Debugging

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Debugging

- Node (ASP.NET and others on their way)
- Launch configurations
- Debugging experience
- Attaching to processes
- Source maps
- JavaScript and TypeScript

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Debugging Keystrokes

F5	Run / Pause / Run to Cursor
⇧ F5	Stop
F10	Step Over
F11	Step Into
⇧ F11	Step Out
F9	Toggle Breakpoint
	Restart

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Code Inspections

Inspect the code while debugging

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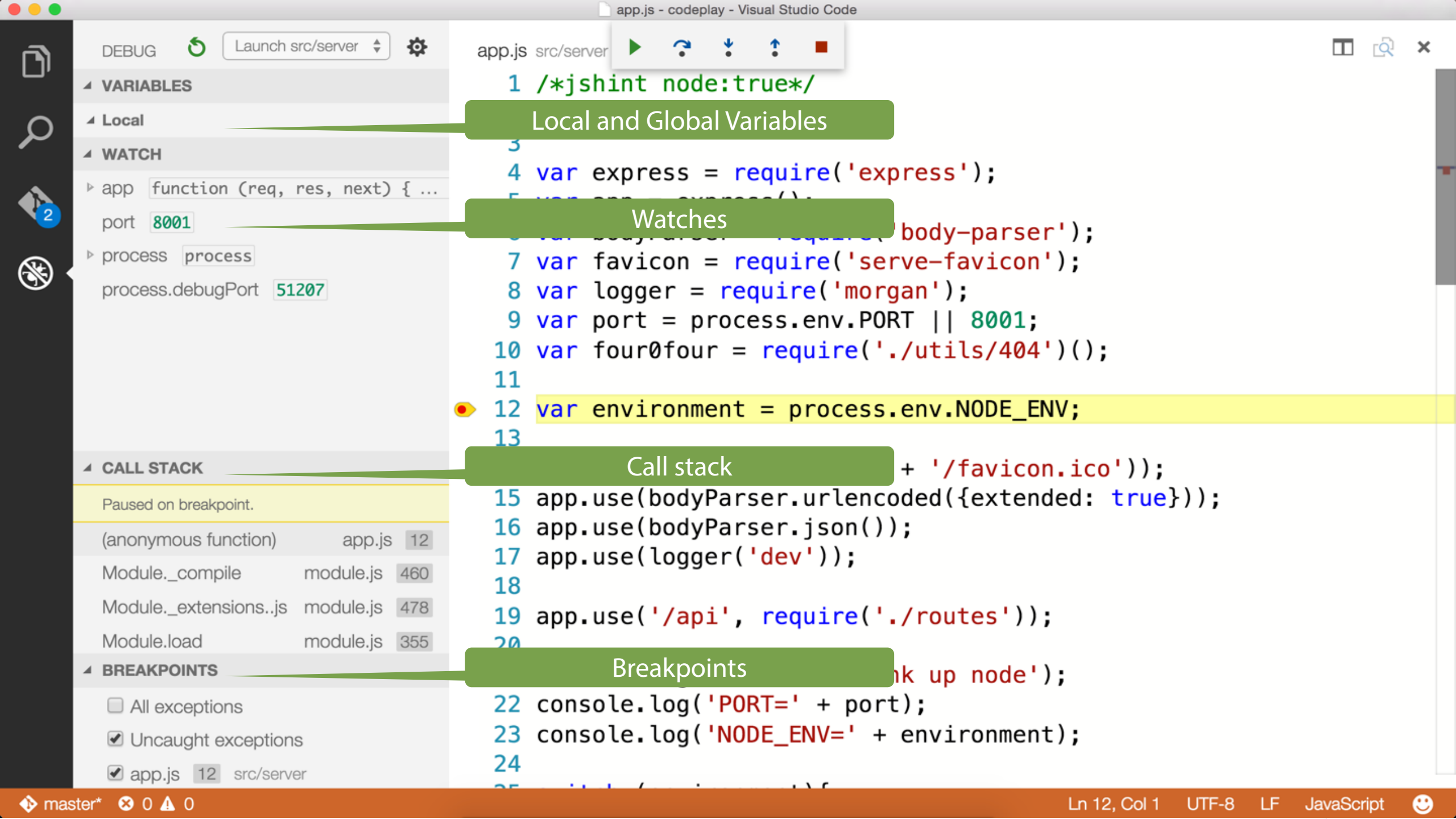
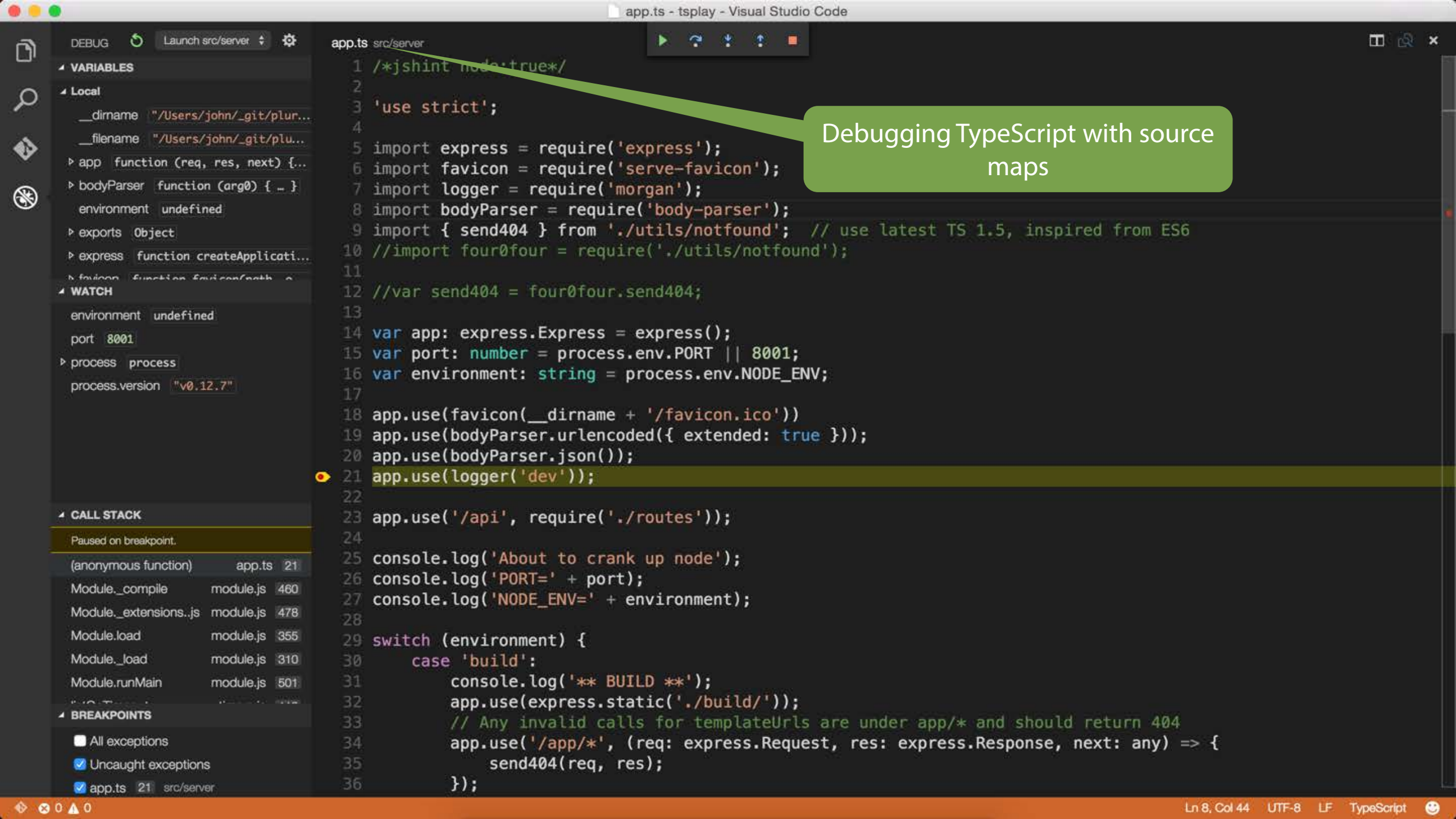

app.js - codeplay - Visual Studio Code
DEBUG
Launch src/server
VARIABLES
Local
WATCH
app function (req, res, next) { ...
port 8001
process process
process.debugPort 51207
CALL STACK
Paused on breakpoint.
(anonymous function) app.js 12
Module._compile module.js 460
Module._extensions..js module.js 478
Module.load module.js 355
BREAKPOINTS
All exceptions
Uncaught exceptions
app.js 12 src/server
app.js src/server
1 /*jshint node:true*/
4 var express = require('express');
7 var favicon = require('serve-favicon');
8 var logger = require('morgan');
9 var port = process.env.PORT || 8001;
10 var four0four = require('./utils/404')();
12 var environment = process.env.NODE_ENV;
15 app.use(bodyParser.urlencoded({extended: true}));
16 app.use(bodyParser.json());
17 app.use(logger('dev'));
19 app.use('/api', require('./routes'));
22 console.log('PORT=' + port);
23 console.log('NODE_ENV=' + environment);
Local and Global Variables
Watches
Call stack
Breakpoints
master*
0 0
Ln 12, Col 1
UTF-8
LF
JavaScript

Source Maps

Debugging TypeScript or Minified JavaScript


app.ts - tsplay - Visual Studio Code
DEBUG
Launch src/server
VARIABLES
Local
__dirname "/Users/john/_git/plur...
__filename "/Users/john/_git/plu...
app function (req, res, next) {...
bodyParser function (arg0) { ... }
environment undefined
exports Object
express function createApplicati...
WATCH
environment undefined
port 8001
process process
process.version "v0.12.7"
CALL STACK
Paused on breakpoint.
(anonymous function) app.ts 21
Module._compile module.js 460
Module._extensions..js module.js 478
Module.load module.js 355
Module._load module.js 310
Module.runMain module.js 501
BREAKPOINTS
All exceptions
Uncaught exceptions
app.ts 21 src/server
app.ts src/server
1 /*jshint node:true*/
2
3 'use strict';
4
5 import express = require('express');
6 import favicon = require('serve-favicon');
7 import logger = require('morgan');
8 import bodyParser = require('body-parser');
9 import { send404 } from './utils/notfound'; // use latest TS 1.5, inspired from ES6
10 //import four0four = require('./utils/notfound');
11
12 //var send404 = four0four.send404;
13
14 var app: express.Express = express();
15 var port: number = process.env.PORT || 8001;
16 var environment: string = process.env.NODE_ENV;
17
18 app.use(favicon(__dirname + '/favicon.ico'))
19 app.use(bodyParser.urlencoded({ extended: true }));
20 app.use(bodyParser.json());
21 app.use(logger('dev'));
22
23 app.use('/api', require('./routes'));
24
25 console.log('About to crank up node');
26 console.log('PORT=' + port);
27 console.log('NODE_ENV=' + environment);
28
29 switch (environment) {
30 case 'build':
31 console.log('** BUILD **');
32 app.use(express.static('./build/'));
33 // Any invalid calls for templateUrls are under app/* and should return 404
34 app.use('/app/*', (req: express.Request, res: express.Response, next: any) => {
35 send404(req, res);
36 });
Debugging TypeScript with source maps
0 0
Ln 8, Col 44
UTF-8
LF
TypeScript

5 Important Debugging Features

- Launching
- Attaching
- Stop on entry
- Inspecting
- Sourcemaps

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