

# Setting up your Development Environment: Git

## Objectives and Outcomes

At the end of this lesson you should have set up Git and Node.js on your computer.  
At the end of this lesson, you will be able to:

- Set up a Git repository and perform basic Git operations
- Set up and use online Git repositories
- Use Node-based modules to perform basic operations.

## Setting up your Development Environment

### Software Requirements

1. **Text editor of your choice:** Any text editor that you are already familiar with can be used for editing the project files. I will be using Visual Studio Code (<https://code.visualstudio.com/>) as the editor of choice in this specialization. You may also consider other editors such as Brackets (<http://brackets.io/>), Sublime Text (<http://www.sublimetext.com/>), or Atom (<https://atom.io/>).
2. **Browser of your choice:** You may use your preferred browser. I will be using Chrome as the browser in all the exercises. All the exercises and assignments in this course have been tested using Chrome v. 46. Please note that not all browsers may support all the HTML5 features to the same extent. You might encounter problems when using other browsers. I strongly urge you to use the latest Chrome browser for the exercises and assignments in this course so that any problems are minimized.
3. **Command line shell:** Familiarity with the command-line shell will be essential for the exercises. In Windows a cmd window or power shell with admin privileges would be needed. On a Mac or in Linux, a terminal window can be used. Please get familiar with the "sudo" command in OS X and Linux.
4. **Files required for the exercises:** We will provide additional starter files for the exercises wherever needed. Links to download the files will be provided inline in the **exercise instructions** that follow each exercise video. Please download the files provided there, if any, before beginning the exercise.

**Note:** Please remember to retain the folders and all the files that you create in the exercises. Further exercises will build upon the files that you create in the preceding

*exercises. DO NOT DELETE the files at the end of the exercises, unless otherwise instructed. You may wish to set up your exercise folder as a Git repository and commit the files to the repository at the end of each exercise.*

## Setting up Git

### Objectives and Outcomes

In this exercise you will learn to install Git on your computer. Git is required for using all the remaining Node.js and Node based tools that we encounter in the rest of the course. At the end of this exercise, you would be able to:

- Install Git on your computer
- Ensure that Git can be used from the command-line or command-prompt on your computer
- Set up some of the basic global configuration for Git

### Downloading and Installing Git

- To install Git on your computer, go to <https://git-scm.com/downloads> to download the Git installer for your specific computing platform.
- Then, follow the installation steps as you install Git using the installer.
- You can find more details about installing Git at <https://git-scm.com/book/en/v2/Getting-Started-Installing-Git>. This document lists several ways of installing Git on various platforms.
- Installing some of the GUI tools like GitHub Desktop will also install Git on your computer.
- On a Mac, setting up XCode command-line tools also will set up Git on your computer.
- You can choose any of the methods that is most convenient for you.

### Some Global Configuration for Git

- Open a cmd window or terminal on your computer.
- Check to make sure that Git is installed and available on the command line, by typing the following at the command prompt:

```
git --version
```

- To configure your user name to be used by Git, type the following at the prompt:

```
git config --global user.name "Your Name"
```

- To configure your email to be used by Git, type the following at the prompt:

```
git config --global user.email <your email address>
```

- You can check your default Git global configuration, you can type the following at the prompt:

```
git config --list
```

## Conclusions

At the end of this exercise you should have Git available on the command-line of your computer.