

# Introduction Lab

Congratulations! You and your partners have just been hired by Northwind Traders, a restaurant supplier to build the warehouse management system (WMS) for their burgeoning business!

They've been

1. keeping track of inventory,
2. shipping product,
3. and receiving new product into their small warehouse

all by hand! Their growth has taken them to the point where they need to automate.

Let's get started!

## Make sure node and npm are installed

1. Open a bash shell and run this command:

```
node --version
```

2. Did you see a version number? If so, you have npm installed and you can skip to "Make sure Angular CLI is Installed". If not, go to the next step.
3. Point your browser at <http://nodejs.org>
4. Click the download button on the main page. Choose the one recommended for most users; it will be the stable release.
5. Follow the instructions to install it on your machine. This will install both npm and node.
6. Rerun your node --version command to make sure it is installed alright. If you get command not found, you should probably reboot so make sure your PATH has been reread.

## Make sure Angular CLI is installed

7. Open a bash shell and run this command:

```
ng --version
```

8. Did you see a version number? If so, you have the Angular CLI installed and you can skip to "Make sure MongoDB is Installed". If not, go to the next step.
9. Open a bash shell as an administrator and run this command  

```
npm install --global @angular/cli
```
10. Rerun your ng --version command to make sure it has installed properly.
11. If it does, skip to "Make sure MongoDB is installed". If not, you'll need to add the installation directory to your PATH. That installation directory on Windows is `%APPDATA%/npm`. On MacOS, it is `/usr/local/bin/ng`.

## Make sure MongoDB is installed

12. Run this command:

```
mongod --version
```

13. Did you see a version number? If so, you have MongoDB installed and you can skip to "Download the starter files". If not, go to the next step.
14. Point your browser to [mongodb.com/download-center](https://www.mongodb.com/download-center). Choose to install MongoDB Community edition. Choose your OS and follow the instructions to install. One note, though: on step 3 **un**check "Install MongoDB Compass". We don't want that.
15. You may need to add the install directory to your path and restart.
16. Rerun your mongod --version command to make sure mongo installed properly.

## Download the starter files

17. Point your browser to the site your instructor gives you to download and install the starter files.

18. Take a look around the directory structure. You should see these directories:

instructions	Will eventually hold each lab's instructions
setup	Files and commands to load the database. Some code snippets.
webServer	The server-side code which is pre-written for you. Feel free to look and see how node, express, and mongo work together.

19. This is the root of your project. Please make a note of it here:

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## Install needed libraries

20. Open a bash shell and type this in  
`mongod`

This will start up the database server so we can load some data into it.

21. Open another bash shell and `cd` to the `setup` directory

22. Run this command in the bash shell

```
./installLab.bash
```

This will install the libraries needed for the node/express/mongo web server.

## Testing the web server

23. Now start the web server. Open a new bash shell and `cd` to the `webServer` directory. Run this command:

```
node warehouseServer
```

It will tell you it is listening on a particular port, usually 3000.

24. Try a few of these addresses:

```
localhost:3000/api/products
```

```
localhost:3000/api/locations
```

```
localhost:3000/api/orders/10250
```

If you can see data, you are up and running! You can be finished with this lab.