DEPOT/U

Web Servers and Node.js

Agenda

9am	Solution Review (David)
9:30am	Lecture
10:30am	Lab
12:30pm	Lunch
1-5pm	Lab – cont'd

Web Servers

- Serves HTML content and executes server code
- Accepts requests and issues responses
- Some functions must be run on the server
  - The server is a secure place to execute code. The browser is not.
- Notable servers
  - Internet Information Systems (Microsoft)
  - Apache
    - Tomcat (Java)
    - HTTP
  - Express (Node)

Node

- JavaScript on the server
  ```
  node index.js
  ```
- Modules
  - Core modules: http, https, fs, path, url, etc.
- Components are shared as packages
  - NPM – node package manager
- Use *require* to pull in installed packages and Core modules
  ```
  var express = require('express');
  ```
- User defined modules
  - modules.exports

Node – cont'd

- Asynchronous vs. Synchronous
  - Synchronous commands wait for the command to complete before executing the next command
  - Asynchronous commands move to the next command before the command completes
- Callbacks
  - Node's method for implementing asynchronous commands
  - Function that is called at certain events
  - Typically a parameter to another function

Node – cont'd

- http/s Module
  - Provides low-level access to the http stack
  - Request – data that is incoming to the server
  - Response – data that is outgoing from the server
  - Headers – content-type, content-length, etc.
  - Methods – GET/POST/DELETE
- Streams
  - Access to data in a sequential order
  - Readable, writeable, duplex

Week 3 Lab 1

Learn You Node Tutorial