Node.js and Gulp Basics Needed for Angular Single Page App SPA

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Why 30 Minutes on Node.js

SRC tag madness eliminated

Without Node.js

```
<!DOCTYPE html>
<html>
<head lang="en">
    <meta charset="UTF-8">
    <title>SVCC in AngularJS</title>

    <!-- Style sheets -->
    <link href="css/toastr.css" rel="stylesheet"/>
    <link href="css/app.css" rel="stylesheet"/>

    <link href="Content/Styles/site-svcc-relative.css" rel="stylesheet"/>


    <!-- Library Scripts -->
    <script src="js/jquery.js"></script>
    <script src="js/angular.js"></script>
    <script src="js/angular-resource.js"></script>
    <script src="js/angular-mocks.js"></script>
    <script src="js/angular-ui-router.js"></script>
    <script src="js/ui-utils.js"></script>

    <!-- Application Script -->
    <script src="app/app.js"></script>

    <!-- Services -->
    <script src="common/services/common.services.js"></script>

    <!-- Session Services -->
    <script src="common/services/sessionResource.js"></script>
    <script src="common/services/sessionResourceMock.js"></script>
    <script src="common/services/sessionService.js"></script>

    <!-- SessionsByPresenter Services -->
    <script src="common/services/sessionsByPresenterResource.js"></script>
    <script src="common/services/sessionsByPresenterResourceMock.js"></script>

    <!-- Presenter Services -->
    <script src="common/services/presenterResource.js"></script>
    <script src="common/services/presenterResourceMock.js"></script>
    <script src="common/services/presenterService.js"></script>

    <!-- Session Controllers -->
    <script src="app/sessions/sessionListCtrl.js"></script>
    <script src="app/sessions/sessionDetailCtrl.js"></script>

    <!-- Presenter Controllers -->
    <script src="app/presenters/presenterListCtrl.js"></script>


</head>

<body ng-app="svCodeCamp">
```

With Node.js

```
<!DOCTYPE html>
<html>
<head lang="en">
    <meta charset="UTF-8">
    <title>SVCC in AngularJS</title>

    <link href="Content/Styles/site-svcc-relative.css" rel="stylesheet"/>

    <!-- Application Script -->
    <script src="app/app.js"></script>
</head>

<body ng-app="svCodeCamp">
```

Why 30 Minutes on Node.js

SRC tag madness eliminated

Building for local testing

Code Sanity

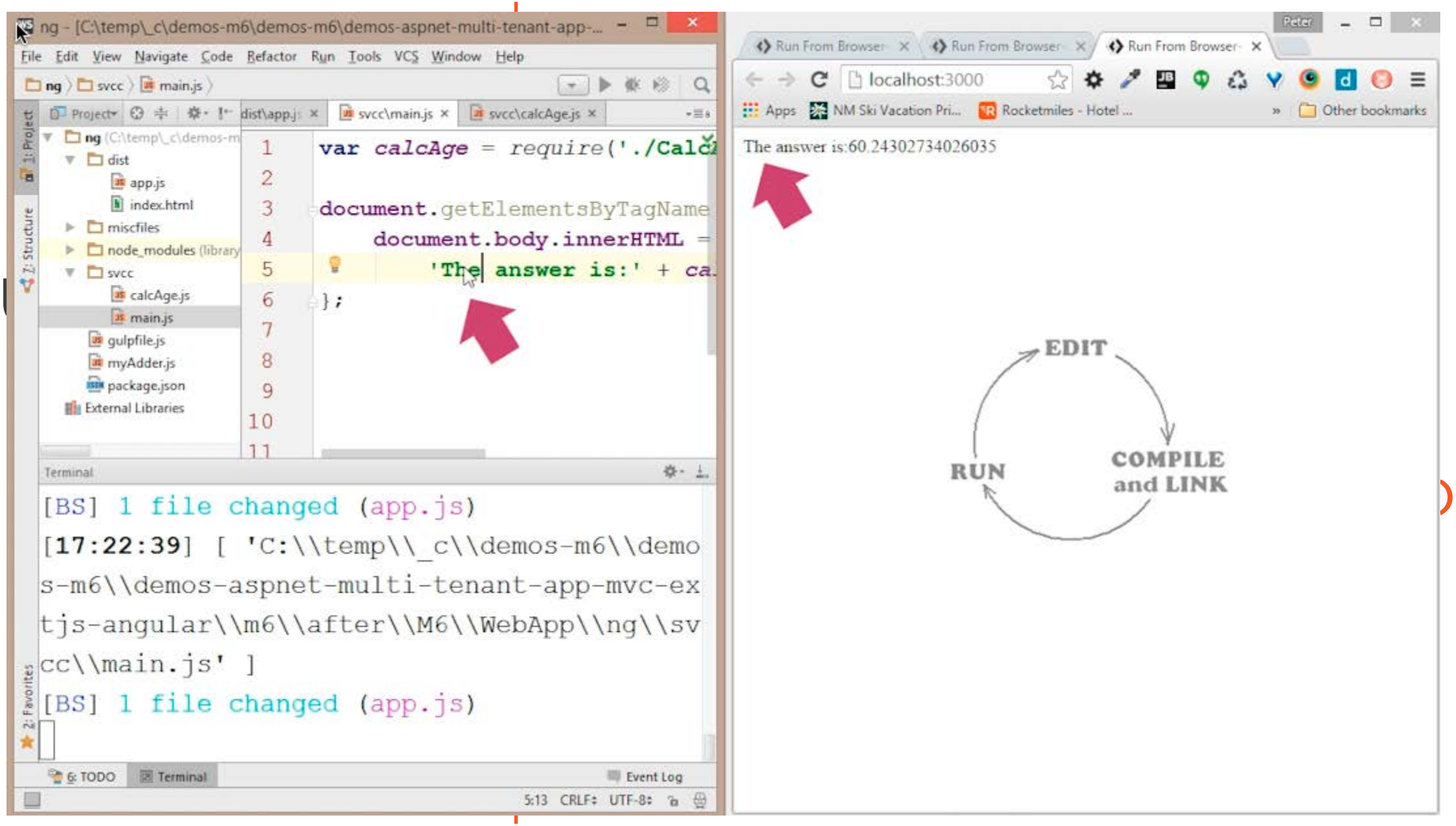
JSON Files

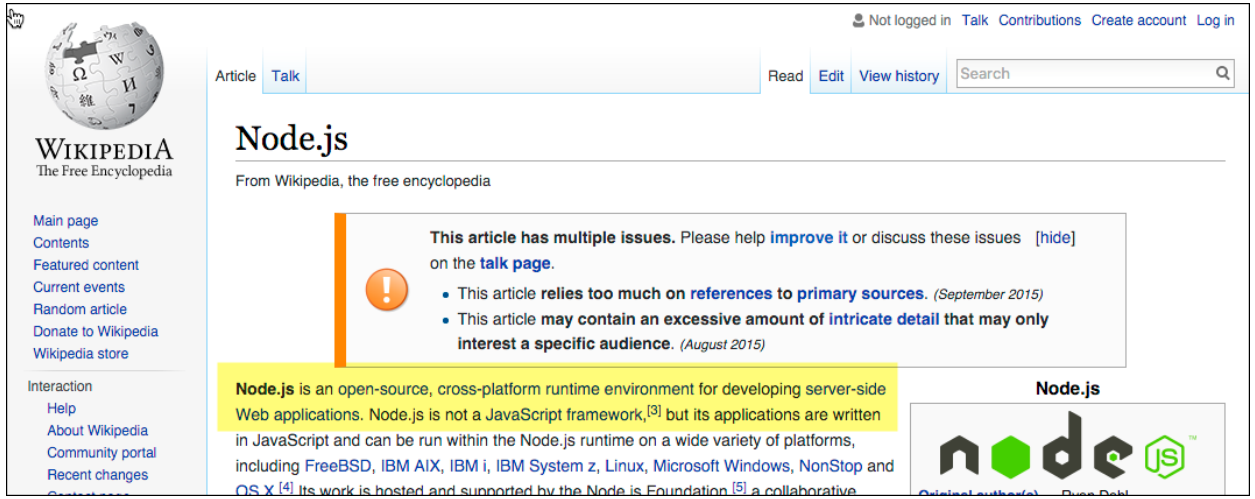
What You Will Learn in This Node.js Module

- Node.js interpreter REPL
- CommonJS (require and export)
- Gulp streaming build server
- BrowserSync web server
- Browserify and Watchify

Understanding Node.js Basics and Why We Care

- What is Node.js?
- REPL defined
- The REPL interface and examples
- Dependency management in Node.js
- Node.js Require and Export (CommonJS)
- Node.js as a development web server


ng - [C:\temp_c\demos-m6\demos-m6\demos-aspnet-multi-tenant-app-...
File Edit View Navigate Code Refactor Run Tools VCS Window Help
ng svcc main.js
Project
dist\app.js
svcc\main.js
svcc\calcAge.js
ng (C:\temp_c\demos-m
dist
app.js
index.html
miscfiles
node_modules (library
svcc
calcAge.js
main.js
gulpfile.js
myAdder.js
package.json
External Libraries
1 var calcAge = require('./Calc
2
3 document.getElementsByTagName
4 document.body.innerHTML =
5 'The answer is:' + ca
6 };
7
8
9
10
11
Terminal
[BS] 1 file changed (app.js)
[17:22:39] ['C:\\temp_c\\demos-m6\\demo
s-m6\\demos-aspnet-multi-tenant-app-mvc-ex
tjs-angular\\m6\\after\\M6\\WebApp\\ng\\sv
cc\\main.js']
[BS] 1 file changed (app.js)
6: TODO
Terminal
Event Log
5:13 CRLF UTF-8
2: Favorites
Peter
Run From Browser
Run From Browser
Run From Browser
localhost:3000
Apps
NM Ski Vacation Pri...
Rocketmiles - Hotel ...
Other bookmarks
The answer is:60.24302734026035
EDIT
COMPILE
and LINK
RUN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Article Talk
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Search
Node.js
From Wikipedia, the free encyclopedia
Main page
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Featured content
Current events
Random article
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Wikipedia store
Interaction
Help
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This article relies too much on references to primary sources. (September 2015)
This article may contain an excessive amount of intricate detail that may only interest a specific audience. (August 2015)
Node.js is an open-source, cross-platform runtime environment for developing server-side Web applications. Node.js is not a JavaScript framework,[3] but its applications are written in JavaScript and can be run within the Node.js runtime on a wide variety of platforms, including FreeBSD, IBM AIX, IBM i, IBM System z, Linux, Microsoft Windows, NonStop and OS X.[4] Its work is hosted and supported by the Node.js Foundation.[5] a collaborative
Node.js

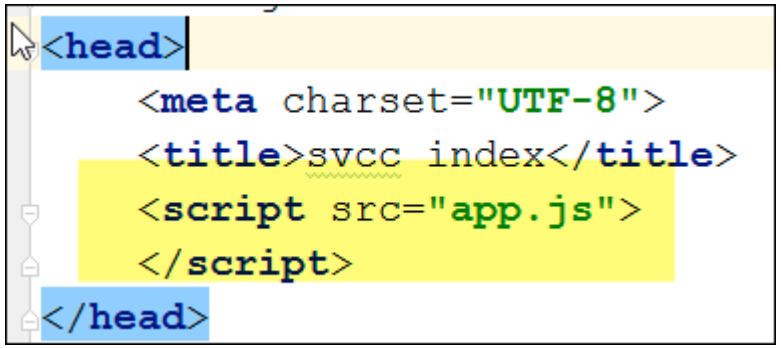
Learning CommonJS Basics with Require and Export

The conundrum

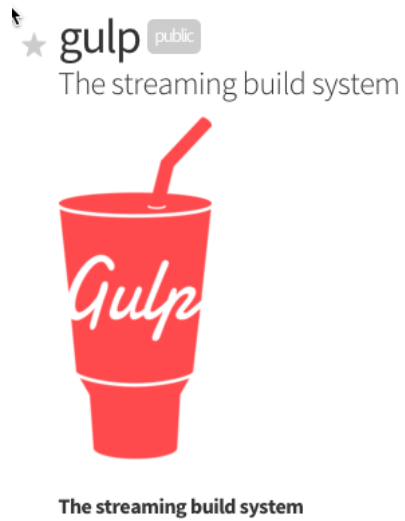
CommonJS

Require

Export



Introducing the Gulp Streaming Build System That Uses CommonJS



gulp

verb | \ˈgəlp\

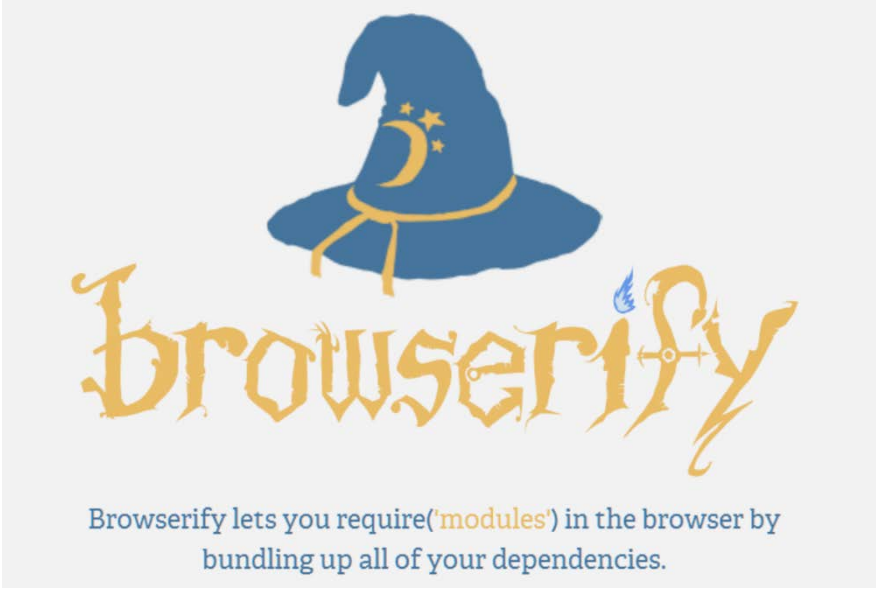
Simple Definition of GULP

: to eat or swallow (something) quickly or in large amounts

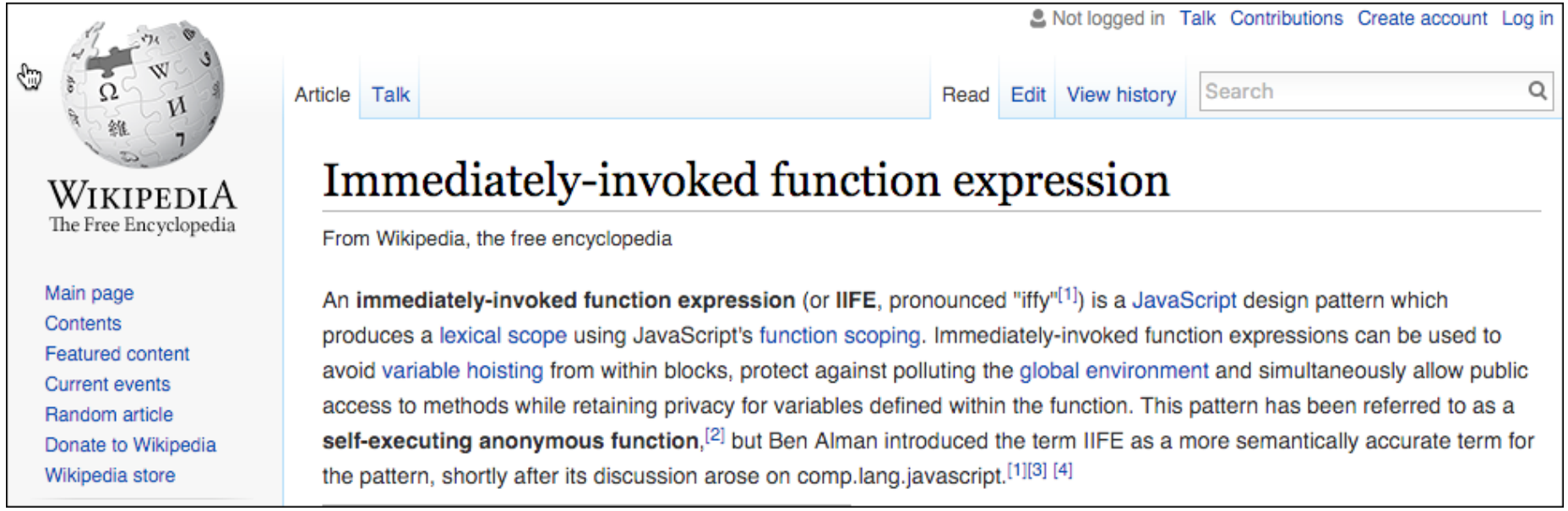
: to take (air) into your lungs quickly

: to swallow because of strong emotion (such as fear or shock)

Browserify


browserify
Browserify lets you require('modules') in the browser by
bundling up all of your dependencies.

The IIFE



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Immediately-invoked function expression

From Wikipedia, the free encyclopedia

An **immediately-invoked function expression** (or **IIFE**, pronounced "iffy"[1]) is a JavaScript design pattern which produces a lexical scope using JavaScript's function scoping. Immediately-invoked function expressions can be used to avoid variable hoisting from within blocks, protect against polluting the global environment and simultaneously allow public access to methods while retaining privacy for variables defined within the function. This pattern has been referred to as a **self-executing anonymous function**,[2] but Ben Alman introduced the term IIFE as a more semantically accurate term for the pattern, shortly after its discussion arose on comp.lang.javascript.[1][3] [4]

Summary

- Why Node.js so important to SPA
- Node.js interpreter REPL
- CommonJS (require and export)
- Gulp streaming build server
- BrowserSync web server
- Browserify and Watchify