Intro to AngularJS Lab

Now that we've got an idea of what Angular can do, let's install it as well as the other parts of its ecosystem.

Installing NodeJS & npm

1. Open a browser and go to http://nodejs.org
2. Hit the big install button in the middle of the page. Allow it to download and run the installation program. Follow the prompts through.
3. Put node in your PATH. Note: This may have already been done by the install program itself. So you can wait until after testing (next step) if you like.

On MacOS X & Unix	On Windows
• Edit $HOME/.profile • PATH=$PATH:/usr/local/bin/	• Go Control Panel - Advanced - Environment Variables • Add ";C:\Program Files\nodejs" to the PATH variable

Testing Node

4. Open a command window and type in "node". You'll see a command prompt.
5. Type in:

```
var x = "hello";
console.log(x + " world");
```

6. It is normal to see "undefined" a few times. But you should see "hello world". If so, NodeJS is installed and ready to go.
7. Hit ctrl-C to exit Node.

Installing MongoDB

8. Go to http://mongodb.org
9. Choose your OS and version and hit the download button. No need to join anything or provide any personal information.

On MacOSX	On Windows

• Make a directory like this:
`mkdir -p /usr/local/bin/mongodb`
• Unzip all the downloaded files to your new mongodb directory.
• Put mongo in your path in .profile:
`PATH=$PATH:/usr/local/bin/mongodb/bin`
• And make the data directory:
`mkdir -p /data/db`
	• Run the msi file following the prompts.
	• Go Control Panel - Advanced - Environment Variables
	• Add ";C:\Program Files\MongoDB\Server\X.X\bin" to the PATH variable where "X.X" is the mongoDB version.
	• And make the data directory:
	`md c:\data\db`

That should be it! Let's test it out.

Testing MongoDB

10. Open a new command prompt and type in *mongod*

It should show a bunch of messages to the command line and finally say that it is waiting for connections on a particular port. Keep it running in that window at all times throughout these labs.

11. In another window, type in *mongo*
12. From the Mongo prompt, type in *show dbs*
13. It should say there's a local database and give you a size. Verify that it does.

If these steps work, you've got MongoDB installed and running.

Downloading and installing the lab files

14. Your humble instructor will give you the lab files on a USB drive or web site. Get that file and unzip it to any directory you like. This will be your lab project directory. Write it down here: _____
15. Notice that there is a directory called 'setup' with scripts to load your database with data and to download/install all the library files we'll need for the labs.

On MacOS X & Unix	On Windows

• Get to a shell prompt in your setup directory
• cd to setup/unix
• Run the script like this:
`./installLab.bash`
	• Start - Find PowerShell - right click - Run as Administrator
	• cd to setup/Windows
	• Tell PowerShell you're okay with remote scripts. Type this into PowerShell:
	`Set-ExecutionPolicy remotesigned`
	• Run the script like this:
	`./installLab.ps1`

Testing the Lab Install

16. Let's make sure it worked. Do this from a command prompt:

```
mongo northwind
db.employees.find()
```

    You should see some employees. If so, you're on the right track.

17. If you go back to the root of your project directory, you'll see a folder called *node_modules*. Do a listing in that folder. You should see a few sub-folders like *express*, *passport*, and *gulp*.
18. Go back to the root and into the *app* folder. Hey, look! There's another *node_modules* folder. It should have *bootstrap*, *jquery*, and *angular*.
19. Lastly, open a command prompt, cd to your lab project directory and go:

```
node northwindServer.js
```

    It'll tell you that your web server is listening on a particular port.

20. Open your favorite browser (Chrome, Firefox, Edge, whatever) and point it to that address.
21. You should see the landing page of the web site. Have a look around the site. The data is all hardcoded, but the site should look good.

If all those things check out, we are ready to go. Let's learn how Angular works!