

Localhost

Node and Express

INSTRUCTOR:

LAURENCE SVEKIS



Course instructor : Laurence Svekis

- Over 300 courses in technology and web applications.
- 20 years of JavaScript web programming experience
- 500,000+ students across multiple platforms
- Digital instructor since 2002

READY TO HELP YOU LEARN and ANSWER ANY questions you may have.

Install Node

<https://nodejs.org/en/download/>

<https://cygwin.com/install.html> - for windows

Open terminal Windows

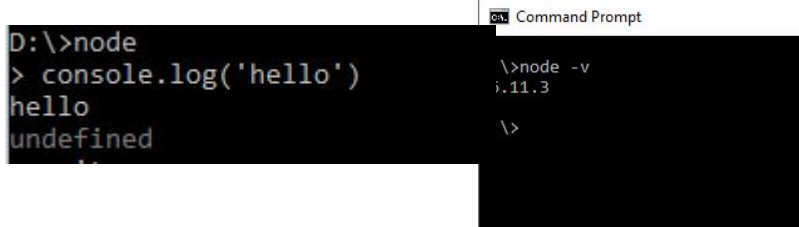
Press \square Win + R on your keyboard. Hold down the Windows key on your keyboard, and press the "R" button. ...

Type cmd in the Run window. This shortcut will open the Command Prompt terminal.

Click OK in the Run window.

Open terminal Mac

The Terminal app is in the Utilities folder in Applications. To open it, either open your Applications folder, then open Utilities and double-click on Terminal, or press Command - spacebar to launch Spotlight and type "Terminal," then double-click the search result



```
Command Prompt
D:\>node
> console.log('hello')
hello
undefined
>
```

```
node -v
npm -v

D:\>node
> console.log('hello')
.exit
D: - switch to D drive
cd
```

EXERCISE :

1. Install Nodejs
2. Open your terminal
3. Check if node is installed node -v
4. Check is package manager is installed npm -v
5. Run node
6. type JavaScript
7. Use .exit to exit node

Open in Editor

Create a new directory to use for your project

Quick Command Line Commands

mkdir = makes directory `mkdir <folderName>`

cd = change directory `cd <folder>/<folder>`

cd.. = goes back one folder level

d: change drive `<driveLetter>`:

ls or dir = view contents of folder.

ren = renames `ren <oldName> <newName>`

del = deletes folder `del <folder>`

cd. > <filename> or touch <filename> = create file

notepad <filename> - open on windows in notepad

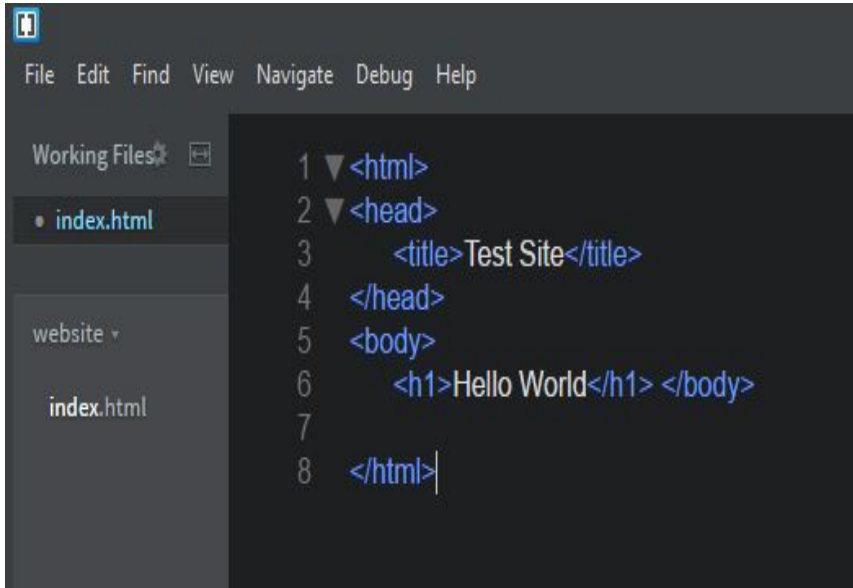
```
mkdir website
cd website
cd. > index.html OR MAC touch index.html
```

EXERCISE :

1. Navigate to the folder you want to use
2. Create new directory for project
3. Create blank index.html

Use Editor open file

I'm using <http://brackets.io/> in the course, you can open the folder/project in any editor.



```
<html>
<head>
  <title>Test Site</title>
</head>
<body>
  <h1>Hello World</h1> </body>

</html>
```

EXERCISE :

1. Open index.html
2. Update code to have hello world

Install Express

Use the npm init command to create a package.json file for your application.

<https://docs.npmjs.com/files/package.json>

```
Working Files*
├── index.html
└── website
    ├── index.html
    └── package.json
1  {
2    "name": "tester",
3    "version": "1.0.0",
4    "description": "testing site",
5    "main": "index.js",
6    "scripts": {
7      "test": "echo \"Error: no test specified\" && exit 1"
8    },
9    "author": "",
10   "license": "ISC"
11 }
12
```

```
npm init
npm install express --save
```

```
express@4.17.1
added 50 packages from 37 contributors and audited 126 packages in 10.19s
found 0 vulnerabilities

New minor version of npm available! 6.9.0 -> 6.13.7
Changelog: https://github.com/npm/cli/releases/tag/v6.13.7
Run npm install -g npm to update!

C:\website>
```

EXERCISE :

1. In the CLI go to folder and type npm init
2. Check the package.json file created.
3. Install Express
4. Open folder

Create Local Machine

Setup default index.js file to run express

This code starts a server and listens on port 3000 for connections.

Use CTRL+C to stop server if currently running



Hello World!

```
const express = require('express');
const app = express();
const port = 3000;
app.get('/', function (req, res) {
  return res.send('Hello World!');
});
app.listen(port, function () {
  return console.log("Ready on port ".concat(port, "!"));
});
```

EXERCISE :

1. Create new index.js file
2. Require express
3. Set port ex 3000
4. Return message
5. In your browser go to <http://localhost:3000/>

Nodemon

<https://nodemon.io/> Nodemon is a utility that will monitor for any changes in your source and automatically restart your server. Perfect for development.

<https://www.npmjs.com/package/nodemon>

Please note that on windows you need to be admin in order to install, you can also prefix with sudo for linux.



```
npm install -g nodemon
nodemon index.js
```

```
app.listen(port, function () {
  return console.log(`Ready on Port : ${port}!`);
});
```


EXERCISE :

1. Run index.js with nodemon
2. Update index.js and save

Test folder Route

JSON ready to return JavaScript objects.

Perfect for testing your AJAX requests and exploring routing.



← → ↻ ⓘ localhost:3000/test

```
{"message": "Hello world"}
```

```
const express = require('express');
const app = express();
const port = 3000;

app.get("/test", function (req, res) {
  res.json({
    message: "Hello world"
  });
});

app.listen(port, function () {
  return console.log(`Ready on Port : ${port}!`);
});
```

EXERCISE :

1. Create a test route
2. Return response as JSON

Serve files route folder

Create a folder for all public files

Move index.html into public folder

Add routing to dirname and public folder.



← → ↻ ⓘ localhost:3000

Hello World 1

```
const express = require('express');
const app = express();
const port = 3000;

app.get("/test", function (req, res) {
  res.json({
    message: "Hello world"
  });
});

app.use(express.static(__dirname + '/public'));

app.listen(port, function () {
  return console.log(`Ready on Port : ${port}!`);
});
```

EXERCISE :

1. Create a folder called public
2. Move your index.html into public
3. Use use to provide static route to public folder

Congratulations on completing the course!

Thank you for your support



Course instructor : Laurence Svekis - providing online training to over 500,000 students across hundreds of courses and many platforms.

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