The Jackal of Javascript

Knowing is different & Doing is different

HOME ABOUT ME HISTORY OF THE WEB JAVASCRIPT 101 REQUEST

Hello Node

I have written a post here that will give you a good idea on what Nodejs is all about. In this post I will walk you through the steps to install Node and run a Hello Node application.

Contents

Setup

Installation

- Open Nodejs.org
- Click on the green “*Install*” button

Search …

This is me!!

Hello.. I am Arvind Ravulavaru a Full Stack Consultant based out of Hyderabad, India. This blog is my way of giving back to the Javascript Community!

Know more about me

Follow @arvindr21

Follow @arvindr21

Linked In

Google Plus

Mongo Director

Site Point

- Depending on your OS a msi or a pkg will be

Learn your way around Ionic framework. Check out Learning Ionic! Buy X

- Run the downloaded file and leave all the options to default while running the setup
- Thats it! You are done

PS: If you are interested, you can get the sources files from here and build your own version.

Validation

Open up a command prompt (in windows) or terminal (in *nix) and run `node -v` . This should present you with the version of Node you are running. Neat!

Hello Node

So lets say hello to Node. In the prompt, type `node` and hit enter. This will take us to the Node world!!. This is know as Node REPL (***Read-Eval-Print-Loop***), prompting you for a JavaScript line. Now type `console.log("Hello Node!!");` You will get a reply `"Hello Node!!"`. Pretty easy right?

Lets write the same piece of code in a file and run it (just for fun). Create a new folder, lets call it `node-dev` and create a new file inside it and name it `helloNode.js`. Open this file in your favorite editor and add the below line of code to it.

```
console.log("Hello Node!!");
```

Now lets run it. Back to prompt [(`Ctrl + C`) twice] in case the node server is still running from our previous example. And then navigate to the location where you have created the file `helloNode.js` using `cd` .

Now run `node helloNode.js` Bam!! your message!!

Jackal of Javascript

Chrome App

Chrome Extension

Workshops

- \o/ M.E.A.N. Workshop

Presentations

- Overview of Angularjs
- How Browser Works
- Web Components
- Modern UI Build Systems and Scaffolding Tools
- Backbonejs
- Responsive Web Design

Projects

- Rotten Tomatoes jQuery Rest Client
- blueimp-file-upload-expressjs - A Node Package
- lazyboy - ınd line lazines ıned

Hello HTTP

Learn your way around Ionic framework. Check out Learning Ionic! Buy

Lets do something a bit more interesting. Lets write a simple HTTP server, that will dispatch a message.

The rule of thumb with Node.js is

> Every function in Node.js is asynchronous.

Create a new file inside our `node-dev` folder and name it `server.js`. Open this file in your favorite editor and add the below piece of code

```
Hello HTTP!
1  var http = require("http"),
2      port = 1234;
3
4  var server = http.createServer(function(request,response){
5      response.writeHeader(200, {"Content-Type": "text/plain
6      response.write("Hello HTTP!");
7      response.end();
8  });
9
10 server.listen(port);
11 console.log("Server Running on "+port+".\nLaunch http://lo
```

Yes, that's it. This is our HTTP server, that will understand all the HTTP requests and can respond accordingly.

Code Walk-through

Line 1: Node.js has a simple module loading system. In Node, libraries (in C) are called as ***modules***. We can add our own modules (a post later on this). Here we are loading the HTTP module via the `require()`

Line 2: Lets specify the port we want our server to run on.

Line 4: Creates a new Server and this function takes a callback. Remember everything in Node is *Async*!. The anonymous function takes in the request and response object. In simple terms, Request is that data when the

- diskDB - A Light JSON Database - A Node Package
- My Slush Generators
- My Yeoman Generators
- My Web Components
- My Bower Packages

Series

- Ionic, Twilio and Node Scheduler – A Reminder App
- Node Webkit Apps
- Raspberry Pi

Guest Posts

- Building a Chat App with node-webkit, Firebase, and AngularJS
- Creating a Sentiment Analysis Application Using Node.js
- Implementing pagination with MongoDF Express.j ısh

call is made to the server and Response is that data

Learn your way around Ionic framework. Check out Learning Ionic! Buy X

e.g. `http://www.something.com?id=1` (the `id=1` part) are a part of the request object. And response can be anything from simple string to a complete page!. In this case it is a string "Hello HTTP!".

Line 5: This will set a response header, describing the content type we are dispatching.

Line 6: This will write our message to the client.

Line 7: Unless the `response.end()` is encountered, the response will not be dispatched back. This method will notify that the server operation is completed.

Line 10: We are initializing the server and asking it to listen to the port specified & then wait for things to happen.

Line 11: A friendly console log message

Now lets run this. Back to prompt then run `node server.js`. Open a browser and navigate to `http://localhost:1234/` and there you can see your message!

Order of execution

On load of the js file, only lines 1, 2, 4, 10 &11 are executed. Then Node creates a new server and waits for something to happen. As soon as you open a browser and navigate to `http://localhost:1234/` a new event is raised notifying the event loop to dispatch lines 5,6,7 and then Node goes back to doing what it was doing..!

Hello TCP

- Creating a End to End Ionic Application
- Getting started with MongoDB and Mongoose
- Yeoman, Mongoose and MongoDB

Top5 Posts

- Architecting a Secure RESTful Node.js app - 161,812 views
- Getting Started with Angular 2.0 - 138,235 views
- Developing a MEAN app with Angular 2.0 - 86,983 views
- Node Webkit – Build Desktop Apps with Node and Web Technologies - 85,002 views
- Ionic Restify MongoDB – An End to End Hybrid App - 67,986 views

Recent Post

You can create your own `TCP` server using the

Learn your way around Ionic framework. Check out Learning Ionic! Buy

X

add the below code

Hello TCP! JavaScript

```javascript
var net = require('net');
var port = 1235;

net.createServer(function(socket) {
    console.log('A new client connected');

    socket.on('data', function(data) {
        console.log('Data received from client : '+data);
    });
     socket.on('close', function(data) {
        console.log('A client disconnected');
    });

}).listen(port, "localhost");

console.log("Server Running on "+port+".\nLaunch http://lo
```

You can run the above code in the prompt as `node helloTCP.js`. Open a browser and navigate to `http://localhost:1235/` and then come back to the prompt to see the output.

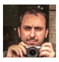
There are a lot of other thing that can be done with Node. I will unveil some in my future posts.

Thanks for reading! Do comment.
@arvindr21

0 0 0

Like this:

★ Like



One blogger likes this.

Related

Write your own Node Modules
February 15, 2014
In "Javascript"

Deploying Node Applications to Heroku
May 17, 2014
In "Deployments"

Koa Monk and Gulp - Getting Started
May 17, 2014
In "Database"

- Learning Ionic
- WordPress & Angular Material – An Offline Viewer
- Developing a MEAN app with Angular 2.0
- Pushbots and Cordova – Easy Push Notifications for your app
- Getting Started with Client Side Storage

Categories

- Architecture (8)
- CSS (9)
    - CSS3 (6)
    - LESS (3)
    - SASS (1)
- Database (17)
    - Disk DB (6)
    - Firebase (4)
    - MongoDB (8)
        - MongoLab (3)
        - Monk (1)
- Deployments (4)
    - Heroku (2)
- Desktop Apps (8)
- DNA Analysis (1)
- ECMAScript 6 (3)
- Electron (atom shell) (1)

Learn your way around Ionic framework. Check out Learning Ionic! Buy

FEBRUARY 12, 2014 ARVIND RAVULAVARU

12 Comments **The Jackal of Javascript** 1 **Login**

Recommend 1 **Share** **Sort by Best**

Join the discussion…

Jeff • 2 years ago

Thanks Arvind for all of your tutorials. They are eloquently written and easy to follow. Cheers.

2 ^ | v • Reply • Share ›

Arvind Ravulavaru Mod → Jeff • 2 years ago

Thanks Jeff!

^ | v • Reply • Share ›

8ne • 2 years ago

Hi, nice tutorials.

I tested HelloHTTP and works perfectly, now I tested helloTCP but once it starts I can not connect the navigator says "ERR_CONNECTION_REFUSED" . I dont know how to correct, any suggestion?

1 ^ | v • Reply • Share ›

8ene → 8ne • 2 years ago

I discover the problem, I was doing the test remotely on my raspberry Pi and this is not localhost. I change "locahost" by "0.0.0.0". Now it works remotely.

^ | v • Reply • Share ›

Arvind Ravulavaru Mod → 8ene • 2 years ago

Great!

^ | v • Reply • Share ›

Tech4Lead • a year ago

Great explanation !!! Thanks

^ | v • Reply • Share ›

- Frameworks (42)
  - Angularjs (21)
  - Backbonejs (1)
  - Bootstrap (9)
  - Emberjs (1)
  - Foundation (3)
  - Framework7 (1)
  - Ionic (11)
  - Lumx (1)
  - MEAN (4)
  - Meteorjs (1)
  - Onsen UI (2)
- Git (12)
  - GitHub (10)
- HTML (22)
  - HTML5 (21)
    - WebRTC (1)
    - WebSockets (6)
- Intel's App UI (1)
- IoT (6)
- Javascript (75)
  - jQuery (14)
- Material Design (3)
- Mobile (21)
  - Android (15)
  - Firefox OS (2)
  - iOS (11)
  - PhoneGap (16)
- MQTT (1)
- My Books (1)
- Node (60)
  - CLI (3)
  - Expressjs (18)
  - Genome (1)
  - Grunt (8)
  - Koa (1

Learn your way around Ionic framework. Check out Learning Ionic! Buy

X

Reply • Share ›

Arvind Ravulavaru Mod ➦ Vikrant Singh • 2 years ago

Thanks Vikranth. Glad it helped.

Reply • Share ›

Randy Davis • 2 years ago

Arvind, I'm hooked on your style of doing things! Keep it up as you have gained a follower for a long time to come! Great stuff!

Reply • Share ›

Arvind Ravulavaru Mod ➦ Randy Davis • 2 years ago

Thanks Randy. Glad I could be of help.

Reply • Share ›

Tara Prasad Dash • 2 years ago

Great place to start. Thanks a lot.

Reply • Share ›

Arvind Ravulavaru Mod ➦ Tara Prasad Dash • 2 years ago

Thanks Tara!

Reply • Share ›

ALSO ON THE JACKAL OF JAVASCRIPT

Javascript 101

5 comments • 2 years ago•

TublarDisk — This was excellent. Cheers!

Raspberry pi, an Ultrasonic Sensor and Node.js – Measure

24 comments • 2 years ago•

Surampalli Rajesh — Hello Sir,I just followed all the steps mentioned in this blog bit in

Electron, WordPress & Angular Material – An Offline Viewer

6 comments • a year ago•

Robert Cox — bravo man, this

Learning Ionic

22 comments • a year ago•

Pavan Alapati — hi Arvind, you blogs are really userfully. we

- Node Webkit (7)
- Restify (3)
- Push Notifications (1)
- Quick and Dirty (42)
- Raspberry Pi (9)
- Setup (60)
- Testing (5)
  - Jasmine (1)
  - Protractor (1)
  - Test Automation (1)
  - Test Driven Developement (2)
- Third Party Products (4)
  - Twilio (4)
- Tutorial (79)
- UI Performance (1)
- Web Components (3)
- Web Starter Kit (1)

Archives

- July 2015
- May 2015
- April 2015
- March 2015
- February 2015
- January 2015
- December 2014
- November 2014
- October
- Septemb 4

- August 2014

Learn your way around Ionic framework. Check out Learning Ionic! Buy

X

- June 2014
- May 2014
- April 2014
- March 2014
- February 2014

Inform me about new posts

Email *

SUBSCRIBE!

ALL RIGHTS RESERVED | THE JACKAL OF JAVASCRIPT

← →