**Learning Node**

**Installing Node**[**https://nodejs.org/en/download/**](https://nodejs.org/en/download/)has the links for Windows, Macs, and Linux machines – so you should be able to install it on your own machine.  
  
Then we are going to verify that node has been installed and also that npm (the node package manager) has been installed . The easy way to do this is by asking for their versions --- i.e. (see below) in our command prompt we will type node -v and then   
npm -v (see below). **1. How to do it  
 a.** If you are on a **Windows** machine, any of these tutorials will do:   
i. <http://blog.teamtreehouse.com/install-node-js-npm-windows>   
ii. [How to Install Node Js in Windows 10 & set VsCode for NodeJs as an IDE - Node Js Tutorial 2019 - YouTube](https://www.youtube.com/watch?v=31dRWcPcvhM)   
iii. [Node JS Installation - YouTube](https://www.youtube.com/watch?v=JINE4D0Syqw) will step you through the process.  
iv) [Install Node JS & Visual Studio Code - Mac & Windows - YouTube](https://www.youtube.com/watch?v=4UYe5aMHXfs) for Macs and then Windows

If you just do it from the downloads page at nodejs.io then be sure to check that you want choclatey and let all the updates etc. run. Also, it will install some build tools for VS Code. It will take about 10 minutes and may require a re-boot.  
  
Either way, you need to get a ***command prompt*** *to test it.* If you have never done this, click on the Window icon on your desktop or hold down the Windows key and type **r.** Either way, in the box which appears, type ***cmd*.**

The YouTube tutorial recommends installing also Node.js Modules Intellisense (for auto completion) and the Node.js Extension Pack and the VS Code for Node.js Development Pack. You will probably also want to turn on the live terminal if you haven't done so already. (Ctl+shift+~ also opens the terminal, but doesn't have it always open, the way you can set it up from the extensions.)  
  
At minute 10:00 of tutorial ii) he shows you how to get to a folder in the terminal of VS Code with drag-and-drop.(This is a VS Code trick – so also works on Macs).   
He types **npm init** there to set up package.json --- more on that later.  
Note that he makes his first app be the file index.js ------ it is much more common to name it app.js  
Note that this is a **js** file and that **node assumes any file is a js file so you can type (in the right folder) node index. (or node app as the case may be.)**  
  
b. If you are on a Mac, There is a tutorials for installing Node on **Macs** at <https://www.youtube.com/watch?v=Imj8PgG3bZU&index=2&list=PL6gx4Cwl9DGBMdkKFn3HasZnnAqVjzHn_>   
  
There is information on installing Node for various flavors of **Linux**, using the package manager, at <https://nodejs.org/en/download/package-manager/> and you will find many others with a search for *install node.js linux*. The Felix’s tutorial at <http://nodeguide.com/beginner.html> begins with the installation.  
  
**Node is already installed on the Simmons CS VPM.** You can click on the black command line icon and when it opens up type ***node*** . To be sure it is running you can type   
*console.log(“Hello World”)*

**2. Checking the PATH**If you are on Windows 7 or 10 then the advice at <http://stackoverflow.com/questions/27344045/installing-node-js-and-npm-on-windows-10> will solve any problems with the PATH environment variable.

**3. What you get when you install node  
 a. To get to node you need to be in the shell or at the command line interface.** In Windows you can get there by typing the windows key + r and then typng cmd.

**b. If you type npm** (at any directory) you will see a list of the ***modules*** (small packages)   
 that are automatically installed with node.  
  
 **c. To use node you need to navigate to the folder where your files will be.  
 If your folder has a simple javascript file named app.js then you run it by typing** node app.js  
  
 For example, your app.js file might have the code:

console.log(“Hello World!);  
  
 **NOTE:** In code for node it is standard to put in the semi-colons at the end of each   
 line (which is best practices for JS anyway to avoid automated semi-colon insertion.)