Node JS Essential Training Notes

course: Node.js Essential Training

course date: 12/11/15

level: intermediate

instructor: Alex Banks

Introduction

Welcome

What you should know

Installing Dependencies

What is Node.js?

**Node.js history**

**How Node.js works**

* non-blocking event-driven i/o
* we have a single thread that will respond to a event in the order they are raised
* this thread works asynchronously (ability to multitask making node.js fast) as it does not have to wait for resources to complete before continuing

Installing Node.js

The Node Core

**The Global Object**

* documentation
* <https://nodejs.org/api/globals.html>
* these are APIs available globally (global namespace)
* global.console.log("hello world");
* global namespace is assumed therefore we don’t have to include it
* console.log(`Rock on World from ${justNode}`);
* using a template string
* require function is available globally
* can leave off ‘.js’ when invoking node on cmd line

**Argument Variables with process.argv**

* ‘process’ object can be accessed anywhere and tells us about the current process instance
* we can
* get environment information
* read environment variables
* communicate with the terminal or parent processes
* giving us a way to work with the current process instance
* information is saved in a variable called
* process.argv
* can run this an send parameters on the command line while invoking it
* e.g.
* node app.js –user danielkline –greeting “Good Day Sir”
* this will add more elements to the array
* **ex)** create a function that will grab the flags from this command line array

**Standard Input and Standard Output**

* a way to communitcate with a process while it is running
* <https://nodejs.org/api/process.html#process_process_stdin>
* The process.stdout property returns a stream connected to stdout (fd 1). It is a [net.Socket](https://nodejs.org/api/net.html#net_class_net_socket) (which is a [Duplex](https://nodejs.org/api/stream.html#stream_duplex_and_transform_streams) stream) unless fd 1 refers to a file, in which case it is a [Writable](https://nodejs.org/api/stream.html#stream_writable_streams) stream.
* when we have a running application it will continue until an error is encountered or we stop it with ^c
* ways we can use a running process
* process.stdin
* process.stdout

**Global Timing function**