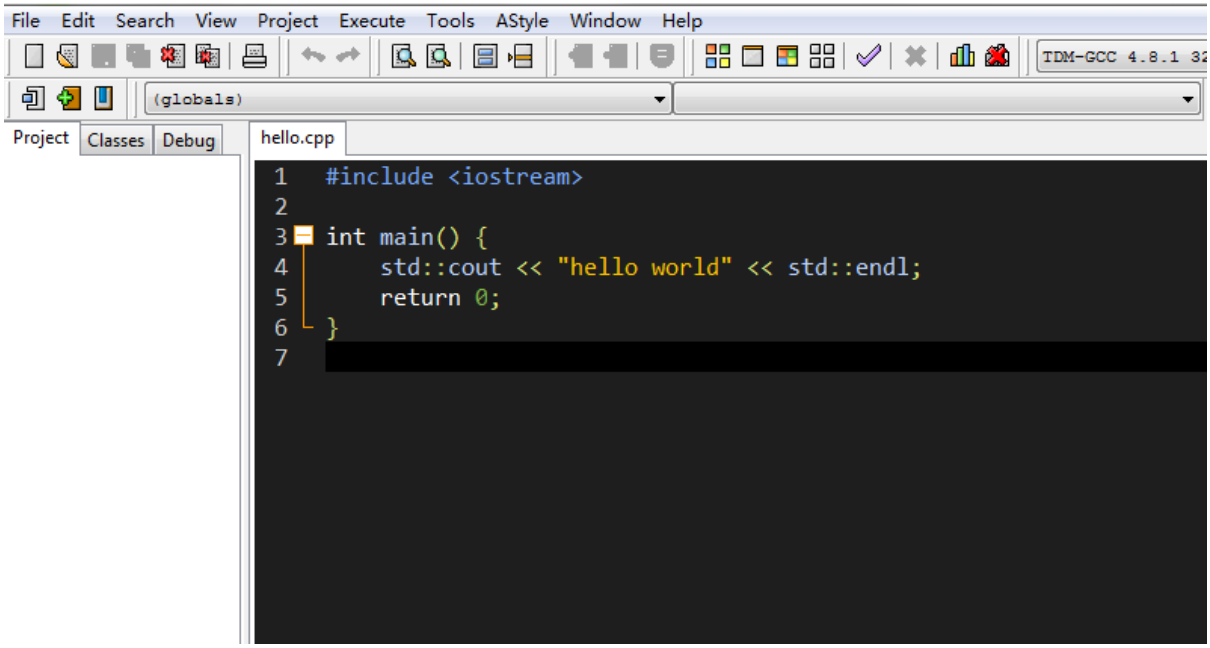


- Clone it to your local repo in your client

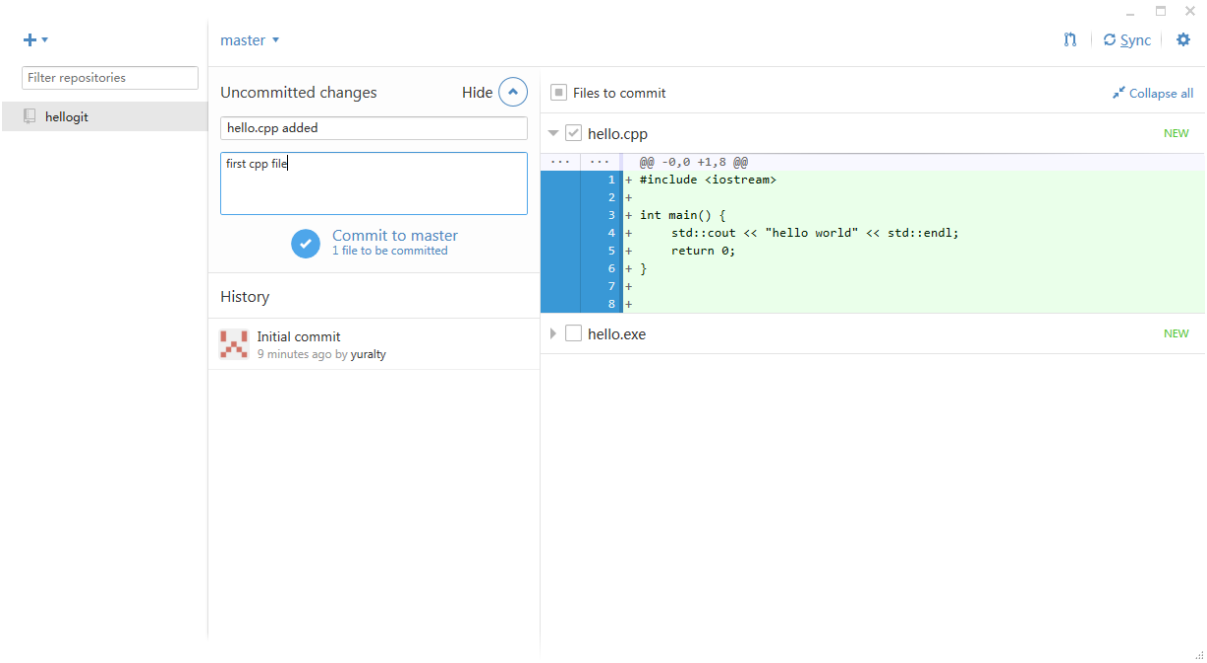


Start working on hello world

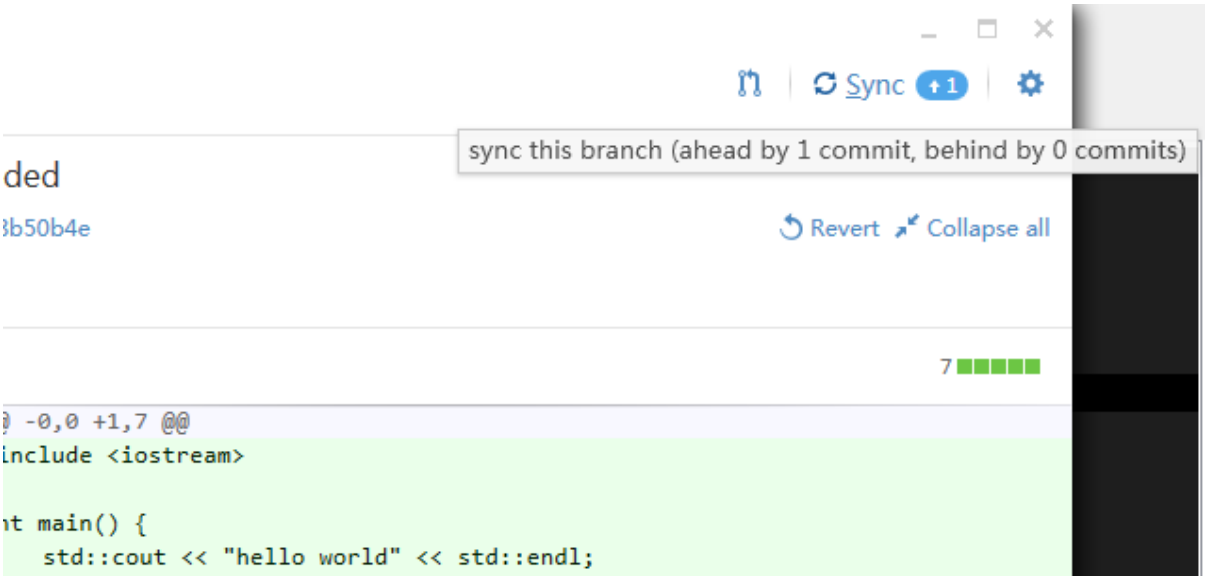
- Write a hello world .cpp file, compile, and run. Be sure to save the files in your local repo, which by default is C:\Documents\Github\<your repo name>\.



- In your client, you can see your changes in your local repo. You can now commit your changes to your repo. Usually we do not commit the binary files (.exe file in Windows) to our repo.



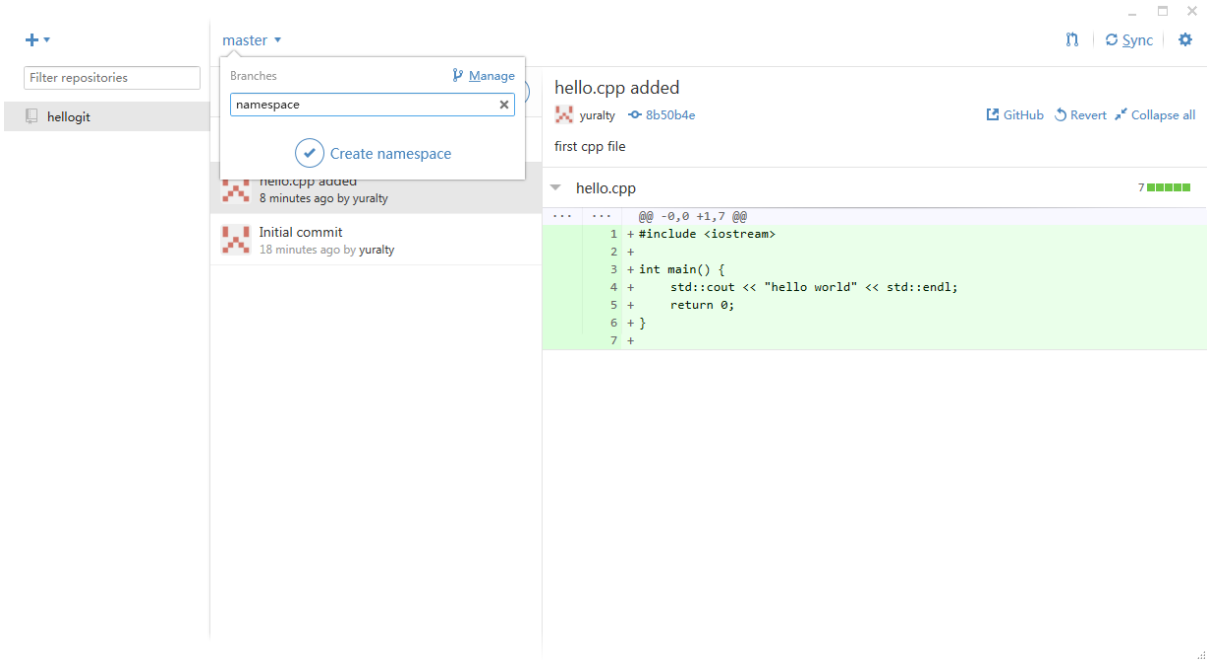
- Commit only make changes to your local repo, to push it to your remote repo, click sync button.



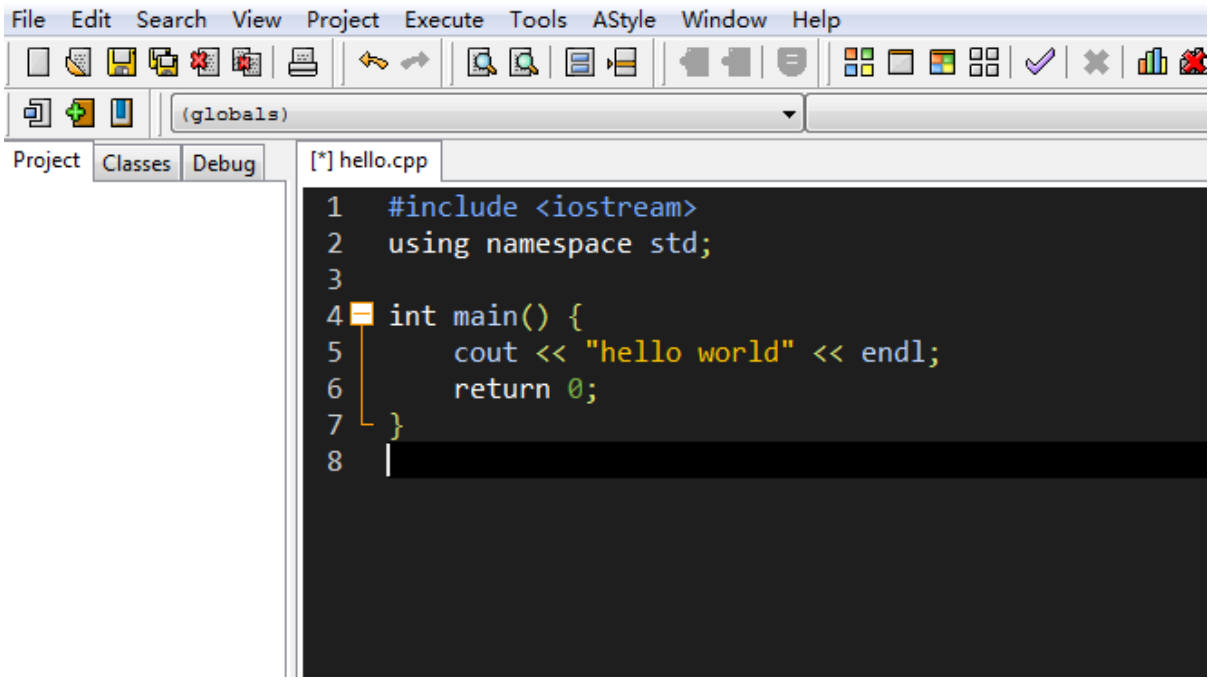
Play around branches

Branch is the way you can make change to your code without worrying about corrupting it. Next you will learn how to create, merge and discard a branch.

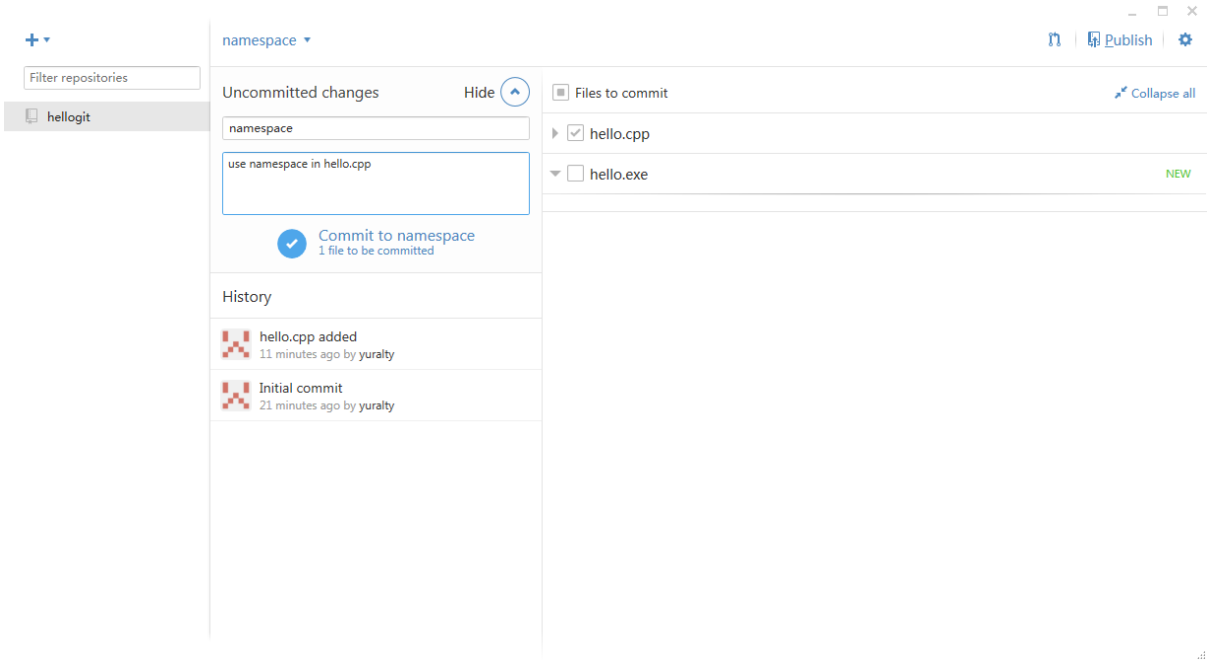
- Create a new branch from your client.



- Make some change in your code.



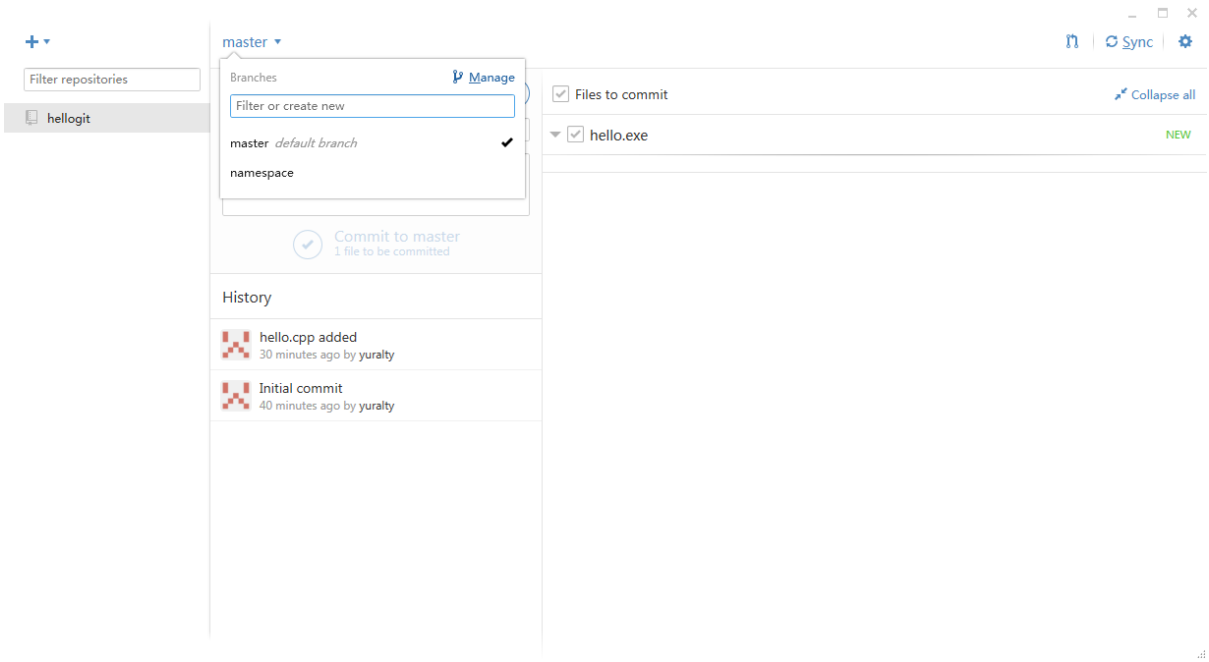
- Commit your changes and publish your branch to the remote repo.



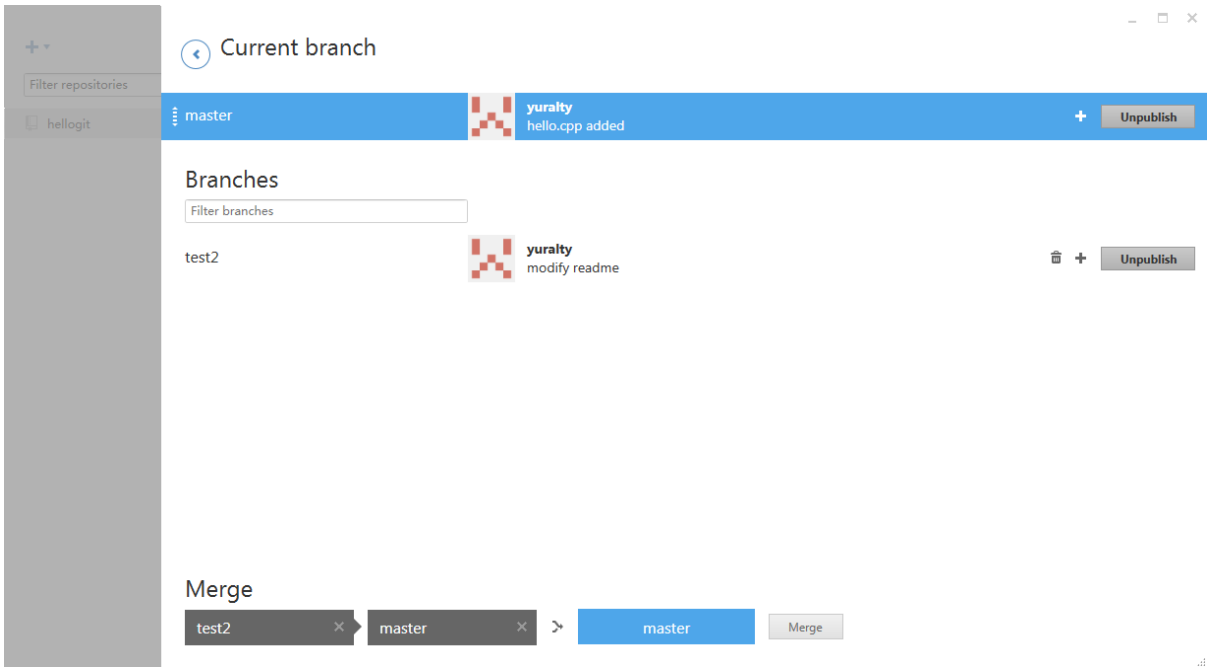
Now you can switch among branches and reopen your file to see the difference.

If you don't want this branch anymore

- Switch to your master branch.



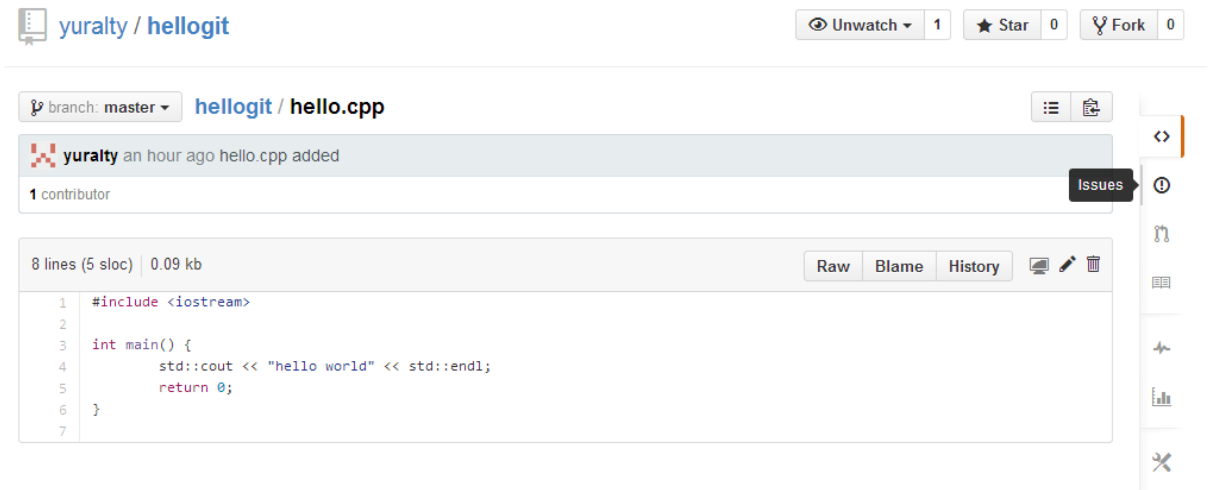
- In “manage” tab, delete your new branch.

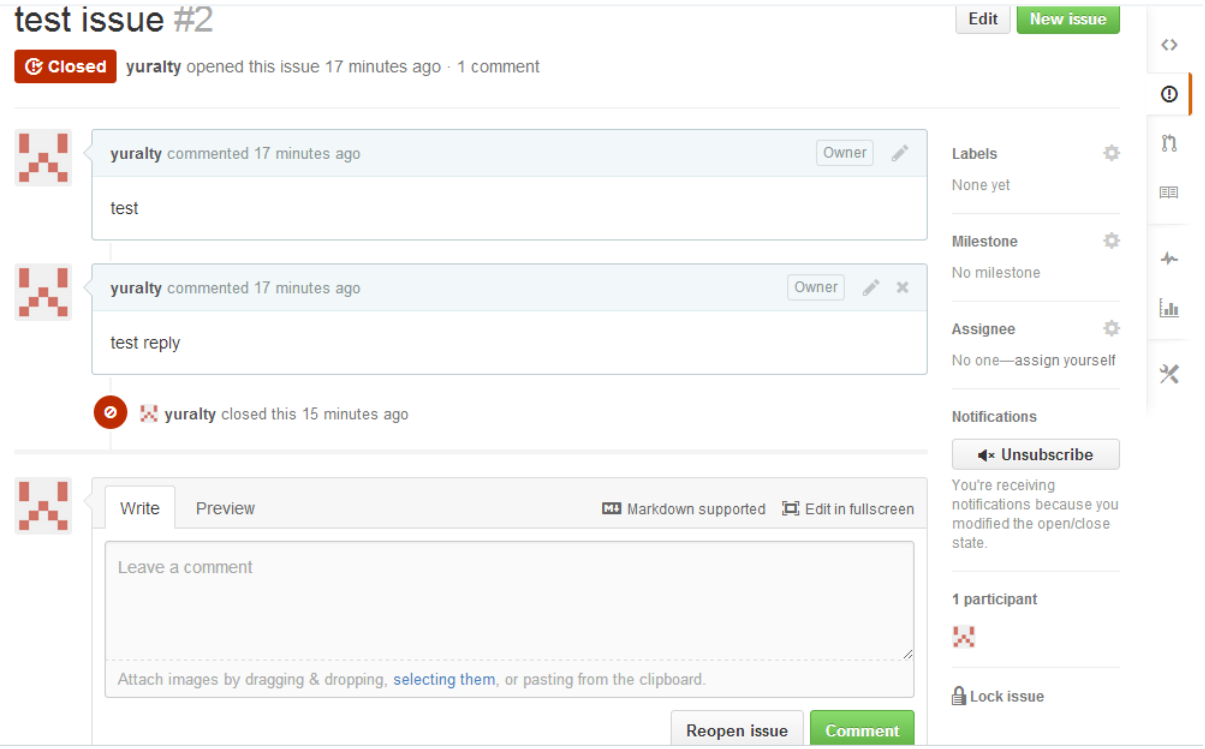


If you are satisfied with your changes, you can merge your new branch to your master branch at the same place.

Discuss issues

One feature of Github is to create issues on others’ code. We will leverage this feature to do cross-review among team members. Here is an example of how to create, close and reopen issue.




test issue #2
Edit
New issue
Closed
yuralty opened this issue 17 minutes ago · 1 comment
yuralty commented 17 minutes ago
Owner
test
yuralty commented 17 minutes ago
Owner
test reply
yuralty closed this 15 minutes ago
Write
Preview
Markdown supported
Edit in fullscreen
Leave a comment
Attach images by dragging & dropping, selecting them, or pasting from the clipboard.
Reopen issue
Comment
Labels
None yet
Milestone
No milestone
Assignee
No one—assign yourself
Notifications
Unsubscribe
You're receiving notifications because you modified the open/close state.
1 participant
Lock issue

Homework

1. Setup your Dev environment and Github account.
2. Write a hello world, and push it to your Github repo.
3. Select a team leader. The team leader should fill in an info list of your team members and send it to your TA.
4. Every one open a test issue in someone else's hello world repo.