

# Matetials: Git and GitHub

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Everything is optional except that marked with **(Required)**. The information is updated on December 3, 2017.

## 1 Git

### 1.1 Installation and configuration

For windows, there're Git for Windows and it's fully functional. However, I personally recommend UNIX-like terminal emulation in Windows, like MSYS2 and Cygwin.

For Linux, git can always be retrived from the distribution repository. For example, `apt` can be used for Ubuntu.

For Mac, this page offers a detailed guide.

### 1.2 Resources

#### 1.2.1 Tutorials

Xuefeng Liao's Git Tutorial is recommended for beginners in Git. The outline is based on this tutorial.

Git officially offers the book *Pro Git*, which is also a great tutorial for Git. Note that .pdf format and Chinese version are also provided. This tutorial covers more topics than Xuefeng Liao's tutorial, and therefore first 5 sections are sufficient.

Further information can be found in Git's official document, where videos and a cheat sheet of Git commands are provided.

#### 1.2.2 Websites

Questions about Git may be found in Stack Overflow.

## 1.3 Assignment

**Question 1 (Required)** Initialize a Git repository for assignments locally. Add your assignments to the repository and commit your changes. Keep using Git to arrange assignments.

## 2 GitHub

### 2.1 Installation and configuration

GitHub is fully accessible through GitHub.

GitHub for Windows also exists, but it can do no more than a terminal (and Git).

### 2.2 Resources

### 2.3 Tutorials

GitHub itself provides a brief introduction to GitHub which I highly recommend. GitHub Guides covers more topics which you may find helpful at some point.

A section in Xuefeng Liao's Git Tutorial introduces GitHub.

Section 6 of *Pro Git* also introduces GitHub.

#### 2.3.1 Websites

You may search Stack Overflow for GitHub question.

Directly raising an issue on the seminar repository is always welcomed.

#### 2.3.2 Assignment

**Question 2 (Required)** Register a GitHub account. Upload your repository of assignments onto GitHub. Keep pushing your commits to GitHub.

**Question 3 (Required for those responsible for topics)** Finish the following:

- (1) Fork the seminar repository.
- (2) Clone the forked seminar repository.
- (3) Make commits to the forked seminar repository to add your outlines and materials.
- (4) Make pull request to the original repository.
- (5) Set an issue on the original seminar repository to collect suggestions.

## 2.4 Remarks

**The name of repository have been changed into ToolsSeminar, please rename your forked repository!!!**

**Once you are familiar enough with GitHub, contact me for collaborator access of the seminar repository.**

Any modifications of outline and materials are welcomed. Contact the author and push if you want to extend the topic of perform modifications.

The file `.gitignore.template` is a template for `.gitignore` file. You may use `cp .gitignore.template .gitignore` to create your own `.gitignore` file. Adding new entries to the template is welcomed.

Further information about `.gitignore` can be found in Xuefeng Liao's Git Tutorial and Git's reference.