Express version 4 used in lesson

Web application framework for Node.js

Routing – core component of the framework

npm init for package.json

npm install express --save to install Express and add it to our package.json as dependency

Adding Express also creates node\_modules folder

sublime\_text to open files and create files in Windows command! Must add to Path in System Variables.

Nodemon and Node-Inspector: npm install nodemon -g, npm install node-inspector -g

Can run node app using ‘nodemon src/app’ (think of it as node cmd)

node-debug src/app.js to use Node-Inspector. Press play to start script execution and click on line of code to set breakpoint. Then we can see the scope of where the program is.

Use nodemon --debug src/app to allow Node process that runs our server to set up a debugger to listen on port 5858, allowing Node-Inspector to interact with the Node process.

nodemon --debug-brk src/app tells app to break on first ‘debugger’ (another way to set breakpoint) line no matter what

In console of Node Inspector browser, we can check req, req.hostname, req.url, req.route, req.method, and req.params

The request object is like a JavaScript bundle of the incoming HTTP requests

With res, we can do res.send to send String or JSON, or req.sendFile. The res.render method is used to turn templates into HTML.

Popular templating languages for JavaScript (Template Rendering)

• Handlebars

• EJS (Embedded JavaScript)

• JADE (Most popular and easiest to integrate with Express)

Templates are also known as Views by convention and are used for rendering!

Make sure templates path is relative to file not Node process by using \_\_dirname

Ways to assign class nav to a div:

• div.nav

• div(class=”nav”)

• div#nav

index.jade in Views or Templates acts as a skeleton to provide structure for the client side HTML

Unspecified HTML tags are divs by default in Jade (for templating)

Good to keep file size within ~150 lines of code

‘block content’ in layout.jade tells Jade any page extending the layout can inject HTML here

Partials folder is a naming convention, so is naming the files in it beginning with \_ (\_nav.jade) = this file is part of a complete page and included in another template (convention also in Sass)

Most projects have 1 layout template

Static files called static because they are sent to client as-is, without rendering. Need to add a static server.

`req.path` for a request made to `localhost:3000/blog` would be /blog

The `res.locals` object stores variables that will be accessible in the template

Express-Generator to do automatic scaffolding for app

npm start convention for throwing all commands you need to start an app into package.json

In Express, `routers` can be routed to different namespaces in the application, e.g 'users' has a router, 'posts' has a router, etc. Look at app.js in TESTAPP

The express generator can be invoked with ‘express TESTAPP’ command, where TESTAPP is name of app

Express can be used as REST API Server, serving data, mostly JSON, to be consumed by front-end

Angular on front-end “consuming” Express REST API

MEAN stack has generator too, from mean.io