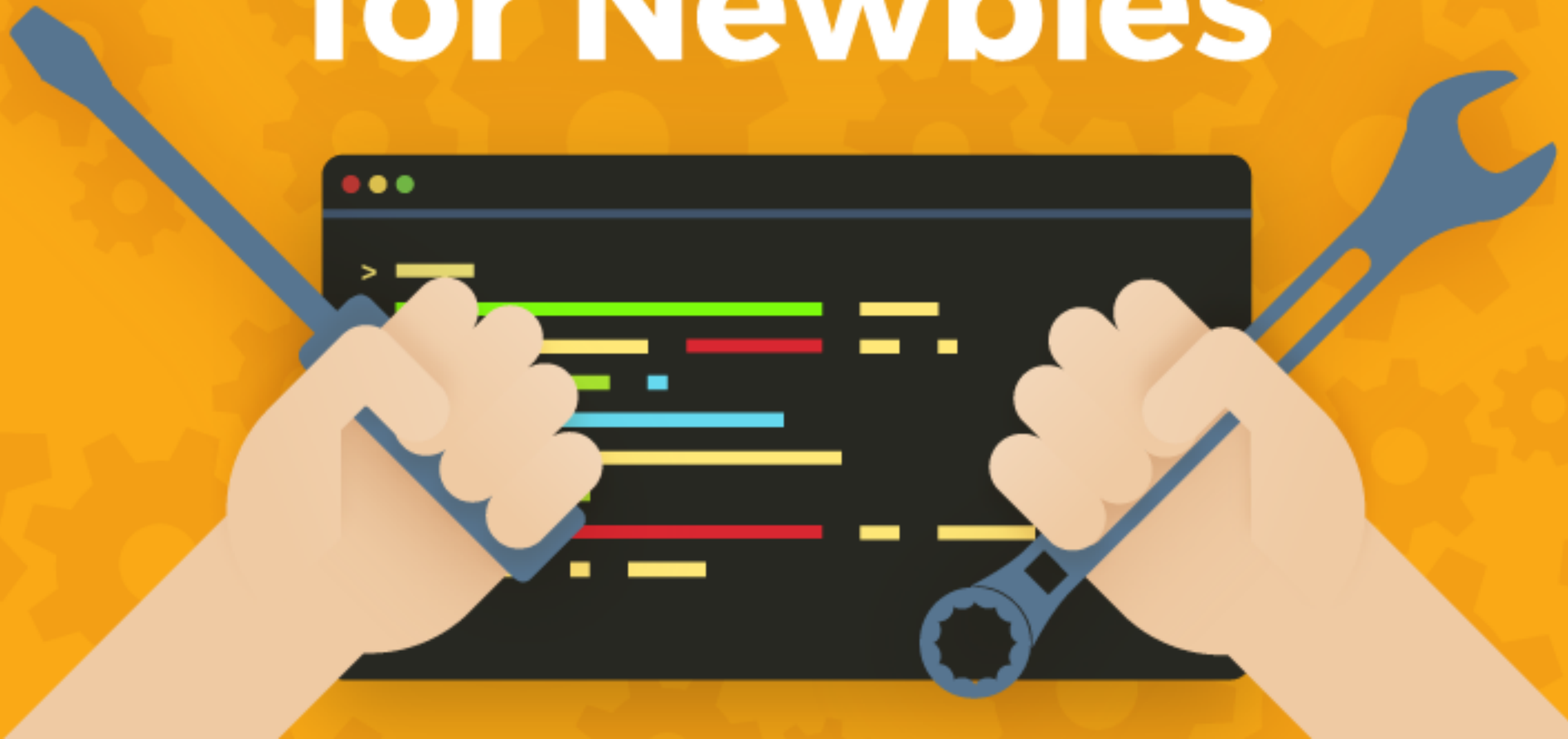
Node Toolchain for Newbies



Node Toolchain for Newbies

The Best Node Apps and Libraries to Increase Productivity

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Node University

"What tools would you recommend for Node development?"

- IDEs/code editors
- Libraries
- GUI tools
- CLI tools

IDEs/code editors

Atom

- Atom: created and maintained by GitHub; uses Electron, HTML, JS and CSS under the hood which makes it very easy to customize or add functionality; allows to have Git and terminal support via packages. Price: free.

VS Code

- VS Code: a newer addition; uses similar to Atom web-based tech; was created from Azure's Monaco editor; comes with debugging, smart autocomplete based on types, Git and terminal support. Price: free.

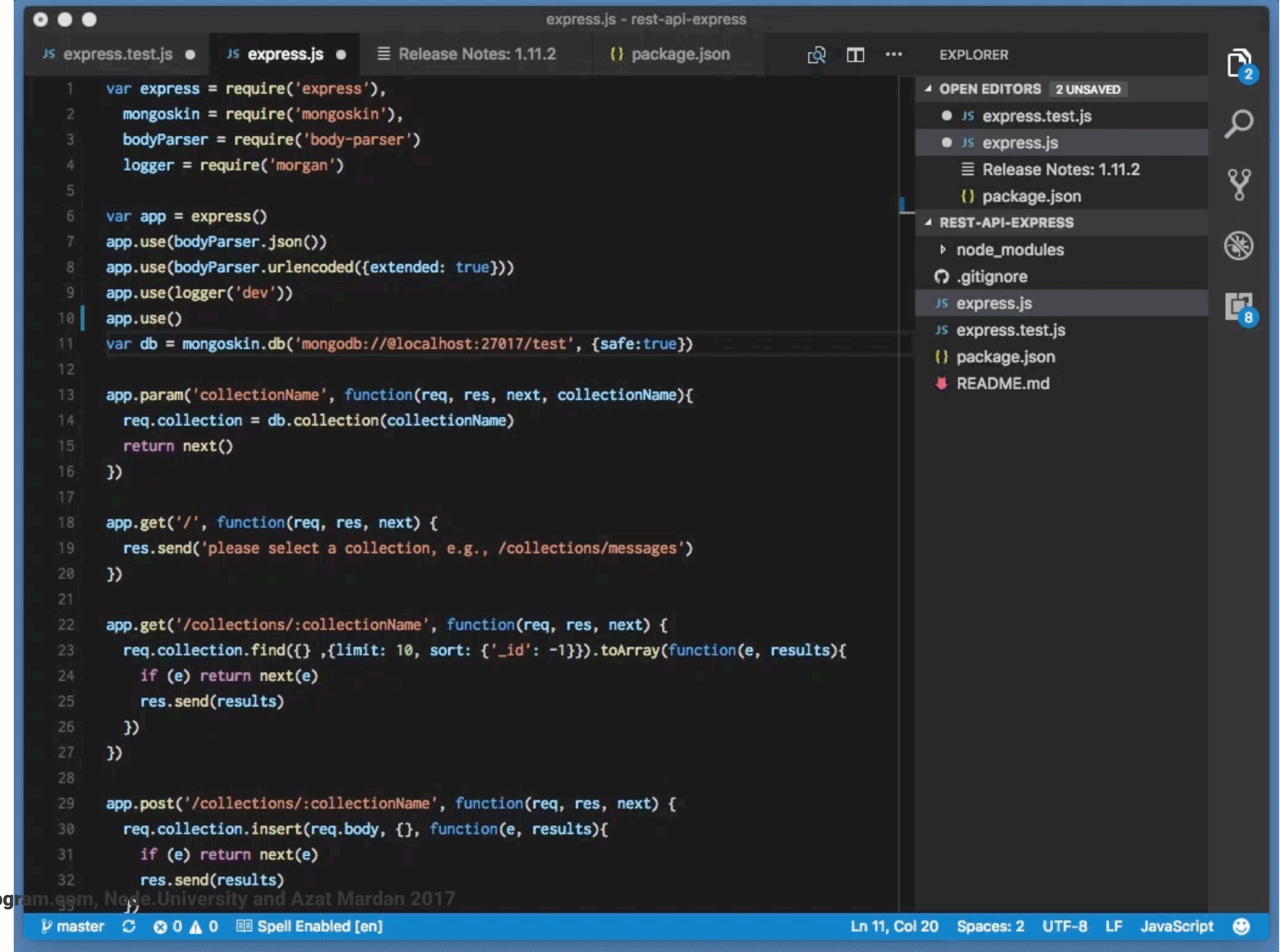
WebStorm

WebStorm: more of an IDE than an editor, developed by JetBrains and based on IntelliJ platform; has code assistance, debugging, testing, Git. Price: starts at $59/yr for individuals.

There are more options like Brackets, Sublime Text 3 and of course IDEs like Eclipse, Aptana Studio, NetBeans, Komodo IDE, and cloud-based like Cloud 9, Codenvy.

What to pick?

VS Code



The most popular and useful libraries and project dependencies

The libraries are listed with the npm names, so you can execute `npm i {name}` substituting `{name}` with the name of the package/module:

webpack

webpack: Builds static assets like browser JavaScript, CSS and even images. It allows to use node modules in the browser.

babel

babel: Allows to code in the latest versions of JavaScript/ ECMAScript without having to worry about your runtime by converting the new code to the code compatible with older versions of ECMAScript

axios

axios: Makes HTTP requests

express

express: the most popular Node web framework

mongoose

mongoose: MongoDB object-document mapper library

sequelize

sequelize: PostgreSQL object-relational mapper library

socket.io

socket.io: Real-time library with support of Web Sockets and others.

cheerio

cheerio: jQuery syntax for working with HTML-like data on the server

node-oauth

node-oauth: Low-level but very mature and tested library to roll out any OAuth integration

passport

passport: OAuth library to quickly integrate with major services

yargs

yargs

shelljs

shelljs

mocha

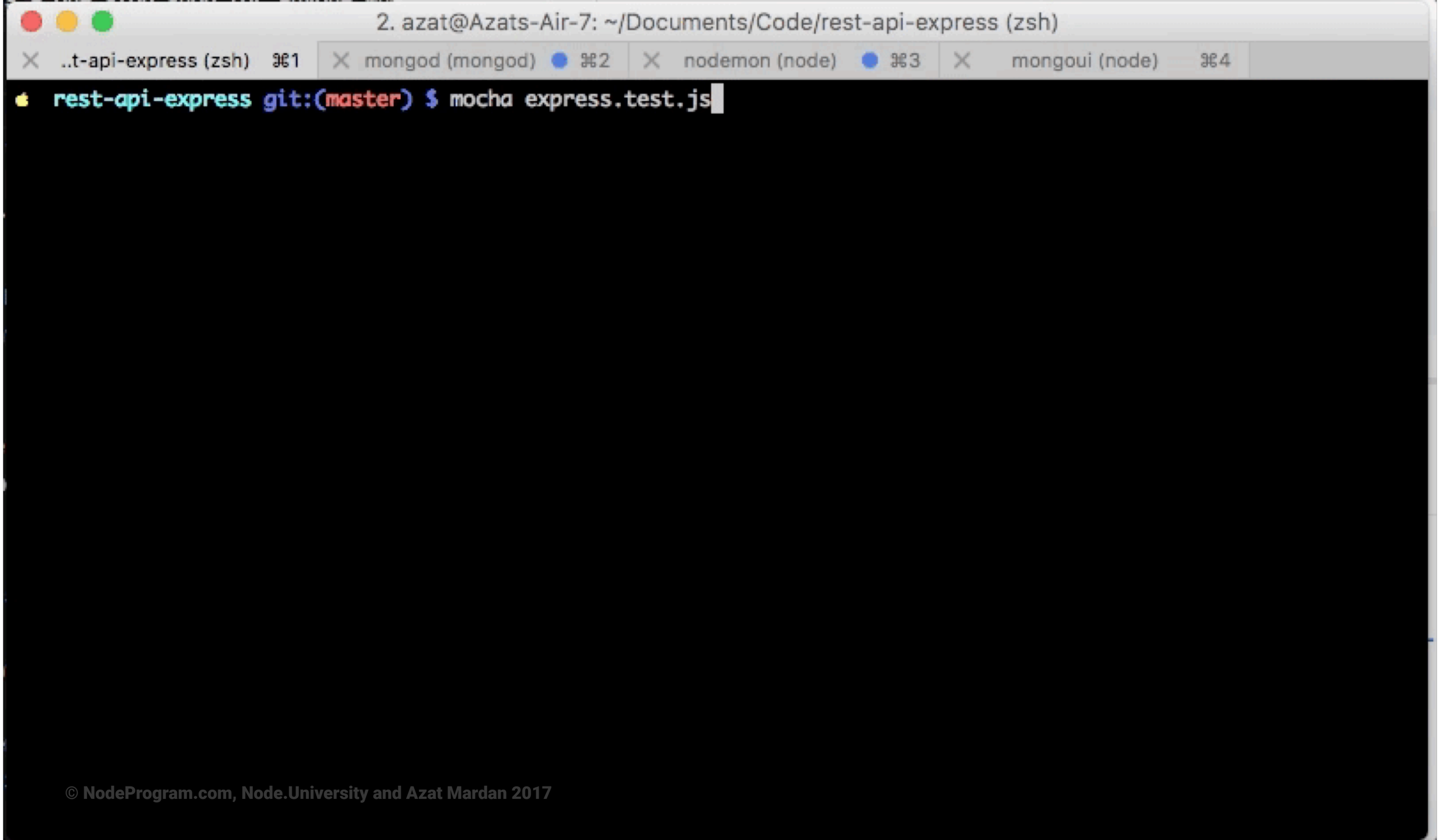
mocha: Testing framework

async

async: Controls flow by running function concurrently, sequentially or any way you want

concurrently

concurrently: Allows to execute CLI tools (local) as multiple processes all at the same time, e.g., webpack and node-static.


2. azat@Azats-Air-7: ~/Documents/Code/rest-api-express (zsh)
..t-api-express (zsh) ⌘1
mongod (mongod) ⌘2
nodemon (node) ⌘3
mongoui (node) ⌘4
rest-api-express git:(master) $ mocha express.test.js
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Note: Some of the libraries/tools listed above like webpack or mocha, can be installed globally instead of locally in your project folder. However, installing them globally is an old practice and currently is an anti-pattern because local installation allows developers to use multiple versions of the tool with different projects in addition to have these tools specified in package.json.

Of course there are a lot of different options in each category. For example, request and superagent are also extremely popular HTTP agent libraries. However, I don't want to give too many options and confuse you with the differences, I listed only one tool (typically the one I use the most currently).

CLI tools (global)

Unlike the previous section, these tools are okay to install globally since most likely their version won't affect or break your project.

node-dev

node-dev: Monitor and restart your Node app automatically on any file change within the current folder

node-static

node-static: Serve files over HTTP web server

node-inspector

node-inspector: Debug Node code in a familiar interface of DevTools (now part of Node starting with v7)

docker

docker: Build and run Docker containers to isolate app environment, speed up deployment and eliminate conflicts between dev and prod (or any other) environments

curl

curl: Make HTTP(S) requests to test your web apps (default for POSIX but can get for Windows too)

nvm

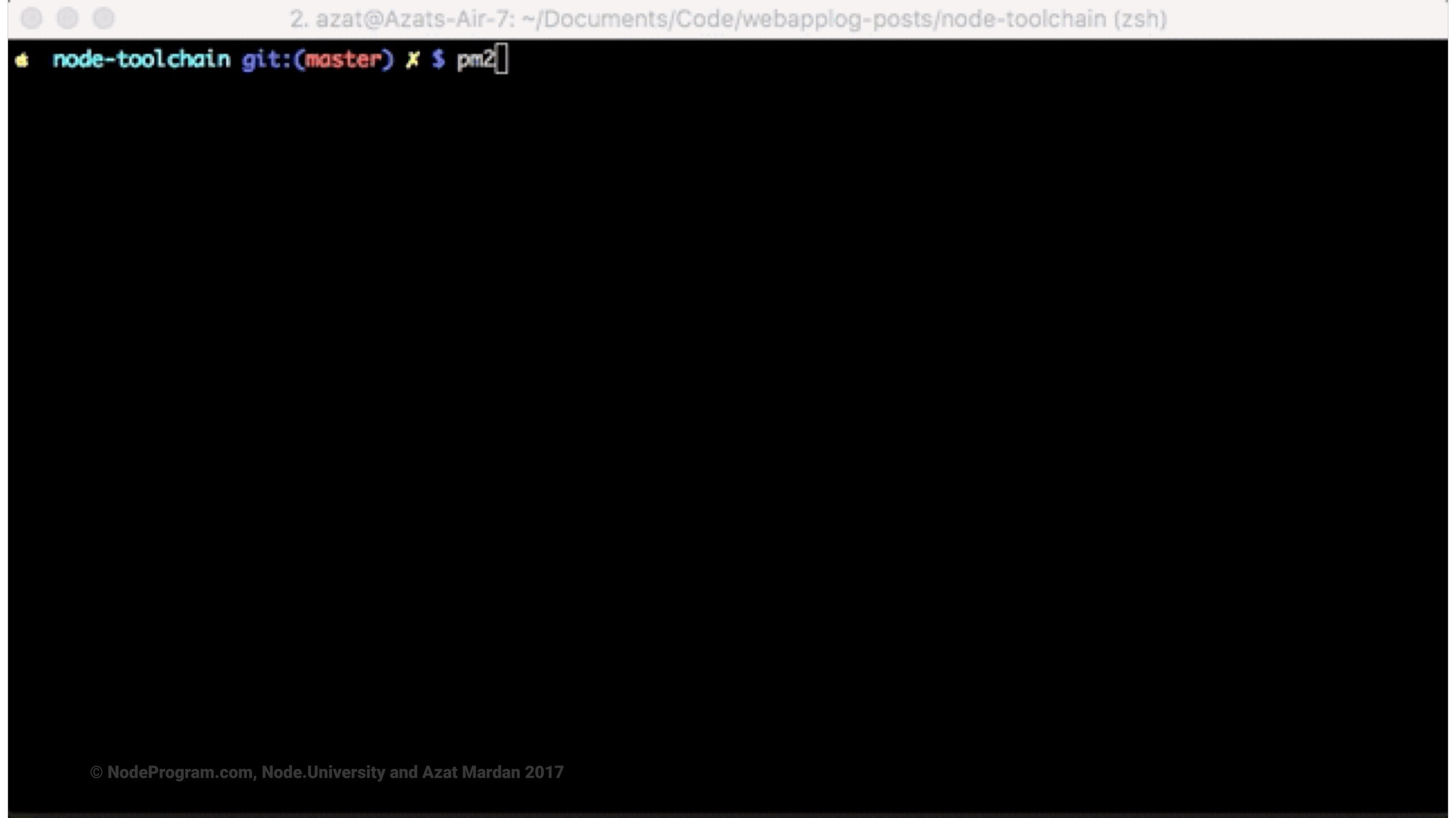
nvm: Change Node versions without having to install and re-install them each time

wintersmith

wintersmith: Build static website using Node templates and Markdown

pm2

pm2: Process manager to vertically scale Node processes and ensure fail-tolerance and 0-time reload



GUI tools

A good share of Node developers prefer GUI (graphical user interface) tools at least for some of the tasks because these tools require less typing and have features which makes them more productive and the development easier and simpler.

Postman

Postman: HTTP client with ability to save requests and history, change formats (JSON, form, etc.) and do other things

MongoUI

MongoUI: Modify and inspect your MongoDB data in a web interface. You can host this web app on your server to enable the database management.

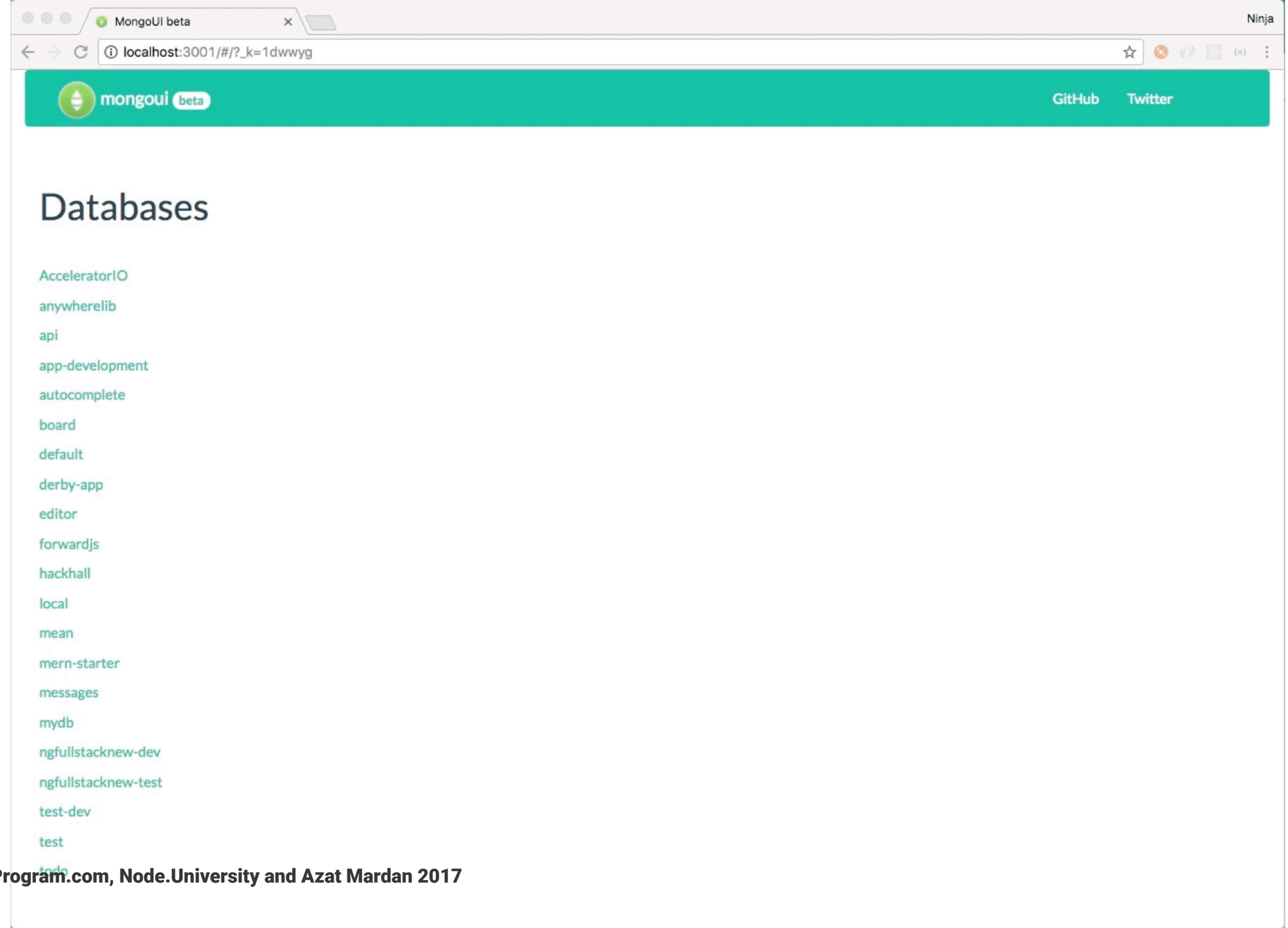
Chrome

Chrome: DevTools is a great way to inspect your requests, network, traffic, CPU profiles and other developer related data which is very useful for debugging

iTerm, itermocil and zsh: A better alternative to a native macOS Terminal app which together with itermocil and zsh increases productivity greatly

SourceTree

SourceTree: Visual git trees and histories



THE END

Next courses to take:

- Node Foundation
- Express Foundation
- React Foundation